

GREENFIELD
HIGH
SCHOOL

**Curriculum
Guide**

Revised: March 2021

AGRICULTURE

INTRODUCTION TO THE AGRICULTURAL INDUSTRY

Credit: 1

Grade 9/10/11/12

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, agriculture mechanics, agricultural biotechnology, food science technology, environmental science and aquacultural science and technology will be presented. The development of leadership, employability and computer skills will also be taught. Because FFA and Supervised Agricultural Experience Programs are integral components of this course, students are encouraged to maintain SAEPs and to participate in activities of the FFA.

BASIC HORTICULTURAL SCIENCE

Credit: 1

Prerequisite: Introduction to Agriculture

Grades 10/11/12

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. Participation in FFA student organization activities and Supervised Agricultural Experience (SAE) projects are an integral course component for leadership development, career exploration and reinforcement of academic concepts.

AGRICULTURAL BUSINESS MANAGEMENT

Credit: 1

Prerequisite: One year of agriculture

Grades 11/12

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

BASIC AGRICULTURAL MECHANICS

Credit: 1

Prerequisite: Introduction to Agriculture or Introduction to Industrial Technology
Grades 11/12

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. 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.

GREENHOUSE PRODUCTION AND FLORAL DESIGN

Credit: ½

Prerequisite: Horticulture or Instructor Approval
Grades 10/11/12

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. Units will be introduced in merchandising, advertising, sales, and operating a retail floral business. The development of leadership, employability, and computer skills will also be taught. Because FFA and SAEPs are integral components of this course, students are encouraged to maintain SAEPs and to participate in activities of the FFA organization.

LANDSCAPING AND TURF MANAGEMENT

Credit: ½

Prerequisite: Horticulture or Instructor Approval
Grades 10/11/12

This advanced course focuses on the landscape, nursery, and turf segments of the horticulture industry. Units of study include: identifying landscape plans, designing 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 calculating prices for work, managing a horticultural business, advertising and sales. The development of leadership, employability, and computer skills will also be taught. Because FFA and SAEPs are integral components of this course, students are encouraged to maintain SAEPs and to participate in activities of the FFA organization.

BIOLOGICAL SCIENCE APPLICATIONS IN AGRICULTURE

Credit: 1

Grades 10/11/12

This course is designed to reinforce and extend students understanding of science by associating basic scientific principles and concepts with relevant applications in agriculture. Students will

examine major phases of plant growth and management in agriculture and the specific biological science concepts that govern management decisions. Topics of study are in the areas of initiating plant growth – germination, plant sensory mechanisms, enzyme action, absorption, and managing plant growth – photosynthesis, respiration, translocation, metabolism, and growth regulation. Students will also examine major phases of animal agriculture and specific biological science concepts that govern management decisions in the animal industry. Topics of study are in the areas of growth and development of animals – embryology, ethology, nutrition, immunity systems, and processing animal products – preservation, fermentation, and pasteurization. The course will be valuable preparation for further education and will increase the relevance of science through the applied setting of agriculture by enhancing literacy in science and the scientific process. 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.

AGRICULTURAL METAL FABRICATION

Credit: 1

Grade 12

This course will emphasize the development of basic welding and metalworking skills necessary to succeed in agricultural careers in the agricultural metal fabrication industry. Topics of instruction include: metal identification and properties, metal preparation, use of oxy-acetylene torch, plasma cutting and cutting operations, arc welding, MIG welding, TIG welding, and project design and construction. 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.

BUSINESS

BUSINESS TECHNOLOGY CONCEPTS

Credits: 1

Grades 9/10/11/12

This 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. This course is not intended to meet the consumer education requirement, but rather to provide preparation for the skill level courses that make up the Business, Marketing and Management occupations programs.

ACCOUNTING I

Credit: 1

Grades 10/11/12

Accounting I is a course that assists students pursuing a career 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.

ACCOUNTING II

Credit: 1

Grades 11/12

Accounting II is a course that builds upon the foundation established in Accounting I. This course is planned to help students to 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: partnerships, corporations, branches, etc. The students may become familiar with such specialized fields of accounting as cost accounting, tax accounting, payroll accounting, and others. Some students may choose to do specialized accounting computer applications, and others may elect payroll clerk, data processing computer applications. Simulated business conditions may be provided through the use of practice sets. Skills are developed in the entry,

retrieval, and statistical analysis of business data using computers for accounting business applications.

COMPUTER CONCEPTS AND SOFTWARE APPLICATIONS

Credit: 1

Grades 9/10/11/12

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. This course is required for graduation.

