

**Paw Paw High School  
Course Catalog  
2013-2014**

# Agriculture

## Basic 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, natural resources, agribusiness management, agricultural mechanics, agricultural biotechnology, food science technology, environmental science and aquacultural science and technology 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.

State Course ID:	18001A001
State Course Title:	Introduction to the Agricultural Industry
Prerequisite: None	Level: 9,10,11,12                      Semesters: 2
Credit: .5 Unit per semester	

## Agricultural Mechanics and Technology

This course will concentrate on expanding student's knowledge and experiences with agricultural mechanics technologies utilized in the agricultural industry. Units of instruction included are: design, construction, fabrication, maintenance, welding, electricity/electronics, internal combustion engines, hydraulics, and employability skills. Careers of agricultural construction engineer, electrician, plumber, welder, equipment designer, parts manager, safety inspector, welder, and other related occupations will be examined. Improving workplace and computer 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.

State Course ID:	18402A001
State Course Title:	Agricultural Mechanics & Technology
Prerequisite: None	Level: 11,12                      Semesters: 2
Credit: .5 Unit per semester	

## Agricultural Sales and Marketing

This course is designed to develop student knowledge and skills in agricultural sales and marketing, commodity marketing, agricultural economics, and international agriculture. Instructional units include: successfully starting an agribusiness, developing a marketing plan, pricing, advertising, and selling products and services, communicating with customers, applying commodity trading techniques, basic economic principles, the international agribusiness economy and agricultural career opportunities. Student skills will be enhanced in math, reading comprehension, communications and writing through agribusiness applications. 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.

State Course ID: 18202A001

State Course Title: Ag Sales and Marketing

Prerequisite: None

Level: 10-12

Semesters: 2

Credit: .5 Unit per semester

## Landscaping and Turf Management (Fall 2013)

This advanced course focuses on the landscape, nursery, and turf segments of the horticulture industry. Units of study include: identifying landscape plans, hardscape construction techniques, and installing landscape plants. Also included are nursery production, turfgrass production, small engine repair, and maintenance of existing landscapes. Agribusiness units will cover calculation prices for work, managing a horticulture business, advertising, and sales. 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.

State Course ID: 18054A001

State Course Title: Landscaping & Turf Management

Prerequisite: None

Level: 11, 12

Semesters: 1

Credit: .5 Unit per semester

### Greenhouse (Spring 2014)

This course focuses on the greenhouse management, floral design and related segments of the horticulture industry. Major units of study include floriculture plant identification, greenhouse structures, and the culture of greenhouse crops. Also included are care and handling of cut flowers, principles of art applied to floral design, and the mechanics of floral design. Agribusiness units will be introduced in merchandising, advertising, sales, and operating a retail floral business. 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.

State Course ID: 18053A001  
State Course Title: Greenhouse Production & Floral Design  
Prerequisite: None Level: 11, 12 Semesters: 1  
Credit: .5 Unit per semester

### Horticultural Production and Management(Fall 2014 & Spring 2015)

This advanced course offers instruction in both the floriculture and landscape areas of horticulture. Units of study include plant identification, greenhouse management, culture of greenhouse crops, care and handling of cut flowers, and some basic floral design principles. Also included are landscape design, installation, and maintenance; horticulture mechanics; nursery management; integrated pest management; ornamental crop production and vegetable production. Agribusiness units will cover operating a horticulture business, pricing work, advertising, and sales. 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.

State Course ID: 18051A001  
State Course Title: Horticulture Production & Management  
Prerequisite: None Level: 11, 12 Semesters: 2  
Credit: .5 Unit per semester

### Agricultural Science (Fall 2013)

This orientation course builds on basic skills and knowledge gained in the Introduction to the Agricultural Industry course. Major units of instruction include agricultural research, soil science, advanced plant science, biotechnology, advanced animal science. Applied science and math skills and concepts will be stressed throughout the course as they relate to each area. 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.

State Course ID: 18003A001  
State Course Title: Basic Agricultural Science  
Prerequisite: None Level: 10-12 Semesters: 1  
Credit: .5 Unit per semester

### Ag Communications (Spring 2014)

Students will analyze current agricultural issues and determine how they affect people on all sides of the issue. 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. 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.

State Course ID: 18203A002  
State Course Title: Ag Communications  
Prerequisite: None Level: 11, 12 Semesters: 1  
Credit: .5 Unit per semester

### Agriculture Business (Fall 2014 & Spring 2015)

This course will develop students' 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, and advanced computerized record keeping. Student skills will be enhanced in math, reading comprehension, and writing through agribusiness applications. Employability skills will be developed with resume writing and interviewing techniques to gain employment. Post-secondary education will be explored at agricultural colleges and universities. 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.

