

AGRICULTURE

INTRODUCTION TO AGRICULTURE **(18001A001)**

Length: Full year
Credit: .5 per semester
Prerequisite: None

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, technology, environmental science and aqua cultural science and technology will be presented. Improving computer and workplace skills will be a focus. Participation in FFA student organization activities and Supervised Agricultural Experience (SAE) projects is an integral course component for leadership development, career exploration and reinforcement of academic concepts.

AGRICULTURAL SCIENCE **(18003A001)**

Length: Full year
Credit: .5 per semester
Prerequisite: Introduction to Agriculture

This orientation level course further defines the basic skills and knowledge learned in the introduction to the Agricultural course. Major units of instruction include advanced plant science, soil science, animal science, and agricultural mechanics. Applied science and math skills and concepts will be stressed throughout the course as they relate to each area. Improving computer and workplace skills will be a focus. Participation in FFA student organization activities and supervised agricultural experience (SAE) projects is an integral course component for leadership development, career exploration and reinforcement of academic concepts. Science credit for graduation will be received for this class. This course meets the graduation requirement for 1 credit in a life science.

AGRICULTURAL MACHINERY SERVICE: AG OPERATIONS **(18401A001)**

Length: Full year
Credit: .5 per semester
Prerequisite: Introduction to Agriculture

This comprehensive machinery service course concentrates on the following areas: using service manuals, electrical applications for agricultural equipment, fundamentals of multi-cylinder engines, reconditioning and repairing agricultural equipment, organization and management of agricultural machinery dealerships, human relations, and sales techniques. Careers such as agricultural equipment salesperson, mechanic, parts manager, sales manager, service technician, 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.

AGRICULTURAL MECHANICS AND TECHNOLOGY: AG DESIGN **(18403A001)**

Length: Full year
Credit: .5 per semester
Prerequisite: Introduction to Agriculture

This course will concentrate on expanding students' knowledge and experiences with agricultural mechanics technologies utilized in the agricultural industry. Units will cover topics such as servicing vehicles, conveyor equipment, livestock feeding equipment, electrical outlets and systems, fuel systems, lubrication systems, cooling systems, maintaining tool and service records, assembling planting equipment, tillage equipment, pumps and harvesting equipment, repairing equipment for off piece metal utilizing welding equipment, preparing equipment for off season storage, performing building inspection and repair/paint, planning and constructing buildings, fences and gates, and maintaining ventilation systems. Leadership skill development is provided through the various programs offered by the national, state, sectional and local FFA organizations.

BUSINESS

KEYBOARDING **(12005A001)**

Length: One semester
Credit: .5
Prerequisite: None

Keyboarding is a graduation requirement taken by all freshmen. However, students may waive this course by passing a proficiency exam. This course develops basic skills in keyboarding technique on a personal computer. Emphasis is placed on keyboarding technique, proofreading, correcting errors, formatting, and production of copies. Units include 1) develop touch-system techniques; 2) develop speed and accuracy skills; 3) use manipulative parts of a personal computer; 4) develop punctuation, syllabication and capitalization skills; 5) proofread and correct errors; 6) perform vertical and horizontal centering; 7) prepare documents such as letters, envelopes, MLA reports, interoffice memoranda, and outlines.

COMPUTER APPLICATIONS **(10004A001)**

Length: One semester
Credit: .5
Prerequisite: Keyboarding or Proficiency

Computer Applications is a graduation requirement taken by all freshmen. This 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, and presentation software. Students will explore topics related to computer concepts, operating systems, telecommunications and emerging technologies. The development of employability skills, as well as transition skills, will be included in the course as well as an understanding of the ethical considerations that arise in using information processing equipment and gaining access to available databases.

ADVANCED COMPUTER APPLICATIONS **(10004A001)**

Length: One semester
Credit: .5
Prerequisite: Computer Applications

An advanced 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 primarily using Microsoft Excel software. Students will explore topics related to computer concepts, operating systems, telecommunications and emerging technologies. The development of employability skills, as well as transition skills, will be included in the course as well as an understanding of the ethical considerations that arise in using information processing equipment and gaining access to available databases.

ACCOUNTING 1 & 2 **(12104A000)**

Length: Full year
Credit: .5 per semester
Prerequisite: Successful completion of Keyboarding and Computer Applications; Junior Standing; Sophomore standing only with teacher approval.

