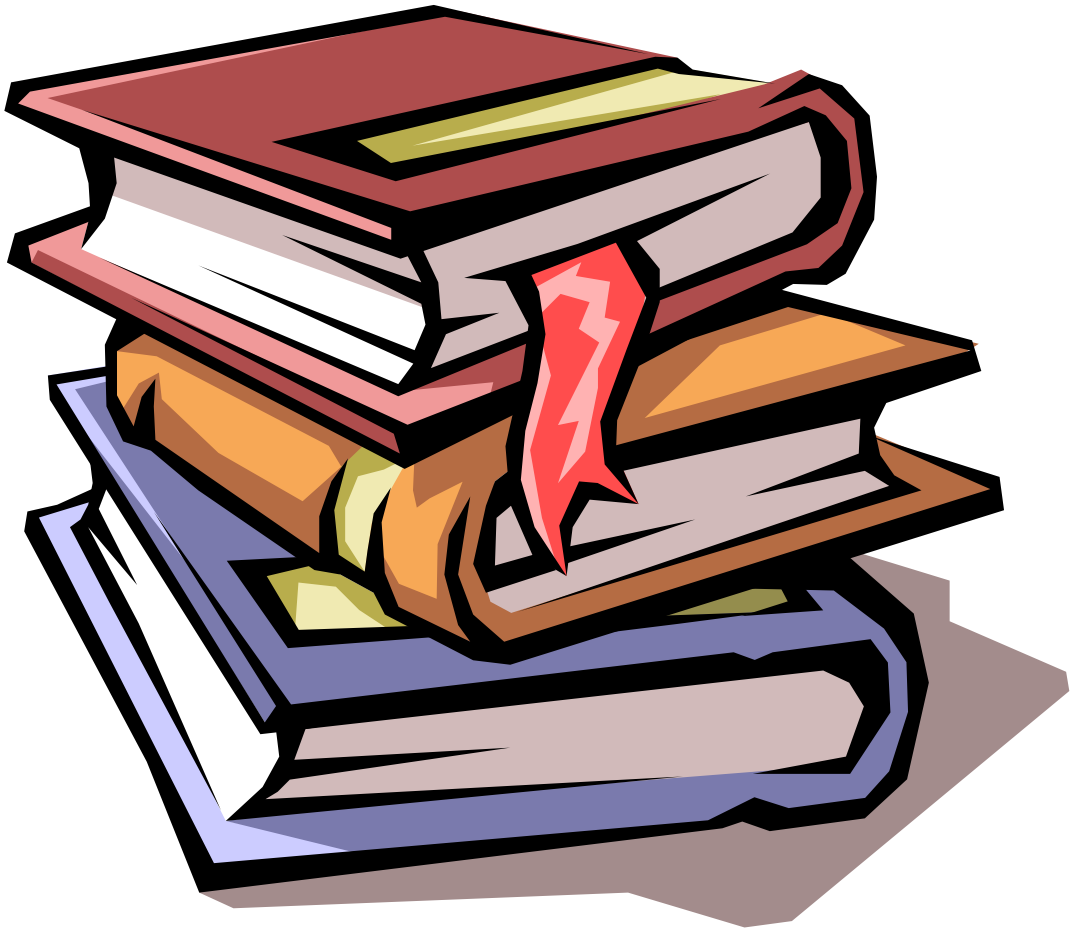
Maroa-Forsyth High School Course Selection Guide

2010-2011



Graduation Requirements

Minimum Graduation Requirements **28 Credits**

4 Yrs PE
4 Yrs English
3 Yrs Math (*Geometry Required*)
3 Yrs Science *(Lab Science Required)*
3 Yrs Social Studies *(W. Geography, W. History, & U.S. History or AP U.S. History Required)*
1 Yr Foreign Language, Art, Music, or Vocational course
.5 Yr Health
.5 Yr Business Computer Applications
.5 Yr Consumer Ed or passing the State Consumer Ed test

College Entrance Requirements

***Specific requirements will vary by institution**

4 Yrs English
3 Yrs Math (Algebra I lowest accepted)
3 Yrs Science (lab)
3 Yrs Social Studies
2 Yrs Electives from music, art, foreign language, or vocational education

English

Course #	Title	Prerequisite	Credit	Grade
161001	English I	Teacher Recommendation	1	9
161111	English I (Adv)	Explore/Act English 90% or higher	1	9
161002	English II	English 1	1	10
161222	English II (Adv)	Adv. English I w/A or English I w/ A & Teacher Rec.	1	10
161003	English III	English II	1	11
161004	English IV	English III	1	12
161444	AP English Literature	Plan/Act English 90% or higher	1	11-12
161333	AP English Language	Plan/Act English 90% or higher	1	11-12
161009	Speech	English I & II	.5	11-12
161008	Yearbook Publications	None	.5	10-12

Course Description

English I - The purpose of this class is to provide learning experiences and opportunities for students to improve their individual reading, writing, and communication. This class will stress such language skills as grammar, sentence structure, proper usage, and numerous writing techniques. Students will be expected to demonstrate their ability to write well-structured paragraphs, essays, short stories and a more extensive research paper. Reading skills will be further developed through a selection of numerous short stories, poems, and novels.

