

# FLORA HIGH SCHOOL

## Course Description Guide

This handbook contains a description of the curricular programs of Flora High School. In selecting your courses for the school year you need to think about your high school objectives and your career goals. While making your decisions, involve your parents, your counselor and your teachers. They have years of experience in career planning and goal setting that they can share with you as you make decisions that could affect you years into the future.

### CURRICULUM OBJECTIVES

The curriculum will provide a comprehensive and sequential education program that will assist students at Flora High School in exploring and preparing for future career, professional, and educational goals.

The curriculum will provide opportunities for students to develop and apply the following skills: to reason deductively and inductively using facts, figures and symbols in systematic ways; to develop and apply the fundamental skills of measurement and compilation; to develop problem solving techniques in the solution of verbal and theoretical problems.

The curriculum will provide a variety of activities and experiences that will enhance the interests of students raise the achievement levels of students and provide students with an educational climate that allows them to develop a sense of self-worth.

Based on these objectives, the curricular goal of FHS is to develop knowledge and skills necessary for young people to learn and grow into the citizens and leaders of a rapidly changing society and nation

### REGISTRATION

Each student will be asked to make an appointment with the guidance counselor to register for courses. Since there is one counselor available for all the students at Flora High School, we must ask that students take seriously their responsibility to see that they contact the guidance counselor for an appointment to register for courses next year. Failure to see the guidance counselor could result in not taking the courses needed to meet future goals and objectives, particularly high school graduation and/or college admission. It is each student's responsibility to meet specific course requirements and graduation credits. All required courses failed need to be re-taken as soon as possible.

### GRADUATION REQUIREMENTS

Math (Includes Algebra 1 & Geometry)	3
Science	3
English	4
P.E.	4
History (Includes U.S History I & II)	3
Art, Music, Voc. Educ. or Foreign Language	2
Resource Management	½
Keyboarding	½
Computer Concepts	½
Health	½
<b>Total Required</b>	<b>21 credits</b>
Total Elective Credits	7
<b>Total Required for Graduation</b>	<b>28 credits</b>

The following proposals have been developed by the administration and the guidance personnel of Flora High School as a step toward the classification of students and the establishment of course requirements for graduation.

1. Students may earn credits by correspondence - extension to fulfill graduation requirements. Such courses must have pre-approval of F.H.S.
2. Students may enroll in Optional Education courses for the school year only with prior consent of F.H.S. Principal.
3. Transfer students must meet Flora High School graduation requirements. Any deficiencies from prior school must be made up at Flora High School.

## COLLEGE PREPARATORY CURRICULUM

The following high school subjects are recommended for freshmen entering community college, transfer programs and public universities after high school graduation.

Units (credits)	Subjects
4	<b>English</b> (emphasizing written and oral communications and literature).
3	<b>Social Studies</b> (emphasizing history and government)
3	<b>Mathematics</b> (Algebra I and II, Geometry, Pre-Calculus, Calculus) <b>Student athletes</b> are advised that Pre-Algebra and Applied Math do not meet NCAA core course requirements.
3	<b>Science</b> (laboratory sciences including certain vocational courses).
2	<b>Foreign language</b> , or <b>music</b> and <b>art</b> , or vocational courses.

**Individual public universities and community colleges may have specific subject requirements in effect. Check the college catalogue for specific requirements. Applicants must contact each college or university for details about all requirements for admission. Admissions requirements for private college and universities as well as proprietary schools vary. Each must be contacted for admission requirements.**

## NCAA Requirements (College Athletes)

**For the class of 2009: Division I only -- 16 core courses**

If you plan to enter college in 2009 or after, you will need to present 16 core courses in the following breakdown:

- 4 years of English
- **3** years of mathematics (Algebra I or higher)
- 2 years of natural/physical science (one must be a lab science)
- 1 year of additional English, math or science
- 2 years of social studies
- **4** years of additional core courses (from any area listed above, or from foreign language, non-doctrinal religion or philosophy)

## CURRENT HONOR ROLL

You have achieved the High Honor Roll if your GPA falls between 3.500 - 4.000

You have achieved the Honor Roll if your GPA falls between 3.000 - 3.490

NOTE: Any D or F or I (incomplete) grade automatically removes honor roll status.

## Weighted Grades (Starting with Class of 2011)

Courses weighted are as follows:

- English IV – College Prep
- Pre-Calculus
- Calculus
- Chemistry II
- Genetics/Microbiology
- Physics
- Government

The weighted grading scale will be 5 = A, 4 =B, 3 =C, 2 =D, and 0 = F.

# Courses Offered at Flora High School

## COURSE DESCRIPTIONS

### FINE ARTS

**ART I - (9, 10, 11, 12 — 1 credit)** - is designed to give students experiences with a wide variety of art media as well as study in color, design, and art history. The course is not an in-depth study in any particular area but familiarization of materials, terms, artists, and the diversity of visual arts. The students will become acquainted with the practical and figurative aspects of art for appreciation, practicality, or further study in the area. Open to all students.

**ART II (10, 11, 12 — 1 credit)** - a planned course for the extension of work in certain media such as ceramics, perspective drawing, watercolor painting, etc. Some new media will be introduced - copper/enameling and fresco painting. This course is scheduled and directed to the extent necessary, but self-determination in the student's work will be in part developed by the student in preparation for the independent type of study in Art III and IV. **Prerequisite: Art I**

**ART III - (11, 12 — 1 credit)** - a course of independent study to the extent that the student can develop and maintain a positive direction in interest and development in projects. A degree of research is expected as well as a great deal of practical work. Objective is to give more in-depth understanding into media or area of interest. **Prerequisite: Art II and I**

**ART IV - (12 - 1 credit)** - a course of the independent nature with research projects and presentation made by the student. The student will work in the following directions: (1) to increase already developed skills of limited knowledge and in order to gain understanding in interest areas. (2) experimentally in areas of limited knowledge to gain understanding, and (3) to exchange limited knowledge with other art students and to promote understanding and appreciation within the student body in ways within grasp. Examples (a) student exhibits, (b) lectures, (c) cover designs (d) posters, (e) scenery in dramatic productions, (f) conversations, (g) new items (h) assisting instructor, (I) encouraging other students with an interest in art.

**Prerequisite: Art I, Art II, Art III**

**MUSIC APPRECIATION - (9, 10, 11, 12 - ½ credit)** - the student will learn basic music skills such as pitch, intervals, and rhythmic values, and theory, as well as discover music as a cultural phenomenon. Units will include basic elements, instruments, and in-depth study of the six historical periods, major composers, and world music. Other topics will consist of various genres of music, such as Jazz, Rock, Electronic Music, Film Music, and Musical Theater.

**MUSICAL THEORY- (11, 12- ½ credit)** – a course designed for upper level band students who are interested in pursuing music beyond high school. Units will include a basic theory review and then delve into topics such as triads and chords, major and minor tonalities, voice leading, part writing, chord progressions, phrasing, and cadences. Chromatics will be explored, including secondary functions, modulations, modes, and special function chords, as well as additional harmonic elements. Ear training skills will be refined throughout the length of the course. A brief look into the music theory late Romanticism and early twentieth century may be covered toward the end of the curriculum. ***In order to enroll in this class, the student must be eleventh or twelfth grade and concurrently enrolled in band; underclassmen may enroll at the discretion of the band director.***

**MUSICAL THEATER - (9, 10, 11, 12 - 1 credit)** - a yearlong course designed to provide students the opportunity to be involved with the many aspects of musical theater. Topics to be discussed will be reading music; singing; dancing; set design; props; lighting issues; sound; make-up; costumes and acting. Other units may be covered in addition to those listed here, such as performing monologs, dialogs, skits, and one-act plays. Fall semester will emphasize performing and play production, while the spring semester will focus on preparation for the annual spring musical. Singing will be a requirement for students in the musical theater class. ***Outside school participation will be required for rehearsals, concerts, and the spring musical***

**BAND - (MARCHING, CONCERT, AND SYMPHONIC & PEP) - (9, 10, 11, 12 - 1 credit per year)** - Band includes Concert, Marching, and Pep Band into one versatile class ensemble. Students will perform at all home football games, play in the pep band during basketball season, and participate in several parades throughout the school year, and perform in three formal concerts each school year. Activities and experiences are designed to develop the students' ability to listen, analyze, interpret and sight-read, while studying literature appropriate for high school bands. Participation in all performances of the band is required for successful completion of the course unless excused by the band director. Outside school participation is required for rehearsals and performances. Additional volunteer band activities include Jazz Band, Percussion Ensemble, and playing in pit band for the spring musical. These activities will require rehearsals outside of the regular school day. Pre-requisite for enrollment in high school band is prior participation and a passing grade in the previous semester of band, unless otherwise authorized by current band director.

