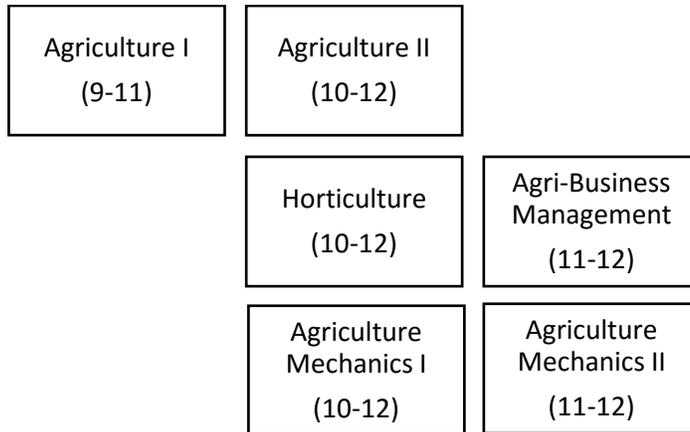


AGRICULTURE



Introduction to Agriculture Industry (Intro to Ag or Ag I)

Freshmen - Sophomore (Juniors must have Agriculture Instructor Approval)

1 Credit

Prerequisite- None

Course Description: 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. 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.

Topics: Introduction to Agriculture, Agriculture Careers, Agriculture Basics, FFA, Leadership & Public Speaking, Parliamentary Procedure, Swine Production, Beef Production, Sheep & Goat Production, Bee Production, Dairy Production,

Woodworking, Gardening, Floral Design

Agriculture Science or (Ag II)

Sophomore - Junior (Seniors must have approval of Agriculture Instructor)

1 Credit

Prerequisites: Introduction to Agriculture

Course Description: 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.

Topics: Semester 1: Soil Science and Agronomy Semester 2: Meat Science, Livestock Nutrition, Livestock Reproduction, Livestock Health,

Animal Behavior and Animal Welfare & Rights

Horticulture

Sophomore - Senior

1 Credit

Prerequisites: Introduction to Agriculture

Course Description: This course is designed to introduce students to the horticulture industry and provide them with basic plant science knowledge that can be further developed in advanced horticulture courses. Major units of instruction include horticulture research, horticultural careers, plant anatomy, seed germination, plant propagation, growing media, pest management, hydroponics, identifying horticultural plants, growing greenhouse crops, and floral design. 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.

Agribusiness Management

Junior-Senior (Will be offered on an every other year basis or as the Agriculture Instructor sees needed)
1 Credit

Prerequisites: Intro to Ag. Industry & Agriculture Science and General Business or Accounting I

Course Description: This course will include areas essential to the operation of a farm and the agribusiness world. This course is designed to develop student skills in the areas of advanced agricultural business procedures, establishment of agricultural businesses, managing the agribusiness, financing the agribusiness, marketing and advertising, sales techniques and strategies via electronic media. Students will participate in agricultural market simulation activities and in developing a small agricultural cooperative, while using prior knowledge gained from prerequisite classes. Product knowledge is stressed as it relates to the Illinois agricultural economic base. Resource people from the community will be utilized to supplement classroom experiences. Because FFA and Supervised Agricultural Experience Programs are integral components of this course, students are encouraged

to maintain an SAEP and to participate in activities of the FFA organization.

*Agribusiness Management is accepted as three credit hours at Joliet Junior College, if the student receives a minimum grade of "B".
Topics: Development of Agri-business, Agriculture Careers, Agricultural Economics, Agricultural Sales, Preparing for a Career, Business Systems, Managing a Business, Farm Business Management, Accounting & Record Keeping, Marketing, Agricultural Policy, Taxes, Agricultural Current Events and Agricultural Communications

Agriculture Mechanics (Ag. Mech I)

Sophomore - Junior (seniors must have permission from Ag. Instructor)
15 student maximum
1 Credit

Prerequisites: Introduction to Ag.

Course Description: In this course, theory and hands-on experience provide opportunities for students to develop basic knowledge and skills in agricultural mechanics. The major areas include maintaining and repairing small gasoline engines, understanding fundamentals of

electricity, welding with the arc and wire welder, welding with cutting gas, and operating agricultural equipment safely.

Topics: General Safety, Welding, Arc, Mig, OxyAce, Electricity, Woodworking/Construction, Small Engine

Agriculture Mechanics II

Junior/Senior 15 students maximum
1 Credit

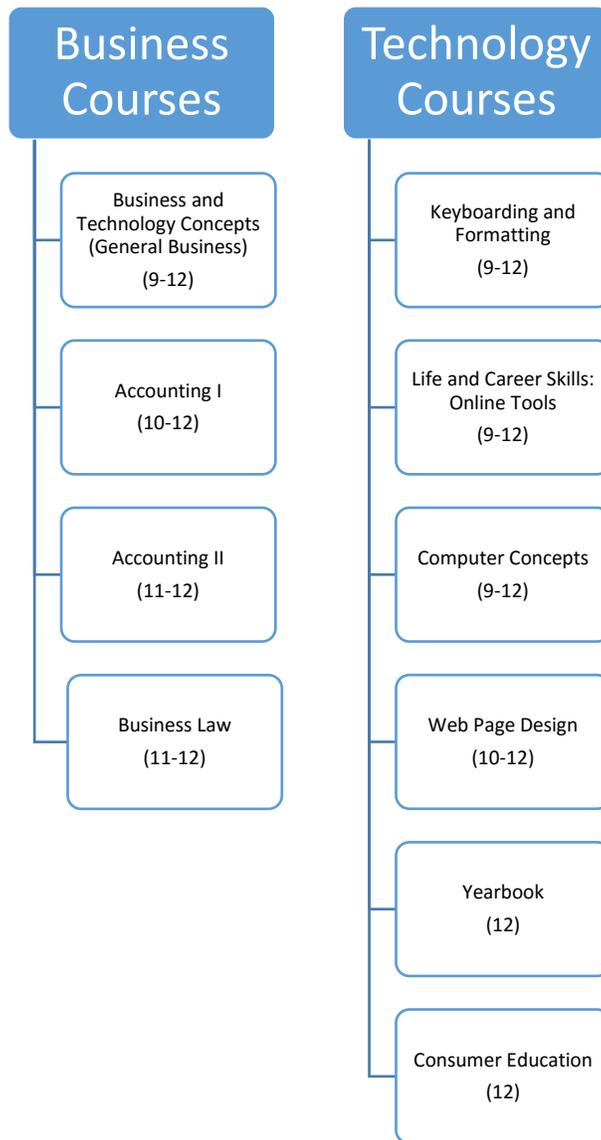
Prerequisites: Introduction to Agriculture, Ag. Mechanics I -passed with a C or higher

Course Description:

This course deals primarily with agricultural construction techniques necessary for building agricultural structures with an emphasis on learning how to safely use small agricultural shop tools. Small projects will be constructed in the agricultural shop in order to learn the application of each tool.