State Course ID:	18201A001
State Course Title	Agricultural Business Management
Prerequisite:	Level: 11,12                      Semesters: 2
Credit: .5 Unit per semester	

### Agriculture Mechanics

In this course, theory and hands-on experiences provide opportunities for students to develop basic knowledge and skills in agricultural mechanics. Instructional areas include the basic fundamentals of maintaining and repairing small gasoline engines, basic electricity, welding, construction, cold metal work, and operating agricultural equipment safely. Improving workplace and computer 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.

State Course ID:	18401A001
State Course Title:	Basic Agricultural Mechanics
Prerequisite: None	Level: 9,10,11,12                      Semesters: 2
Credit: .5 Unit per semester	

## Agriculture Construction

This advanced course focuses on the knowledge, hands-on skills, and work place skills applicable to construction in the agricultural industry. Major units of instruction include: personal safety, hand tools, power tools, blue print reading, surveying, construction skills in carpentry, plumbing, electricity, concrete, block laying, drywall and painting. Careers such as agricultural engineers, carpenter, plumber, electrician, concrete and block layers, finishers, safety specialists, and other related occupations will be examined. Improving workplace and computer 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.

State Course ID: 18403A001  
State Course Code: Agricultural Construction & Technology  
Prerequisite: None Level: 11, 12 Semesters: 2  
Credit: .5 Unit per semester

## Interrelated Cooperative Education

Interrelated Cooperative Education students participate in teacher supervised on-the-job training for which they are paid and they complete related classroom work to give themselves an organized and successful introduction into the world of work. During the program the training supervisor at the work site and the teacher work collectively to give students positive employee skills and challenging experiences. Practical adult skills and attitudes are fostered throughout these experiences.

Prerequisite: Successful completion of two vocational courses and Instructor's permission.

State Course ID: 22153A001  
State Course Title: Cooperative Education  
Prerequisite: Successful completion of two vocational courses and Instructor's permission Level: 11,12 Semesters: 2  
Credit: 2-3 Unit per year

# Art

## Art I

A course introducing the students to basic visual concepts, skills, materials and techniques needed in creating projects that convey individual expressing and extend an awareness, knowledge and appreciation of fine arts and culture. Areas covered are ceramics, painting, drawing, design, sculpture, and printmaking.

State Course ID: 05154A000  
Prerequisite: None Level: 9,10,11,12 Semesters: 2  
Credit: .5 Unit per semester

## Art II

A course adding to the basic skills and knowledge gained in Art I.

State Course ID: 05154A000  
Prerequisite: Art I with a C Level: 10,11,12 Semesters: 2  
average or above and  
instructor's permission.  
Credit: .5 Unit per semester

## Art III

A course adding to the basic skills and knowledge gained in Art II.

State Course ID: 05154A000  
Prerequisite: Art II with a C Level: 11,12 Semesters: 2  
average or above and  
instructor's permission.  
Credit: .5 Unit per semester

## Art IV

A course adding to the basic skills and knowledge gained in Art III.

State Course ID: 05154A000  
Prerequisite: Art III with a C Level: 12 Semesters: 2  
average or above and  
instructor's permission.  
Credit: .5 Unit per semester



# Business

## Computer Literacy

Computer Literacy consists of two semester-long courses that are linked under a broad general heading and is designed to give students both an introduction and a more in-depth opportunity to study a variety of issues within the field of Business.

### Keyboarding and Formatting-Fall Semester

Keyboarding and Formatting I is a course designed to develop basic skills in touch keyboarding techniques for entering alphabetic, numeric, and symbol information found on computers and terminals. Students will learn to edit and format text and paragraphs, change fonts, work with headers and footers, cut and paste text, create and use tab keys, create labels, and work with multiple windows. Students will format documents such as letters, envelopes, memorandums, reports, and tables for personal, educational, and business uses. During the second half of the course, major emphasis is placed on formatting documents, improving proofreading skills, and increasing speed and accuracy.

### Computer Concepts and Software Applications-Spring Semester

Computer Concepts and Software Applications is an orientation-level course designed to develop awareness and understanding of application software and equipment used by employees to perform tasks in business, marketing and management. Students will apply problem-solving skills to hands-on, real-life situations using a variety of software applications, such as word processing, spreadsheets, database management, presentation software, and desktop publishing. Students will explore topics related to computer concepts, operating systems, telecommunications and emerging technologies. The development of employability skills, as well as transition skills, will be included in the course as well as an understanding of the ethical considerations that arise in using information processing equipment and gaining access to available databases.