# SOCIAL SCIENCE

**U.S. HISTORY I - (10 - 1 credit)** - this course is designed to cover the United States history from the arrival of explores and early colonist through the Civil War and Great Depression (1930s). The United States Constitution is studied and tested first semester. Passing the United States Constitution fulfills a portion of graduation requirements for Flora students. Understanding and interpreting aspects and various impacts of geographical changes with the nation will be addressed. A research paper will be required second semester.

**U.S. HISTORY II - (11 - 1 credit)** - is an intense study of Post-Reconstruction to present day. Research and writing is required each semester for the course. The Illinois Constitution is studied and tested during the first semester. Passing the Illinois Constitution fulfills a portion of graduation requirements for Flora students. The course will address aspects and impacts of global changes through the utilization of workshops. Students will identify continents and countries covered in each unit.

**Modern WORLD HISTORY - (9,10,11,12 - 1 credit)** – This course begins with the Renaissance and Reformation and continues with age of exploration, age of monarchs, age of enlightenment, French Revolution, Russian Revolution, WWI and the 20<sup>th</sup> Century. Geography of various places and time periods and their effects will be studied.

**PSYCHOLOGY - (11, 12 – 1/2 credit)** - involves the study of human behavior. The student is encouraged to analyze his/her own motivations and behavior. Major emphasis will be on personality development, mental and emotional health, physical growth, and intelligence and thinking.

**SOCIOLOGY - (11, 12 - 1/2 credit)** - this course serves as an introduction to Sociology. Sociologists study human behavior and the organization of society. Their work assumes that social forces external to individuals shape behavior. The science aims to understand and explain what these specific forces are and make valid predictions concerning how they shape behavior within groups.

**GOVERNMENT OF THE U.S. (Senior Political Science) - (12 - 1 credit)** - the course covers colonial government and birth of the constitution, current problems of government, current affairs, and research methods.

# WORK STUDY

**RESOURCE SKILLS - (9, 10, 11, 12 - 1 credit)** - this course is designed to aid students in their class work. The student will participate in test taking skills and study strategy lessons. Activities to focus on organizational skills will be addressed. During this time students will receive additional preparation for elective and required classes. **(Admittance to this class through special testing only)**

**LIFE SKILLS - (9, 10- 1 credit)** - this course is design to teach students about the different resources available to them. Students will learn about the different vocabulary in which they will encounter in everyday situations. Students will also learn how to fill out paperwork and follow directions for different life situations. Some cooking and crafts for everyday life will be presented. **(Admittance to this class through special testing only)**

**VOCATIONAL SKILLS - (11, 12 - 1 credit)** - the main goal is to orient students to the world of work. The focus will be on applications, resumes, job etiquette; social skills, basic job skills and role-play situations related to the world of work. **(Admittance to this class through special testing only)**

**WORK STUDY (STEP PROGRAM) - (11, 12 - 2 credit on campus, 2 credits off campus)** - offers students work experience. Vocational Skills must be taken previously or concurrently for classroom learning experiences. The on-campus assignments require 8 hrs. /week, off- campus assignments require 15 hrs/week. Students must be 16 years old and meet other requirements **(Admittance to this class through special testing only)**.

# HEALTH, SAFETY AND PHYSICAL EDUCATION

**HEALTH - (9,10 - 1/2 credit)** – Students will receive instruction in the following areas: systems review, decision making and wellness skills, nutrition, fitness, mental and emotional health, drugs, alcohol, smoking, reproduction, STD's, parenting, infectious and non-infectious diseases, personal care, abuse and violence, environmental and safety health. .

**DRIVER EDUCATION - (9, 10 - 1/2 credit)** - attempts to develop in the student the knowledge needed to drive safely in our society. It provides actual practice in driving under the direction of a certified driving instructor. The course meets a minimum of 30 clock hours with supplemental behind-the-wheel instruction amounting to 6 clock hours scheduled individually.

**Driver Education Eligibility HB418:** prohibits ineligible public or private high school students from enrolling in and licensed Driver Education instructors from providing classroom or behind-the-wheel instruction. Eligibility is granted to students who have received a passing grade in at least 8 courses during the previous two (2) semesters.

**PHYSICAL EDUCATION - (9, 10, 11, 12 - 1 credit)** - is planned to provide students with an opportunity for instruction and experience in a variety of individual sports, team sports, first aid and CPR. **A \$10.00 Fee is required.**

**WEIGHT TRAINING - (9, 10, 11, 12 - 1 credit) (Upon Availability)** - Students will participate in weight training, flexibility training, and conditioning. This class is for the student athlete. It is designed to allow athletes to work on skills and training under supervision, during school time. This class is a substitute for the regular P.E. class. **A \$10.00 Fee is required.**

# ENGLISH

All students will be required to pass a minimum of one semester of English before they can move on to the next level. If they pass only one semester, they will move on to the next level and repeat the failed semester. If they fail both semesters, they must repeat the entire level before they will be promoted.

## **\*Honors Program Requirements:**

**To stay in or be admitted to the Honors English program a student must:**

- 1. Be recommended for the course by the preceding English teacher.**
- 2. Maintain a B average each semester. Failure to maintain a B average will result in the student being reviewed for continued placement in Honors English or reassignment to conventional English class.**
- 3. Achieve a score in the top 25<sup>th</sup> percentile on the English portion of the standardized test taken the previous year.**
- 4. A student may be reinstated once during his/her high school career by meeting the above criterion the semester directly following initial removal.**
- 5. Students who receive a C, D, or F for a semester grade will be placed on academic probation and will be reviewed for continued enrollment in the Honors Curriculum.**

**ENGLISH I - (9 - 1 credit)** - this English course incorporates all aspects of receiving and communicating information, including reading, writing, speaking, and making presentations. The focus of the course is on reading, analyzing, and understanding a variety of forms of literature, both fictional and non-fictional from different cultures, eras, and sources. Students will be required to demonstrate their understanding of the material through quizzes, essays, speeches, presentations.

**\*Honors English I – (9 – 1 credit)** – this English course is designed for those students who excel in the study of literature and writing. It incorporates all aspects of receiving and communicating information, but with a greater focus writing and understanding in abstract, rather than concrete terms. Students will not only read for understanding, they will create their own fictional and non-fictional stories to deepen their understanding of different forms of literature. The focus of this course is on reading, analyzing, and understanding, and creating a variety of forms of literature, both fictional and non-fictional from different cultures, eras, and sources.

