

Central Springs



High School

The Central Springs Community School District offers career and technical programs in the following areas of study: Business Education; Industrial Technology, Family Consumer Science & Health Occupations/Careers.

It is the policy of the Central Springs Community School District not to discriminate on the basis of race, color, national origin, sex, disability, religion, creed, age (for employment), marital status (for programs), sexual orientation, gender identity and socioeconomic status (for programs) in its educational programs and its employment practices. There is a grievance procedure for processing complaints of discrimination. If you have questions or a grievance related to this policy please contact Robert Hoffman, Middle School Principal, Central Springs Community School District, 509 N.Iowa, Nora Springs, IA 50458. Telephone: 641.749.5301 email: rdhoffman@centralsprings.net.

Agriculture

Introduction to Agriculture

Course Length: year long

Introduction to Agriculture and Natural Resources courses survey a wide array of topics within the agricultural industry, exposing students to the many and varied types of agriculture and career opportunities and those in related fields. These courses serve to introduce students to the agricultural field, providing them an opportunity to identify an area for continued study or to determine that their interest lies elsewhere. These courses often focus on developing communication skills, scientific research, types of business ownership, business principles, and leadership skills.

Art I

Course Length: fall or spring semester

Art I is open to all high school students. It is geared primarily to the artistic needs of first year art students with a sincere desire to study art. This is a general course designed to give the student a foundation in art to prepare him or her for more specialized classes in the art program. *This course is a prerequisite for all other art courses. The student must complete and pass Art I to qualify for any other art courses.*

Subject areas covered – perspective, light and shade, design, color theory, figure drawing, lettering, print process and crafts

Pottery

Course Length: fall or spring semester

Prerequisite: Successful completion of Art I

The pottery courses are intended for the students who have found a sincere interest in 3 dimensional designs. The experiences provided in the pottery courses are meant to help the student develop creativity and give a better understanding of esthetics and aide in total art development. The student can take a pottery course for each of his or her remaining semesters of high school art. Each semester will be increasingly more intense. It is possible that a student could take seven semesters of pottery. The desired outcome of such a student would be post high school caliber product by the end of their seventh semester. Subject areas covered – thrown and hand built pottery utilized both functionally and non-functionally.

Drawing and Painting

Course Length: fall or spring semester

Prerequisite: Successful completion of Art I

These courses are intended for the student who has successfully completed Art I. The drawing and painting courses introduce the student to advanced mediums involved with two-dimensional art. These courses will provide a background in composition which will serve as a foundation for future art studies. The drawing and painting courses will consist of advanced media. Subject areas covered – painting in watercolor, goache, tempera, acrylic and airbrush. Drawing utilizing pencil, charcoal, and ink.

Document Processing I

Course Length: fall or spring semester

Eligibility: Grades 9 - 12

This course has as its main objectives the mastery of the keyboard using the touch method and using correct technique. The student will develop the ability to format simple problems such as letters, memos, tables and reports. Microsoft Word computer software is used in a networked IBM-compatible computer lab. Through the articulation agreement with the community colleges, students completing this course plus Document Processing II may earn college credit. **Understand the basic skills necessary for life skills in a technological society.**

- Demonstrate a good understanding of the major operating systems.
- Identify components of a computer system.
- Demonstrate computer skills (e.g. copy, file, save, folder maintenance)

Business Law

Course Length: spring semester

Eligibility: Grades 10 – 12

This class will study the basic principles of business law which all people need to know for everyday personal and business use. Units of instruction include law enforcement and the courts, crimes, torts, law for the minor, student's legal rights and responsibilities, contract law, landlord/tenant relationships, and wills. **Understand and apply the processes and concepts needed for effective business management.**

- Understand the legal process
- Explain the legal rules that impact society.

Introduction to Business

Course Length: fall semester

Eligibility: Grades 10 – 12

This course is designed to introduce students to the world of business and help prepare them for their economic roles of consumer, worker, and citizen. This course will serve as a background for other business courses the student may take in high school and college. Included in this course will be topics on economic environment, business operations, management, issues in the global economy, financial institutions and banking, credit management and much more. **Understand the elements that are involved in business operations and how a person can use credit, invest and save, and manage personal finances in the economy.**

- Understand the role of economics in society.
- Understand the role of business operations in the U.S. economy.
- Describe the role of business and government in the global economy.
- Identify steps to manage a small business and how to maintain financial information.
- Understand the use of technology in the business world and economy.
- Understands financial resources and strategies available to the general public, along with the risks that go along with the risks that go along with the resources.