The successful completion of Computer Literacy is required for graduation. It is recommended that this course be taken during the freshman year.

State Course ID:	12005A001	10004A001
State Course Title:	Keyboarding & Formatting	Computer Concepts & Software Applications
Prerequisite: None	Level: 9,10,11,12	Semesters: 2
Credit: .5 Unit per semester		

## Business and Technology Concepts

This orientation-level course will provide an overview of all aspects of business marketing and management, including the concepts, functions, and skills required for meeting the challenges of operating a business in a global economy. Topics covered will include the various forms of business ownership, including entrepreneurship, as well as the basic functional areas of business (finance, management, marketing, administration and production).

Students will be introduced to a wide range of careers in fields such as accounting, financial services, information technology, marketing, and management. Emphasis will be placed on using the computer while studying applications in these careers along with communication skills (thinking, listening, composing, revising, editing, and speaking), math and problem solving. Business ethics as well as other workplace skills will be taught and integrated within this course.

State Course ID: 12001A001  
State Course Title: Business & Technology Concepts  
Prerequisite: None Level: 9,10,11,12 Semesters: 2  
Credit: .5 Unit per semester

## Web Page and Interactive Media Development I

Web Page and Interactive Media Development I is a skill-level course designed to prepare students to plan, design, create and maintain web pages and sites. Students will learn the fundamentals of web page design using HTML, HTML editors, and graphic editors as well as programming tools such as JavaScript. Students will work in a project-based environment to create a working website. Students will learn to create pages, add hyperlinks, make tables and frames, create forms, integrate images, and set styles. Students will use image-editing programs to manipulate scanned images, computer graphics, and original artwork. Instruction will include creating graphical headers, interactive menus and buttons, and visually appealing backgrounds. Students will use hardware and software to capture, edit, create, and compress audio and video clips.

State Course ID: 10201A001  
State Course Title: Web Page & Interactive Media Development I  
Prerequisite: Computer Lit. Level:11,12 Semesters: 2  
Credit: .5 Unit per semester

## Web Page and Interactive Media Development II

Web Page and Interactive Media Development II is a skill-level course for students who have completed Web Page and interactive Media Development I. Instruction will include using multimedia authoring applications and programming tools such as JavaScript to create a website that combines text, hyperlinks, images, video, and sound. Instruction will include using hardware and software to capture, edit, create, and compress audio and video clips as well as create animated text, graphics, and images. Other topics will include using tables to align images with text, creating newspaper-style columns, and inserting side menus and call-outs. Students will learn how to use templates, cascading style sheets and interactive elements to enhance web pages. Students will learn to create dynamic forms that include multiple-choice questions, comment boxes, and buttons. Students will learn how to connect to a database and retrieve and write data.

Students are to develop a portfolio project that demonstrates their expertise in areas such as multimedia authoring, web development, audio and video editing, and advanced JavaScript applications to create interactive web pages.

State Course ID: 10201A002  
State Course Title: Web Page and Interactive Media Development II  
Prerequisite: Web Page I Level:12 Semesters: 2  
with a grade of B or better &  
instructor's permission.  
Credit: .5 Unit per semester

## Accounting I

Accounting I is a skill level course that is a value to all students pursuing a strong background in business, marketing, and management. This course includes planned learning experiences that develop initial and basic skills used in systematically computing, classifying, recording, verifying and maintaining numerical data involved in financial and product control records including the paying and receiving of money. Instruction includes information on keeping financial records, summarizing them for convenient interpretation, and analyzing them to provide assistance to management for decision-making. Accounting computer applications should be integrated throughout the course where applicable. In addition to stressing basic fundamentals and terminology of accounting, instruction should provide initial understanding of the preparation of budgets and financial reports, operation of related business machines and equipment, and career opportunities in the accounting field. Processing employee benefits may also be included. Practice sets with business papers may be used to emphasize actual business records management.

Secondary School ID: 12104A001  
State Course Title: Accounting I  
Prerequisite: None Level:11, 12 Semesters: 2  
Credit: .5 Unit per semester

## Accounting II

Accounting II is a skill-level course that builds upon the foundation established in Accounting I. This course is planned to help students develop deeper knowledge of the principles of accounting with more emphasis being placed on financial statements and accounting records.

Topics covered include notes and accounts payable, notes and accounts receivable, valuation of inventory, valuation of plant and equipment, the voucher system, continued accounting for corporations, and analyzing financial statements. An overview of partnership accounting, departmental accounting, and manufacturing accounting is also presented.

Students will develop a comprehensive understanding of the educational training, aptitudes and skills necessary for professional accounting careers.