**ENGLISH II - (10 - 1 credit)** - this sophomore level course focuses on analyzing the themes of early American literature as they were influenced by the social and historical events of the time. Students will practice writing effective compositions, and will review grammar techniques and vocabulary. In addition, research techniques including note taking, paraphrasing, and using books, periodicals, the Internet, and interviews as forms of research will be introduced. This class is a writing-intensive course. **Prerequisite – English II.**

**\*Honors ENGLISH II - (10 - 1 credit)** - Course focuses on analyzing the themes of both fiction and non-fiction in world and early American literature. Students will utilize and enhance composition and research skills throughout the course through both analysis and research based essays. Testing, project grades, homework, and class participation determine grades. This class is a writing-intensive course. **Prerequisite – English II.**

**ENGLISH III - (11 - 1 credit)** - this junior level course emphasizes the analysis of American Literature; composition and research writing techniques will be stressed. In addition, using effective reading strategies and practicing the rules of Standard English as preparation for the Prairie State Achievement Exam will be a major focus of second semester. Students will be assessed through written essays, portfolios, and tests. Students will complete a documented research paper. This class is a writing-intensive course. **Prerequisite – English II**

**\*Honors ENGLISH III (Pre-AP English and Composition (11 - 1 credit)** – This junior level class is designed for students who excel in the areas of literature and composition. Students will read and analyze, orally and in writing, classical and contemporary American literature. Students will study the way writers use language to convey meaning and stimulate readers. Each work's structure, style, and themes will be considered, along with other common literary elements. Students' understanding of these concepts will be evaluated through class discussion, homework, quizzes and tests, essays, and projects. Reading assignments outside the classroom will be given and students will be expected to discuss the readings in class. Research and writing skills will be developed through a required research paper. This class is a writing-intensive course. **Prerequisite – English II**

**ENGLISH IV - (12 - 1 credit)** – With a goal of preparing students for college English, this senior level course concentrates on in-depth analysis of various genres of British literature. Students will be expected to complete reading assignments outside of class and discuss selections during class. First semester will focus on responding to literature through response journals. These journals will help to prepare students for the formal research paper written during second semester. The students will conclude the year with a unit on business writing (memos, letters, and resumes). **Prerequisite – English III.**

**ENGLISH IV TECHNICAL- (12 - 1- credit)** -the focus of this course is on writing for the workplace and reading comprehension as it applies to everyday life. Students will write for a variety of purposes, including letters of application, resumes, memos, reports, letters, and online writing. Students will also practice reading strategies as they are applied to the technical writings they will see on the job and in their lives. The use of the Internet as a research tool, along with note taking, paraphrasing, and gathering data are also included in the course for its required research paper. Students will be required to write frequently and will be responsible for using correct grammar, spelling, and punctuation. Portfolios, compositions, tests, and presentations will be utilized as a means of assessing student's comprehension. **Prerequisite – English III**

**\*Honors English IV (12- 1 credit)** – This class is designed for those students who excel in the study of literature and writing. This class will work at a faster pace than the English IV College Prep. Class. Additionally, grades for this class will be similar to college classes. Grades will be based on class participation, writing assignments, a midterm, and a final exam. **Prerequisite – English III**

**NEWS WRITING (JOURNALISM) - (10, 11 – 1/2 credit) - (this course does not satisfy any part of the English requirement for graduation).** students will improve their skills in communicating and critical reading and thinking by studying the print and broadcast media. Skills to be enhanced include usage of standard English, organization of ideas, critical listening, reading and analyzing factual literature, enhancing vocabulary, and oral and electronic presentations. Units of study include news writing, feature writing, sports writing, editorial writing, editing, proofreading, headlining, page design and advertising. **Prerequisite – English I and C or better in English. If a student fails News Writing, he or she may not repeat the class.**

**PUBLICATIONS (HARSTAN, LOCUST LOG - 11, 12 - 1 credit) - (this course does not satisfy any part of the English requirement for graduation).** Students in Publications produce the student newspaper and yearbook. Skills practiced include use of Standard English and style manuals, proofreading, page design, photography, interviewing, note taking, telephone etiquette, advertising sales and design, and budgeting. Students will use desktop publishing and photography software programs. **Prerequisite – C average in all English classes and C in News Writing. Prerequisite may be waived with the consent of the instructor. If a student fails Publications, he or she may not repeat the class.**

**MYTHOLOGY - (11, 12 - 1 credit) - (this course does not satisfy any part of the English requirement for graduation).** This class meets for an entire year. During the first semester, students will study classical mythology (Greek and Roman) and Nordic mythology. Second semester will focus on Celtic and Egyptian mythology. In addition, students will watch the *Star Wars* saga and discuss its mythological archetypes. **Prerequisite – Passing grade in English I and English II. If a student fails Mythology, he or she may not repeat the class.**

**SPEECH - (11, 12 - ½ credit) - (this course does not satisfy any part of the English requirement for graduation).** This semester course will concentrate on the fundamentals of speaking in a variety of situations. Impromptu speaking, formal public speaking, and presentations will be included in the course. Prerequisite – C average in all English classes. If a student fails Speech, he or she may not repeat the class.

**WORLD LITERATURE – (11, 12 – ½ credit) - (this course does not satisfy any part of the English requirement for graduation).** During this semester course, students will explore various types of literature from around the world. Units will include, but are not limited to, African, Oriental, Russian, South American, and Indian. **Prerequisite – C average in all English classes. If a student fails Speech, he or she may not repeat the class.**

## FOREIGN LANGUAGE

**SPANISH I - (9, 10, 11 - 1 credit) -** experiences will be given in dialogues, drills, patterns, translations, and vocabulary. The emphasis in this course is oral comprehension and conversation growth. Written comprehension is improved through dictations, grammar items and rules learned through usage. **Prerequisite: Students must have at least a B average in English to enroll in Spanish I.**

**SPANISH II - (10, 11, 12 - 1 credit) -** continues the study of dialogues, drills, patterns, translations, and vocabulary with more emphasis on written exercises and grammar. Cultural information and background of Spanish-speaking countries are included. **\*Prerequisite: Students must have a grade of B- (86%) or better in both Spanish I and English to enroll.**

**SPANISH III - (11, 12 - 1 credit) -** students continue practicing their pronunciation of Spanish. They acquire a more extensive knowledge of Spanish grammar, literature and cultural patterns. **\*Prerequisite: Students must have a grade of B- (86%) or better in both Spanish I and II.**

**SPANISH IV - (12 - 1 credit) -** students will practice Spanish through dialogues, translations, and written exercises focusing on fluency. Cultural information, literature and current events will be discussed. **\*Prerequisite: Students must have a B- (86%) or better in both Spanish II & III.**

## MATH

**PRE-ALGEBRA- (9- 1 credit) – (this course does not satisfy any part of the Math requirement for graduation) Students enrolled in this class will be double blocked with Algebra 1 starting the 2009-10 school year.** This class includes the concepts and skills necessary to prepare for Algebra I or Applied Math the following year. This course is designed to meet the needs of students that begin in the general strand of the mathematics ladder.

**ALGEBRA I - (9, 10, 11 - 1 credit) -** strives to give the student an understanding of the basic structure of algebra, to help him acquire facility in applying algebraic concepts and skills, to perceive the role of deductive reasoning in algebra, and to appreciate the need for precision of language. Topics include sets, open sentences, algebraic expressions, linear and quadratic dimensions, relations, and functions.

**GEOMETRY - (9, 10, 11, 12 - 1 credit) -** uses algebraic skills in developing the basic structure of geometry in the relationships between points, lines, planes and three-dimensional figures. The course is a study of inductive and deductive reasoning as applied to mathematical models and situations. Topics include angles, triangles, similar polygons, circles, loci, analytic geometry, areas, volumes of geometric figures and solids and some elements of classical logic.

**ALGEBRA II - (10, 11, 12 - 1 credit) -** this course is strongly recommended as a college-preparatory course. Topics include a thorough review of Algebra I, linear and quadratic functions, introduction to analytic geometry, exponential functions, logarithms, pure imaginary and complex numbers, and adequate preparation for future mathematics courses such as trigonometry, probability, and statistics.

## **PRE-CALCULUS - (11, 12 - 1 credit) -**

**TRIGONOMETRY** - An in-depth look at trigonometry concepts that will enable the student to be successful on the ACT exam, calculus, and college level mathematics classes. Topics include circular and triangular trigonometry, graphing, problem solving, law of sines and cosines, and vector analysis. Students will be given the opportunity to expand their skills in the use of graphic calculators and computer technology. Cross-categorical activities will include oral/written mathematical reports dealing with many individuals, male and female involved in the development of mathematics through the ages.

**PROBABILITY AND STATISTICS** - this particular area of pre-calculus explores the use of probability and statistical terminology in modern life situations. The latter part of the pre-calculus text features an abundance of charts, graphs, and sketches that illustrate key concepts. The focus of the course is enabling the student to develop an understanding toward the collection, treatment, and analysis of data. To further appreciate the importance of the subject matter, students will complete a statistical project that will encompass many learning area.