Personal Finance

Course Length: fall or spring semester (**required**)

Eligibility: Grades 11 - 12

Introduction to a structured career decision making process, including self-awareness, career and educational information, economic information, and related activities and projects.

- Assess personal strengths and weaknesses as they relate to career exploration and development.
- Utilize career resources to develop an information base that includes global careers.
- Integrate all forms of communication in the successful pursuit of a career.
- Relate work ethic, workplace relationships, and workplace diversity to career development.
- Utilize strategies to make a connection between school and work.
- Relate the importance of lifelong learning to career development.
- Explain the role of international business and analyze its impact on careers.

Accounting I

Course Length: fall semester

Eligibility: Grades 11 and 12

Accounting is the language of business. All businesspersons should have knowledge of the accounting process in order to function properly in the business world. Accounting I serves the dual purpose of providing the foundation for those desiring entry-level careers in business as well as providing the background necessary for all students desiring to go into business in a college where they will be required to take college accounting. Students are given opportunities to apply the accounting principles taught through daily problem assignments in the textbook and workbook. This course includes accounting for a service business organized as a sole proprietorship. **Understand the concepts and apply the principles of accounting, financial decision-making, and personal finance.**

- Recognize and understand basic terminology, principles, and concepts in the accounting process.
- Complete the various steps of the accounting cycle and explain the purpose of each step using manual and/or computerized systems.

Accounting II

This course with Accounting I articulate for NIACC's Introduction to Accounting (3 s.h.)

Course Length: spring Semester

Eligibility: Grades 11 and 12 **Prerequisite: Accounting I**

Accounting II builds on the knowledge of double-entry bookkeeping started in Accounting I. It includes accounting for a merchandising business organized as a partnership and as a corporation. The student will also spend time learning automated accounting on the computer. This course provides the background to do one's personal financial record keeping and to understand a business's financial records, to be employable at an entry-level position, or to take college accounting. **Understand the concepts and apply the principles of accounting, financial decision-making, and personal finance.**

- Interpret and analyze financial statements
- Apply appropriate accounting principles to satisfy the legal requirements of a business

NIACC Introduction to Entrepreneurship (BUS-130)

Course Length: spring semester

Eligibility: Grades 11th and 12th, or 9th and 10th TAG students

This course introduces the concept of Entrepreneurship beginning with identifying characteristics of the Entrepreneur, evaluating opportunities, feasibility, financing, and planning for success. Students will also understand the need for a contingency plan as well as an exit strategy. **A student also receives 3 hours of NIACC credit for this class.**

NIACC Computer Business Applications (BCA-215)

Course Length: fall semester

Eligibility: Grades 11th and 12th, or 9th and 10th TAG students

Emphasis on business applications of computer software. Students do business problems using word processing, electronic spreadsheet, and database management software. Students are also exposed to Windows operating systems, presentation software, and the internet. **A student also receives 3 hours of NIACC credit for this class.**

NIACC Human Relations (BUS-161)

Course Length: spring semester

Eligibility: Grades 11th and 12th, or 9th and 10th TAG students

Human Relations is a course designed to improve the student's ability to function in the workplace. This class will work on increasing the student's self-awareness and improving their ability to get along with customers, coworkers, and supervisors. **A student also receives 3 hours of NIACC credit for this class.**

NIACC Exploring Careers (WBL-100)

Course Length: spring semester

Eligibility: Grades 11th and 12th

This course will provide guidance in choosing a career goal and preparing for employment. Emphasis will be placed on identifying interests, abilities, and values, and exploring options for careers. Students will learn how to access labor market information and employment trends. Additionally, students will develop the skills and aptitudes necessary to obtain employment, emphasizing the development of characteristics associated with job success.

A student also receives 3 hours of NIACC credit for this class.

Foreign Language

Spanish I

Course Length: year long

The students will be exposed to basic vocabulary, the structure of the language and cultural differences. Topics covered will include friendships, school, sports and leisure activities, food, family, clothing, and other areas. Students will:

- Communicate in a language other than English
- Gain knowledge and understanding of target culture.
- Connect with other disciplines and acquire information.
- Participate in multilingual communities.