Secondary School ID: 12104A002  
State Course Title: Accounting II  
Prerequisite: Accounting I Level: 11, 12 Semesters: 2  
Credit: .5 Unit per semester

## Interrelated Cooperative Education

Interrelated Cooperative Education students participate in teacher supervised on-the-job training for which they are paid and they complete related classroom work to give themselves an organized and successful introduction into the world of work. During the program the training supervisor at the work site and the teacher work collectively to give students positive employee skills and challenging experiences. Practical adult skills and attitudes are fostered throughout these experiences.

The paid on-the-job training and classroom portions of the program must both be successfully completed in order for the student to receive credit for the program.

Secondary School Codes: 22153A001  
State Course Title: Cooperative Education  
Prerequisite: Completion of Level:12 Semesters: 2  
two courses within the  
department with a grade of B  
or better and Instructor's permission.  
Credit: .5 Unit per semester

# Consumer Education

## Consumer Education

Students will study the basic concepts of financial literacy, including installment purchasing (credit scoring, managing credit debt, and completing a loan application), budgeting, savings and investing, banking (balancing a checkbook, opening a deposit account, and use of interest rates), understanding simple contracts (rental agreements), State and federal income taxes, personal insurance policies, and homeownership (mortgages), and understanding the roles of consumers interacting with agriculture, business, and labor unions. money management (budgeting, shopping –comparison of prices), careers, and insurance. Students will have 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. Many of the topics covered will help prepare the student for the responsibilities associated with being an adult. The goal is for the student to become a wise consumer.

State Course ID: 22210A000

Prerequisite: None Level: 10-12

Semesters: 1

Credit: .5 Unit per semester

# Driver Education

## Driver Education

The goal of driver education is the development of traffic citizens who will be competent and responsible users of the highway transportation system. Drive Education is a two-phase program consisting of the classroom phase (which is required) and the behind-the-wheel phase. The classroom phase stresses safety and attitudes for safe driving, and a student must have a minimum of 30 close hours to receive credit. The behind-the-wheel phase teaches safety and competent driving practices in actual on-the-street situations. A student must complete 6 hours of behind-the-wheel instruction. A person cannot receive a driver's license in Illinois prior to his 18<sup>th</sup> birthday unless he has received credit in driver education.

A student is required to have a social security number to obtain a driver's permit or an operator's license.

State Course ID: 08152A000

Prerequisite: Must pass all classes in previous semester

Level: 10

Semesters: 1

Credit: .5 Unit per semester

# Health

## Health

Health will be taken during the sophomore year in the semester opposite driver education. Curriculum content includes human ecology and health; human growth and development; the emotional, psychological, physiological, hygienic and social responsibilities of family life including sexual abstinence until marriage; dangers associated with drug and alcohol consumption during pregnancy, prevention and control of disease; sexual assault awareness, public and environmental health; consumer health; safety education and disaster survival; mental health and illness; personal health habits; alcohol and drug use and abuse; the dangers of tobacco use; nutrition, and dental health.

State Course ID: 08052A000

Prerequisite: None Level: 10

Semesters: 1

Credit: .5 Unit per semester

# Mathematics

## Algebra I (DB)

Students generalize the operations of numbers learned in arithmetic including integers, fractions, and decimals. Operations with radicals are also developed. Solutions to equations by making use of these skills are stressed. Much emphasis is placed on translating story problems into equations and then solving those equations. Graphic representations of numeric relations are also developed. The concepts of functions, relations, equations of lines serve as an introduction to coordinate geometry and as necessary tools for solutions to certain types of story problems. These topics are taught with both the use of technology and, traditionally, by hand. Each student has access to a graphic calculator; therefore there is a visual representation of the topics as well as an algebraic representation of the topic. At least two projects are assigned per semester to reinforce the topics in a hands-on, real world setting. These projects may be in cooperative groups or as individuals. Projects are completed using applications on the computer. Homework is intended to improve a student's skills and accuracy; and thus, it must be done very day.

This course meets for two class periods per day and by passing the course a student will earn one credit per semester. The student will receive .5 credit in math and .5 credit in elective coursework per semester.

State Course ID: 02052A000

Prerequisite: None

Level: 9

Semesters: 2

Credit: .5 Unit per semester



### Informal Geometry

Informal Geometry is a less rigid course than regular geometry. This is not a university-accepted class and the student should keep that in mind when determining whether to take this class or geometry. Some junior colleges may accept this class. However, Informal Geometry relates geometric principles to their use in decision-making problems. The same main topics are discussed as in geometry without the use of difficult algebra or proofs. This course is intended for those students coming from Pre-algebra or Algebra IB. It is meant to provide students of less math ability a chance to gain knowledge of geometric concepts and their every day application. Homework and/or projects will be given daily. It is highly recommended that a compass and a protractor be purchased. Homework is intended to improve a student's skills and accuracy; and thus, it must be done every day.