**CALCULUS - (12 - 1 credit)** - a class that includes analytic geometry. This course takes ideas from elementary mathematics (Algebra, Geometry, and Trigonometry) and enhances those concepts by the limit process. The book chosen for this course is designed as middle of the road book, not overly rigorous and yet with due attention to the logic of the subject. The text provides an appropriate foundation for mathematics majors as well as scientists and engineers. Topics include: review of analytic geometry and trigonometry, limits, derivatives, integral, transcendental functions, infinite series, conics, polar coordinates, and vectors. Students will be asked to complete a project each semester, which deals with mathematics in the workplace or provide a community service following the guidelines of the ETA-LAMBDA club. **Prerequisite: Successful completion of Pre-Calculus or permission of counselor and/or principal.**

## **SCIENCE**

**ENVIRONMENTAL SCIENCE- (9 - 1 credit)**. Topics of study involving the earth include: the earth as a part of the universe, the face and composition of the earth, Plate Tectonics, the shifting of the continents, Physical Features: volcanoes, earthquakes, soil; Compositions: rocks, minerals, chemistry, energy resources, Reshaping the Crust: weathering, erosion, glaciers, and wind; Oceans: water, basins, movement; Atmospheric Forces: climate, composition, weather. A major emphasis will be placed on understanding the environmental issues that will impact students in the future. Topics of study will include: the hydro logic cycle; the impact of humans on water quality; the role of plants in the environment; industry and pollution; the demands of an increasing population. \* **Freshmen Science Requirement.**

**BIOLOGY I (9, 10 - 1 credit)** - is an introductory course focusing on biological principles, cell biology, botany, zoology, and classification. Regular labs and dissection will help to enlighten the students about the complex world around them. **Prerequisite: Students must have a grade of C or better in previous science class.**

**ANATOMY AND PHYSIOLOGY- (10, 11, 12, - 1 credit)** - this course builds on the knowledge and skills learned in Biology I. The class focuses on the structure and function of the human organ systems. Areas of study include: skeletal system, muscle system, circulatory system, respiratory system, and other human organ systems. Ecology will also be covered in the first quarter. Labs are held on a regular basis including a fetal pig dissection. **Prerequisite:** Chemistry I with a passing grade or currently taking Chemistry.

**GENETICS/MICROBIOLOGY- (11, 12 - 1 credit)** - Genetics will be taught the first half of this course. Areas of study include focusing on cell division, DNA and inheritance patterns. Emphasis is placed on Mendelian principles, including monohybrid and dihybrid crosses, and sex-linked traits. A research paper on genetic diseases will be done. Microbiology is an advanced course focusing on the microscopic world, including fungi, bacteria and viruses. An emphasis will be placed on aseptic (sterile) techniques, and the culturing, staining and identification of various bacteria. **Prerequisite: Students must have a C or better in Anatomy & Physiology**

**CHEMISTRY I - (10,11,12 - 1 credit)** - Topics covered include the metric system and measurement, structure of the atom, the periodic table and its uses, chemical bonds, chemical formulas, chemical equations, gas laws, solutions, and acid base reactions. Regular laboratory experiments dealing with these topics are conducted. **Prerequisite: Algebra I and Biology I or permission of counselor and/or principal.**

**CHEMISTRY II - (11, 12 - 1 credit)** - topics covered include chemical equilibrium and solutions, acid base titration, organic chemistry, descriptive chemistry, and nuclear chemistry. Regular laboratory experiments dealing with these topics are conducted. **Prerequisite: Chemistry I with a C average and/or permission of the counselor and/or principal.**

**PHYSICS - (11, 12 - 1 credit)** - topics covered include mechanics, heat, sound, light, electricity, and nuclear physics. Regular laboratory experiments dealing with these topics are conducted. **Prerequisite: Chemistry I and Trigonometry (Chemistry I and Trigonometry may be taken concurrently with Physics).**

## **VOCATIONAL DIVISION**

Vocational Education opportunities are offered without regard to race, color, national origin, sex or handicap. \*\*\* Juniors may only take one 2-period class. \*\*\* Seniors may only take two 2-period classes. (Examples of 2-period classes: Construction, CO-OP, Health Occupations, Child-Care)

### **BUSINESS**

**B1 - BUSINESS AND TECHNOLOGY CONCEPTS - (9,10,11,12 - 1 credit)** - is an orientation to Business, Marketing, and Management which includes the following concepts: introduction to business principles; understanding basic business and

economic principles; identify types (entrepreneurship, partnerships, and corporations) and classifications (financial institutions, marketing, and service entries) of business organizations; organization and use of financial data; contrasting management theories, understand the composition of the marketing mix, demonstrate an understanding of business administration, applying production data for decision making. Business Communication and Business Computations are integrated throughout the course. Business Communication competencies will be developed by understanding the mechanics of writing, listening, speaking skills, and nonverbal communications, as well as, familiarity with communications technology.

**B2 - KEYBOARDING AND FORMATTING I** - (9,10,11,12 - ½ credit) - is a course designed to develop basic skills in touch keyboarding techniques for entering alphabetic, numeric, and symbol information found on computers. Major emphasis in the first semester is placed on keyboarding techniques and skill-building practice. Students will learn to edit and format text and paragraphs, change fonts, work with headers and footers, cut and paste text, create and use tab keys, create labels, and work with multiple windows. Students will format documents such as letters, envelopes, memorandums, reports, and tables for personal, educational, and business uses. Required course: taken in conjunction with Computer Concepts.

**B6 - COMPUTER CONCEPTS AND SOFTWARE APPLICATIONS** - (9, 10, 11, 12 - ½ credit) - 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 understanding of ethical considerations that arise in using information processing equipment and gaining access to available databases. Taken in conjunction with Keyboarding and Formatting I.

**B8 - ACCOUNTING I - (11, 12 - 1 credit)** - 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 and development of initial and basic skills used in systematically computing, classifying, recording, verifying and maintaining numerical data involved in financial and product control records (including the payment 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 will be integrated throughout the course where applicable. In addition to stressing basic fundamentals and terminology of accounting, instruction will 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 will also be included. Practice sets with business papers will be used to emphasize actual business records management.

**B9 - ACCOUNTING II - (11,12 - 1 credit)** - dual credit through Frontier College - (ACC 1102 Fundamentals of Accounting) - is a skill-level course that builds upon the foundation established in Accounting I. This course is planned to help students to develop deeper knowledge in the principles of accounting with more emphasis being placed on financial statements and accounting records. It is a study of business organizations: partnerships, corporations, branches, etc. The student will become familiar with specialized fields of accounting such as cost accounting, tax accounting, payroll accounting, managerial accounting, and others. Some students may choose to do specialized accounting computer applications. Simulated business conditions will 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. This course provides a technical background for college-bound students who plan a business curriculum, as well as those who wish vocational preparation. Prerequisite: Accounting I with a grade of C or above or consent of Teacher and/or Principal.

**ACCOUNTING III - (12 - 1 credit)** - dual credit through Frontier College - (ACC 2101-Financial Accounting) - is a skill-level course that builds upon the foundation established in Accounting I and II. This course is designed primarily for college-bound students with career objectives in business/computer/accounting related fields. Students will continue developing knowledge in corporate accounting and will be introduced to basic issues of cost and management accounting. Simulated business conditions will be provided through the use of practice sets (automated and/or manual). Skills are developed in the entry retrieval and statistical analysis of business data using computers for accounting business applications. Prerequisite: Accounting I and II with a grade of C or above or consent of Teacher and/or Principal.

**B10 - SHORTHAND I (SUPERWRITE - ALPHABETIC WRITING SYSTEM)** - (11, 12 - 1 credit) - is a skill-level course that covers the theory of shorthand plus emphasizes reading and writing skills, taking dictation, and transcription. This is a speed-writing course. During the second semester, intensive speed building and transcribing mail able letters is stressed. An integration of shorthand, keyboarding, and language skills is taught. Prerequisite: Keyboarding and Formatting I/ Computer Concepts and Software Application.