English I (Advanced) - The purpose of this class is to provide learning similar in design to that of English I, while simultaneously emphasizing students' creative abilities. Discussion of novels and other literary works will often be led and directed by the students, encouraging class participation, while developing listening and interpreting skills. Communication skills will be assessed through oral presentations and challenging projects, and students will gain valuable experience working in cooperative groups.

English II – This class will focus more extensively on reading comprehension, vocabulary building, effective communication skills, and more complex/creative writing. Students will be asked to write opinionated/personal response and essays. Additional literary works and novels will be introduced. The more difficult areas of grammar, mechanics, and usage will be studied. Students will take part in classroom debates and oral presentations in order to improve their speaking skills.

English II (Advanced) - The purpose of this class is to provide continued learning opportunities for students in the areas of high-level, individualized thinking and creativity. A minimum of eight literary experiences will be provided (from world literature), along with numerous speaking and writing opportunities. Research papers, short stories and themes will be written on a weekly basis, along with one major research speech. Overall, the goal of this class is to cause students to develop their own perspective of the world, its customs, its norms, its expectations and its values.

English III – This course is a survey of American Literature and an intense review of grammar and language. Students will read various short stories, plays, poems, and novels as well as study important grammar units containing skills that will improve personal writing and state test scores. A variety of writing assignments, mostly formal essays, will also be written and revised.

English IV – This course is a survey of British literature. Students will also be responsible for writing a variety of essays including narrative, expository, cause/effect, definition, and more. A number of short research papers are also required. The purpose of this course is to expose students to a variety of English literature and to perfect writing skills in preparation for college. Grammar and language units will be studied as needed for writing improvement.

AP English Literature and Composition – This is a college level accelerated course designed to provide junior and senior students with the skills they need to take the national AP Literature test. A successful completion of this test can possibly result in earned college credit. Regardless of whether or not students choose to take the AP test, the material in the course is designed around the national AP test model. The material, being college level, is advanced and sometimes of a mature nature. Students will be responsible for buying many of their own paperback novels, so there are expenses involved. Students will read, write and analyze fiction novels and poetry. Students will study major authors and movements in literature. Many essays and research papers are required. There are prerequisites that are required for enrollment. Your counselor will be of assistance in deciding if you are eligible for this course.

AP English Language – – This is a college level accelerated course designed to provide junior and senior students with the skills they need to take the national AP Language test. A successful completion of this test can possibly result in earned college credit. Regardless of whether or not students choose to take the AP test, the material in the course is designed around the national AP test model. The material, being college level, is advanced and sometimes of a mature nature. Students will be responsible for buying many of their own books, so there are expenses involved. Students will read, write and analyze fiction novels and non-fiction selections. Students will study major authors and movements in literature. Many essays and research papers are required. There are prerequisites that are required for enrollment. Your counselor will be of assistance in deciding if you are eligible for this course

Speech - A semester course in public speaking that stresses practical speech experiences the student might well be asked to continue in real world business and social setting. Students will learn what constitutes good speech such as dictation, grammar, and correct body language. They will learn how to prepare, organize, and correctly word a speech, as well as determine the audience and the purpose of the speech. Students will prepare speeches that are informational, persuasive, and demonstrative in nature as well as courtesy, commemorative, and special occasion speeches.

Yearbook Publications - We will have lessons in several different areas including photography, advertising, reporting, editing, and graphic design as it applies to yearbook. Next year we will be working with "Page Maker" on the computer to learn about layout designs. We will put the yearbook together for publication.

Mathematics

Course #	Title	Prerequisite	Credit	Grade
211000	Pre-Algebra	Teacher Recom. & Testing	1	9
211001	Algebra I	Teacher Recom. & Testing	1	9-10
211003	Geometry	Algebra I	1	9-12
211008	Intermediate Algebra II	Geometry	1	10-12
211009	Advanced Algebra II	Geometry	1	10-12
211004	Trig/Pre-Calc	Algebra II & Geometry	1	11-12
211010	Statistics	Algebra II	1	11-12
211011	Vocational Math	Algebra	1	11-12
211007	Calculus	Trig	1	12
211012	Computer Math	Algebra II	1	12

Course Description

Pre-Algebra - This course is for those students who are not quite ready for Algebra I. The student will take this course and follow-up the next year with Algebra I.

Algebra I - A study of the real number system and the four operation - addition, subtraction, multiplication, and division. Included in the real numbers are integers, (negative and positive whole numbers), rational numbers (fractions) and irrational (numbers which cannot be written as fractions. Variables are used to take the place of specific numbers to set the pattern for the properties (laws). There is extensive work with exponents and solving equations.

Geometry - This course is a study of objects in a two dimensional space. Objects such as triangles, rectangles, squares, and pentagons are compared. Angles and line segments of the geometric figure are studied. The course also includes practical problems for the PSAT and ACT tests and the study of formal proofs and logic.

Intermediate Algebra II - This course is a continuation of Algebra I with the same mathematical properties still true. There is added emphasis on exponents and roots. Additional topics include solving quadratic equations and solving radical and fractional equations.