State Course ID: 02079A000  
Prerequisite: Algebra DB Level: 10 Semesters: 2  
Credit: .5 Unit per semester

### Introductory to Algebra IIB

State Course ID: 02069A000  
Prerequisite: Algebra DB Level: 11 Semesters: 2  
& Informal Geometry  
Credit: .5 Unit per semester

### Algebra I

Students generalize the operations of numbers learned in arithmetic including integers, fractions, and decimals. Operations with radicals are also developed. Solutions to equations by making use of these skills are stressed. Much emphasis is placed on translating story problems into equations and then solving those equations. Graphic representations of numeric relations are also developed. The concepts of functions, relations, equations of lines serve as an introduction to coordinate geometry and as necessary tools for solutions to certain types of story problems. These topics are taught with both the use of technology and, traditionally, by hand. Each student has access to a graphic calculator; therefore there is a visual representation of the topics as well as an algebraic representation of the topic. At least two projects are assigned per semester to reinforce the topics in a hands-on, real world setting. These projects may be in cooperative groups or as individuals. Projects are completed using applications on the computer. Homework is intended to improve a student's skills and accuracy; and thus, it must be done every day.

State Course ID: 02052A000  
Prerequisite: None Level: 8 & 9 Semesters: 2  
Credit: .5 Unit per semester

## Geometry

This is intended as the primary course for sophomores who, when graduated, plan to attend college. The algebra required for this course is intense and must be nearly mastered in order for success. Geometry is the study of mathematics related to plane figures through logic and deductive reasoning. Angles and sides of congruent and similar polygons are computed as is the area, perimeter, and volume. The natural intuition of the student is confirmed with step-by-step deductive reasoning and accurate, logical constructions. Right triangles, sides and angles, and ratios are devised and applied to real situations. These topics are taught with both the use of technology and, traditionally, by hand. Each student has access to a graphic calculator; therefore, there is a visual representation of the topics as well as an algebraic representation of the topic. At least two projects are assigned per semester to reinforce the topics in a hands-on, real world setting. These projects may be in cooperative groups or as individuals. Projects are completed using applications on the computer. Homework is intended to improve a student's skills and accuracy; and thus, it must be done every day.

State Course ID: 02072A000  
Prerequisite: Algebra Level: 9 & 10 Semesters: 2  
Credit: .5 Unit per semester

## Algebra II

Algebra II is the primary course for juniors who intend to attend college upon graduation. In general, Algebra II is a review and extension of topics covered in Algebra I and Geometry, and an introduction into the new topics of conic sections; logarithmic, exponential, rational, and polynomial functions; and sequences and series. If time allows, a further study into trigonometry is done. These topics are taught with both the use of technology and, traditionally, by hand. Each student is responsible for having a graphing calculator; therefore there is a visual representation of the topics as well as an algebraic representation of the topic. At least two projects are assigned per semester to reinforce the topics in a hand-on, real world setting. These projects may be in cooperative groups or as individuals. Projects are completed using applications on the computer. Homework is intended to improve a student's skills and accuracy; and thus, it must be done every day.

State Course ID: 02056A000  
Prerequisite: Algebra & Geometry Level: 10-11 Semesters: 2  
Credit: .5 Unit per semester Grading Scale: Weighted

## Trigonometry and Advanced Algebra

This course is intended for the student who will be attending college in a math/science field or a student who may be able to fulfill the college math requirement for their major. The ability to use and understand a graphic calculator is a must. This course covers the fundamentals of trigonometry, analytical geometry, probability, limits, derivatives, and functions (polynomial, rational, and real). These topics are taught with both the use of technology and, traditionally, by hand. Each student has access to a graphing calculator; therefore, there is a visual representation of the topics as well as an algebraic representation of the topic. At least two projects are assigned per semester to reinforce the topics in a hands-on, real world setting. These projects may be in cooperative groups or as individuals. Projects are completed using applications on the computer. Homework is intended to improve a student's skills and accuracy; and thus, it must be done every day.

In addition, this course can be taken for college credit through Kishwaukee College as long as the student meets the prerequisites required by Kishwaukee College.

State Course ID:	02103A000 & 02057A000	
Prerequisite: None	Level: 11-12	Semesters: 2
Credit: .5 Unit per semester		Grading Scale: Weighted

## Kishwaukee Trigonometry and Advanced Algebra

Study of the trigonometric functions and their graphs, radian measure, equations and identities, logarithms, inverse functions, and applications.