Spanish II

Course Length: year long

Prerequisite: Spanish I

This will be a continuation of Spanish I. The students will be exposed to vocabulary, the structure of the language and cultural differences. Topics covered will include all Spanish I topics plus feelings, sickness home descriptions, where do we live and other areas. The students will continue building a foundation for communication through the use of listening, speaking, reading and writing. Students will:

- Communicate in a language other than English
- Gain knowledge and understanding of target culture.
- Connect with other disciplines and acquire information.
- Participate in multilingual communities.

Spanish III

Course Length: year long

Prerequisite: Spanish II (Passing with a minimum grade of C)

This will be a continuation of Spanish II. The students will be exposed to vocabulary, the structure of the language and cultural differences. Topics covered will include all Spanish II topics plus TV shows or movies, order a meal, natural, environment, environmental dangers, giving or attending a party, school day and homework, extracurricular activities and describing clothing in detail. The students will build a foundation for communicating in Spanish through the use of listening, speaking, reading and writing. Students will:

- Communicate in a language other than English
- Gain knowledge and understanding of target culture.
- Connect with other disciplines and acquire information.
- Participate in multilingual communities.

Spanish IV

Course Length: year long

Prerequisite: Spanish III (Passing with a minimum grade of C+)

The students will build a foundation for communicating in Spanish through the use of listening, speaking, reading and writing. Students will:

- Communicate in a language other than English
- Gain knowledge and understanding of target culture.
- Connect with other disciplines and acquire information.
- Participate in multilingual communities.

Family and Consumer Sciences

Family and Consumer Science Basics

Course Length: year long (Grades 9-12)

This entry level class introduces the students to various units associated with FCS including nutrition, simple food preparation, safety and sanitation, consumer skills, child development, textiles (design principles, clothing care/construction, with a possible project to be a lap quilt), self-esteem and relationships. The cost of project materials will be the responsibility of the student. This class is a prerequisite for Foods and Textiles. Students will:

1. Integrate multiple life roles and responsibilities in family, work, and community settings

Foods I

Course Length: fall semester

Prerequisite: FCS Basics (Grades 10-12)

Continue the study of food preparation and nutrition. In this class, the student will continue their learning of food preparation, measurement, and nutrition introduced in FCS Basics. The students will make basic foods and learn to plan nutritious meals for themselves and their families. Students will:

1. Understand essential concepts and practices about food and nutrition
 - Understand the nutritional value of foods in relation to well-being throughout the life cycle
 - Know how to plan, purchase, and prepare food

Advanced Foods

Course Length: spring semester (Grades 10-12)

Prerequisite: Foods I

A continuation of Foods I with an emphasis on culinary arts as a career. Included will be an introduction to foreign foods. *Foods I and Advanced Foods could articulate with NIACC's Culinary Nutrition course (2 semester credits).* Students will:

1. Understand essential concepts and practices about food and nutrition
 - Know how food preparation methods and food handling practices affect the safety and nutritional quality
 - Know food related occupations

Industrial Technology

Industrial Technology I & II

This course is required before a student is able to enroll in any other Industrial Technology course.

Course Length: year long

This is a two semester course that provides introductory work in drafting, planning, woodworking, metal working, and electricity. The students will have the opportunity to produce projects in all areas. A group mass production project may be produced in any of the four areas. This course is a background course for all future Industrial Technology courses and is suggested for all students.

Standards and Benchmarks-Students will:

- Use drafting equipment to learn basic drafting skills and principles.
- Produce wood working projects using basic wood working principles and processes.
- Use metal working equipment to learn basic metal working processes.
- Use electronic equipment to gain basic knowledge of the principle of production, control, and use of electricity.
- Use the design process and principles and apply those principles to real world applications.

Computer Aided Drafting I (CAD I)

Course Length: fall semester

This course will be useful to students who are interested in an Engineering career. Students interested in the Construction Industry careers such as Carpentry and Cabinet Making will benefit from taking the class as well. Basic concepts of drafting will be covered, as well as learning to use the Computer Aided Drafting System (CAD) as a drawing tool. Standards and Benchmarks-Students will:

- Use mechanical drafting equipment to produce drawings that communicate information or ideas in graphic or picture like form.
- Use the AutoCAD computer program to produce drawings that communicate information or ideas in graphic or picture like form.

Computer Aided Drafting II; Architectural Design (CAD II)

Course Length: spring semester

The student will be introduced to Architectural Design and Drafting and will design and draw plans for a home. They may also build a model of a house as a group project. Computers will also be used for some parts of the design and drawing process. This class will help persons interested in the construction industry. Standards and Benchmarks-Students will:

- Apply the design process to create a dream home and become more knowledgeable about residential house construction.
- Use the AutoCAD computer program to produce a set of house plans.