**B32 - BUSINESS TECHNOLOGY AND PROCEDURES** - (11, 12 - 1 credit) - is a skill-level course that is designed to prepare students for entry-level employment in a technology-based office setting. Integrated software applications will be included

in this course. Instruction will focus on office etiquette, office management, telephone and communications procedures, time management, records management, and proper business behavior and attire. Students will perform clerical duties, create, edit and correct documents, records and files, perform information processing activities, and prepare documents using presentation software. Student will discuss appropriate procedures for receiving visitors, patients, or clients, and organize, schedule, and plan meetings. In addition, students will file materials, manually and electronically, make travel arrangements, perform financial activities, process mail, transmit messages electronically, and maintain office supplies and equipment. Students will organize and plan office activities, compose and distribute meeting notes and reports, answer routine correspondence, input information from voice recordings, and supervise and train other employees. Students will apply proper grammar, punctuation, spelling, and proofreading skills. Accuracy will be emphasized. Students will apply new skills as well as skills learned in other courses to complete a series of realistic office assignments or participate in an office work-based learning experience. Workplace skills as well as communications skills (thinking, listening, composing, revising, editing, and speaking) will be taught and integrated throughout this course. Prerequisite: Keyboarding and Formatting I/Computer Concepts and Software Applications; Advanced Keyboarding and Formatting or Information Processing I or consent of the Teacher and/or Principal.

**B13 - INFORMATION PROCESSING I** - (11,12 - 1 credit) - 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 of information processing software. Students will develop advanced problem-solving skills with hands-on, real-life situations using a variety of software applications, such as word processing, spreadsheet, database, presentation, and desktop publishing. Concepts of digital imaging, video, and multimedia are also included. An introductory understanding of flowcharting and programming is studied and applied to macros and web page design. Students will explore topics related to computer concepts, operating systems, file management, Internet, and emerging technologies. Workplace skills, including computer/network ethics, and communications skills will be taught and integrated throughout this course. Prerequisite: Keyboarding and Formatting I/Computer Concepts and Software Applications or consent of the Teacher and/or Principal.

**B17 - INFORMATION PROCESSING II** - (11, 12 - 1 credit) - is a skill-level course that builds upon the foundation established in Information Processing I. The course pursues the principle objective of developing the level of skill and speed required for initial employment requiring electronic data/information processing. Students will create and update more advanced documents, spreadsheets, databases, presentations, and multimedia projects using programs from a variety of software developers. Students will explore advanced topics related to computer concepts, operating systems, file management, Internet, and emerging technologies. Workplace skills, including computer/network ethics, and communications skills will continue to be taught and integrated throughout this course. Successful completion of the course will prepare a student for Microsoft or similar software certification. Prerequisite: Keyboarding and Formatting I/Computer Concepts and Software Applications or consent of the Teacher and/or Principal.

NOTE: Courses noted as prerequisite classes may not be taken after the advanced course without the consent of the Teacher and/or Principal. EXAMPLE: Record Keeping may not be taken after Accounting I.

**B13 – Flora TV/ Information Processing** - (11,12 - 1 credit) 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 messages 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 presentations using presentation software. Students will learn basic editing principles to be used with video software. Students will be required to tape extracurricular activities and edit them to be broadcast on the TV channel. 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 this course. Prerequisite Keyboarding, Typewriting, Formatting & Computer Concepts

## **FAMILY & CONSUMER SCIENCE**

**H3 – FOODS AND NUTRITION I** - (9,10 – ½ credit) - includes basic classroom and laboratory experiences needed to develop knowledge and understanding of basic food principles and applied nutrition for people of all ages. We focus on learning abbreviations, equivalents, measuring and kitchen safety. The course content center around the following duty areas: promoting food service and preparation management using the decision-making process; meeting basic needs by applying nutrition concepts; meeting health and safety needs in planning, preparing, and serving food; maximizing resources when planning/preparing/serving food; promoting hospitality in food practices; and analyzing individual and

family nutritional needs in relation to change. Information related to careers in foods and nutrition is incorporated throughout the course.

H4 – FOODS AND NUTRITION II - (9, 10 – ½ credit) - In this second orientation level foods course, more attention is paid to food selection and preparation for special circumstances and dietary needs. Laboratory sessions are devoted to preparation of foods with specific characteristics. Course content should include the following broad areas of emphasis: careers in foods and nutrition, influences on food customs, diet and health, current nutritional issues, planning for special food needs, safety of foods, food purchasing, prevention of food-borne illnesses, conservation in providing food, food preservation. The application of the above-mentioned areas of emphasis to food service occupations is stressed. This course provides an introduction to commercial food service, preparation, and management. Prerequisite Foods and Nutrition I

H5 – Orientation to Family and Consumer Sciences and CLOTHING AND TEXTILES I - (9, 10 – ½ credits) - is designed to present basic subject matter in six areas: clothing and textiles, resource management, foods and nutrition, housing, furnishing and equipment, human development, interpersonal relations and introduction to the world of work. Learning experiences assist students in understanding themselves, their roles in today's society and the nature of family and consumer sciences. This course is planned to provide students opportunities to develop knowledge and understanding of textiles, fashions, and fabrics and to assist them in meeting the clothing and fabric (fashion) product needs of themselves, families and/or general public. The course content centers around developing student competencies in the following duty areas: selecting clothing and textile products using goal-making skills; meeting social, physical, psychological, and economic needs in evaluating, selecting and caring for clothing and textiles; appraising clothing/textile products which contribute to health, safety, and comfort, maximizing resources in selecting, altering, repairing and remodeling clothing textile products; communicating intended clothing image to others, and approving decisions necessary for clothing and textile needs. Information and experiences providing students with an understanding of the psychological aspects of fabric products as related to the needs of people, and careers using competencies related to textiles and fabrics are included throughout the course. **\*\*\* This course is the suggested first course for FACS programs.**

H6 – CHILD DEVELOPMENT - (9, 10 – ½ credit) - emphasizes learning experiences which help students gain knowledge and understanding of the intellectual, physical, social, and emotional development of children from conception through adolescence. The course content should center around the following duty areas: managing and organizing child development by applying decision-making and goal-setting skills; promoting child development by applying physical, social, intellectual, and emotional principles, practicing health and safety standards for children to maximize resources; encouraging human relations skills in children; and evaluating family and career changes in relation to impact on children. Information related to careers in child care is incorporated throughout the course.

NUTRITION - (11, 12 – 1/2 credit) deals with topics involving the fundamentals and principles of normal nutrition and metabolism, food values and requirements for maintenance and growth. Emphasis is placed on essential nutrients and current nutritional topics. Successful completers will: Explain the connection between nutrition and health. Evaluate nutrition information by judging sources, research and comparing information to tried and true factual information. Interpret information contained on nutrition labels on foods required to have nutrition labeling. List food groups and recommended servings of the Food Guide Pyramid. Discuss how human body uses food. Explain the highs and lows of body weight as related to health. Discuss food categories and interconnections with utilization for growth and health. 3 college credits through Frontier Community College

H12 – FOOD SERVICES OCCUPATIONS I (Advanced Foods) - (11,12 - 1 credit) is designed to provide students interested in a career in food service with the information and practical experiences needed for the development of food service, job-related competencies. The students receive laboratory experiences using commercial food service equipment, preparing food in quantity, and serving food. Safety and sanitation are emphasized. Training experiences involve equipment and facilities which simulate those found in business and industry. Enrollment Level 11 – 12; Units of Credit 1; Prerequisite Foods I & II

H11 – CHILD AND DAY CARE SERVICES OCCUPATIONS I - (11,12 - 2 credits) is designed to provide students interested in a career in child and day care operations with information and practical experiences need for the development of job-related competencies. Students will be provided laboratory experiences either in a school-based or extended campus facility. Students will be expected to develop appropriate skills in program development and in assisting with children's and/or adult are activities. Classroom study is concerned with the philosophy and management of care centers and the state and local regulations governing care-giving operations. The main learning experiences will involve actual work with children/adults in situations that simulate those found in business and industry as well as preparation for that activity. *Prerequisite-Child Development.* Students must also have a minimum of C average; students must have an average of no more than 5 absences per semester prior to enrollment; students must be passing all courses while enrolled in child care; students who fail child care the previous semester or year are not eligible to re-enroll; students may not have more than 2 discipline notices in the preceding year. Students must have an interest in the child care/teaching profession. Final

permission will be given after consultation with instructor, counselor and principal. Child Care I is offered to students at North Clay, Cisne, Clay City and Noble.