State Course ID:	02103A000 & 02057A000	
Prerequisite: Kishwaukee Placement Test	Level: 11-12	Semesters: 2
Credit: .5 Unit per semester		Grading Scale: Weighted

## Calculus

Calculus is intended for the students who are moved ahead one year in the traditional math sequence, especially those who started Algebra I in eighth grade. The ability to use and understand the graphing calculator is a must. Topics covered include the following: 1) modeling real world data using statistical regression and creating a linear, quadratic, cubic, exponential, or trigonometric model, 2) a complete review and extension of limits, continuity, differentiation, and its application in curve sketching, 3) an introduction and development of integration as a method of finding area under and between curves as well as surface area, arc length, and volume of solids. These topics are taught with both the use of technology and, traditionally, by hand. Each student has access to a graphing calculator; therefore there is a visual representation of the topics as well as an algebraic representation of the topic. At least two projects are assigned per semester to reinforce the topics in a hand-on, real world setting. These projects may be in cooperative groups or as individuals. Projects are completed using a WORKS type application on the computer. Homework is intended to improve a student's skills and accuracy; and thus, it must be done every day.

State Course ID:

Prerequisite: None

Level: 12

Semesters: 2

Credit: .5 Unit per semester

Grading Scale:

Weighted

## Business Math

Business Math is intended for juniors or seniors who may not be in the college bound category and would like to take a fourth year of math. The course is designed to enable the work bound student to become proficient in solving practical and essential business applications that affect every day living. Some of the units that are covered in the course include checking/savings accounts, automobile/housing costs, loans, mortgages, income taxes, cash purchases, charge accounts, insurance and investing. These topics are taught with both the use of technology and, traditionally by hand. Each student has access to a graphic calculator; therefore there is a visual representation of the topics as well as an algebraic representation of the topic. At least two projects are assigned per semester to reinforce the topics in a hands-on, real world setting. These projects may be in cooperative groups or as individuals. Projects are completed using applications on the computer. Homework is intended to improve a student's skills and accuracy; and thus, it must be done every day.

State Course ID:

02154A000

Prerequisite: None

Level: 11-12

Semesters: 2

Credit: .5 Unit per semester

# Music

## Band

All band members are required to attend rehearsals each week and have appropriate materials for each session. Students enrolled in band are members of the mandatory Pep Band and Concert Band. The Pep Band plays at Pep sessions and three boys and three girls home basketball games. The Concert Band performs a Winter Concert, Spring Concert, and at graduation. Additional band performances may be required with sufficient notice. Members may also participate in the I.H.S.A. Solo and Ensemble Contest and IMEA District Auditions. Select members will participate in the Little 10 Conference Music Festival. Grades are based on attendance, conduct, and participation in rehearsals, attendance at the required performances, scale and excerpt quarter playing exams, and final written exams covering music theory fundamentals. The Concert Band will also perform in the IHSA Organizational Contest, also a mandatory event.

State Course ID: 05102A000  
Prerequisite: None Level: 9-12 Semesters: 2  
Credit: .5 Unit per semester

## Chorus

Students learn to sing various forms of music including sacred, popular, classical, and music from foreign cultures. The chorus participates in the Winter Concert, Spring Concert, Little Ten Conference Choral Festival, and IHSA Organizational Contest. Members may also participate in the I.H.S.A. Solo and Ensemble Contest. Additional chorus performances may be required with sufficient notice. The goals of the choral program are to develop singing skills in a variety of music styles, as well as sensitivity to musical expression. Grades are based on attendance, conduct, and participation in rehearsals; attendance at the required performances; quarter and final exams covering basic music theory fundamentals.

State Course ID: 05110A000  
Prerequisite: None Level: 9-12 Semesters: 2  
Credit: .5 Unit per semester

### Music Appreciation-Independent Study

Students will study basic note reading and apply it to the piano. When proficient in note reading students will write original compositions and arrangements of popular songs. The curriculum is individualized to the student's skill level. Students need to be self-motivated and work independently. Beginners to music are welcomed.

This course is individualized and a student may take it more than once with teacher permission.

State Course ID: 05118A000

Prerequisite: None Level: 10-12

Semesters: 2

Credit: .5 Unit per semester

# Physical Education

## Physical Education

Physical Education is a part of the education, which provides wholesome learning experiences in carefully selected and carefully taught physical education classes. Physical activities have a unique opportunity to develop physical, emotional mental and social poise and stamina. These qualities are very important in meeting the demands of our everyday life and the emergencies, which might confront us. Students are required to enroll in physical education each semester that they attend high school. Students will be excused from physical education upon a doctor's request. A varied and well-balanced system curriculum is offered, including team sports individual sports, rhythmic and physical fitness activities. Listed below are the activities that tentatively will be offered. Activities will be coeducational when possible. Badminton, basketball, indoor soccer, pickelball, floor hockey, shuffleboard, soccer, golf, physical fitness testing, softball, speedball, flag football, volleyball, bowling, and weight training.