COMPUTER GRAPHICS

Credit: 1

Grades 11/12

Computer Graphics provides students with the opportunity to explore the capability of the computer to produce visual imagery and to apply graphic techniques to various fields. Course topics include modeling, simulation, animation, and image retouching. Students are responsible for generating ideas and designing the yearbook (as well as raising money for the yearbook). Students will use Photoshop and Adobe InDesign.

RECORD KEEPING

Credit: 1

Grades 10/11/12

Record keeping develops understanding of and skill in maintaining accurate records; includes skills used in everyday business activities both for personal and professional use; provides an opportunity to develop skills related to personal financial management as well as budgeting, financial planning, cashier's records, handling of money, and tasks common to simple office practices.

CEO

Credit: 2

Grade 12

The CEO Program enables students to become self-reliant, enterprising individuals who will start successful businesses and contribute to the ongoing economic development of their communities. Student needs to be a senior with 3.0 cumulative GPA to apply. Selection is made by committee affiliated with the CEO program.

DRIVERS' EDUCATION

DRIVERS' EDUCATION

Grades 9/10

Credit: ½

Classroom Phase – the course is designed to acquaint the student with Illinois driver's license laws, traffic signs and signals, traffic regulations, laws pertaining to accidents, automobile insurance, fundamental principles of operation of the automobile, laws governing driving qualities necessary for good driving, physical and psychological fitness of the driver and many other areas. Drivers' Education provides students with the knowledge and experience to become safe drivers on America's roadways.

Driving Phase – the mechanics of driving are practiced and developed in the car which consists of (6) hours of actual driving time. Skills such as steering, stopping, shifting, turning, backing, parking, etc. are developed while driving in various traffic situations. Experience in driving a vehicle is an essential component of this course.

FINE ARTS

Comprehensive art courses provide students with the knowledge and opportunity to explore an art form and to create individual works of art. These courses may also provide a discussion and exploration of career opportunities in the art world. Initial courses cover the language, materials, and processes of a particular art form and the design elements and principles supporting a work of art. As students advance and become more adept, the instruction regarding the creative process becomes more refined, and students are encouraged to develop their own artistic styles. Although Creative Art courses focus on creation, they may also include the study of major artists, art movements, and styles.

ART I

Credit: 1

Grades 9/10/11/12

Introduction to drawing with pencil and ink. Studying value through shading and line use. Introduction to print making, group work on stage design and prop construction. Introduction to pottery with basic coil pot building.

ART II

Credit: 1

Grades 10/11/12

Introduction to painting on canvas with acrylic as well as watercolor. Still life study and self portrait using various media. Basic understanding of mosaic construction and continuation of pottery.

ART III

Credit: 1

Grades 11/12

Advanced painting with oil and acrylic paints, jewelry making and wire sculpture, works in clay sculpture.

ART IV

Credit: 1

Grade 12

Independent studies focusing on main area of interest in art production. Large emphasis in group and teacher critique.

FAMILY AND CONSUMER SCIENCE

INTRODUCTION TO FAMILY AND CONSUMER SCIENCES CAREERS Credit: 1

Grades 9/10/11/12

This course introduces students to the field of family and consumer sciences and the many career opportunities available in this broad field. The course includes theory and laboratory experiences in the following content areas: Nutrition and culinary arts; textiles and design; family, career, and community leadership development; resource management; human development and life-long learning; facility design, care, and management; and interpersonal relationships and life management skills.

TEXTILES AND DESIGN

Credit: ½

Grades 9/10/11/12

This course is designed to provide basic knowledge and understanding of the design, development, and production of textile products. Through hands-on and project based learning experiences students will discover fiber characteristics, fabric construction methods, elements of science and design in textiles and apparel, and basic construction skills used in interior furnishings and apparel industries. This course emphasizes awareness and investigation of careers and industry trends in textiles.

NUTRITION AND CULINARY ARTS I

Credit: 1

Grades: 9/10/11/12

This course includes classroom and laboratory experiences needed to develop a knowledge and understanding of culinary principles and nutrition for people of all ages. Course content encompasses: food service and preparation management using the decision-making process; meeting basic needs by applying nutrition concepts; meeting health, safety, and sanitation requirements; maximizing resources when planning/preparing/preserving/serving food; applying hospitality skills; analyzing nutritional needs in relation to change; and careers in nutrition and culinary arts, including entrepreneurship investigation.