Topics: Construction and design projects to better the school, community, agriculture department: Welding Projects, Construction Projects, Independent Projects, Concrete Projects, and Electricity Projects.

BUSINESS AND TECHNOLOGY



BUSINESS COURSES:

Business and Technology Concepts (General Business)

Freshmen - Senior
 1 Credit
 Prerequisite- None

Course Description: This course is designed to improve economic citizenship through the introductory study of business communications, business computations, personal business management, and knowledge of the American business system as it relates to the world of work and career opportunity.

Instruction is supplemented by the use of budgeting simulations, videos, and local/national newspapers. Guest speakers from the community are frequently invited to class to share their working knowledge.

Accounting I

Sophomore- Senior
 1 Credit

Prerequisite- General Business

Course Description: This is a skill level course that is of 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. All work is completed online. Instruction includes information on keeping financial records, summarizing them for convenient interpretation and analyzing them to provide assistance to management for decision making. In addition to stressing basic fundamentals and terminology of accounting, instruction provides understanding of the preparation of budgets, financial reports and career opportunities in the accounting field.

Simulations are used to emphasize actual business records management.

Accounting II

Junior - Senior

1 Credit

Prerequisite- Accounting I

Course Description: This is an online 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. It is a study of previously learned principles as they apply to the more complicated types of business organizations: including partnerships and corporations. The students will become familiar with such specialized fields of accounting as cost accounting, tax accounting, payroll accounting, and others. Simulated business conditions will be provided through the use a practice set.

Business Law

Junior - Senior

1 Credit

Prerequisite- General Business

Course Description: This class introduces students to the areas of the law, which affect them in their daily lives and enables them to better understand the legal system. Topics include contracts, credit, bankruptcy, personal property, employment, insurance, sale of goods, and commercial paper. Instruction is supplemented by the use of mock trials, videos, and guest speakers. Upon completion of this course, the student will have a greater insight into law and the implications of law in business and real life.

TECHNOLOGY COURSES:

Keyboarding and Formatting

Freshmen - Senior

.5 Credit

Prerequisite- None

Course Description: This course will require the use of the touch method to key data. Proper formatting for letters, memos, tables, resumes, and reports will be presented. Speed, accuracy, and proofreading skills will be emphasized. A business keyboarding simulation will be used to integrate skills learned and to reinforce students' keyboarding proficiency. Composition, critical thinking, and decision-making skills are also stressed during the simulation. This course is an excellent introductory computer course and is required for those who want to enroll in other computer courses.

Topics: Intro to Computer/Keyboard, Microtype Alphabetic Keying Lessons, Microtype Numeric Keying Lessons, and Adventure Fitness Keyboarding Simulation

Life and Career Skills / Online Tools (Google Apps)

Freshmen - Senior

.5 Credit

Prerequisite- None

Course Description: This is a course that pairs up with Drivers Education and is a Graduation Requirement. It is designed to increase student knowledge of Google Apps as well as post-secondary transitions. Students will be required to work in groups and individually to complete assignments in this class. Topics Include: Google Apps, Digital Footprint, Bullying, High School Courses, Transcripts, Four-Year Plan, Career Exploration and College Exploration with an emphasis on Community College Options.

Computer Concepts

Freshmen - Senior

.5 Credit

Prerequisite- Keyboarding

Course Description: Information Processing I is a skill-level course that includes the concepts and terminology related to the people, equipment, and procedures of information processing. as well as skill development in the use of

information processing equipment. Students will operate computer equipment to prepare memos, letters, reports, and forms. Students will create rough drafts, correct copy, process incoming and outgoing telephone calls and mail, and transmit and receive message electronically. Students will create, input, and update databases and spreadsheets. Students will create data directories; copy, rename, move, and delete files, and perform backup procedures. In addition, students will prepare files to merge, as well as create mailing labels and envelopes from merge files. Students will learn to locate and retrieve information from hard copy and electronic sources, and prepare masters for a presentation using presentation software. Students will apply proper grammar, punctuation, spelling and proofreading practices. Accuracy will be emphasized. Workplace skills as well as communication skills (thinking, listening, composing, revising, editing, and speaking) will be taught and integrated throughout the course. *Topics: Introduction to the Computer, Microsoft Word, Unit 3, Microsoft Excel, Microsoft PowerPoint*

Web Page and Interactive Media Development

Sophomore - Senior

.5 Credit

Prerequisite- Keyboarding and Computer Concepts

Course Description: 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.

Topics: Introduction to Web Design, Photoshop, Weebly, Google Sites

Consumer Education

Senior

.5 Credit

Prerequisite- Required for Graduation

Course Description: Consumer Education is designed to help students deal with problems faced as a consumer in our complicated society. The course examines consumer rights and responsibilities

and the history of consumer protection and advocacy. Much of the course is centered on developing an understanding of banking, investments, budgeting, insurance, contracts, credit and taxes. A portion of the course is devoted to guidelines for wise shopping and care in making major purchases.

Topics: Consumer Behavior and Protection, Taxes, Insurance, and Careers, Budgeting and Banking, Investing, Credit, Transportation and Housing online simulation.

Beginning Digital Graphics (Yearbook)

Senior

.5 Credit

Prerequisite- Web Design and Teacher Approval

Course Description: Beginning Digital Graphics course provides students with the opportunity to explore the capability of the computer to produce visual imagery and to apply graphic techniques to various fields, such as advertising, TV/video, and architecture. Typical course topics include modeling, simulation, animation, and image retouching. The focus of this class will be the creation of the Raider Yearbook.

Topics: Introduction to Walsworth Online, Layout, Layout Design, Design layouts by hand on grid paper, Designing the Yearbook, Yearbook Completion

ENGLISH

FRESHMEN	SOPHOMORE	JUNIOR	SENIOR
English I	English II	English III	English IV
English I Honors	English II Honors	English III Honors	English IV Honors
			College Writing

English I

Freshman - Senior

1 Credit

Prerequisites: None

Course Description: This class will emphasize the basic English skills needed to succeed in high school English classes. The elements of fiction and non-fiction, analysis of fiction and non-fiction readings, vocabulary, grammar, inference, and writing will be the essential elements covered. Students will read fiction and non-fiction selections, both short and long, in genre units and thematic units. Writings will be both formal and informal and include research-based, text-based, and personal writing.