Advanced Algebra II - This course is a review and continuation of Int. Algebra II. There is considerable work with word problems and additional topics include logarithms, probability, matrices, and more in-depth work on conics and problem solving.

Trigonometry/Pre-Calculus - *First Semester* - Trigonometry: a study of the six circular functions- sine, cosine, tangent, cotangent, secant, and cosecant. This includes graphing the functions on a two-dimensional graph. The values of these functions are found using both radiant measures for arcs of circles and degree measures of angles. *Second Semester* - Pre-Calculus: Introductory to calculus -Will possibly touch some on analytical geometry, but emphasis will be mainly on introduction to calculus.

Statistics – This is a course that will give the college-bound students a background in statistics. The student will learn how to collect, organize, analyze, and interpret numerical information from raw data. There is an emphasis on critical thinking skills and drawing accurate conclusions from data.

Vocational math is a set of modular learning materials prepared to help high school students develop and refine job-related mathematics skills. The course includes material that focuses on arithmetic operations, problem-solving technique, estimation of answers, measurement skills, geometry, date handling, simple statistics and the use of algebraic formulas to solve problems in the world of work. The use of the calculator as a problem-solving tool is stressed. Homework assignments, tests and lab assignments determine grades.

Calculus - This class covers most topics of a first-semester college Calculus course: limits, differentiation, integration, and applications.

Computer Math This course is an interactive class that will look at topics from Algebra I, Algebra II, and Trigonometry in a graphical, symbolic, and numerical method. This class will employ the use of the technical software program, *Mathematica,* as well as spreadsheets and calculators. Students in this class will spend a majority of their time actively solving problems and investigating mathematical concepts.

Science

Course #	Title	Prerequisite	Credit	Grade
241010	Lab Science	None	1	9
241001	Biology	None	1	9-10
241008	Anatomy-Physiology	Biology	1	10-12
241011	Anatomy -Physiology II	Anatomy-Physiology I	1	11-12
241005	Zoology	Anatomy-Physiology I	1	11-12
241003	Chemistry I	Algebra I W/ C or Better	1	10-12
241002	Chemistry II	Completion of Algebra II or currently enrolled in Algebra II	1	10-12
241007	AP Chemistry	Chemistry II W/B or better or Chemistry I W/A and teacher recommendation	1.5	11-12
241004	Physics	Trig. W/ B or Better	1	11-12
241009	Organic Chemistry	AP Chemistry W/ B or Better	1	11-12

Course Description

Lab Science Lab Science is a survey course that addresses the three main branches of science, which includes, Earth, Physical, and Life Science. The Earth Science aspect will cover the exploration of space and the solar system as well as geological time and the history of the Earth. The portion of lab science devoted to Physical Science will cover physical and chemical changes, chemical reactions, motion, forces, energy, and heat. Life science will address the cell as basis for life, reproduction, heredity, populations, environment, and people and resources. The scientific method will be a focus of the material throughout the course.

Biology - Five major areas will be addressed in this yearlong biology course: introductory material (including characteristics of life, scientific method, microscopes, and cells), genetics, classification (including an overview of the six modern kingdoms), ecology, and human biology. The unit on genetics begins with a look at DNA on the molecular level and continues through genetic mutations and disorders in humans. Students will gain an understanding of classification and how it changes/evolves. The survey of kingdoms will include: Archaebacteria, Eubacteria, Protista, Fungi, Plantae, and Animalia. The unit on ecology will include the earth's biomes, the structure and relationships of ecosystems, how populations are affecting ecosystems, and what we can do to protect life. The unit on human biology will introduce the eleven systems of the human body. Considerable lecture and lab work is involved. This course may be taken simultaneously with Lab Science freshman year. This will be a full year lab science course.

Anatomy-Physiology - This is taught as a preparation for a career in the health sciences. It involves work on the college level. Time outside the regular class hours is required for preparation. Material presented includes introductory work to anatomy/physiology, tissues, integumentary, skeletal, muscular, and digestive systems. The cat dissection is used for lab study. Considerable text work involving other body systems is involved.

Anatomy-Physiology II - This is taught as a preparation for a career in the health sciences. It involves work on the college level. Time outside the regular class hours is required for preparation. Material presented includes: respiratory system, cardiovascular system, urinary system, reproductive system, endocrine system, and nervous system. The cat dissection is used for lab study. Considerable text work involving other body systems is involved.

Zoology - The purpose of zoology is for students to have the opportunity to study life forms simple to complex and to compare the anatomies of these animals, to study their adaptations, and to study their interrelationship to

the environment. The course is designed for any junior or senior who has successfully completed Biology I and Anatomy/Physiology I.

Chemistry I – Chemistry I is a one year course which provides an introduction to the terms and techniques of the study of inorganic chemistry. It covers in detail the use of the metric system, periodic table, atomic structure and theory, and the behavior of solids, liquids, and gases. Some other topics discussed are as follows; arrangement of electrons, periodic law, chemical bonding, chemical formulas, chemical compounds, equations, stoichiometry, physical characteristics of gases, molecular composition of gases, liquids, solids, solutions, ions in aqueous solutions, acids, bases, and acid-base titration. There is considerable emphasis on problem solving. For this reason, successful completion of Algebra I is necessary. Anyone who is thinking of continuing his/her education beyond high school will find chemistry useful. The course is open to seniors and juniors, but a sophomore may take this course if successfully completed Algebra I.