NUTRITION AND CULINARY ARTS II

Credit: 1

Grades: 11/12

Nutrition and Culinary Arts II provides principles of application into the hospitality industry, including nutrition, culinary, and entrepreneurial opportunities. Course content includes the following: selection, purchase, preparation, and conservation of food, dietary needs and trends, regional & international cuisine, safety and sanitation, and careers in food service industries. All of these concepts can be interpreted through laboratory experiences.

CHILD DEVELOPMENT

Credit: ½

Grades 9/10/11/12

Child Development addresses the knowledge, skills, attitudes, and behaviors associated with supporting and promoting optimal growth and development of infants and children. The focus is on research-based nurturing and parenting practices and skills, including brain development research, that support positive development of children. Students will explore opportunities in human services and education-related careers and develop a career portfolio.

PARENTING

Credit: ½

Grades 9/10/11/12

This course is designed to help students think through the responsibilities, satisfactions and stresses of parenthood. Many types of parenting situations are examined. Stress prevention and management and the work of community agencies that help parents deal with various types of parenting crises are emphasized. The course content includes the following duty areas: managing and organizing parenting by applying real-life decision-making and goal-setting skills; applying the basic principles of the parenting process practicing health and safety standards as related to parenting; providing experiences which encourage parents and children to maximize resources; encouraging human relations skills on children/adolescents; and evaluating impact on parenting of family and career changes. Special attention is given to the needs of teenage parents and to the importance of readiness for parenthood.

FAMILY AND CAREER RELATIONSHIPS

Credit: ½

Grades 9/10/11/12

This course focuses on the identification and management of personal and family resources to meet the needs, values, and wants of individuals and families throughout the life cycle. The course utilizes a variety of project-based experiences and service learning opportunities to gain knowledge and expertise in understanding and applying management skills, with consideration to diverse social, economic, technological, environmental, and cultural characteristics of individuals and families. Topics include: consumer rights and responsibilities in the marketplace; financial responsibility and decision making; planning and money management; credit and debt; risk management and insurance; saving and investment; homeownership; state and federal taxes; electronic banking; and current issues in the economy.

INTERIOR DESIGN

Credit: ½

Grades 9/10/11/12

Living Environment provides students with knowledge and skills regarding interior design and decoration of the home for the individual or family. While exploring design principles, personal needs and style, and decision-making, students have an opportunity to explore such topics as color, texture, furniture styles and arrangement, lighting, window treatments, floor and wall

coverings, and home improvement/modification. This course emphasizes personal (rather than commercial) use and application of home décor principles.

FAMILY RESOURCE MANAGEMENT AND PLANNING

Credit: 1/2

Grade 11

This course focuses on the identification and management of personal and family resources to meet the needs, values, and wants of individuals and families throughout the life cycle. The course utilizes a variety of project-based experiences and service learning opportunities to gain knowledge and expertise in understanding and applying management skills, with consideration to diverse social, economic, technological, environmental, and cultural characteristics of individuals and families. Topics include: consumer rights and responsibilities in the marketplace; financial responsibility and decision making; planning and money management; credit and debt; risk management and insurance; saving and investment; homeownership; state and federal taxes; electronic banking; and current issues in the economy.

INDUSTRIAL TECHNOLOGY

INTRODUCTION TO TECHNOLOGY AND ENGINEERING

Credit: 1

Grades 9/10/11/12

Introduction to Technology and Engineering is comprised of the following areas: Production, Transportation, Communication, Energy Utilization and Engineering Design but is not limited to these areas only. This course will cover the resources, technical processes, industrial applications, technological impact and occupations encompassed by that system.

INDUSTRIAL ARTS

Credit: 1

Grades 10/11/12

This course is designed to introduce students to the Carpentry/Carpenter occupation. Students are instructed in areas of safety, including hand tool, power tool, ladder, scaffolding and the use of safety harnesses. Students are introduced to the theoretical knowledge needed to lay out rafter, stairs, and basic framing techniques. Students demonstrate knowledge of blueprint reading, including foundations, concrete, floor plans, specification schedules, and electrical, plumbing and mechanical symbols. Students demonstrate entry-level skills in all facets of residential construction. Technology-related mathematics, reading, writing, vocabulary, blueprint reading, and science are integrated throughout the curriculum.

CONSTRUCTION TRADES

Credit: 1

Grades 11/12

This course provides experiences related to the erection, installation, and maintenance of residential buildings and related fixtures. Planned learning activities allow students to understand fundamental principles and methods, and develop technical skills related to masonry, carpentry, and finish work. Instruction includes safety principles and practices, recognition of standard lumber sizes, foundation layout methods, building concepts and procedures, local, state, and national codes, cost estimating, and blueprint reading.