This is a preparation level course that includes planned learning experiences that develop initial and basic skills used in systemically computing, classifying, recording, verifying and maintaining numerical data involved in financial and product control records including the paying and receiving of money. Instruction includes information on keeping financial records, summarizing them for convenient interpretation, and analyzing them to provide assistance to management for decision making. Accounting computer applications are introduced in the course. In addition to stressing basic fundamentals and terminology of accounting, instruction provides initial understanding of the preparation of financial reports, operation of related business machines and equipment, and career opportunities in the accounting field.

BUSINESS MANAGEMENT
(12166A000)

Length: Full year
Credit: .5 per semester
Prerequisite: Computer Applications

This is an introductory level course designed to foster an awareness and understanding of the business, marketing and management concepts, which are: 1) understand basic business and economic principles; 2) identify types (entrepreneurships, partnerships and corporations) and classifications (such as financial institutions, marketing and service entities) of business organizations; 3) organize and use financial data; 4) contrast management theories; 5) understand marketing; 6) demonstrate an understanding of business administration; 7) apply production data for decision making; and 8) understand technology. Students will be exposed to business principles, business communications and business computation. Areas of study are: 1) understand business communication theories, 2) develop reading skills, 3) develop writing skills, 4) develop listening skills, and 5) develop speaking skills.

ENGLISH

ENGLISH 9
(01001A000)

Length: Full year
Credit: .5 per semester
Prerequisite: None

This required writing-intensive course presents a study of fiction, non-fiction, classic and modern texts, literary terms, argumentative, expository, and narrative writing, and an introduction to research methods and MLA style.

HONORS ENGLISH 9
(01001A000)

Length: Full year
Credit: .5 per semester
Prerequisite: None. 8th grade teachers will provide recommendations.

Description: The honors level course will mirror the curriculum of English 9. However, additional standards will be covered in greater depth. Students will also receive additional assignments to complete.

ENGLISH 10
(01002A000)

Length: Full year
Credit: .5 per semester
Prerequisite: English 9

This required writing-intensive course presents a study of literary analysis, fiction, non-fiction, multicultural classic and modern texts, argumentative, expository, and narrative writing, and a research project in MLA format.

HONORS ENGLISH 10
(01002A000)

Length: Full year
Credit: .5 per semester
Prerequisite: English 9

The honors level course will mirror the curriculum of English 10. However, additional standards will be covered in greater depth. Students will also receive additional assignments to complete.

ENGLISH 11
(01003A000)

Length: Full year
Credit: .5 per semester
Prerequisite: English 10

This required writing-intensive course presents a study of fiction, non-fiction, classic and modern texts, drama, literary terms, argumentative, expository, and narrative writing, and a research project in MLA format.

ENGLISH 12
(01004A000)

Length: Full year
Credit: .5 per semester
Prerequisite: English 11

This required writing-intensive course presents a study of literary analysis, fiction, non-fiction, drama, classic and modern texts, argumentative, expository, and narrative writing, and a research project in MLA format.

AP English Literature and Composition
(01004A000)

Length: Full year
Credit: .5 per semester
Prerequisite: English 10

The course is designed according to College Board guidelines, with rigor and expectations of high proficiency. It is designed to meet the needs of students designated as exceptionally gifted or talented in the area of language arts. The course will focus on American and British literature through a variety of literary periods. Composition, listening, and speaking skills are practiced and reinforced within the study of the literary or historical periods, as a part of required independent reading, and as a part of individually selected or teacher directed research. The course will also focus on preparing students for the AP Exam.

AP English Language and Composition
(01004A000)

Length: Full year
Credit: .5 per semester
Prerequisite: English 10

The course is designed according to College Board guidelines, with rigor and expectations of high proficiency. It is designed to meet the needs of students designated as exceptionally gifted or talented in the area of language arts. Students will be exposed to prose written in a variety of periods, disciplines, and rhetorical contexts. This course will emphasize the interaction of authorial purpose, intended audience, and the subject at hand, and through them, students learn to develop stylistic flexibility as they write compositions covering a variety of subjects that are intended for various purposes. Students are required to read over broad topic or subject areas and write critical and analytical papers in relation to reading, based both upon the reading itself and the means by which the writer accomplished his or her goals. The course will also focus on preparing students for the AP Exam.