Chemistry II-This is a one-year laboratory science course designed as a preparatory class for students who plan additional work in science fields. This course will cover theories of chemistry with an emphasis on developing laboratory and problem solving skills. Topics covered will include: problem solving and scientific measurement, atomic structure and periodic table, chemical nomenclature, chemical reactions and bonding, solutions, stoichiometry, states of matter, gas laws, thermochemistry, nuclear and organic chemistry, and acid/base chemistry.

Advanced Placement Chemistry-The advanced placement chemistry course is a one year class intended to offer motivated students with a good background in math and science the opportunity to take a college level chemistry course. It is an accelerated course, which follows a prescribed general college curriculum established by the College Board for Advanced Placement Chemistry. This curriculum is the equivalent of first year chemistry for chemistry majors at most colleges and universities. It requires dedication, hard work, increased study time and interest in chemistry from its students. Advanced problem solving skills and laboratory skills are emphasized. Students are encouraged to take the AP Chemistry examination and class time is used to prepare for the exam. Summer assignments are required as part of the curriculum. Topic covered will include: stoichiometry, chemical reactions, gas laws, thermochemistry, atomic structure, periodicity, bonding, liquids, solids, solutions, chemical kinetics, chemical equilibrium, acids, bases aqueous equilibria, spontaneity, entropy, free energy, electrochemistry, and an introduction to organic chemistry.

Physics – Physics is a one-year course in the science of measurement and problem solving. A background in Algebra I, Algebra II, Geometry, and Trigonometry is required. Students will study velocity, acceleration, vector addition, force, work, power, energy, momentum, and motion in straight and curved paths, heat, sound, and light.

Organic Chemistry Organic chemistry will offer an extensive look at the special nature of carbon chemistry. Emphasis will be placed on structure, functional groups and nomenclature as well as some important classes of organic reactions. Biochemistry topics including proteins, carbohydrates, nucleic acids and lipids will also be included. There will be a laboratory component, which will include activities such as the synthesis of aspirin and the extraction of caffeine from tea.

Social Studies

Course #	Title	Prerequisite	Credit	Grade
231007	World Geography	None	1	9
231001	World History	None	1	10
231002	U.S. History	None	1	11-12
231012	Modern American History	See course description	.5	11-12
231011	AP U.S. History	Teacher Recommendation	1	11-12
231004	Current Events	None	1	11-12
231005	Psychology	None	.5	11-12
231006	Sociology	None	.5	11-12
231010	American Government	None	.5	11-12
231009	Student Assistantship	None	1	11-12

Course Description

World Geography & Global Studies- Taking an imaginary voyage around the globe, we explore diverse nations, famous cities, and incredible land and water features. Nearly a dozen regional guest speakers provide "snap shots" of an array of cultures in addition to exposure to images of world-renowned tourist destinations and heritage sites. From there we embark on the chronology of human history, starting with the anthropological cultures of longevity – Communal and Agri-cultural, such as Aboriginal Peoples of Australia and Catal-Huyuk of Anatolia. Continuing in sequence to the Urban Culture Hearths and beyond, we emphasize social patterns, cultural expressions, techno-economic trends, human-environment relationships, and political structures. Analyzing constructive and destructive elements of culture, we identify universal themes of human societies across the planet and over the millennia

World History-Centuries of Urban empires lead us to the rise of nation-states and Industrial Culture. Analyzing and evaluating at increasing levels of complexity, we investigate the Global Culture in which the United States is a world participant and the interdependent nature of contemporary Communal, Agri-cultural, Urban, Industrial, and Global societies. "History as debate" is emphasized in the use of diverse historical vantage points to gain perspective on watershed events; ruling classes and powerful leaders; and the social history (daily life) of "the people." This World History course employs the Western Civilizations tradition with a global perspective relevant to Twenty-first century challenges and triumphs.

U.S. History - This course examines the history of a place, a people, and an idea from the colonization to the 20th century wars, administrations, and social conflicts and accomplishments. After examining colonial growth and the revolutionary era, the course devotes a unit to understanding the constitution. The rest of the course traces 19th and 20th century developments, including westward expansion, the causes and consequences of the Civil War and Reconstruction, Industrial America, immigration, World War I and II, the New Deal, post-1945 American society, and the Vietnam era. The 1980's and 1990's are also discussed towards the end of the year.

AP U.S. History - A full-year introductory college course in the United States' history, which covers early colonization to the Nixon Years. A special Unit is used to cover the 80's and 90's at the end of the year. The course requires students to complete various summer assignments over the first four chapters of the textbook. The summer assignments include textbook readings, note taking, summary analysis / objectives, document summaries, and a colonial history project. The majority of the class material is geared toward the preparation of the A.P. History Exam that can be taken in May.