BUILDING MAINTENANCE

Credit: 1

Grades 11/12

This course includes learning experiences and skills in servicing building systems, repair and maintenance of machinery, maintaining plumbing systems, minor electrical repairs, essential heating ventilation and air conditioning system maintenance, painting, and basic carpentry. These experiences provide students the opportunity to become knowledgeable in a variety of practices and skills associated with all trades necessary to maintain a building's daily operations that are repair-related. The Building Maintenance course provides instruction and hands-on activities including the use of test equipment and tools, hand tools, basic electricity and carpentry and masonry skills.

LANGUAGE ARTS

ENGLISH I

Grade 9

Credit: 1

English I builds upon students' prior knowledge of grammar, vocabulary, word usage, and the mechanics of writing and includes the four aspects of language use: reading, writing, speaking, and listening. This course introduces and defines various genres of literature, with writing exercises often linked to reading selections.

ENGLISH II

Grade 10

Credit: 1

This course offers a balanced focus on composition and literature. Students learn about the alternate aims and audiences of written compositions by writing persuasive, critical, and creative multi-paragraph essays and compositions. Through the study of various genres of literature, students can improve their reading rate and comprehension and develop the skills to determine the author's intent and theme and to recognize the techniques used by the author to deliver his or her message. The literature is varied and includes classics such as *Julius Cesar*, *To Kill a Mockingbird*, *True Grit*, *Animal Farm* and *A Separate Peace*.

ENGLISH III

Grade 11

Credit: 1

This course continues to develop students' writing skills, emphasizing clear, logical writing patterns, word choice, and usage, as students write essays and begin to learn the techniques of writing research papers. Students continue to read works of literature, which often form the backbone of the writing assignments. Literary conventions and stylistic devices may receive greater emphasis than in previous courses. The literature selections are focused upon American authors.

ENGLISH IV

Grade 12

Credit: 1

The elective English IV course is designed for advanced students who plan to further prepare for four or more post high school years of education. Literature in the course is British, approximately three-quarters verse, plus two novels, *Lord of the Flies* and *On the Beach*. Students improve their critical-thinking skills as they determine the underlying assumptions and values within the selected works and as they understand how the literature reflects the society of the time. Oral discussion is an integral part of literature courses, and students in this class will write one typewritten argumentative research paper. To be admitted into this class, students should have earned a B in all other English classes as well as have completed a research paper with an understanding of each step in the process.

NOVELS

Credit: ½

Grades 9/10/11/12

The elective novels course will explore five to six novels through reading, writing, discussion, and viewing. A literary analysis paper will be assigned with most novels. This class is recommended for those students who plan to continue education after high school. The following novels are included on the reading list: *Silas Marner*, *The Adventures of Huckleberry Finn*, *The Great Gatsby*, *Fahrenheit 451*, *The Old Man and the Sea*, *Love Story*, *Brave New World* and *One Flew Over the Cuckoo's Nest*. Note – some novels may contain mature subject matter. This course offers the opportunity for students to study and reflect upon the themes presented in the body of literature being presented. Students improve their critical-thinking skills as they determine the underlying assumptions and values within the reading selection and as they understand how the work reflects society's problems and culture. Oral discussion is an integral part of literature courses, and written compositions are often required.

SHORT STORIES

Credit: ½

Grades 9/10/11/12

This one semester elective will focus on short stories from several time periods and countries. The short story will be analyzed through characterization, point of view, plot, setting and theme. Students will compare and contrast story plots and characters in writing for selected works. This course has the same aim as general literature courses (to improve students' language arts and critical-thinking skills), focusing on one the short story. Students determine the underlying assumptions and values within the selected works and also examine the structure, techniques, and intentions of the short story. Oral discussion is an integral part of these genre-oriented courses, and written compositions are often required.

CREATIVE WRITING

Credit: ½

Grades 9/10/11/12

The Creative Writing course offers students the opportunity to develop and improve their technique and individual style in poetry, short story, drama, essays, and other forms of prose. The emphasis of the course is on writing; however, students may study exemplary representations and authors to obtain a fuller appreciation of the form and craft.

JOURNALISM

Credit: ½

Grades 10/11/12

This semester course will explore the use and application of journalism and media concepts as they affect our daily lives. Journalism emphasizes writing style and technique as well as production values and organization. Journalism introduces students to the concepts of newsworthiness and press responsibility; develops students' skills in writing and editing stories,

headlines, and captions; and teaches students the principles of production design, layout, and printing.