Metals

Course Length: fall semester

This is a one-semester course involving advanced metal working procedures. This course provides advanced work in oxy-acetylene welding, arc welding, mig welding, foundry, machine operations (metal lathe, milling), heat treating, bench metal, and sheet metal. The course is supplemented with industrial field trips on an individual and group basis. This course provides a concrete background for the individual who plans on pursuing post-secondary vocational training. Metals can be articulated into NIACC's Auto and Climate Control programs if the student receives an A or B. Standards and Benchmarks-Students will:

- Use metal working equipment to produce required activities (welding, engine lathe, sheet metal, foundry, bench metal).
- Use safe metal working practices to create metal working projects.
- Apply technical drafting skills to produce actual projects.
- Use pre-planning skills and basic knowledge to create metal working projects.

Power Mechanics

Course Length: spring semester

The student is introduced to the operation and repair of two and four cycle engines. The student will learn the theory and operation of the gas-powered engine. The student will disassemble and reassemble a school-owned engine before proceeding to the trouble shooting of an engine that is brought in by the student. They will also learn about basic auto maintenance. Standards and Benchmarks-Students will:

- Use small engines to explore the concepts of the 2 and 4-stroke internal combustion engine.
- Use automotive hand tools to disassemble/reassemble, make service measurements and checks on a 4-stroke internal combustion engine
- Use automotive hand tools to perform basic maintenance procedures on an automobile.

Carpentry

Course Length: fall semester

This course involves general carpentry rather than fine cabinet work. A general project will be produced by the class. General techniques will be learned in home construction. Units in house wiring, dry walling, concrete work, siding, and plumbing may also be taught. Standards and Benchmarks-Students will:

- Use basic construction equipment to produce storage shed.
- Use house wiring practice walls to learn the concepts of electrical wiring in a home.
- Use practice walls to learn the procedures used in the dry walling process.

Cabinet Making

Course Length: spring semester

This is a one-semester course in which the student will design and construct an advanced wood working project. This course will involve extensive use of woodworking machines and power hand tools. Standards and Benchmarks-Students will:

- Use woodworking machines and power hand tools to create an Adirondack chair.
- Use the design process to design and produce an advanced wood working project.

NIACC Maintenance Shop Operations (ELT-745)

Course Length: fall semester

Eligibility: Grades 11th and 12th, or 9th and 10th TAG students

Introduction to shop equipment generally found in the industrial maintenance environment. Instruction and practice with metal saws, drills, grinders, elementary welding and cutting, thread repair, anchors and fasteners. Study of mechanical prints to identify parts in assembly and repair situations. Use of catalogs to find and order repair parts, study of bearings and seals, applications, and failure analysis. **A student also receives 3 hours of NIACC credit for this class.**

NIACC Transportation Fundamentals (AUT-113)

Course Length: spring semester

Eligibility: Grades 11th and 12th, or 9th and 10th TAG students

This course will require many of the basic elements required to be successful in transportation courses. The concepts covered include basic electronics and an introduction to basic shop equipment. Emphasis will be placed on problem solving, proper use and application of equipment, study of electrical and mechanical diagrams, and ability to identify equipment needed in repair situations. Coursework will include many hands-on exercises with industrial grade equipment. **A student also receives 3 hours of NIACC credit for this class.**

Advanced Projects I, II, III, IV

Course Length: fall or spring semester

Instructor approval required in order to take an advanced project class.

- Before meeting with the instructor, student must have a plan of what they want to accomplish for the upcoming semester.
- Instructor's decision is final.

The students enrolling in this course will design the work to be done in this course. The class period for the course will be arranged to meet the student's schedule. They will submit their activity plan to the instructor for approval before the student will be allowed to schedule the course. Standards and Benchmarks-Students will:

- Use the design process to design and produce an advanced project.
- Develop and use self-guided learning principles.

Students also have the option to use Advanced Projects as school service. In school service, students will perform various activities that include preparing materials, performing shop maintenance, and work as assistant teachers. Standards and Benchmarks-Students will:

- Use laboratory equipment to prepare materials for other Industrial Technology classes.
- Use tool and repair knowledge to perform shop maintenance.

Explore the world of teaching working as assistant teachers in the classroom and laboratory.