Current Events - This class deals with the events in today's world. The text used is a number of magazines located in the school library and the Herald and Review. Each is read and analyzed to better understand today's society.

Psychology - Topics covered could include but are not limited to: research methods, states of consciousness, learning, intelligence and mental abilities, motivation, emotion, life span development, personality, stress, and psychological disorders.

Sociology- Focusing upon societal customs within the United States, we utilize cultural perspectives from around the globe and across time to create a view of ourselves within broad contexts of place and history. After practicing foundational methods and philosophies, we explore the concepts of socialization; deviance and control; the institutions of family, religion, education, & politics; and the social inequities of poverty, gender, and race. Reflective writing and Socratic-style open discussion create a college style atmosphere in this high school level course.

American Government -This semester course focuses on the organization and implementation of government within the United States. Topics to be discussed include the brief history of the Constitution, the three branches of government, state and local government, political parties and rights and freedoms guaranteed American citizens. Emphasis will be placed on the formation of the federal government and how the government works for its citizens.

Modern American History- This semester course takes a comprehensive look at American life and institutions since the post-WWII era with regards to social, political, and economic change. The topics would include, but not be limited to: McCarthyism, the Baby Boom, Civil Rights, Vietnam, Watergate, Iran Hostage Crisis, Reaganomics, impeachment of Bill Clinton, the 2000 election, 9/11, and U.S./Middle East relations. Students must have successfully completed or be currently enrolled in American History.

Student Assistantship - This course will allow the student to earn credit by serving as an assistant to a staff member in the school. Students may work as lab assistants, office aides, or other assigned duties. Enrollment is based on an interview with the staff member who is responsible for monitoring the student's progress. A review of the students academic and discipline records will occur prior to enrollment in the class.

Physical Education

Course #	Title	Prerequisite	Credit	Grade
121001	Coed PE	None	1	9-12
121002	Weight Training	See Below	1	10-12
121003	Health	None	.5	9-12

Course Description

Physical Education - Physical Education is required for each semester that a student is enrolled in high school. Physical Education is designed to promote physical fitness through various sports, running, conditioning, and weight lifting. Socially, the competition consists of fair play, a desire for teamwork and the will to excel. Emotionally, physical education teaches responsibility, self-control, and motivation in the process of maturity. Long-term goals are to develop an appreciation and an understanding of the importance of teamwork and good sportsmanship, to continue after high school years, and to maintain an adequate degree of physical fitness during and after high school years. Grades are assigned thru a combination of skills test and daily participation.

Weight Training - This course may be taken in place of PE. Emphasis in this course is on physical conditioning (two days a week) and weight training (three days a week). Students grades are based on twenty percent participation and the remaining eighty percent on their performance. The events that will be tested at the midterm and the quarter include: Bench press, Squat, Power Clean, Dot Drills, and Jump Ropes. Pre-requisite: "A" average in the previous two semesters of PE or Weight Training. Students must maintain an "A" or "B" average in order to continue enrollment in the course.

Health is a state-required course to be offered on a semester basis. The semester health requirement is usually presented during the Freshman/Sophomore year. Units taught during this time include, but are not limited to: Personal Health and Fitness, Mental Health and Stress Management, Nutrition, Drugs in our Society (beneficial - dangerous), Family and Social Health, Safety and Emergency Care, Communicable and Non-Communicable diseases.

Driver Education

Course #	Title	Prerequisite	Credit	Grade
555555	Driver Education	None	.5	9-10

Course Description

Driver Education - The driver education course consists of thirty (30) hours of classroom instruction and six (6) or more hours (depending on the student progress) of behind the wheel training. The classroom phase is required and is offered the first nine weeks of each school year. The behind the wheel is optional and is offered the remainder of the year. All students have to be fifteen years of age to complete both phases of the course. We schedule sophomores first and if there is still room we will take the older freshmen.

Band

Course #	Title	Prerequisite	Credit	Grade
221001	Band	None	1	9-12

Course Description

Band - High school band has three essential areas of instruction: Marching Band, Concert Band, and Pep Band. Students perform at every home football game, pep session, boys basketball game, and the homecoming parade. They also participate in marching band contests, attend the Macon County Festival, and participate in concert band contests. During class, performance skills are stressed with several tests given in class during the year. Music history and music theory are also covered as much as possible. Jazz Band is an extra-curricular part of the band program. Open to all students-musical and non-musical.

Chorus

Course #	Title	Prerequisite	Credit	Grade
221002	Chorus	None	1	9-12

Course Description

Chorus - High school chorus is made up of all high school boys & girls who are interested in singing. The course is mainly geared to performance, but includes some music appreciation and history through various sources such as outside activities and performances and current events in the musical world. The course covers

such things as sight singing, reading music, and ear training. Solo work is encouraged and many students use study halls and after school hours for solo work. Performances given during the year are Christmas concert, spring concert, state contests, performance at the Hickory Point Mall, Macon County Choral Festival, and Commencement, and other performances that come up during the year. Mainly - a goal is to develop the voice so that it may be used in a musical group activity that will bring recognition and satisfaction to the individual and the group.