DRAMA

Credit: ½

Grades 9/10/11/12

This one semester elective to all grades introduces students to drama through language arts and visual arts. The traditional and modern drama includes: *Twelve Angry Men*, *Our Town*, *Macbeth*, *Death of a Salesman*, *Medea*, *Driving Miss Daisy*, *Steel Magnolias*, *Pygmalion*, *My Fair Lady*, and *Fiddler on the Roof*. This course has the same aim as general literature courses (to improve students' language arts and critical-thinking skills), but focuses on drama. Students determine the underlying assumptions and values within the selected works and also examine the structure, techniques, and intentions of the genre being studied. Oral discussion is an integral part of this drama course, and written compositions are often required.

FILM IN LITERATURE

Credit: ½

Grades 10/11/12

The course will offer a basic study of classic literature in film. The class will compare and contrast some literary works with their Hollywood counterparts. Students will read a novel each quarter as well.

SPEECH

Credit: 1

Grades 9/10/11/12

This elective semester course covers speaking skills, listening skills and nonverbal behaviors. Students will participate in researching, organizing, and presenting extemporaneous speeches for a variety of purposes as well as impromptu, pantomime, and memorized presentations. Communications class is recommended as a prerequisite, but not required. Speech enables students, through practice, to develop communication skills that can be used in a variety of speaking situations (such as small and large group discussions, delivery of lectures or speeches in front of audiences, and so on). Course topics may include (but are not limited to) research and organization, writing for verbal delivery, stylistic choices, visual and presentation skills, analysis and critique, and development of self-confidence.

TECHNICAL WRITING

Credit: 1

Grades 11/12

Applied English and Communications courses teach students communication skills—reading, writing, listening, speaking—concentrating on “real-world” applications. These courses usually emphasize the practical application of communication as a business tool—using technical reports

and manuals, business letters, resumes, and applications as examples—rather than emphasize language arts skills as applied to scholarly and literary materials.

SPANISH I

Credit: 1

Grades 9/10/11/12

Designed to introduce students to Spanish language and culture, the Spanish I course emphasizes basic grammar and syntax, simple vocabulary, and the spoken accent so that students can read, write, speak, and understand the language at a basic level within predictable areas of need, using customary courtesies and conventions. Spanish culture is introduced through the art, literature, customs, and history of Spanish-speaking people.

SPANISH II

Credit: 1

Prerequisite: Spanish I

Grades 10/11/12

Spanish II builds upon skills developed in Spanish I, extending students' ability to understand and express themselves in Spanish and increasing their vocabulary. Students learn how to engage in discourse for informative or social purposes, write expressions or passages that show understanding of sentence construction and the rules of grammar, and comprehend the language when spoken slowly. Students usually explore the customs, history, and art forms of Spanish-speaking people to deepen their understanding of the culture(s).

SPANISH III

Credit: 1

Prerequisite: Spanish II

Grades 11/12

Spanish III focuses on having students express increasingly complex concepts both verbally and in writing while showing some spontaneity. Comprehension goals for students include attaining more facility and faster understanding when listening to the language spoken at normal rates, being able to paraphrase or summarize written passages, and conversing easily within limited situations.

SPANISH IV

Credit: 1

Prerequisite: Spanish III

Grade 12

Spanish IV focuses on advancing students' skills and abilities to read, write, speak, and understand the Spanish language so that they can maintain simple conversations with sufficient vocabulary and an acceptable accent, have sufficient comprehension to understand speech spoken at a normal pace, read uncomplicated but authentic prose, and write narratives that indicate a good understanding of grammar and a strong vocabulary.

MATHEMATICS

ALGEBRA IB

Grade 9

Credit: 1

This is the second part in a multi-part sequence of Algebra I. This course generally covers the same topics as the second semester of Algebra I, including the study of properties of the real number system and operations, evaluating rational algebraic expressions, solving and graphing first degree equations and inequalities, translating word problems into equations, operations with and factoring of polynomials, and solving simple quadratics.

ALGEBRA II

Grades 10/11/12

Credit: 1

This course extends number systems to include irrational and complex numbers. Students will factor third degree polynomials. It will introduce basic trigonometry and matrix. Students will graph equations that include absolute value, radicals and higher orders of exponents. Algebra II includes field properties and theorems; set theory; operations with rational and irrational expressions; factoring of rational expressions; in-depth study of linear equations and inequalities; quadratic equations; solving systems of linear and quadratic equations; graphing of constant, linear, and quadratic equations; properties of higher degree equations; and operations with rational and irrational exponents.