Honors English I

Freshman

1 Credit

Prerequisites: 8th grade

English/Literature (minimum grade of "B"); recommendation of 8th grade teacher(s)

Course Description: This class will emphasize the basic and higher level English skills needed to succeed in high school Honors English classes. The elements of fiction and non-fiction, analysis of fiction and non-fiction readings, vocabulary, grammar, inference, and writing will be the essential elements covered. Students will read fiction and non-fiction selections, both short and long, in genre units and thematic units. Readings will include novels and in-depth study of specific authors and their writings. Writings will be both formal and informal and include research-based, text-based, and personal writing.

English II

Sophomore - Senior

1 Credit

Prerequisites: Passing grade in English I

Course Description: This class will emphasize the basic English skills needed to succeed in high school English classes. The elements of

fiction and non-fiction, analysis of fiction and non-fiction readings, thematic development, propaganda and satire, author choice and style, and evidence based writing will be the essential elements covered. Students will read fiction and non-fiction selections, both short and long, in genre units and thematic units. Writings will be both formal and informal and include research-based and text-based.

Honors English II

Sophomore

1 Credit

Prerequisites: English I or Honors English I with a minimum grade of B and teacher recommendation

Course Description: This class will emphasize the basic and higher level English skills needed to succeed in high school Honors English classes. The elements of fiction and non-fiction, analysis of fiction and non-fiction readings, thematic development, propaganda and satire, author choice and style, and evidence

based writing will be the essential elements covered. Students will read fiction and non-fiction selections, both short and long, in genre units and thematic units. Readings will include novels and in-depth study of specific authors and their writings. Writings will be both formal and informal and include research-based, text-based, and personal writing.

English III

Junior - Senior

1 Credit

Prerequisites: Passing grade in English I

Course Description: This class will emphasize the basic English skills needed to succeed in high school English classes. The elements of fiction and non-fiction, analysis of fiction and non-fiction readings, thematic development, rhetoric, author choice and style, and evidence based writing will be the essential elements covered. Students will read fiction and non-fiction selections, both short and long, in genre units and thematic units. Writings will be both formal and informal and include research-based and text-based.

Honors English III

Junior

1 Credit

Prerequisites: English II or Honors English II with a minimum grade of B and teacher recommendation

Course Description: This class will emphasize the basic and higher level

English skills needed to succeed in high school Honors English classes. The elements of fiction and non-fiction, analysis of fiction and non-fiction readings, thematic development, rhetoric, author choice and style, and evidence based writing will be the essential elements covered. Students will read fiction and non-fiction selections, both short and long, in genre units and thematic units. Readings will include novels and in-depth study of specific authors and their writings. Writings will be both formal and informal and include research-based, text-based, and reflective writing.

English IV

Senior

1 Credit

Prerequisites: Passing grade in English III

Course Description: This class will emphasize the basic English skills needed to succeed in high school English classes, with emphasis on skills needed for college entry-level English courses. The elements of fiction and non-fiction, analysis of fiction and non-fiction readings, thematic development, rhetoric, and connection based writing will be the essential elements covered. Students will read fiction and non-fiction selections, both short and long, in thematic units. Writings will be both formal and informal and include research and text-based and personal and reflective writing.

Honors English IV

Senior

1 Credit

Prerequisites: Honors English III with a minimum grade of B and teacher recommendation

Course Description: This class will emphasize the basic English skills needed to succeed in high school English classes, with emphasis on skills needed for college entry-level English courses. The elements of fiction and non-fiction, analysis of fiction and non-fiction readings, thematic development, rhetoric, and connection based writing will be the essential elements covered. Students will read fiction and non-fiction selections, both short and long, in thematic units. Discussion techniques will be a main focus, therefore, attendance is a major factor in the student's success. Writings will be both formal and informal and include research and text-based and personal and reflective writing.

Extended English

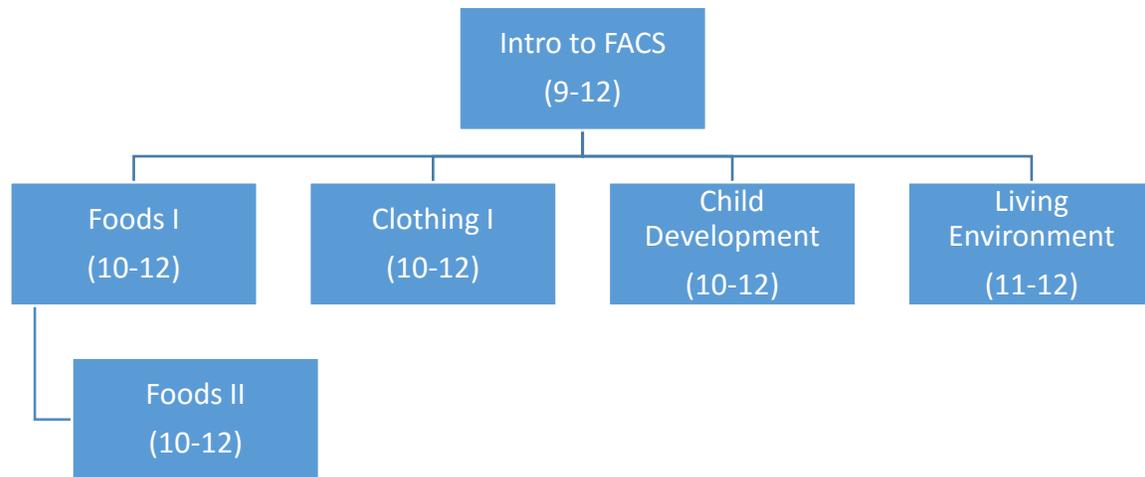
Freshman

1 credit

Prerequisites: test scores must indicate need for intervention

Course Description: This course will focus on vocabulary development, fluency, rate, comprehension, and written response to reading. Students will engage in whole class and individual online lessons. Students can test out at semester if testing reveals they are caught up to grade level in fluency and comprehension.

FAMILY AND CONSUMER SCIENCES



Introduction to Family and Consumer Sciences

Freshmen - Senior

1 Credit

Prerequisites: None

Description of Class: This course is a basic introduction to Family and Consumer Sciences. It includes classroom and laboratory experiences. Emphasis is given to personal traits/habits, nutrition, basic food skills, sewing skills, as well as parenting topics. Learning experiences assist students in understanding themselves, their role in today's society and career opportunities in the Family and Consumer Sciences. The FCCLA program will be integrated throughout the course but is not mandatory to be a member of. *Note: This class MUST be completed before taking any other FCS classes.*

Foods I

Sophomore - Senior

.5 Credit

Prerequisites: Successful completion of Intro to FACS

Description of Class: The purpose of the Foods Science and Nutrition 1 class, is to provide the students with nutritional information to help them make healthier food choices. The Students will also be provided with food lab experiences emphasizing proper safety and sanitation. Basic food preparation skills will be used.