Coop Program

Course #	Title	Prerequisite	Credit	Grade
251001	Coop (Classroom)	Selection	1	11-12
241002	Coop (Experience)	Selection	1	11-12

The Coop Program is open to juniors and seniors who are placed in a paid, career related position after completing the application process and being selected for the program. Being in the program as a junior does not guarantee selection as a senior. Each student selected will earn 1 ½ credits per semester (total of 3 for the year) for the work performed for the employer and the grade being "recommended" by the employer. Additionally, per State Law, each student will be enrolled in a Coop class and receive one credit for the year. Students enrolled in the program must sign a contract agreeing to abide by the rules and consequences. As well, the parents/guardians, Coop teacher and counselor must sign the contract. Each student must maintain a 3.0/5.0 overall average/semester and must work 15 hours per week (Monday-Friday). If the student is requested to work on weekends, MFSD will not be held responsible and the hours must be agreeable between the employer and the student. The Coop teacher will visit each student at least one time per month on the job. Students cannot miss more than 4 days per semester. If the student does not come to school, s/he cannot go to work. Students may not drive while on the job (child labor laws by the State of Illinois). A student can be removed from the program only at the end of the semester unless extenuating circumstances arise.

Agriculture

Course #	Title	Prerequisite	Credit	Grade
101001	Intro. to Agricultural Ind.	None	1	9-12
101002	Biological Science Applications	None	1	10-12
101003	Physical Science Applications	None	1	10-12
101005	Ag. Science	Intro to Ag	1	10-12
101004	Ag. Power Mechanics	Intro to Ag	1	10-12
101006	Agribusiness Management.	Intro to Ag	1	11-12
101007	Ag Mech. & Tech. (Const)	Intro to Ag	1	11-12
101008	Landscaping and Turf Mng.	None	.5	9-12
101009	Horticulture	None	.5	9-12

Course Description

Introduction to the Agricultural Industry – This orientation course provides an opportunity for students to learn how the agricultural industry is organized; its major components; the economic influence of agriculture at state, national and international levels; and the scope and types of job opportunities in the agricultural field. Basic concepts in animal science, plant science, soil science, horticulture, natural resources, agribusiness management, agricultural mechanics, agricultural biotechnology, food science technology, environmental science and aquacultural science and technology will be presented. Possible careers in agriculture will be examined in each area to provide the students with knowledge of opportunities. Students will also be introduced to FFA.

Biological Science Applications in Agriculture – This lab science course will reinforce and extend students to understanding science by associating biological science principles and concepts with relevant applications to agriculture. This course will be broken down into a semester covering plants with such topics as Initiating Plant Growth (Germination, Plant Sensory Mechanisms) and Managing Plant Growth (Photosynthesis, Respiration, Translocation, Growth Regulation.) The other semester will examine animals with such topics as Growth and Development (Embryology, Nutrition, Reproduction, Aquaculture) and Processing (Preservation, Fermentation, and Pasteurization.)

Ag Science – This science course will provide students with hands on instruction of different science areas. Major units of instruction include agricultural mechanics, animal science, and environmental science the first semester. Horticultural science which encompasses floriculture, landscaping, and plant and soil science will be the focus of the second semester. Applied science and math skills and concepts will be stressed throughout the course as they relate to each area.

Physical Science Applications in Agriculture – This lab science course will emphasize the principles, concepts, and laws of science and the mathematical relationships supporting, describing, and explaining that science in a sense of agriculture. Sample topic areas are Agriculture Power Systems (energy, force, work, torque), Environmental/Natural Resource Systems (water, air, and soil quality and preservation), Agricultural Structural Systems (stress, loads and loading, pulleys, psychometrics, and heat treatment), and Agricultural Processing Systems (specific heat, coagulation, food testing).

Ag Power Mechanics - This is a yearlong course that focuses on the principles of power. Alternative and common will be investigated. Electricity and wiring procedures will be learned extensively in the shop where walls would be constructed to learn the appropriate professional wiring techniques. Also covered will be wind power, hydropower, and nuclear power units. Another extensive unit will be small engines, where the principles of a four-cycle engine will be covered and then students will be expected to apply them on engines brought in to determine the course of action to fix them.

Ag Mechanics and Technologies– This is a yearlong course that will provide students with the knowledge to construct structures. Students will spend extensive time with woodworking. Learning of basic hand tools for the first project followed with power tool in all following experiences. Three teacher guided projects followed by a student selected one will finish out the first semester. Second semester will begin with the principles and theories of welding. Fourteen weeks will be dedicated to the learning of welding including Oxy-Acetylene, Arc Welding, MIG, and TIG as well as different types of cutting procedures. Different projects will be decided upon as the students progress through the units.

Agribusiness Management – This consumer education course will develop the students with skills pertaining to communication, accounting, finance, marketing, sales, taxes, and economics. This will be a business-based course applying agriculture examples for understanding.

Horticulture- This is a semester long course focusing on 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 is care and handling of cut flowers, principles of art applied to floral design, and the mechanics of floral design. Agribusiness units will be introduced in merchandising, advertising, sales, and operating a retail floral business.