GEOMETRY

Grades 9/10/11/12

Credit: 1

This course investigates properties of triangles, quadrilaterals, and circles. Students will apply their knowledge to real world situations. They will use appropriate formulas to find area, volume or other desired solutions. Geometry emphasizes a practical approach to the study of geometry and de-emphasize an abstract, formal approach. Topics include properties of and work with plane and solid figures; inductive methods of reasoning and use of logic; concepts of congruence, similarity, parallelism, perpendicularity, and proportion; and rules of angle measurement in triangles.

VOCATIONAL GEOMETRY

Grade 12

Credit: 1

Vocational Geometry combines the study of some pre-algebra and algebra topics with introductory geometry topics. This course includes the study of formulas, algebraic expressions, first degree equations and inequalities, the rectangular coordinate system, area, perimeter, and volume of geometric figures, and properties of triangles and circles.

PRE-CALCULUS

Credit: 1

Grades 11/12

Pre-Calculus combines the study of Trigonometry, Elementary Functions, Analytic Geometry, and Math Analysis topics as preparation for calculus. Topics include the study of complex numbers; polynomial, logarithmic, exponential, rational, right trigonometric, and circular functions, and their relations, inverses and graphs; trigonometric identities and equations; solutions of right and oblique triangles; vectors; the polar coordinate system; conic sections; Boolean algebra and symbolic logic; mathematical induction; matrix algebra; sequences and series; and limits and continuity.

CALCULUS

Credit: 1

Grade 12

Calculus includes the study of derivatives, differentiation, integration, the definite and indefinite integral, and applications of calculus. Students have previously attained knowledge of pre-calculus topics.

STEM

Credit: ½

Grades 10/11/12

STEM is a curriculum based on the idea of educating students in four specific disciplines — science, technology, engineering and mathematics — in an interdisciplinary and applied approach. Rather than teach the four disciplines as separate and discrete subjects, STEM integrates them into a cohesive learning paradigm based on real-world applications.

TRANSITIONAL MATH

Credit: 1

Grade 12

Math course framework designed to prepare and transition students directly into college and career pathways requiring general education college level math competencies in quantitative literacy and statistics. The competencies within each domain should include, but are not limited to: numeracy (operation sense, estimation, measurement, quantitative reasoning, basic statistics, and mathematical summaries), application based algebraic topics, and functions and modeling. Upon completion students should be able to: demonstrate proficiency and understanding in basic numeracy competencies in whole numbers, integers, fractions, and decimals, use estimation and explain/justify estimates, apply quantitative reasoning to solve problems involving quantities or rates, use mathematical summaries of data such as mean, median, and mode, use and apply algebraic reasoning as one of multiple problem solving tools, and use functions and modeling processes. Course to be delivered through authentic application, problem based instruction designed to build mathematical conceptual understanding and critical thinking skills.

MUSIC

BAND

Credit: 1

Grades 9/10/11/12

The GHS Band Program has a proud tradition of excellence in the community. All students who register for this program have the privilege of performing with the Tiger Marching Band in the fall, which performs at all home football games, the Homecoming parade, and other various parades each season. The Tiger Pep Band performs in the spring at all home Varsity Boys Basketball games. Throughout the year, students are also engaged in preparations with the Wind Ensemble, which performs at the Christmas Concert, Spring Concert, State Organizational Contest and Graduation ceremonies. Students also have the opportunity to perform at the WIVC Band Festival in the fall, and to compete at the State Solo and Ensemble Competition in the spring. Band courses develop students' technique for playing brass, woodwind, and percussion instruments and cover a variety of nonspecified band literature styles (concert, marching, orchestral, and modern styles).

CHORUS

Credit: 1

Grades 9/10/11/12

The GHS Concert Choir performs a variety of repertoire throughout the year. All students, regardless of prior musical training, are encouraged to participate in this group. The Concert Choir performs at the Christmas and Spring concerts. Students enrolled in the Concert Choir also have the opportunity to perform at the WIVC Choral Festival at the State Solo and Ensemble Competition, both of which occur in the spring. Chorus provides the opportunity to sing a variety of choral literature styles for men's and/or women's voices and are designed to develop vocal techniques and the ability to sing parts.

PHYSICAL EDUCATION

PHYSICAL EDUCATION

Grades 9/10/11/12

Credit: 1

The purpose of this course is to bring a state of readiness for playing activities, to increase the body's ability to handle the demands made on it in everyday life, and to encourage individual goals to continue a training program after the school day is finished. Also, student self-esteem is encouraged with regard to their physical abilities. Students will be taught games and work-outs that may help keep them healthy and fit for a life-time. Physical Education provides students with knowledge, experience, and an opportunity to develop skills in more than one of the following sports or activities: team sports, individual/dual sports, recreational sports, and fitness/conditioning activities.