State Course ID: 08001A000

Prerequisite: None Level: 9-12

Semesters: 2

Credit: .5 Unit per semester

# SAT Program

## Students Assisting Teachers

This course is designed for students interested in learning about the teaching profession. Students will be required to read and summarize educational articles, maintain a daily log, complete bulletin boards, tutor students, complete a major project, and act in a professional manner. The student will be working one on one with a teacher in the classroom environment. Daily duties will include spending up to a 1/3 of the class time completing clerical duties and a minimum of 2/3 of the class time assisting students. Because the SAT student is working with elementary and junior high children one must possess integrity, positive leadership skills, a positive and professional attitude, and maintain confidentiality.

Applicants to this program must have a GPA of 86% or more and be enrolled in three courses from the following disciplines: English, math, science, and social science. A written application is required and must be submitted to the guidance counselor. The counselor will meet with interested teachers to assign placement of SAT applicants. Acceptance to the program will be on an individual basis. Applications are available in the guidance office.

State Course ID: 19151A000

Prerequisite: None

Level: 12

Semesters: 1

Credit: .5 Unit per semester



# Science

## Earth Science I

Earth Science I is a series of two semester-long courses that are linked under a broad general heading and designed to give students an opportunity to study two individual lab based topics in detail. The scientific method is discussed and used in all classes. Earth Science I consists of two semester long courses and as such the student must pass each semester individually in order to receive credit. Enrollment is open to all high school students but preference will be given to freshmen and sophomores.

### Fall Semester – *Air and Sea*

*Air and Sea:* The student will learn about the conservation of natural resources, atmosphere, weather, and precipitation. The student will keep a log of daily conditions (using TV, radio, newspaper or Internet). The student will make models of the ocean floor during the oceanography unit. The student will learn to determine the salinity of sea water, in addition to completing other required labs.

### Spring Semester – *W.E.C.H.*

*W.E.C.H.:* The student will learn about weathering, erosion, forces that change the earth's surface such as rivers, glaciers, wind and waves, river formation and underground water and its affects, plate tectonics, formation and identification of fossils, the study of plant and animal life, changes to the earth through the 4 major eras (Precambrian, Paleozoic, etc.), and radioactive dating. The student will be able to identify and determine the age of fossils by using reference materials, and the student will be able to study river formation and erosion by using stream tables, in addition to completing other required labs.

State Course ID:

Prerequisite: None

Level: 10-12

Semesters: 2

Credit: .5 Unit per semester

## Earth Science II

Earth Science II is a series of two semester-long courses that are linked under a broad general heading and designed to give students an opportunity to study two individual lab based topics in detail. The scientific method is discussed and used in all classes. Earth Science II consists of two semester long courses and as such the student must pass each semester individually in order to receive credit. Enrollment is open to all high school students but preference will be given to freshmen and sophomores.

### Fall Semester – *Space Science*

Space Science: The student will learn about the sun, stars, galaxies, solar system, and space travel/rocketry. The student will keep a journal of weekly sky observations. The student will learn to make and use a simple refracting telescope and the student will be able to measure the distance to the sun, in addition to completing other required labs.

### Spring Semester – *Geotonics*

Geotonics: The student will learn about conservation of natural resources, plate tectonics, volcanoes, earthquakes, mountain building, geology and basic chemistry. Students learn to identify minerals and rocks. Geotonics labs used: ID minerals using density, locate earthquakes from seismic wave records (s and p waves), etc.

State Course ID:

Prerequisite: None

Level: 10-12

Semesters: 2

Credit: .5 Unit per semester

### Introduction to Biology

This is a modern course in biology, covering the study of cells, cell chemistry, classification, botany, zoology, ecology, and conservation of natural resources. The course is designed to awaken student curiosity about their world through investigation. The student will use the scientific method to investigate all topics. This course covers the same topics as Biology but at a slower pace with less detail.

State Course ID:

03051A000

Prerequisite: None

Level: 9

Semesters: 2

Credit: .5 Unit per semester

### Biology

This is a modern course in biology, covering the study of cells, cell chemistry, classification, botany, zoology, ecology, and conservation of natural resources. The course is designed to awaken student curiosity about their world through investigation. The student will use the scientific method to investigate all topics.