Landscaping and Turf Management- This semester long advanced course focuses on the landscape, nursery, and turf segments of the horticulture industry. Units of student include: identifying landscape plants, designing landscape plans, hard-scape construction techniques, and installing landscape plants. Also included are nursery production, turf grass production, and maintenance of existing landscapes. Agribusiness units will cover calculating prices for materials and labor, managing a horticulture business, managing inventory, and employee management.

Art

Course #	Title	Prerequisite	Credit	Grade
111001	Design	None	1	9-12
111007	Advanced Design	Design	1	10-12
111002	Drawings	Design	.5	10-12
111003	Construction	Design	.5	10-12
111005	Printmaking	Design	.5	10-12
111006	Painting	Design	.5	10-12
111004	Computer Graphics	Business Computer Apps.	1	10-12

Course Description

Design – Introduces students to Elements and Principles of Design: color, line, shape, space, texture/patterning, balance, rhythm, proportion, and unity/variety. These elements and principles are the basis for all artwork. Students will develop drawing and painting skills using a variety of materials and tools including but not limited to: pencil, colored pencil, markers, watercolors, acrylics, papers, crayons, and inks.

Advanced Design – continues the use if the elements and principles of Design: color, line, shape, space, texture/patterning, balance, rhythm, proportion, and unity/variety. These elements and principles are the basis for all artwork. A variety of materials and tools will be used including but not limited to: pencil, colored pencils markers, watercolors, acrylics, papers, crayons, and inks. Students in Advanced Design will create more complex projects appropriate for their portfolios.

Drawing –Students will learn to master line and shading skills working from real life and from photos. Emphasis is on direct observation, developing pictorial space and layout, and drawing concepts. Media will include but not limited to: pencil, colored pencil, markers paints, and washes.

Construction – Exploration of 3 dimensional art using a variety of techniques and materials including clay, paper, and found objects.

Printmaking – The use of additive and subtractive printmaking techniques to create multiple images of each design idea. Techniques include: block, stencil, and intaglio printmaking methods.

Painting - Experimental work with a variety of transparent and opaque painting media.

Computer Graphics-Students will learn how to combine color, text, and illustration into successful layouts. They will also develop enhanced skills in using the computer as an art tool.

Business

Course #	Title	Prerequisite	Credit	Grade
141000	Intro. to Business	None	1	9-12
141001	Accounting I	None	1	11-12
141002	Accounting II	Accounting I	1	12
141003	Economics	None	.5	11-12
141004	Marketing	None	.5	11-12

Course Description

Introduction to Business- This yearlong course is highly recommended for students who are interested in learning how to function effectively in the business world. Some of the topics included in this course of study are the economy, banking and saving, investing in the stock market, accounting principles, marketing, management and leadership skills required to become successful in the business world. The application and importance of business etiquette and ethics will be introduced. Additionally, students will participate in a Stock Market trade competition. Students will also engage in an entrepreneurial unit to enhance their understanding of what is involved in owning their own businesses. After completing this course, students will understand how the different components of the business world operate and interact with each other, and will gain exposure to the skills necessary to function well in today's changing economy.

Accounting I – Accounting I is a yearlong course that utilizes the microcomputer and Quick Books Accounting Software as students learn how to work with journals, ledgers, balance sheets, income and capital statements. Accounting is an important course that will prepare students for the job market and give them a solid background for further study in college, and provide students with an understanding of how financial decisions are made.

Accounting II- Accounting II is an advanced yearlong course that students will apply accounting principles for partnerships, corporations, and departments. Students will use spreadsheet software to create financial statements for all units studied. Topics covered in Accounting II include, but are not limited to: accruals, prepaid expenses, income received in advance, vouchers, notes receivable and payable, and capital stock. Simulations are utilized to allow students to assume the role of an accountant. This course builds a solid foundation for business majors at the college level.

Marketing - This course will help students learn about marketing principles and to develop marketing skills. Real cases correlated to the text materials are provided at the end of each chapter to present realistic business situations for analysis. Students at the end of the semester will develop a marketing plan. The marketing plan provides students with a structured experience that will result in a well-written marketing plan that uses both decision making and creativity.

Economics – A semester course that will teach a 5-step decision process to enable each student to make informed and relevant choices in the marketplace, the voting booth, and in life. You will be able to identify the opportunity costs of any choice and evaluate those costs against the expected benefits. Secondly, one needs to understand how individual choices affect supply and demand (microeconomics). In Part 3, we will discuss macroeconomics and explain the choices made by the whole economy. Lastly, we will explore economic topics as related to the whole world economy with international trade and problems of less-developed countries as the focus.

Computer

Course #	Title	Prerequisite	Credit	Grade
151002	Business Computer Applications	25 Words/Min.	.5	9-12
151001	Visual Basic Programming	Business Computer Apps.	1	10-12
151003	Web Page Design	Business Computer Apps.	1	10-12

Course Description

Visual Basic Programming- This yearlong course will provide many opportunities for students to exercise their creativity while individualizing programs. Business and industry have adopted Visual BASIC as a popular, easy-to-use alternative to C++. Students will build applications in a graphical/Windows environment. Students will learn how to design programs using textboxes, label controls, and command buttons on a Visual BASIC form. Students will also learn to change property controls and create EXE files as well as develop game related programs after learning the basic functions.