HEALTH

Grade 9

Credit: ½

The purpose of this course is to cause students to care about themselves, their peers, their family and any other person with whom they come in contact. It will promote high quality health as a value and a goal for each student. The course will help students maintain or improve their total health, namely the interaction of their physical, mental, and social well-being. Topics covered within Health include personal health (nutrition, mental health and stress management, drug/alcohol abuse prevention, disease prevention, and first aid) and consumer health issues. The course also includes brief studies of environmental health, personal development, and community resources.

HEALTH AND FITNESS

Grade 10/11/12

Credit: 1

Health and Fitness courses combine the topics of Health Education courses (nutrition, stress management, substance abuse prevention, disease prevention, first aid, and so on) with an active fitness component (typically including aerobic activity and fitness circuits) with the intention of conveying the importance of life-long wellness habits.

SCIENCE

INTRODUCTORY PHYSICAL SCIENCE

Credit: 1

Grade 9

IPS involves study of the structures and states of matter. This is a lab-oriented class which enables the student to make discoveries about quantity of matter, mass, characteristic properties of matter, solubility, solvents, the separation of substances, compounds and elements, radioactivity, the size and masses of atoms and molecules and molecular motion.

GENERAL SCIENCE

Credit: 1

Grade 9

General Science draws upon the principles of several scientific specialties—earth science, physical science, biology, chemistry, and physics—and organizes the material around thematic units. This course uses appropriate aspects from each specialty to investigate applications of the theme. The purpose of general science is to develop scientific literacy, educate students to use scientific principles and process appropriately in decision-making, and provide a basic understanding of the natural world. General Science covers the topics of weather and weather prediction, ecological interactions, photosynthesis, basic chemical structures, plate tectonics, and energy transfer. The goal is to provide the student with the science background needed to make educated decisions regarding these concepts. Labs are used to reinforce understanding.

BIOLOGY

Credit: 1

Grade 10

Biology is designed to provide information regarding the fundamental concepts of life and life processes. Biology will give students a well rounded background of life on a cellular-molecular level and proceed to more complex life forms from unicellular ones. The core subject material includes cell structure, cell reproduction and the classification of life. The average subject material includes inherited traits and human development. The advanced material includes molecules, DNA and protein synthesis and energy in the cell.

CHEMISTRY

Credit: 1

Grade 11

Chemistry involves studying the composition, properties, and reactions of substances. This course explores such concepts as the behaviors of solids, liquids, and gases; acid/base and oxidation/reduction reactions; and atomic structure. Chemical formulas and equations and nuclear reactions are also studied. A good understanding of algebraic procedures is required. Labs are used to reinforce understanding.

PHYSICS

Credit: 1

Grade 12

Physics involves the study of the forces and laws of nature affecting matter, such as equilibrium, motion, momentum, and the relationships between matter and energy. The study of physics includes examination of sound, light, and magnetic and electric phenomena. Students should have a good understanding of many algebraic functions. Labs will be used to reinforce understanding.

ENVIRONMENTAL SCIENCE

Credit: 1/2

Grade 11

The purpose of environmental science is to provide the student with a balanced approach to the diverse study of our environment. Environmental Science emphasizes in the study of science and the development of thinking and decision making skills. The goal is to provide the student with the science background needed to analyze issues concerning our environment. Topics include ecosystems, biomes, pollution, biodiversity, waste, and population growth. Environmental Science examines the mutual relationships between organisms and their environment.

ECOLOGY

Credit: 1/2

Grade 11

The purpose of ecology is to discuss and develop an awareness about the environment and the problems associated with it. Students should be able to develop attitudes and arrive at solutions concerning these problems. A broad overview of ecology is given and the various social, economical, technical, and political issues are discussed. Problems such as ecological disruptions, growth of human populations, land use, energy, nuclear power, food supplies, air and water pollution, and solid waste are covered.

SOCIAL SCIENCE

UNITED STATES HISTORY

Credit: 1

Grade 10

U.S. History provides students with an overview of the history of the United States, examining time periods from discovery or colonialism through World War II or after. This course includes a historical overview of political, military, scientific, and social developments. Course content includes a history of the North American peoples before European settlement.