Foods II

Sophomore - Senior

.5 Credit

Prerequisites: Successful completion of Intro to FACS and Foods I

Description of Class: The purpose of the Foods Science and Nutrition 2 class, is to provide the students with the abilities to pair foods together to complement each other. The Students will also be provided with food lab experiences emphasizing proper safety and sanitation. Basic food preparation skills will be used as well as more challenging cooking/preparation skills. Students will be required to taste the foods that are created. If a student is a picky

eater, they should not take this class. There will be a lot of food labs in this class.

Clothing I

Sophomore - Senior

.5 Credit

Prerequisites: Successful completion of Intro to FACS

Description of Class: This course provides knowledge and understanding of textiles, fashions, and fabrics necessary in meeting the clothing and fabric (fashion) product needs of individuals, families, and the general public. The course content centers on developing student competencies in understanding fibers & fabrics, figure types, patterns, & sewing equipment. Basic construction techniques are learned. Sewing/Craft projects will be done in this class.

Child Development

Sophomore - Senior

.5 Credit

Prerequisites: Successful completion of Intro to FACS

Description of Class: Child development is the study of children and their growth and development as they move through various stages of life. Students will receive practical, usable skills to assist them in becoming better educated and better prepared caregivers, siblings, parents, and citizens. The development of children will be emphasized. Group/individual projects will be completed in this class. *Note: the*

simulated infant project is completed in this class.

Living Environments

Junior - Senior

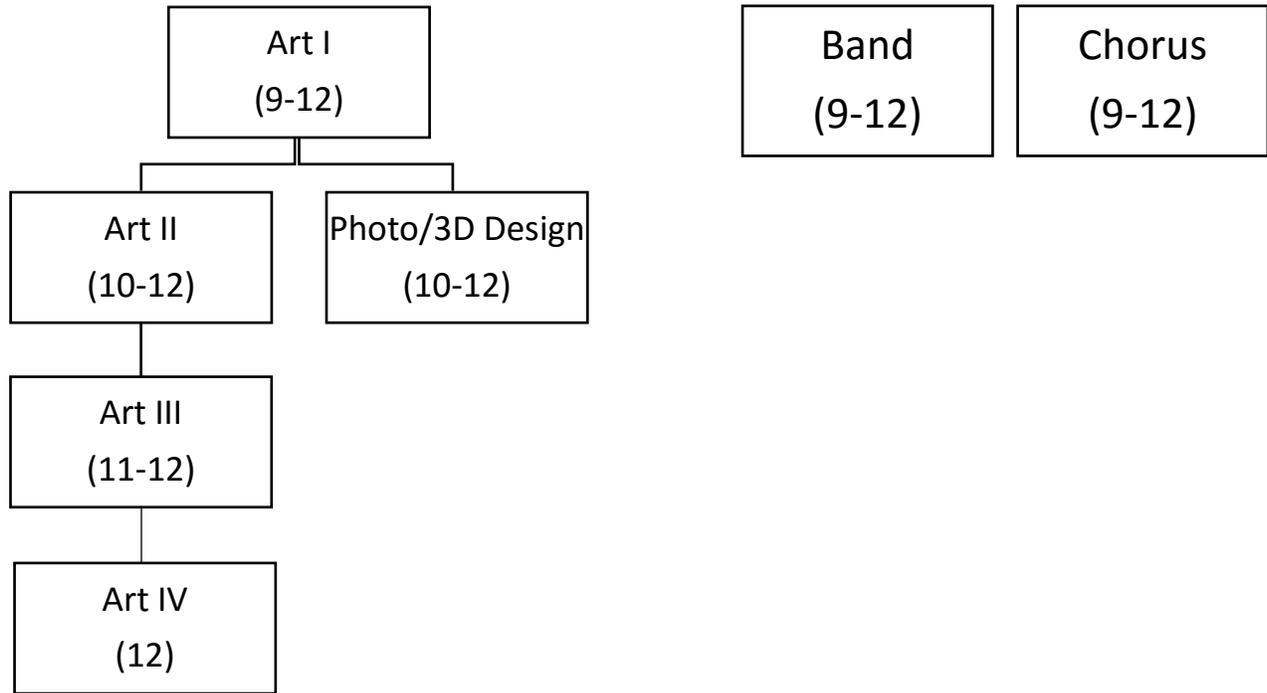
.5 Credit

Prerequisites: Successful completion of Intro to FACS

Description of Class: This course is designed to provide students with an introduction to the housing and

interior design field. Learning experiences will be related to the selection of housing, furnishings and application of interior design theories to meet environmental, societal and comparison shopping, savings, installment purchasing, and decision making skills. Information on careers related to housing will be incorporated throughout the course. There will be several design projects required to complete in this class.

FINE ARTS



ART

Art I

Freshmen - Senior

1 Credit

Prerequisite- None

Course Description: Art 1 is an introductory course in which students will explore and express art concepts, processes, materials, and techniques. Such art concepts will include the basic art fundamental known as the elements and principles of art, art history, and art criticism. This introductory course will allow students to experiment with a variety of art processes (drawing, painting, sculpture, and ceramics) and materials (graphite pencil, pastel, clay, and paint). Students will explore questions such as "What is art? What is the purpose of art? Why do we make art? How can art and art making become personally meaningful?" Throughout this course, students are expected to think creatively and

critically with art and art making. A sketchbook and a regular #2 pencil are required for this course.

Art II

Sophomore - Senior

1 Credit

Prerequisite- Successful completion of Art I with a "C" average.

Course Description: Art II is a second level course in which students will continue to explore, express, and discuss art concepts, processes, materials, and techniques demonstrated by artists throughout time. Art II is designed to offer a concentrated focus on drawing and painting. Students will analyze and identify various art concepts displayed in famous works of art and explore various art styles from the past and present, such as Abstract, impressionism, expressionism, conceptual, and contemporary art to

include in their artistic process. Students will apply art history knowledge and basic art fundamentals (elements and principles) to plan and create an artwork that expresses an intended meaning or big idea.

Art III

Junior - Senior

1 Credit

Prerequisite- Successful completion of Art II with a "B" average.

Course Description: Art III is a third level advanced art course that is designed for students who have a serious interest in art and have successfully completed both Art I and Art II. Students will work more independently as they experiment with variety of drawing and painting techniques and materials to create advanced pieces of art. Students are expected to demonstrate mastery of

advanced level design by applying knowledge (gained from art 1 & 2 courses) of the artistic process, techniques, and the elements and principles of art in to their work. For ever artwork students will brainstorm, plan, connect, and construct a meaningful artwork based on a “big idea” (Time, Memory, Place, or Desire). Students will continue ongoing critical analysis through group and individual critiques throughout the creative process, to analyze personal work and the work of their peers. In addition, students will collect planning notes/reflections, thumbnail sketches, and final projects to develop a process portfolio at the end of each semester.