SPEECH
(01151A000)

Length: One semester
Credit: .5
Prerequisite: English 10

An elective, this course helps the student develop skills for successful oral communication. This includes intrapersonal and interpersonal communication skills, listening techniques, assertiveness skills, group discussion and decision-making skills, as well as the verbal and non-verbal factors in preparing and delivering information to a group. Several formal speaking assignments will be assigned during the course of the semester. During the fourth quarter, time will be spent on an introduction to debate, and oral interpretations.

CREATIVE WRITING
(01104A000)

Length: One semester
Credit: .5
Prerequisite: English 10

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

DRAMA
(05053A000)

Length: One semester
Credit: .5
Prerequisite: none

This course is designed for the student who is interested in drama and would like to learn the basic skills necessary to act in or produce a play. Prior experience is not necessary for success. Acting, directing, character development, script and character analysis, improvisation and more will be taught through various theater games, activities, and lessons. This highly interactive class will culminate in a project which is a final performance of a scene from a play. This course may be taken multiple times during the course of a student's high school career.

FAMILY CONSUMER SCIENCE

CONSUMER EDUCATION
(22210A001)

Length: one semester
Credit: .5
Prerequisite: senior standing

This required course for seniors focuses on the understanding and skills needed to make decisions about the use of resources and prevention strategies that contribute to an improved quality of life. The course content includes the following duty areas: evaluating use of resources to meet social, physical and psychological needs; maintaining health standards by applying safety information; applying consumer rights and responsibilities in the marketplace; accomplishing mutual goals by utilizing human resources; and analyzing resource/consumer management skills necessary to make decisions. This course meets the content requirements for consumer education instruction, including installment purchasing, budgeting, comparison of prices and an understanding of the roles of consumers when interacting with agriculture, business labor unions and government in formulating and achieving the goals of the mixed free enterprise system. Seniors may waive this course by taking a proficiency exam or may take Economics in lieu of Consumer Education.

INTRODUCTION TO FAMILY CONSUMER SCIENCE
(22201A001)

Length: Full year
Credit: .5 per semester
Prerequisite: none

This class serves as an introduction and background for all vocational home economics programs. Seven areas are covered: 1) clothing and textiles 2) resource management 3) foods and nutrition 4) housing, furnishing and equipment 5) human development, 6) interpersonal and family relationships, and 7) introduction to the world of work.

FOODS AND NUTRITION I
(16054A001)

Length: One semester (fall)
Credit: .5 per semester
Prerequisite: Intro to Family Consumer Science

This course includes the basic classroom and laboratory experience needed to develop a knowledge and understanding of basic food principles and nutrition for people of all ages. Course content centers around: 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.

FOODS AND NUTRITION II
(16054A001)

Length: One semester (spring)
Credit: .5 per semester
Prerequisite: Foods & Nutrition I

The second orientation-level foods course centers on food selection and preparation for special circumstances and dietary needs. Laboratory sessions are devoted to preparation of foods with specific characteristics. Course content includes the following: careers in foods and nutrition, influences on food customs, diet and health, current nutritional issues, special food needs, food safety and sanitation, food purchasing, food conservation, and food preservation. This course provides an introduction to commercial food service, preparation and management; there is an emphasis on food service and hospitality occupations.

INTERNATIONAL FOODS
(16054A001)

Length: Full year
Credit: .5 per semester
Prerequisite: Minimum B in Foods & Nutrition II

International Foods is a cultural awareness program with the use of food and geography. Emphasis will be placed on working cooperatively and appreciating the historical and geographical reasons of food and their preparation differences. Countries included (but not limited to) will be China, Italy, and Mexico.

CHILD DEVELOPMENT
(19052A001)

Length: One semester
Credit: .5 per semester
Prerequisite: Intro to Family Consumer Science

Students are given experiences which enable them to gain knowledge and understanding of the intellectual, physical, social, and emotional development from conception through adolescence. Course content is designed to promote positive child development and centers around: managing and organizing child development, promoting child development, practicing health and safety standards, providing experiences which encourage children to maximize resources, encouraging human relations skills, and evaluating family and career changes.

PARENTING
(22204A001)

Length: One semester
Credit: .5 per semester
Prerequisite: Child Development

Many parenting situations are examined in this class designed to help students think through the responsibilities, satisfactions, and stresses of parenthood. Stress prevention and management and the work of community agencies that help parents deal with various types of parenting crises are emphasized. Special attention is given to the needs of teenage parents and to the importance of readiness for parenthood.