ADVANCED HISTORY

Credit: 1

Grade 11/12

This class is designed to be a college preparatory class on select topics throughout U.S. History. The topics include: the Revolutionary War, the Civil War, World War I, the Great Depression, World War II, Korea and Vietnam Wars, 1960s and 1970-present. Within these topics in depth study will focus on battle strategy and plans, political strategy, economic crisis and solution and culture where applicable. There are papers to be written each semester and tests are essay based. Students must have completed United States History with an overall average grade of 80% to be eligible for admission to this class.

GEOGRAPHY

Credit: ½

Grade 9

Geography provides students with an overview of world geography. Topics include the physical environment; the political landscape; the relationship between people and the land; economic production and development; and the movement of people, goods, and ideas.

U.S. GOVERNMENT & CIVICS

Credit: ½

Grade 11

U.S. Government provides an overview of the structure and functions of the U.S. government and political institutions and examine constitutional principles, the concepts of rights and responsibilities, the role of political parties and interest groups, and the importance of civic participation in the democratic process. This course examines the structure and function of state and local governments and covers economic and legal topics. The United States and Illinois Constitutions will be covered in this class in order to meet state requirements. This class is required for graduation.

MILITARY HISTORY

Credit: ½

Grades 9/10/11/12

This class will focus on the history of warfare and weapons. We will look at the effects of war on society and the development of the world's foreign policies.

20TH CENTURY HISTORY

Credit: ½

Grades 9/10/11/12

20th Century History provides an overview of the history of human society from 1900 to the present — exploring political, economic, social, religious, military, scientific, and cultural developments. We will cover the majority of the countries in the world without an emphasis on any specific country. We will discuss inventions that change the everyday lives of people, conflicts between countries, and various politics of countries in an attempt to better understand today's world.

ANCIENT HISTORY

Credit: ½

Grades 9/10/11/12

Ancient History provides a survey of the evolution of society from the ancient Middle East through Greek and Roman civilizations. Students study the rise and fall of civilizations and empires, with an emphasis on the legacies they provide to successive societies.

HISTORY OF THE MIDDLE AGES

Credit: ½

Grades 9/10/11/12

History of the Middle Age provides a survey of European civilization from the fall of Rome through the late Middle Ages. This class will focus on the change in culture from a social and spiritual stand point. The class will look at individual events, and understand how these events have changed society during the middle ages.

HOLOCAUST STUDIES

Grades 9/10/11/12

This course is designed to be an in-depth study of the Holocaust. Study will begin with the rise of origins of anti-Semitism in world history. The rise of Nazi Germany and the role of racism and anti-Semitism played in the German society at that time will also be a focus. A special emphasis will be placed on the Nazi policies toward the Jews and how those policies escalate into the "Final Solution" and the near destruction of Europe's Jewish population.

1960s

Credit: ½

Grades 9/10/11/12

This course will focus on the culture of the 1960s. Political, social, economic, and cultural trends will be emphasized.

CURRENT EVENTS

Credit: 1

Grades 9/10/11/12

This is a course that could be taken for a semester or for an entire year. It will use various media – newspapers, news magazines, television, etc. – to explore significant events presently occurring. Current Events enables students to study political, economic, and social issues facing the world. This course focuses on current issues, examines selected issues throughout the 20th century, and looks at historical causes or possible solutions.

SPECIAL EDUCATION

ENGLISH I – IV

Credit: 1

These courses include instruction and remediation in grammar and composition. Basic skills, such as vocabulary, spelling and reading comprehension are stressed, as well as language skills and writing. English in the workplace is also emphasized. Some novels and short stories are used for instruction.

BIOLOGY

Credit: 1

This course is designed to help students learn about classification and organization of all kingdoms; patterns of growth, development, and reproduction; the systems of the human body; ecological cycles, and other basic biological building blocks.

MATH I – IV

Credit: 1

These courses provide individualized instruction and remediation in math skills ranging from basic skills to pre-algebraic concepts. Emphasis is placed on the application of math skills to daily living.

U.S. HISTORY

Credit: 1

This course introduces students to American History beginning with the discovery of America. Studies include the U.S. Constitution and the American Flag. Studies include required testing.

GENERAL SCIENCE

Credit: 1

This course is designed to help students learn important concepts of physical, earth, and life science, and the human body.

WORLD HISTORY

Credit: 1

This course is designed to introduce students to the prehistory era of the world, through the early civilizations, middle ages, and into the contemporary world. Topics include religion, traditions, revolutions, empires, conflicts, reform, and challenges.

RESOURCE

Credit: 1

This course is designed to assist students with course work in the regular education classes and provide remediation as needed. Students are also given instruction in daily skills. These include, but are not limited to, time management, test-taking skills, map and graph skills, critical thinking skills, and memorization skills.