Art IV

Senior

1 Credit

Prerequisite- Successful completion of Art III with a “B” average and teacher approval.

Course Description: Art IV is a highly advanced class in which students are expected to apply their knowledge (gained in 1-3 art courses) of artistic techniques, processes, and elements & principles of design to develop a semester portfolio that contains series of meaningful artworks that are based on one “big idea”. For each semester, students will develop a portfolio that is created through the Breadth, Concentration, and Quality process. Each semester portfolio will display fundamental ability, range of understanding in design and methods, and demonstrate a depth of investigation and process of discovery.

Breadth: Breadth refers to the brainstorming and planning process of an artwork. The student’s work in this section should show evidence of conceptual, expressive, and technical range. Students must develop visual notes and sketches to decide on a meaningful big idea that will be the

relating factor of the series of work. Once big idea is chosen, construct a total of 12 thumbnail sketches of different compositions to demonstrate a variety of subject matter, processes, and techniques.

Concentration: A concentration is smaller artwork (mini project) that is constructed to experiment with previously planned ideas to develop a strong composition and demonstrated mastery in artistic technique. The concentration focuses on a process of investigation, growth, and discovery to provide meaning to the artwork and the incorporation of the elements of art. In this section, students will display visual evidence of the student’s brainstorming and thinking process, artistic materials and techniques used, and development of the work over time. Students are to complete twelve 12 concentrations or mini projects that are completed or partial completed to prepare for the quality artworks.

Quality: Quality refers to the total work of art — the concept, the composition and technical skills demonstrated, and the realization of the artist’s intentions. For this section of the portfolio, students are asked to select 4 examples of their best artworks that demonstrate mastery of design in concept, composition, and execution. The composition must be well thought out and displays how the principles of art (variety, unity, repetition etc.) are used to organize the elements of art (line, shape, value, etc.).

3D Design (Photography and Sculpture)

Sophomore - Senior

1 Credit

Prerequisite- Successful completion of Art I with a “C” average

Course Description: 3-D & Photography is a course in which

students will explore and express art concepts, processes, and techniques in digital photography and in three-dimensional design. This course will be divided into semester courses: Semester 1- digital photography & Semester 2- Three-dimensional design.

1st semester: Digital Photography- A course to provide students to become better-rounded in the fundamentals of digital photography. Five areas of instruction will be emphasized: how cameras work, how to create a strong composition, how lighting works, how to use photo editing software (Photoshop) to edited photos and add visual effects, and what makes a successful photo and what does not. Students will also produce digital artworks that represent a big idea.

2nd Semester: Sculpture-A course in the exploration of the three-dimensional form. Students will work with clay, plaster, wood, wire, and mixed media to construct a three-dimensional preplanned work of art. The course concentrates on developing technical skills and artistic appreciation of successful three-dimensional artwork.

MUSIC

Band

Freshmen – Senior

1 Credit

Prerequisites: None

Course Descriptions: Band rehearses five days a week during the school year and periodic extra rehearsals. Being incorporates Concert Band, Marching Band, Pep Band, Jazz Band, Drumline and extensive Solo-Ensemble work. This program provides a well-rounded musical experience for students. Students are expected to perform at various concerts throughout the year and State Solo-Ensemble and Organizational Contest as well as various Marching and Jazz Band

Contests. The Pep Band may perform at selected athletic events in the Marching Band at home football games. Concert Band is expected to perform at graduation as well. Civic obligations such as parades and festivals will be expected as well as Memorial Day. Opportunities for selected students include District and All-State Festival work, Honor Bands and All-Conference Band Festival.

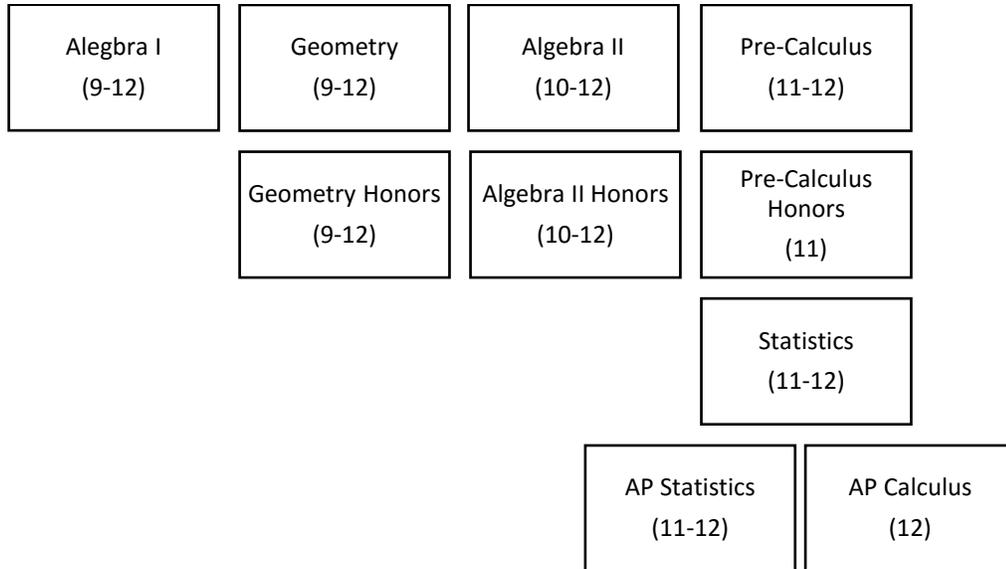
Chorus

Freshmen – Senior
1 Credit
Prerequisites: None

Course Descriptions: Chorus rehearses five days a week. Chorus give students an opportunity to sing a variety of styles of music and includes organizations such as Mixed Choir, Trouble Choir, Bass Player and Jazz Choir as well as extensive opportunities in Solo-Ensemble work giving students a well-rounded vocal

experience. Vocal students are expected to perform at various concerts throughout the year and State Solo-Ensemble and Organizational Contests as well as other events, which may be held. Chorus students have additional opportunities for participation in District and All State Festival work, Honors Choir and All-Conference Chorus Festival as well as other civic opportunities.

MATHEMATICS



Algebra I

Freshman - Senior

1 Credit

Prerequisites: Based on ISAT scores, placement test score, past math grades, and math committee recommendation, students may require concurrent enrollment in Extended Math.

Course Description: Topics include: inequalities, linear functions and their graphs, systems of equations, exponential, polynomials and factoring, quadratic equations, basic probability and statistics. An emphasis will be placed on taking concepts and transferring that knowledge into real world tasks.