INTRODUCTION TO FASHION
(19201A000)

Length: One semester
Credit: .5
Prerequisite: Intro to Family Consumer Science

This course provides knowledge and understanding of textiles, fashions and fabrics in meeting the clothing and fabric (fashion) product needs of individuals, families and the general public. The course content centers around developing competencies in the following duty areas: selecting clothing and textiles 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 contributing to health, safety and comfort; maximizing resources in selecting, constructing, altering, repairing and remodeling clothing/textile products; communicating intended clothing image to others; and approving decisions necessary for clothing and textiles needs. Information and experience provide an understanding of the psychological aspects of fabric products as related to the needs of people, and the jobs and careers using competencies related to textiles and fabrics and fashion are included throughout the course.

INTERIOR DESIGN
(22211A001)

Length: One semester
Credit: .5
Prerequisite: Intro to Family Consumer Science

This course provides basic knowledge and skills needed to select, acquire, furnish, maintain, and manage residential and commercial environments to meet the needs of the users/occupants. The course includes the application of the interior design elements and principles; selection and care of furnishings, equipment and accessories in relation to socio-economic factors, trends, personal tastes and characteristics, as well as physical and psychological needs.

Fine Arts

INTRODUCTION TO ART
(05154A000)

Length: Full year
Credit: .5 per semester
Prerequisite: None

This is a foundation course to introduce the seven elements (line, shape, color, value, texture, form and space) along with the seven principles of design (contrast, rhythm, unity, emphasis, pattern, movement and balance). The class will explore vocabulary, techniques and media through a variety of projects.

INTERMEDIATE 2D ART
(05155A000)

Length: Full year
Credit: .5 per semester
Prerequisite: Intro to Art

Intermediate 2D Art places emphasis on 2-Dimensional work using drawing techniques, imagination, and originality. Further study of color theory through the use of collage, painting, printing, and drawing techniques will be included. Students will explore a variety of media, techniques and subject matter.

ADVANCED 2D ART
(05155A000)

Length: Full year
Credit: .5 per semester
Prerequisite: INTERMEDIATE 2D ART

This course will include use of many drawing techniques studied in Intermediate 2D Art, with more emphasis on advanced design quality and originality. Outside class research will be required.

INTERMEDIATE 3D ART
(05158A000)

Length: Full year
Credit: .5 per semester
Prerequisite: Intro to Art

Intermediate 3D Art places emphasis on 3-Dimensional work, such as clay, sculpting, and fiber designs. Students will explore a variety of media, techniques and subject matter.

ADVANCED 3D ART
(05154A000)

Length: Full year
Credit: .5 per semester
Prerequisite: INTERMEDIATE 3D ART

This course will include use of many techniques studied in Intermediate 3D Art, with more emphasis on advanced design quality and originality. Outside class research will be required.

INDEPENDENT STUDY - ADVANCED ART
(05999A000)

Length: One semester
Credit: .5
Prerequisite: Advanced 2D Art or Advanced 3D Art

A capstone course in art, this course is designed for students who have demonstrated high level of excellence in previous art courses. Students will make project proposals to the art teacher and work independently towards completion of the projects. Students may elect to take this course for two semesters.

DIGITAL PHOTOGRAPHY
(05167A000)

Length: One semester
Credit: .5
Prerequisite: None

Students must already have a basic understanding of the mechanics and operation of their own digital camera. Each student **MUST** have a camera available to him/her every day. (No phones) Student will need a memory card with lots of available memory in their camera. Cameras must have their own chargers or the student must supply their own batteries. An additional memory card (with lots of memory) is required the first week of school. Memory card will be stored in a locked area. This class will delve into camera usage, photo techniques, and composition. Students will photograph a variety of subject matters. The class may also incorporate personal photos in various art projects.

INSTRUMENTAL MUSIC
(05102A000)

Length: Full year
Credit: .5 per semester
Prerequisite: Experience on an instrument

Students will examine the aesthetic, theoretical, and historical elements of music through performance in the wind band idiom. Course material will also include basic musicianship, instrumental technique, and the development of listening skills necessary to perform in an ensemble. **Marching band and pep band are required activities in this class.** Other related extracurricular activities may include opportunities to perform as a soloist, in small ensembles, in county, district, and state festival bands, in musical pit orchestras and in jazz bands. Class may be repeated with permission of instructor.