H28 – Child and Day Care Services Occupations II - (11, 12 - 2 credits) - This course builds on the foundation in Child Care I. The emphasis, however, is more on the administration of the care facility. Caring for infants and special needs children and/or older adults is included. Emphasis is placed on career opportunities, communication skills, human relations and the service needs of clients in the occupational area. The major learning experiences will involve actual work with children and/or adults in facilities that simulate those found in industry and discussion of the learning and problems which arise from that activity. *Prerequisite - Child Development & Child Care I.* Students must also have a minimum of C average; students must have an average of no more than 5 absences per semester prior to enrollment; students must be passing all courses while enrolled in child care; students who fail child care the previous semester or year are not eligible to re-enroll; students may not have more than 2 discipline notices in the preceding year. Students must have an interest in the child care/teaching profession. Final permission will be given after consultation with instructor, counselor and principal.

H7 – LIVING ENVIRONMENTS B - (11,12 – ½ credit) Learning experiences are designed to provide students with the basic knowledge and skills needed to select, acquire, maintain, and manage living environments that meet the needs of the occupants. The selections and care of housing and furnishings are related to factors such as social-economic conditions, individual tastes, psychological effects, aesthetic values, safety, sanitation, and energy conservation. The course content includes the following duty areas: locating and managing housing using goal setting **and decision-making skills; evaluating living space to meet basic needs; creating and maintain environments ensuring health and safety; selecting appropriate resources in creating living environments; determining the impact of the individual and/or group on living environments; applying housing and home management choices relating to changing family/individual career patterns; analyzing resource/consumer management skills necessary for present and future decisions.** Emphasis will be placed on application of basic management principles as they relate to the environment. *Prerequisite – Any 1 of the following courses – Child Growth and Development, Clothing and Textiles 1 & Foods & Nutrition 1*

H8 – RESOURCE MANAGEMENT (11, 12 – ½ credit) - Learning experiences focus on the understandings and skills needed to make decisions about the use of resources and prevention strategies which contribute to an improved quality of life. The course content includes the following duty areas: utilizing resources and consumer information by applying safety information; applying consumer rights and responsibilities in the marketplace; basic concepts of financial literacy, budgeting, savings and investing, banking (including balancing a checkbook, opening a deposit account, and the use of interest rates), understanding simple contracts, state and federal income taxes, personal insurance policies, and comparison pricing, and home ownership. This course meets the requirement for consumer education instruction as required by the School Code of Illinois (Section 27-12.1).

H9 – PARENTING B- (11, 12 – ½ credit) - 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 crisis are emphasized. The course content includes the following duty areas: managing and organizing parenting by applying decision-making and goal-setting skills; applying 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 in children/adolescents; and evaluating impact on parenting of family and career changes. Special attention is given to the needs of teen-age parents and to the importance of readiness for parenthood, human reproduction and STI's. *Prerequisite – Any 1 of the following courses – Child Growth and Development, Clothing and Textiles 1 & Foods & Nutrition 1*

H10 – ADULT LIVING - (11, 12 – ½ credit) - This course is designed to assist individuals and families in achieving life satisfaction through responsible participation as adults in the home, community and workplace. Emphasis is placed on the development of prevention strategies which will assist individuals in responding to situations in terms of their identified values and goals. The course content includes the following duty areas: developing short and long-range plans, demonstrating goal setting and decision-making skill; evaluating and adapting basic needs to assume roles and responsibilities; recognizing and following health practices that assist in coping; selecting and using resources to enhance individual growth and development; developing effective relationships to promote communication with others; and evaluating family and career changes as to the impact on individuals. Various resources to assist with life problems are explored. *Prerequisite – Any 1 of the following courses – Child Growth and Development, Clothing and Textiles 1 & Foods & Nutrition 1*

## AGRICULTURE

A46 – ENVIRONMENTAL SCIENCE APPLICATIONS – (9 - 1 credit) Topics of study involving the earth include: physical features, energy resources, plate tectonics, soil; compositions: rocks, minerals, chemistry, energy resources; Reshaping the crust:

weathering, erosion, glaciers and wind; Oceans: water, movement; atmospheric forces: climate, composition, weather; types of ecosystems and career choices. A major emphasis will be placed on understanding the environmental issues that will impact students in the future. Topics of study will also include: the hydrologic cycles, the impact of humans on water quality, the role of places in the environment, industry and pollution, the demands of an increasing population.

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. \*Freshmen Science Requirement

**A2 – BASIC AGRICULTURAL SCIENCE** - (10 - 1 credit) The second-year course builds on the basic skills and knowledge gained from the introductory course. Major units of instruction include agricultural research, soil science, advanced plant science, biotechnology and advanced animal science. Applied math and science 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. This course will be counted as an approved class for science credit.

**A49 – AGRICULTURAL MECHANICS & TECHNOLOGY** - (11, 12 - 1 credit) - will concentrate on expanding student's knowledge and experiences with agricultural mechanics technologies utilized in the agricultural industry. Units of instruction included are: design, construction, fabrication, maintenance, welding, electricity/electronics, internal combustion engines, and hydraulics and employability skills. Careers of agricultural construction engineer, electrician, plumber, welder, equipment designer, parts manager, safety inspector and other related occupations will be examined. Improving workplace and computer skills will be a focus. . Participation in FFA student organization activities and Supervised Agricultural Experience (SAE) projects is an integral course component for leadership development, career exploration and reinforcement of academic concepts.

**A4 – AGRIBUSINESS MANAGEMENT** - (11, 12 - 1 credit) - will develop students' understanding of the agricultural industry related to the United States and World marketplace. Instructional units include: business ownership types, planning and organizing the agribusiness, financing the agribusiness, agricultural law, and taxes and developing employability skills. Student skills will be enhanced in math, reading comprehension and writing through agribusiness applications. 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.

**A14 – BIOLOGICAL SCIENCE APPLICATIONS IN AGRICULTURE - Plant Science** - (11, 12 – ½ credit) - 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 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. This course will be valuable preparation for further education and will increase the relevance of science through applied setting of agriculture by enhancing literacy in science and the scientific process. 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. Fulfills lab science university entrance requirement.

**A15 – BIOLOGICAL SCIENCE APPLICATIONS IN AGRICULTURE - Animal Science** - (11, 12 – ½ credit) is designed to reinforce and extend students' understanding of science by associating scientific principles and concepts with relevant applications in agriculture. Students will examine major phases of animal agriculture and specific biological science concepts that govern management decisions in the animal industry. Topics of study are in the areas of growth and development of animals - embryology, ethnology, nutrition, immunity systems; Processing Animal Products--preservation, fermentation, and pasteurization. The course will be valuable preparation further education and will increase the relevance of science through the applied setting of agriculture by enhancing literacy in science and scientific process. 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. Fulfills lab science university entrance requirement.

**A16 – PHYSICAL SCIENCE APPLICATIONS IN AGRICULTURE** - (11,12 - 1 credit) - is designed to reinforce and extend students' understanding of physical science and the scientific process by associating scientific and math principles and concepts with relevant applications in agriculture. Topics of study are in the areas of scientific investigations, environmental/natural resource systems, agricultural structural systems, energy and power systems, agricultural mechanics and machine systems, and food processing systems. The course will be valuable preparation further education and will increase the relevance of science through the applied setting of agriculture by enhancing literacy in science and scientific process. 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. Enrollment Level 11-12; Units of Credit 1.0; Fulfills lab science university entrance requirement.