Geometry

Freshman - Senior

1 Credit

Prerequisites: Algebra I – Exception: Students who have passed the first

semester of Algebra I and are currently enrolled in the second semester of Algebra I and Extended Math. Extended Math will be assigned to students who earned a D or F in Algebra 1 or need additional assistance in Geometry.

Course Description: This course covers geometric concepts such as proofs involving angles and triangles, similarity, trigonometry, object transformations, area, volume, and circles. Graphing and constructions will be studied heavily to prepare for Algebra 2. Students are expected to use the computer programs Desmos and Geogebra to complete some graphing tasks. An emphasis will be placed on transferring knowledge to other content areas and applying knowledge to accomplish a task.

Geometry Honors (Weighted)

Freshman - Senior

1 Credit

Prerequisites: A in Algebra I taken during eighth grade along with prior instructor approval or an A in Algebra I, taken during freshmen year with current instructor approval.

Course Description: This course covers geometric concepts such as proofs involving angles and triangles, similarity, trigonometry, object transformations, area, volume, and circles. Graphing and constructions will be studied heavily to prepare for Algebra 2. Students are expected to use the computer programs Desmos and Geogebra to complete some graphing tasks. An emphasis will be placed on transferring knowledge to other content areas and applying knowledge to accomplish a task. This class will focus on preparing students for Algebra 2 and college level math courses.

Algebra II

Sophomore - Senior

1 Credit

Prerequisites: None

Course Description: This course provides a review of the concepts of Algebra I. New concepts studied include complex numbers, radical functions, rational functions, sequences and series, and logarithms. A brief introduction to trigonometry is included.

Algebra II Honors (Weighted)

Sophomore - Senior

1 Credit

Prerequisites: A "B" average in Honors Geometry and/or instructor recommendation.

Course Description: This course is similar to Algebra II, but progresses at a faster pace to cover more material and more in-depth. The purpose of the course is to prepare students for Pre-calculus and Calculus This course provides a review of the concepts of Algebra I. New concepts studied include complex numbers, radical functions, rational functions, sequences and series, and logarithms. A brief introduction to trigonometry is included.

Pre-Calculus & Trigonometry

Juniors-Seniors

1 semester

½ credit

Prerequisites: A or B in regular Algebra II or a C in Algebra II honors or prior instructor recommendation. Senior Level Course.

Course Description: This course serves as an advancement of Algebra II with an introduction and focus into Trigonometry. The goal of this course is to enhance mastery of Algebra II topics in a new setting. Topics include: functions, exponents, trigonometric functions and analytic geometry. This course has normal pacing and structure. Intended as a fourth year Mathematics class for seniors with a stronger mathematical background.

Pre-Calculus & Trigonometry Honors (Weighted)

Juniors

1 credit

Prerequisites: A or B in Algebra II Honors and/or current instructor approval. An A in Algebra II with prior instructor and current instructor approval. This course is intended for juniors intending on entering AP Calculus, and for select seniors intending on taking college level Calculus.

Course Description: This course serves as a catapult course into AP Calculus. The goal of this course is to prepare the student for AP Calculus AB. There is a focus on Mathematical concepts including: Polynomial and rational functions, exponential and logarithmic functions, analytic geometry, trigonometric functions, discrete mathematics, vectors and limits. The course has an increased pace and includes several topics in a Calculus based setting.

Advanced Placement Statistics (Weighted)

Juniors-Seniors

1 credit

Prerequisites: A or B in Algebra II and/or have current instructor & guidance counselor approval. Commitment to taking the exam is expected, but not required. AP Statistics usually will be taken in either the junior or senior year, but may be taken earlier.

Course Description: The AP Statistics course is equivalent to a one-semester, introductory, non-calculus-based college course in statistics. The course introduces students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. There are four themes in the AP Statistics course: exploring data, sampling and

experimentation, anticipating patterns, and statistical inference. Students use technology, investigations, problem solving, and writing as they build conceptual understanding.

Statistics

Seniors

1 semester

½ credit

Prerequisites: B in Algebra II or prior-instructor recommendation. Senior Level Course.

Course Description: This course serves as a general introduction to statistics, focusing on mathematical reasoning and the solving of real life problems. Contents include: descriptive methods, measures of central tendency, probability theory, combinatorics, distributions, sampling techniques, tests of hypotheses and more. Pacing is slightly slower, but the course use theory towards the exploration of real-life scenarios. Course relies heavily on projects and real-world data. This course is for intended for as a fourth year mathematics to any senior that wants to expand their Mathematical Knowledge without the AP intensity or college credit.

Advanced Placement Calculus AB (Weighted)

Seniors

1 credit

Prerequisites: A or B in Pre-Calculus, commitment to take the AP exam, and/or current instructor & guidance counselor approval.

Course Description: AP Calculus AB is roughly equivalent to a college calculus course devoted to topics in differential and integral calculus. The AP course covers topics in these areas, including concepts and skills of limits, derivatives, definite integrals, and the Fundamental Theorem of Calculus. The course teaches students to approach calculus concepts and problems when they are represented graphically, numerically, analytically,

and verbally, and to make connections amongst these representations. Students learn how to use technology to help solve problems, experiment, interpret results, and support conclusions. Success in AP Calculus is closely tied to the preparation students have had

in courses leading up to their AP courses. Students should have demonstrated mastery of material from previous Mathematic courses. Students who take an AP Calculus course should do so with the intention of placing out of a comparable college calculus course.

This may be done through the AP Exam, a college placement exam, or any other method employed by the college.

PHYSICAL EDUCATION

Physical Education

Freshmen – Senior

1 Credit

Prerequisites: Graduation Requirement

Course Description: Every student is required to take a physical education class every semester enrolled at Iroquois West High School. Physical Education is an important facet of the total educational process. Each student will develop an understanding of human movement through exposure and participation in a program of individual and group experiences. The program helps the students develop physically, socially, mentally and emotionally. The coeducational class involves daily calisthenics, running, conditioning and individual or group game activities. The criteria used to evaluate the units includes sports, recreational games, fitness and lifetime fitness/sports. Evaluation will be based on a daily ten-point system divided into five areas: (1) student dress; (2) fitness (calisthenics) and running; (3) attitude; (4) participation and effort; and (5) weekly test grades.

Health

Freshmen – Senior

.5 Credit

Prerequisites: Graduation Requirement

Course Description: Every student is required to take Health. Health provides learning experiences for the student in order to increase knowledge, habits and attitudes pertaining to the student's health. Physical, social and mental-emotional growth will be important topics in the class. Some of the topics will include anatomy, physiology, body systems, food and fitness, AIDS, alcohol and drug abuse, hygiene, disease and illness, sexual education, abstinence, sexually transmitted disease, consequences of unwanted pregnancy, sexual harassment, steroid abuse, growth and development and lifetime fitness.