VOCAL MUSIC
(05110A000)

Length: Full year
Credit: .5 per semester
Prerequisite: none

Students will examine the aesthetic, theoretical, and historical elements of music through performance in the choral idiom. Course material will include basic musicianship, vocal technique, and the development of listening skills necessary to perform in an ensemble. Other related extracurricular activities may include opportunities to perform as a soloist, in small ensembles, in county, district, and state festival choirs, in local community performances, in the cast of school musicals, and in vocal jazz ensembles. Class may be repeated with permission of instructor.

INSTRUMENTAL/VOCAL COMBO
(05149A000)

Length: Full year
Credit: .5 per semester
Prerequisite: Experience on an instrument

This class is a combination of the instrumental and vocal music classes, giving students the opportunity to participate in both, rather than having to choose between them. Students will split their time between the two classes equally, attending each class every other day.

GUITAR I
(05106A000)

Length: Full year
Credit: .5 per semester
Prerequisite: None

An elective, introductory course for any student. Students must provide their own instrument. This course will provide students with introductory instruction in guitar.

GUITAR LAB
(05106A000)

Length: Full year
Credit: .5 per semester
Prerequisite: Guitar I or permission of instructor

An elective, second-year course open to students who have successfully completed Guitar I or with permission of the instructor.

FOREIGN LANGUAGE

SPANISH I **(06102A000)**

Length: Full year
Credit: .5 per semester
Prerequisite: none

An elective course for any student. The first level of Spanish provides the first step towards the mastery of the language through work in conversation, listening, reading, writing, and cultural activities.

SPANISH II **(06103A000)**

Length: Full year
Credit: .5 per semester
Prerequisite: C in Spanish I or minimum 75% on Spanish I proficiency test for students with previous Spanish lessons

The second level of Spanish amplifies the work of the first level. Listening skills continue to be stressed - however, on the second level, original responses are developed; a thorough study of grammar and verbs is emphasized; composition skill is introduced; and, a more advanced reading comprehension is achieved. An appreciation of the Spanish and Latin American culture, history, and geography should be gained.

SPANISH III **(06103A000)**

Length: Full year
Credit: .5 per semester
Prerequisite: C in Spanish II

The third level of Spanish is a one year course aimed towards a higher level of proficiency in the language; its focus is advanced grammar, culture study, readings, literature, and conversational practice.

SPANISH IV **(06104A000)**

Length: Full year
Credit: .5 per semester
Prerequisite: C in Spanish III

The fourth level of Spanish is a one year course focusing on reading and literature, advanced grammar, conversational practice, culture study, and hands-on-projects.

HEALTH, DRIVER'S ED, & P.E.

HEALTH **(08051A000)**

Length: one semester
Credit: .5
Prerequisite: Typically sophomore class

A one semester required course, this class offers current information on physical, mental, and social well-being as it relates to a person's total health. The class can provide a foundation for an understanding of oneself and of the choices that can improve and protect one's health. The course includes a study of major health risk, with emphasis on environmental factors, hereditary factors, and life-style changes.

DRIVER EDUCATION
(08152A000)

Length: one semester

Credit: .5

Prerequisite: Must be 14 ½ years of age; scheduled based on D.O.B.; passed 8 classes in past 2 semesters

Driver education consists of a two phase program designed for the purpose of helping students learn the proper operating skills and techniques necessary to operate a motor vehicle safely.

Phase One: required for high school graduation. The student must be in attendance for a minimum of 30 clock hours; course content includes information on motor vehicle laws and traffic regulations. This portion lasts about nine weeks.

Phase Two: optional--driving behind the wheel; students have opportunities to practice under real life driving conditions. Social security number is required.

PHYSICAL EDUCATION
(08001A000)

Length: One semester

Credit: .5 per semester

Prerequisite: none

The class is an activity-oriented program with emphasis placed on carry-over values. Activities are presented to allow for individual abilities. Badminton, basketball, flag football, pickle ball, softball, and volleyball may be included. Fitness games and activities will be included as well. Students must take and pass six semesters of Physical Education in order to graduate.

P.E. WAIVER

Juniors and seniors may be exempt from physical education for one of the following reasons:

1. If a student needs an additional credit for graduation.
2. If a student needs a course to meet college admission requirements.
3. If a student is participating in interscholastic athletics.

Physical Education Waiver Requests may be requested through the guidance office. After reviewing the requests, the building principal will decide on their approval.