Business Computer Applications- This semester course is a hands-on computer class the students will learn to use Microsoft Office XP. The components of Microsoft Office that are covered in this course are Word, Excel, Access, and Frontpage. Students will be able to create professional looking documents using Microsoft Word. Microsoft Excel will be used to create spreadsheets that allow students to enter data, format data, calculate data, and generate graphs. Students will enter data, create and format tables and reports and query data using Microsoft Access. Frontpage is the program that will be used to create, format, and publish a web page. The students will be able to integrate the Microsoft programs by doing various real world applications.

Web Page Design- In this yearlong hands-on computer class, the students will learn to use Macromedia Suite MX. Components of Macromedia that are covered in this course are Dreamweaver, Fireworks, Flash, and Freehand. Students will be able to create professional looking web pages. Students will be able to integrate the Macromedia programs doing various real world applications. Students in this class will also be responsible for maintaining MFHS Activities pages as well as creating a personal page for themselves.

Family and Consumer Science

Course #	Title	Prerequisite	Credit	Grade
171001	Family & Consumer Science	None	1	9-12
171002	Foods II	Intro FCS	1	10-12
171003	Adult Living	None	.5	11-12
171004	Parenting	None	.5	11-12
171005	World Of Work	None	1	11-12
141005	Consumer ED	None	.5	11-12

Course Description

Family and Consumer Science-This course is designed to cover the following topics: careers, finances, leadership, goals, relationships, food preparation and nutrition. Students will be introduced to career research, workplace skills, and the world of work. Money management through budgeting, saving, and investing will be presented. This course will include laboratory experiences needed to develop knowledge and understanding of

food principles and applied nutrition for people of all ages. Food units to be covered are: cookies, quick meals, nutritional snacks, microwave meals, meat-protein, breads & cereals, fruits-vegetables, and milk & cheese.

Foods II-This course is designed to give students a strong nutrition background and consumer emphasis for practical food preparation skills. Critical thinking, decision-making, and resource management skills are also emphasized. Food units to be covered are: convenience foods and additives, poultry, yeast breads, cake decorating, beef, pork, pastries, cakes, and foreign foods.

World of Work-This course is designed to help students explore careers and make the transition from school to work successfully. Students learn how to research colleges and apply to them, write essay questions, and search for scholarships. Students will learn how to choose, find, and keep a job. After researching careers, students are required to job shadow once during the second nine weeks in their chosen career field.

Adult Living-You're legally an adult at 18…are you really ready? This course is designed to help students explore many of the decisions and responsibilities of adulthood. Topics include: communication skills, decision making, management, sexuality, conflict resolution, and balancing work and family.

Parenting-Babies do not come with instruction manuals, but they do require a lot of time and energy. This course is designed to help students explore the responsibilities and roles of parenthood. Topics include: determining parenting readiness, parenting skills, prenatal care, labor and delivery, and infant care. Other topics covered: development of children, guidance, education, health, and safety of children will also be covered. Students will have the opportunity to be a "parent" through the hands on Sugar Babies Project.

Consumer Education -The ultimate goal of this course is to help students become confident individuals with regard to understanding his/her responsibilities in the America economic system. Topics to be covered are: understanding the economy, credit, savings and investments, insurance, taxes, consumer laws, financial management, and making well informed purchasing decisions. No other course is more deeply rooted in the real world or more relevant to everyday living. This course will satisfy their required Consumer Education by the state of Illinois.

French

Course #	Title	Prerequisite	Credit	Grade
201005	French I	None	1	9-12
201006	French II	French I	1	10-12
201007	French III	French II	1	11-12
201008	French IV	French III	1	12

Course Description

French I - This program is based on a text, taped oral program, exercises in conversation and exercises for memorizing vocabulary lists, exercises for translation to English, and exercises for writing sentences in the French language.

French II - This program is based on a text, a taped oral program, exercises in conversation and exercises for memorizing vocabulary lists, exercises for translations to English and exercises for writing sentences in the French language. This particular course is a continuation and a more in depth study of French I.

French III– This particular course is a continuation and a more in depth study of French II.

French IV – This particular course is a continuation and a more in depth study of French III.

Spanish

Course #	Title	Prerequisite	Credit	Grade
201001	Spanish I	None	1	9-12
201002	Spanish II	Spanish I	1	10-12
201003	Spanish III	Spanish II	1	11-12
201004	Spanish IV	Spanish III	1	12

Course Description

Spanish I - This program is based on a text, taped oral program, exercises in conversation and exercises for memorizing vocabulary lists, exercises for translation to English, and exercises for writing sentences in the Spanish language.

Spanish II - This program is based of a text, a taped oral program, exercises in conversation and exercises for memorizing vocabulary lists, exercises for translations to English and exercises for writing sentences in the Spanish language. This particular course is a continuation and more depth study of Spanish I.

Spanish III - This course is an extension of Spanish II with much more reading, writing and oral communication in Spanish.

Spanish IV - This course is an extension of Spanish III.