Driver's Education - Classroom

Freshmen – Senior

.25 Credit

Prerequisites: Student needs to pass at least 8 classes (4 credits) before taking this course. Graduation Requirement

Course Description: Driver education is a one semester sophomore level course designed to:

- 1) Develop mature attitudes towards driving;
- 2) Provide the student with a broad general knowledge of problems of traffic safety;
- 3) Familiarize the student with the mechanical functions of the automobile and its components;

4) Provide the students with a broad base of actual driving experience. The course is divided into two parts - classroom and behind the wheel. The classroom portion is required for all sophomores. The driving portion is optional. In order for a student to obtain his/her driver's license before reaching 18 years of age, he/she must pass both sections of this course. State law requires successful completion of eight classes (courses) previous to the beginning of this class.

Advanced Physical Education

Sophomore – Senior

1 Credit

Prerequisites: None

Course Description: Advanced Physical Education is a course designed primarily for varsity athletes to improve athleticism. While non-athletes are welcome to join the class, some level of weight room experience is recommended. The course focuses on strength and speed development through a variety of workouts designed to challenge students. Classes are primarily student led, which provides younger and less experienced students an opportunity to learn from their more experienced classmates.

SCIENCE

FRESHMEN	SOPHOMORE	JUNIOR	SENIOR
	Physical Science (9-10)	Environmental Science (11-12)	
Biology (9)	Chemistry (10-11)	Physics (11-12)	Anatomy & Physiology (12)
Honors Biology (9)	Honors Chemistry (10-11)		AP Physics (12)

Biology

Freshmen

1 Credit

Prerequisites: Students will be placed upon previous science class performance

Course Description: An in-depth look at the living-world around us. Students will cover the following topics: Structure and Function, Matter and Energy in Organisms and Ecosystems, Interdependent Relationships in Ecosystems, Inheritance and Variation of Traits, and Natural Selection and Evolution. Students will conduct laboratory exercises to reinforce concepts and practices. Whenever possible labs will be done traditionally but may be done virtually, if necessary. Students may also have the opportunity to do dissection on preserved specimen. This is a required course.

Honors Biology

Freshmen

1 Credit

Prerequisites: Students will be placed upon previous science class performance

Course Description: An in-depth look at the living-world around us. Students will cover the following topics: Structure and Function, Matter and Energy in Organisms and Ecosystems, Interdependent Relationships in Ecosystems, Inheritance and Variation of Traits, and Natural Selection and Evolution. Students will conduct laboratory exercises to reinforce concepts and practices. Whenever possible labs will be done traditionally but may be done virtually, if necessary. Students may also have the opportunity to do dissection on preserved specimen. This is a required course. Honors will have increased rigor in content, practice, and laboratory exercises. Students are advised to purchase safety goggles and gloves for dissections. Goggles may be used in further science courses if they meet safety standards.

Physical Science

Sophomore – Junior

1 Credit

Prerequisites: Placement in this course will be based upon science and math performance.

Course Description: This course is an introduction to the two major physical science fields: Chemistry and Physics. Students will learn conceptual science as well as apply mathematics to basic systems. Topics to be covered include: Structure and Properties of Matter, Chemical Reactions, Forces and Interactions, Energy, and Waves and Electromagnetic Radiation. Students will have virtual and traditional lab experiences. Students are advised to purchase personal safety goggles.

Chemistry

Sophomore – Junior

1 Credit

Prerequisites: Placement in this course will be based upon science and math performance.

Course Description: Students in Chemistry will focus primarily on understanding the structure and properties of matter and the basics of chemical reactions. This course

will also discuss real world science issues and teach students to become familiar with understanding how to think critically about everyday issues. Students are required to have goggles to do labs that further explain matter and chemical reactions in a hands on setting. Labs will be done regularly in class.

Honors Chemistry

Sophomore

1 Credit

Prerequisites: Students will be placed upon previous science class performance and instructor approval.

Course Description: Students in Chemistry will focus primarily on understanding the structure and properties of matter and the basics of chemical reactions. This course will also discuss real world science issues and teach students to become familiar with understanding how to think critically about everyday issues. Students are required to have goggles to do labs that further explain matter and chemical reactions in a hands on setting. Labs will be done regularly in class. **Honors Chemistry will have more in depth work and more rigor than regular Chemistry**

Environmental Science

Junior - Senior

1 Credit

Prerequisites: Placement in this course will be based upon science and math performance.

Course Description: This course is an interdisciplinary science that integrates physical and life sciences. The course content will include a History of the Earth,

Ecological Systems, Population Studies, the Various Matter Cycles, and Historical Environmental Issues. Students will have virtual and traditional lab experiences. Students who are interested in environmental occupations should consider this course.

Anatomy and Physiology

Senior

1 Credit

Prerequisites: Placement in course will be based upon previous science performance and instructor approval.

Course Description: Course format will be that of a college course.

Students will cover a wide range of topics including: Nutrition and the Digestive System, Forensics and the Skeletal System, Sports Medicine and the Muscular System, and basic Medical Application. Students will watch surgery and anatomy videos often. Students will be responsible for a large volume of material and tests will be cumulative throughout each unit of study. Students will have dissections of different organs and specimen, including a cat. Students will read the novel, *Stiff*. End of year final will be a lab practical. This is an elective course. Students who are squeamish or feel strongly against dissection are advised to think carefully before enrolling. There is a class size limit due to materials and space for dissection. Students are advised to purchase gloves and safety glasses for dissection.

Physics

Junior - Senior

1 Credit

Prerequisites: Placement in course will be based upon previous science

performance and instructor approval.

Course Description: The course is an in depth look at the physical world and the properties of motion. This is a lab intensive course that requires students to complete hands on and interactive labs. An emphasis is put on inquiry that requires students to develop critical thinking and reasoning skills. This course will help prepare students for taking AP Physics the following year, or for preparing them for a college physics course. Placement in this course will be based on science and math performance as well as instructor approval.

Advanced Placement Physics

Senior

1 Credit

Prerequisites: Placement in course will be based upon previous science performance and instructor approval.

Course Description: Students in AP Physics will focus on the big ideas typically associated in the first semester of an algebra based college physics class. Through inquiry based learning, students will develop critical thinking and reasoning skills. Students will cultivate their understanding of physics and science practices as they explore the following topics: Kinematics; Dynamics; Circular motion and universal law of gravitation; simple harmonic motion; simple pendulum and mass spring systems; impulse, linear momentum, and conservation of linear momentum; collisions; work, energy, and conservation of energy; rotational motion; torque, rotational kinematics and energy, rotational dynamics, and conservation of

angular momentum; electrostatics,
electric charge and electric force,
DC circuits; mechanical waves and
sounds.