ADVANCED PHYSICAL EDUCATION
(08005A000)

Length: One semester

Credit: .5

Prerequisite: none

This course is designed to improve personal physical fitness through an individualized physical fitness program, which also demonstrates knowledge of principles related to health-related fitness. Students will improve advanced personal physical fitness skills, which include strength, speed, agility, endurance, flexibility and cardiovascular development. Through weight training and conditioning activities, students will develop skills related to physical fitness and exercise while promoting safety and teamwork. Students may elect to take Advanced Physical Education in place of Physical Education.

MATHEMATICS

ALGEBRA I
(02052A000)

Length: Full year

Credit: .5 per semester

Prerequisite: none

Students extensively use functions to set up and solve equations, solve inequalities, graph linear equations, perform operations on polynomials, factor polynomials, simplify rational expressions, solve systems of equations, and work with radicals. A TI-83 or TI-84 graphing calculator is required for the class.

GEOMETRY
(02072A000)

Length: Full year
Credit: .5 per semester
Prerequisite: Algebra I

Geometry covers such topics as points, lines, planes, angles, circles and polygons, and the numerous relationships of congruence, similarity, parallel and perpendicular lines. Algebra is used extensively in geometry. A TI-83 or TI-84 graphing calculator is required for the class.

STATISTICS
(02201A000)

Length: Full year
Credit: .5 per semester
Prerequisite: Algebra I & Geometry

This course will introduce students to four major conceptual themes: observing and exploring data; planning a statistically valid investigation; anticipating patterns and using probability and simulations for predicting outcomes; and confirming or rejecting models through statistical inference. This course is designed for students looking to fulfill their third year of math.

ALGEBRA II
(02056A000)

Length: Full year
Credit: .5 per semester
Prerequisite: Algebra I & Geometry

Algebra 2/Trig builds upon the skills and techniques of Algebra 1 and introduces students to new topics in rational functions, radicals, imaginary numbers, and logarithmic and exponential functions. Properties of functions are explored through algebraic, graphical, numerical, and symbolic representations. A TI-83 or TI-84 graphing calculator is required for the class. This course is designed for students who are planning to take Pre-Calculus.

PRE-CALCULUS/TRIGONOMETRY
(02110A000)

Length: Full year
Credit: .5 per semester
Prerequisite: C in Algebra II or instructor approval

Pre-Calculus builds upon the skills and techniques of Algebra 2/Trigonometry and introduces students to new topics in analytical geometry, functions, triangle trigonometry, exponential functions, logarithms, complex numbers, theory of polynomials, and other topics as time permits. Trigonometric functions and identities are used to solve problems. TI-83/ TI-84 graphing calculators are used extensively in this class.

CALCULUS
(02121A000)

Length: Full year
Credit: .5 per semester
Prerequisite: Pre-Calculus
(Must meet requirements of DACC: ACT score of 25 or higher or pass DACC placement test.)

Calculus covers analysis of functions and graphs, limits and continuity, differentiation, applications of the derivative, integration, and applications of the integral. Students are expected to analyze all concepts through graphical, numerical, algebraic, and verbal approaches and representations. This course is taught at DACC through dual-enrollment.

SCIENCE

PHYSICAL SCIENCE
(03159A000)

Length: Full year
Credit: .5 per semester
Prerequisite: none

Physical science is required of all freshmen. This course examines topics from the sciences of chemistry, physics, and earth science. Topics are studied as they apply to everyday situations. Lab work is required.

BIOLOGY
(03051A000)

Length: Full year
Credit: .5 per semester
Prerequisite: Physical Science

A required course for sophomores, this is an introduction to the study of the life sciences. The course covers basic chemistry related to cell function, cells, and their components, tissues, organs, organ systems, genetics, and classification. Laboratory work is used to provide reinforcement for the various concepts studied.

CHEMISTRY
(03101A000)

Length: Full year
Credit: .5 per semester
Prerequisite: Sophomore or above standing

In this course oriented for the college bound student, demonstrations and laboratory work are used to provide reinforcement for the various concepts studied including a comprehensive study of atoms, atomic structure, stoichiometry, gas laws, crystals, acids, bases and some organic chemistry.

CHEMISTRY II
(03102A000)

Length: Full year
Credit: .5 per semester
Prerequisite: Chemistry I

This course will cover chemical properties and interactions in more details. Advanced Chemistry topics include organic chemistry, thermodynamics, electrochemistry, macromolecules, kinetic theory, and nuclear chemistry.