**A43 – HORTICULTURAL PRODUCTION & MANAGEMENT** - (11, 12 - 1 credit) - concentrates on two important areas of horticulture. Major units of study include growing greenhouse crops, producing nursery crops, designing floral arrangements, operating a flower shop, and operating a garden center. Agribusiness units will be introduced in merchandising, advertising and displaying horticultural products, as well as, selling horticultural products and services. Leadership skill development is an integral part of this program and is delivered through clear and technical student organization (FFA) activities. Individualized instruction and learning reinforcement are provided through SAEP's maintained by each student.

**A5 – SUPERVISED AGRICULTURAL EXPERIENCE 1** - (9, 10 – ½ credit) This experience program is for students in the 9th and 10th grades. Students receiving vocational credit in this area must be enrolled in an approved agricultural program sequence. Individual students will have a minimum of one approved project or acceptable plans for doing so. Supervised study, project record book work, training plans and agreements, report writing, and instructor project visitation and supervision are essentials of the supervised occupational experience.

**A7 – SUPERVISED AGRICULTURAL EXPERIENCE II** - (11, 12 – ½ credit) - This experience program is for the 11th and 12th grade agricultural students. The opportunities and responsibilities are similar to those discussed under Supervised Agricultural Experience I with the exception that the experiences are conducted at a more advanced level of skill training. The project should be expanded as the student progresses through the agricultural program.

## INDUSTRIAL

**I1 – PRODUCTION TECHNOLOGY (Woodworking)/ I3 – COMMUNICATION TECHNOLOGY (Drafting)** - (9, 10 – ½ credit) - is a course designed to foster an awareness and understanding of manufacturing and construction technology. Through a variety of learning activities, students are exposed to many career opportunities in the production field. Experiences in manufacturing include product design, materials and processes, tools and equipment, including computers, safety procedures, corporate structure, management, research and development, production planning, mass production, marketing and servicing. In construction, students will be exposed to site preparation, foundations, building structures, installing utilities, and finishing and servicing structures. This course is designed to foster an awareness and understanding of the technologies used to communicate in our modern society. Students will gain experience in the areas of design and drafting, radio and television broadcasting, computers in communication, photography, graphic arts, and telecommunications. 1<sup>st</sup> semester

**I2 – TRANSPORTATION TECHNOLOGY (Mechanics)/ I4 – ENERGY UTILIZATION TECHNOLOGY (Electricity)** - (9, 10 – ½ credit) - is a course designed to foster an awareness and understanding of the various transportation customs that make up our mobile society. Through laboratory activities the students will be exposed to the technologies of and career opportunities involved in material handling, atmospheric and space transportation, marine transportation, terrestrial transportation, and computer uses in transportation technology. This course is designed to foster an awareness and understanding of how we use energy in our industrial technological society. Areas of study will include conversion of energy; electrical fundamentals; solar energy resources; alternate energy resources such as wind, water, and geothermal; fossil fuels; nuclear power; energy conservation; and computer uses in energy technology. Students will use laboratory experiences to become familiar with current energy technologies. 2<sup>nd</sup> semester

**I29 – WOOD DESIGN & FABRICATION** - (10 - 1 credit) This course is structured to provide students with the basic skills of working with power tools, portable equipment, and machines with emphasis on construction. Emphasis will be placed on safety and proper use of equipment, knowledge of technical processes, industrial applications, and proper work habits necessary for students to be successful in a construction setting. Prerequisite Illinois Plan Core Courses

**I5 – HOUSEWIRING** - (11, 12 - 1 credit) - provides educational activities in the classroom, laboratory, shop, and actual work setting with the opportunity to become knowledgeable of a variety of skill associated with house wiring. The program sequence of organized learning experiences and skills would include selecting electrical materials and determining work to be done; computing service loads; installing electrical environmental control components; installing lighting fixtures; installing service entrance; installing switch boxes and outlet boxes; maintaining existing wiring; roughing in feeders, branch circuit cables, and circuits; trimming out electrical devices and appliances; and installing and maintaining motors.

Employability skills, as well as 1) skills used in work performance that are transferable across jobs and occupations and that are instrumental to job and classroom success (generalized skills); 2) skills used to manage life's transitions (transition skills); and 3) skills employed in the resolution of interpersonal, information or task-related problems, or problems related to behavior in cooperative group settings (vocational ethics) will be included in this curriculum. Prerequisite-Energy Utilization

**16 – CONSTRUCTION I** - (11, 12 - 2 credits) - provides experiences related to the erection, installation, and maintenance of residential buildings and related fixtures. Planned learning activities will allow students to become knowledgeable of fundamental principles and methods and to develop technical skills related to masonry, carpentry, and finish work. Instruction should include 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.

**17 – CONSTRUCTION II** - (11, 12 - 2 credits) - provides learning experiences related to the erection, installation, maintenance and repair of building structures and related utilities. Planned learning activities should emphasize the development of more advanced knowledge and skills than those provided in Construction I. Student technical skill experiences should include instruction and activities in safety principles and practices; performing maintenance control functions; installing switch and outlet boxes, light fixtures, service entrances; roughing in and trimming out electrical devices and appliances; preparing foundations and footings; constructing residential chimneys and fireplaces; laying, jointing and pointing brick; and advanced building and construction methods and codes. All learning experiences are designed to allow the student to acquire job entry skills and knowledge. Prerequisite-Construction I

**116 – TRANSPORTATION I (Auto Mechanics)** - (11, 12 - 1 credit) - provides experiences related to maintenance, repair and servicing of a variety of transportation and maintenance equipment. Planned learning activities will allow students to become knowledgeable of fundamental principles and methods and to develop technical skills related to auto mechanics, diesel mechanics, motorboat mechanics and gasoline engine/mower repair. Instruction should include safety principles and practices; combustion engine principles; maintaining, servicing and repairing different types of transportation vehicles, as well as maintenance equipment such as lawn mowers, chain saws and rotary tillers.

**150 - TECHNOLOGY I** - (11-12 - 1 credit) - is an introduction to computer maintenance, repair, and computer networking fundamentals. Upon completion of the course the student will have a thorough knowledge of current windows operating systems. The student should be competent in the maintenance of computer. Hardware and software: The student will be able to identify, install and trouble shoot hardware components such as hard drives, floppy drives, mother boards, power supplies and how to install and trouble shoot basic operating system software. Students will select, evaluate, and purchase the components to build a new computer. Students will, in small groups, build a computer and in doing so will understand the hardware variables. Students will document class work as if he/she were preparing a professional work report. In addition, each student or groups of students will be responsible for a semester project stretching their knowledge of computers. Students also will demonstrate that they have read and understood the materials with oral and written quizzes and an open notebook test. Regular mid and final exams are standard in all classes.

**157 Networking Fundamentals I** - (11-12 - 1 credit) - This class provides fundamentals in networking. The overview of this course provides a working knowledge of how computers are networked and a brief history of the computer networking industry. Major topics covered are: safety, network addressing, and data encapsulation, classes of IP addresses, network layers, binary numbering system, sub-netting, and introduction to routers, OSI and TCP/IP reference models, switches and bridges.

**190 - Small Systems Architecture** - (11-12 - 1 credit) - This course is designed to introduce students to the basic and advanced microcomputer components and their operations. The course will cover the anatomy of popular personal computers such as the IBM Compatible desktops and laptops. Elements include microprocessors, motherboard, coprocessors, memory, displays, data and expansion buses, floppy and hard disks, mass storage systems, optical and raid storage. . Some topics are: RISC, Cache, The design of video cards, Ram and CPU design and construction. This course is a pre-college course. There is a significant amount of research; summary and sharing both written and orally. Prerequisite: Tech 1 or instructor's permission

**191 - Maintenance and Diagnostics I** - (11-12 - 1 credit) - This course is designed to train students to maintain and diagnose personal computer hardware and software problems. This would include installing and upgrading computer components and diagnosing problems using the latest available techniques. Topics will include such things as storage devices, motherboards, memory, and input devices. Students actively work on their own computers, computers within the school

and as time permits computers from teachers and other sources. Pre Requisite: Tech 1 or instructor's permission.