SOCIAL SCIENCE

FRESHMEN	SOPHOMORE	JUNIOR	SENIOR
World History (9-12)	Global Studies (10-12)	American History (11-12)	Civics (12)
	American Originals (10-12)	AP United States History (11-12)	
		AP Psychology (11-12)	
		Introduction to Pyschology (11-12)	
		Sociology (11-12)	

World History

9-12

.5 Credit

Prerequisites:

Course Description: This course is a general history of nations, events, and eras that left a significant and lasting impact on global societies. An emphasis is placed on those nations and civilizations outside of the United States. The course will begin with prehistoric man and work through influential ancient civilizations such as the Mesopotamians, Egyptians, Greeks, and

Romans. The Fall of the Roman Empire will provide the transition into the Medieval Period, Renaissance and Reformation, Age of Discovery, and Imperialism. The last portion of World History will focus on the Industrial Revolution, French Revolution, and Twentieth Century.

Global Studies

10-12

.5 Credit

Prerequisites: None

Course Description: Global Studies is designed to emphasize how location of land affects the social, cultural, and economical habit of its occupants. Emphasis is placed on regional studies and current issues, using the five themes of geography: location, place, human-environment interaction, movement, and region. Student s will analyze print and non-print materials to discover the issues and causes that plague different regions of the world.

American History

11-12

1 Credit

Prerequisites: Graduation Requirement

Course Description: The course will be an overview of history from the age of exploration and colonization to the present. Emphasis is placed on the growth and development of political, social, economic, and cultural institutions. An attempt will be made to tie events of the past to events of today. Students will be expected to investigate reasons for past events as they relate to the understanding of our heritage. Students will analyze a variety of primary sources to understand past events. The ultimate purpose of this course will be to prepare students to make judgments in the future based on the events of the past.

Advanced Placement United States History

11-12

1 Credit

Prerequisites: Honors English with A or B average and 1 semester of a Social Science

Course Description: The APUSH course focuses on the development of historical thinking skills and an understanding of content learning objectives organized around seven themes. In line with college and university US history survey courses' increased focus on early and recent American history and decreased emphasis on other areas, the APUSH course expands on the history of the Americas from 1491 to 1607 and from 1980 to the present. This course assumes that the base level of knowledge will be primarily

obtained by the student on his or her own time. Through contemporary secondary sources, the current thought on major political, social, intellectual, and economic themes in American history are discussed. The works of great American writers and thinkers are also examined and analyzed through primary sources. Substantial time is also spent preparing students for the Advanced Placement Exam in May.

Sociology

11-12

1 Credit

Prerequisites: None

Course Description: Sociology is the study of human groups. The course looks at man organizing life into orderly patterns in both past and present. Sociology concentrates on developing an understanding of how groups like family, school, church and close friends begin and how they influence our daily lives. There is emphasis on the larger scene in terms of culture and nationality. The last half of the class is usually devoted to investigating the major social problems facing our society such as drug addiction and family problems. An effort is made to broaden the student views of the world in exposing them to some of the lifestyles that are different from our own.

Economics

11-12

1 Credit

Prerequisites:

Course Description: Economics deals with how man in society makes a living and his decisions as to how to spend his earnings. This

course deals with primarily with man's struggle to satisfy his unlimited wants with limited resources. Starting with what is known about very early man's struggle to survive, the course works into comparing economic systems currently in use and their origins. Economics examines how the American economic system works with emphasis on the function of money, banking, production, distribution and consumption.

Advanced Placement Psychology

11-12

1 Credit

Prerequisites: None

Course Description: AP Psychology is a dual-credit class designed to provide high school and college credit. Students must pass the AP Exam in the spring with a score of 3-5. Colleges and universities require different scores to receive college credit. Be sure to check which score your college requires. The AP Psychology course is designed to introduce students to the systematic and scientific study of the behavior and mental processes of human beings and other animals. Students are exposed to the psychological facts, principles, and phenomena associated with each of the major subfields within psychology. They also learn about the ethics and methods psychologists use in their science and practice.

Civics

12

.5 Credit

Prerequisites: Graduation Requirement and successful completion of US History or AP US History

Course Description: This course is designed to study the nature of local, state and national government structures. Students will be required to successfully complete the United States Constitution and the State of Illinois Constitution.

Introduction to Psychology

½ Credit

Junior - Senior

Prerequisite: None

Course Description: This course concentrates on understanding human behavior. The course covers the major personality

theories with emphasis on the psychoanalytic approach. In addition, units are taught on conditioning, principles of learning, motivation, thinking, frustration, emotions, sensation and perception. Course projects and term papers are assigned for different units.

American Originals

½ Credit

Sophomore - Senior

Prerequisite: None

Course Description: American Originals is a class designed around biographies of fascinating

individuals throughout American history. The class requires of the student some background of the various eras of American history, as it is not chronological and not designed to cover the major trends in American history. Instead, it focuses on the contributions of once famous or infamous characters whose careers have been forgotten, overlooked, or covered only superficially. The class does not focus exclusively on political figures. Pop figures, writers, architects, artists, scoundrels and saviors are all included.

SPANISH

Spanish 1
(9-12)

Spanish 2
(9-12)

Spanish 3
(10-12)

Spanish 4
(11-12)

Spanish 1

9-12

1 Credit

Prerequisites: None

Course Description: Spanish 1 will provide the student with a general introduction to the Spanish language: sound system, pronunciation, functional vocabulary related to everyday life, cultural information and basic grammatical structures. Emphasis will be on the acquisition of four skills: listening, speaking, reading and writing. There are two main objectives to the course. First is to give the students the ability to carry on a simple conversation. The second is to provide the students with instruction that teaches a basic understanding of Spanish culture, vocabulary, and grammar.

Spanish 2

9-12

1 Credit

Prerequisites: Successful completion of Spanish 1

Course Description: Spanish 2 builds upon knowledge gained in Spanish 1. This course will also reinforce the skills learned in Spanish I: listening, speaking, reading and writing. Emphasis of this class is grammar and increased communicative proficiency. Acquisition of functional vocabulary is expected. Students will be exposed to the past tenses and commands.

Spanish 3

10-12

1 Credit

Prerequisites: Successful completion of Spanish 1 & 2

Course Description: This course builds upon knowledge gained in Spanish 1 & 2. Students will be

exposed to new vocabulary and grammar including future, conditional present perfect and subjunctive. Students will also read a short novel in Spanish.

Spanish 4

11-12

1 Credit

Prerequisites: Successful completion of Spanish 1, 2, and 3

Course Description: This course uses knowledge gained through Spanish 1-3 while adding in new vocabulary and grammar concepts such as relative pronouns, por y para and any other verb tenses that have not been covered. Students will be expected to expand both vocabulary knowledge and grammar knowledge. The emphasis of this course is on conversation: fluency and proficiency.