EARTH/SPACE SCIENCE

(03001A000)

Length: One semester
Credit: .5 per semester
Prerequisite: Sophomore Standing

Covers the following areas of science: Earth science, composition of Earth, surface processes on Earth, the atmospheres, the oceans, and the dynamic Earth. Select topics in space science will also be addressed.

ENVIRONMENTAL SCIENCE

(03003A000)

Length: One semester
Credit: .5 per semester
Prerequisite: Junior Standing

This class covers the following areas: environmental biology, pollution, human population concerns, ecosystems, biomes, mitosis and meiosis, genetics, evolution, vertebrate natural history and fungi.

HUMAN ANATOMY AND PHYSIOLOGY

(03053A000)

Length: Full year
Credit: .5 per semester
Prerequisite: Biology

An advanced biology course designed primarily for the college bound student and for students interested in medical careers. The anatomy and physiology of the ten major organ systems of the human organism are studied; emphasis is placed on the human as an integrated whole and on the homeostatic mechanisms governing the overall function of the human body.

PHYSICS

(03151A000)

Length: Full year
Credit: .5 per semester
Prerequisite: Physical Science; Junior/Senior standing

Fundamental elements of force, heat, light, and electricity are covered in depth with emphasis on problem solving techniques in each area. Laboratory experiences are coordinated with the lecture.

SOCIAL STUDIES

WORLD HISTORY

(04051A000)

Length: Full year
Credit: .5 per semester
Prerequisite: none

A required class for freshmen, this class will serve as a survey of world history, starting with the Renaissance. The course will explore significant events/periods in World History, including Enlightenment, Industrial Revolution, World War I and II, and Post-World War II.

U.S. HISTORY
(04101A000)

Length: Full year
Credit: .5 per semester
Prerequisite: Junior standing

A required course for juniors, this class provides a study of the history of the United States from the Reconstruction to modern day. Topics/periods such as Progressivism, US involvement in world wars, the Great Depression, the Cold War, civil rights, and 9/11 will be explored.

CIVICS
(04151A000)

Length: One semester
Credit: .5
Prerequisite: Senior standing

This class is designed to help students use the skills, knowledge, and attitudes that will prepare them to be competent and responsible citizens throughout their lives. The class will focus on government institutions, the discussion of current and controversial issues, service learning, and simulations of the democratic process. Also included in the semester study is an in-depth look at the constitutions of the United States and of Illinois. Tests over both constitutions must be passed before a student can graduate. This course fulfills the State of Illinois civics requirement.

WESTERN HEMISPHERE GEOGRAPHY
(04001A000)

Length: One semester
Credit: .5
Prerequisite: None

An elective course, this course covers basic concepts in physical and cultural geography, focusing on North American and South America. Climate, economy, politics, and culture are examined.

EASTERN HEMISPHERE GEOGRAPHY
(04001A000)

Length: One semester
Credit: .5
Prerequisite: None

An elective course, this course covers basic concepts in physical and cultural geography, focusing on Europe, Asia, Africa, and Australia. Climate, economy, politics, and culture are examined.

CURRENT EVENTS
(04106A000)

Length: One semester
Credit: .5 per semester
Prerequisite: Sophomore Standing

An elective course, the class should provide students with a reasonable level of knowledge of current social and political issues of today. Students may have access to the classroom edition of *Time*, *Newsweek*, or *US News and World Report*. Active student participation in class discussion is essential.

SOCIOLOGY
(04258A000)

Length: One semester
Credit: .5
Prerequisite: Junior standing with a 3.0 GPA or Senior standing

Designed for the college bound student, this class studies human society and social behavior. Topics include the development of sociology, culture, social structure, socialization, social inequality, and the family.

PSYCHOLOGY
(04254A000)

Length: One semester
Credit: .5
Prerequisite: Junior standing with a 3.0 GPA or Senior standing

Designed for the college bound student, this class studies human behavior and mental processes. Topics include the development of psychology, sensation and perception, consciousness, learning, intelligence, human development, personality, and abnormal psychology.

ECONOMICS
(04201A000)

Length: One semester
Credit: .5
Prerequisite: Senior standing

Designed for the college bound student, the structure of the American economic system is studied in this semester long course. Students will consider the basics of microeconomics (supply and demand, cost analysis) and macroeconomics (banking, inflation) during this college preparation course. This course fulfills the Consumer Education requirement.