# HEALTH

**N1 – ORIENTATION TO HEALTH OCCUPATIONS** - (10, 11, 12 – ½ credit) - includes classroom and community-based activities. The main purpose of this course is to assist students in further development of their self-concept and in matching personal abilities to a tentative career choice. The suggested course content should provide in-depth information into health careers, the occupational and educational opportunities, and the educational and attitudinal requirements.

**N2 – ORIENTATION TO HEALTH OCCUPATIONS II** - (10, 11, 12 – ½ credit) - includes classroom and community-based activities and a core of knowledge related to many of the occupations within the health field. This core of knowledge will develop the students' cognitive and affective skills in formulating a strong foundation for entry-level skill development. Observation of occupational related activities is an integral part of the course. Prerequisite Orientation of Health Occupations

**N3 – HEALTH OCCUPATIONS CORE OF SKILLS** – (11, 12 - 1 credit) - includes affective, cognitive, and psychomotor skills which are common to most health occupations. Occupational competency is developed at this level. Course content covers such areas as patient observation skills, patient care and documentation; range of motion exercises; positioning, ambulation measurement and transfer techniques; feeding; bathing; vital signs; special procedures (catheter care and specimen collection as examples); and working with patients with various health care problems and deficits (strokes, diabetes, heart disease as examples). Student performance is learned and practiced in the classroom and laboratory and supervised closely by a qualified health occupations teacher in a facility through extended campus facilities. Prerequisite - Health Occupations Related Skills

This course is approved by the Illinois Department of Public Health. Students who successfully complete this approved program are eligible to take the State administered written exam to become a certified nurse assistant.

**W1 - INTERRELATED COOPERATIVE EDUCATION** – (11, 12 - 2 credits) - is a capstone course designed to assist students in the development of effective occupational skills and attitudes through practical instruction in school and on-the-job through cooperative education. Three blocks a day are spent taking supervised classes at school and one block is on-the-job training supervised by the designated Co-op Coordinator. Students meet regularly with their Coordinator addressing related areas of workplace skills. During scheduled meetings, topics to be discussed focus on applying for a job, occupational survival skills, essential character traits and basic work relations. A training plan will be developed jointly by the teacher/coordinator and student that identifies skills developed on the job. Junior and Senior level course meeting for 2 semesters with a minimum of 2 work hours per day.

**Guidelines:** 1. Students must work a total of 360 hours during the school year to receive credit. This averages 10 hours per week. 2. Students are required to complete a weekly log. This is a detailed report of work completed each day. These logs must be signed by the employer and turned in on time. If a student fails to turn in weekly logs they will not pass the class. 3. Attendance at school is a must. If you are absent from school for the entire day, you are not to go to work. 4. If you are suspended from school for any reason, you are not to work during your scheduled co-op hours. 5. Changing jobs is not permitted. If a student is laid off for any reason they will have two weeks in which to find another job. If a job is not found the student will drop co-op and add two classes. 6. Being fired or quitting a job will result in automatic failure for the quarter. 7. Students are required to pass both the required written work and the employer evaluation to remain in this program. Prerequisite: Students must have successfully completed to CTE courses prior to enrollment. Students must also have a minimum of C average; students must have an average of no more than 5 absences per semester prior to enrollment; students must be passing all courses while enrolled in co-op; students who fail co-op the previous semester or year are not eligible to re-enroll; students may not have more than 2 discipline notices in the preceding year. Final permission will be given after consultation with instructor, counselor and principal.

## DUAL CREDIT CLASSES (denoted by \*\*)

These classes are upper division classes offered for college and/or high school credit. Two options are available:

1. Class for high school credit only.
2. Class for high school and college credit.

Students must decide which option to take and fill out an application at the beginning of the class. There is no tuition fee. (Students need to check with the

college they plan on attending to see if dual credit courses will transfer)

**ELIGIBILITY FOR DUAL CREDIT CLASSES – ACT scores will be used for determining if the student gets dual credit. (This determination is made by the college.)**

1. Junior and senior status
2. Grade point average of 3.5 or better

**FRONTIER COMMUNITY COLLEGE**

Calculus  
Construction Techniques I  
Construction Techniques II  
Government of the U.S. (Senior Pol. Science)  
Jobs For Illinois Graduates (Business Psychology/Human Relations)  
New Writing I (Journalism)  
Nutrition  
Student Publications (Publications)  
Trigonometry/Statistic (Pre-Calculus)

**WABASH VALLEY COLLEGE**

Child Care  
Computer in Agriculture (Ag. Business Management)  
Intro to Agricultural Mechanization (Agriculture Mechanics & Technology)  
Intro to Horticulture (Basic Horticulture Science)

# Flora High School 4 year Career Plan

<i>9<sup>th</sup> Grade Courses</i>	<i>Credits</i>		<i>10<sup>th</sup> Grade Courses</i>	<i>Credits</i>	
1. <b>English 1</b>	1		1. <b>English 2</b>	1	
2. <b>Math (Pre-Alg, Algebra 1, Geometry)</b>	1		2. <b>Math ( Geometry)</b>	1	
3. <b>Science</b>	1		3. <b>Science</b>	1	
4. <b>History</b>	1		4. <b>US History 1</b>	1	
5. <b>Physical Education</b>	1		5. <b>Physical Education</b>	1	
6. <b>Keyboarding/ Computer Concepts</b>	1		6. <b>Elective</b>	1	
7. <b>Drivers Education/ Health</b>	1		7. <b>Elective</b>	1	
8. <b>Elective</b>	1		8. <b>Elective</b>	1	
<b>Total Credits</b>			<b>Total Credits</b>		
<i>11<sup>th</sup> Grade Courses</i>	<i>Credits</i>		<i>12<sup>th</sup> Grade Courses</i>	<i>Credits</i>	
1. <b>English 3</b>	1		1. <b>English 4</b>	1	
2. <b>Math (Algebra 2)</b>	1		2. <b>Elective</b>	1	
3. <b>Science</b>	1		3. <b>Elective</b>	1	
4. <b>US History 2</b>	1		4. <b>Elective</b>	1	
5. <b>Physical Educ</b>	1		5. <b>Physical Education</b>	1	
6. <b>Resource Mgmt</b>	.5		6. <b>Elective</b>	1	
7. <b>Elective</b>	1		7. <b>Elective</b>	1	
8. <b>Elective</b>	1		8. <b>Elective</b>	1	
<b>Total Credits</b>			<b>Total Credits (28)</b>		

Future Career Plans:  
(Tell college and work plans....)

Plans after High School:

Career Tracks:				
<b>Agricultural</b>	<b>Grade</b>	<b>Business</b>	<b>Grade</b>	
Environmental Science	9 <sup>th</sup>	Keyboarding/CC	9 <sup>th</sup>	
Ag Science	10 <sup>th</sup>	Business Tech	10 <sup>th</sup>	
PSAA or BSAA AG Mech & Tech, AG Busi Mgmt	11 <sup>th</sup>	Info Processing 1, Info Processing 2, Accounting	11 <sup>th</sup>	
PSAA or BSAA AG Mech & Tech, AG Busi Mgmt, COOP	12 <sup>th</sup>	Busi Tech and Proc, Accounting 2, Web Page Design 1& 2, COOP	12 <sup>th</sup>	
<b>FACS</b>				
<b>Industrial Tech</b>				
Orientation to FACS and Clothing and Textiles, Child Development	9 <sup>th</sup>	Production Tech, Transportation Tech, Communication Tech, Energy Utilization Tech,	9 <sup>th</sup>	
Foods 1 & 2,	10 <sup>th</sup>	Wood Design and Fabrication	10 <sup>th</sup>	
Resource Mgmt, Adult Living, Parenting, Living Environments, ChildCare, Advanced Foods	11 <sup>th</sup>	Housewiring, Construction, Transportation, Tech 1, Computer Hardware & Maintenance	11 <sup>th</sup>	
Adult Living, Parenting, Living Environments, ChildCare, Advanced Foods, COOP	12 <sup>th</sup>	Housewiring, Construction 1 or 2, Wood Design 2, Transportation, Tech 1, Computer Hardware & Maintenance, COOP	12 <sup>th</sup>	