State Course ID:

03051A000

Prerequisite: None

Level: 9

Semesters: 2

Credit: .5 Unit per semester

### Intro to Chemistry

This course is strongly based on experiment with the text dependent upon and integrated with laboratory instruction. Students will have to become thoroughly familiar with the metric measuring system. Study will be devoted to understanding basic atomic structure and chemical bonding processes. Upon completion of the course, students will be able to write and balance common chemical equations. Class and laboratory time will be devoted to problem solving, mainly empirical formulas and molarity problems. Problem solving and quantitative skills are important phases of the course work. Students will learn how chemistry affects their everyday life through experimentation. This course covers the same topics as Chemistry but at a slower pace with less detail.

State Course ID: 03101A000

Prerequisite: Intro Biology Level: 10-11

Semesters: 2

Credit: .5 Unit per semester

### Chemistry

This course is strongly based on experiment with the text dependent upon and integrated with laboratory instruction. Students will have to become thoroughly familiar with the metric measuring system. Extensive study will be devoted to understanding basic atomic structure and chemical bonding processes. Upon completion of the course, students will be able to write and balance common chemical equations. Considerable class and laboratory time will be devoted to problem solving, mainly empirical formulas and molarity problems. Problem solving and quantitative skills are important phases of the course work. Students will learn how chemistry affects their everyday life through experimentation.

State Course ID: 03101A000

Prerequisite: Biology Level: 10-11

Semesters: 2

Credit: .5 Unit per semester

## Intro to Physics

Students are introduced to mechanics, materials, waves and electricity. Students will engage in problem solving and theoretical study. Laboratory work involved simple at home labs, classroom demonstrations and student led investigations. A solid background in algebra is a must for this course. This course covers the same topics as Physics but at a slower pace with less detail.

State Course ID:

Prerequisite: Intro to  
Chemistry & enrolled or have  
taken Algebra II

Level: 11-12

Semesters: 2

Credit: .5 Unit per semester

## Physics

Students are introduced to mechanics, materials, waves and electricity. Students will engage in problem solving and theoretical study. Laboratory work involved simple at home labs, classroom demonstrations and student led investigations. A solid background in algebra is a must for this course.

State Course ID:

Prerequisite: Chemistry &  
Enrolled or have taken  
Algebra II

Level: 11-12

Semesters: 2

Credit: .5 Unit per semester

## Biology II

This course is very much lab oriented. Considerable time will be set towards learning the structure and functions of human systems. Animal dissection is a large component of the class and is required for successful completion of the class. College bound students and students planning to enter the medical field should take this course.

State Course ID:

03052A000

Prerequisite: Biology &  
Chemistry or Teacher  
Approval

Level: 11-12

Semesters: 2

Grading Scale:

Weighted if taken as  
4<sup>th</sup> Science.

Credit: .5 Unit per semester

# Spanish

## Spanish I

In Spanish I, the student develops four basic skills: listening, speaking, reading, and writing. The student becomes familiar with the sound of spoken Spanish and is able to use high frequency vocabulary, and the present indicative tense. One will learn about Hispanic culture. This course will have daily homework and the student must practice the language daily in order to become proficient.

State Course ID: 06101A000  
Prerequisite: None Level: 9-12 Semesters: 2  
Credit: .5 Unit per semester

## Spanish II

Students will continue developing the basic language skills. Students will enlarge their vocabulary and expand their knowledge of Hispanic culture while becoming able to communicate in a variety of tenses. The student will be able to function in everyday situations either with Spanish-speaking people in the U.S. or while traveling or living in Spanish-speaking country.

State Course ID: 06102A000  
Prerequisite: Spanish I with Level: 10-12 Semesters: 2  
a grade of C or better &  
Instructor's Permission  
Credit: .5 Unit per semester

## Spanish III

This independent course is designed for students that are motivated to learn Spanish in the untraditional classroom setting. The student will continue developing the skills in listening, grammar, composition, and reading to increase language mastery. Short works by a variety of authors from Spain and Latin America will be incorporated into the curriculum. Students will improve their ability to understand native speakers from various regions of the world.

State Course ID: 06103A000  
Prerequisite: Spanish II with Level: 11-12 Semesters: 2  
A grade of B or better & Grading Scale:  
Instructor's Permission Weighted  
Credit: .5 Unit per semester

## Spanish IV

This independent course is designed for students that are motivated to learn Spanish in the untraditional classroom setting. The student will continue developing the skills in listening, grammar, composition, and reading to increase language mastery. Literary works from various authors will be studied. Students will improve their ability to understand native speakers from various regions of the world.

State Course ID:

Prerequisite: Spanish III      Level: 12

with a grade of B or better &

Instructor's Permission

Credit: .5 Unit per semester

Semesters: 2

Grading Scale:

Weighted