Language Arts

A total of eight (8) Language Arts credits are required for graduation. Each student must successfully complete English 9, English 10, and English 11. In addition, seniors must complete **two** semesters of one of the following courses: English 12, Creative Writing, NIACC Composition and Speech I, and NIACC Composition II.

English 9

Course Length: year long **(Required)**

This class provides a strong foundation for more specific study and success in future high school English courses. Students will be provided with general information about each major genre of literature (short story, novel, non-fiction, poetry, epic, and drama) so they are prepared when they encounter these in different courses. This literature will be used as the basis for general writing instruction. In addition, students will receive formal grammar instruction and apply this knowledge to their writing skills. Students will:

- Use the writing process to produce different types of compositions (narrative, expository, and persuasive)
- Use conventions of punctuation, spelling, and sentence structure in writing
- Use strategies to analyze, gather, and organize information
- Use a variety of strategies as an aid to comprehending and responding to different types of texts
- Use strategies to understand and build vocabulary
- Use speaking and listening strategies to communicate well for various purposes

Honors English 9

Course Length: year long **(Required)**

Honors English I is a two semester course for those students who wish to accelerate their learning in a more rigorous course of literature-based English. Student will accomplish more than the regular class does in a shorter period of time in order to take an elective course the next semester. A grade of “B” or higher is required to earn credit for the course and students not earning a “B” or higher will be rescheduled into the English I course. Grades are based on test scores, group projects, individual projects and class participation.

English 10

Course Length: year long **(Required)**

This course expands and reinforces the basic language skills taught in English 9. More emphasis will be placed on analyzing and expressing ideas in writing. The class will focus mainly on world literature in the genres of short story, drama, poetry, non-fiction, and novels. This literature will become the basis for essay writing. This course will also include journal writing, vocabulary development, and a comprehensive review of rules which apply to grammar, usage, and spelling. Students will:

- Use the writing process to produce different types of compositions (narrative, expository, and persuasive)
- Use conventions of punctuation, spelling, and sentence structure in writing
- Use strategies to analyze, gather, and organize information
- Use a variety of strategies as an aid to comprehending and responding to different types of texts
- Use strategies to understand and build vocabulary
- Use speaking and listening strategies to communicate well for various purposes

Honors English 10

Course Length: year long **(Required)**

Honors English II is a two semester course for those students who wish to accelerate their learning in a more rigorous course of literature-based English. Student will accomplish more than the regular class does in a shorter period of time in order to take an elective course the next semester. A grade of “B” or higher is required to earn credit for the course and students not earning a “B” or higher will be rescheduled into the English II course. Grades are based on test scores, group projects, individual projects and class participation.

English 11

Course Length: year long **(Required)**

This course focuses on concerns of American literature and what it displays about the values of Americans. Texts span the entire history of our country and attempt to reveal the experiences of different cultures inside that history. Both modern writers and classics will be used. Writing will extend to research format, essay, and persuasive. Some communication strategies will be taught in correspondence to the content of the class. Students will:

- Use the writing process to produce different types of compositions (narrative, expository, and persuasive)
- Use conventions of punctuation, spelling, and sentence structure in writing
- Use strategies to analyze, gather, and organize information
- Use a variety of strategies as an aid to comprehending and responding to different types of texts
- Use strategies to understand and build vocabulary
- Use speaking and listening strategies to communicate well for various purposes

Honors English 11

Course Length: year long **(Required)**

Honors English III is a two semester course for those students who wish to accelerate their learning in a more rigorous course of American literature-based English. Literary selections will be tailored to the historic events under discussion. A grade of “B” or higher is required to earn credit for the course and students not earning a “B” or higher will be rescheduled into the English III course. Grades are based on test scores, group projects, individual projects and class participation.

Classic Literature (Grade 12)

Course Length: Year Long

Classic Literature is a year-long, 12th grade elective English course. The content will cover an array of both American and European novels/texts that are widely considered classics from the 19th and 20th centuries. The class will build on standards mastered through English 11. Instruction will focus on the Iowa Core areas of Reading Literature, the Research to Build and Present Knowledge portion of the writing standards, and all Speaking and Listening standards. Throughout the year to supplement our class texts, we will also engage in Socratic Seminars to allow for opportunities to express interpretations, arguments, etc. with your peers in a structured format.

Creative Writing (Grade 12)

Course Length: Fall or Spring semester

Creative Writing is a semester long class, introducing students to different techniques and styles of writing. Students will be reading, analyzing, and modeling published work of authors. This class will introduce students to a variety of writing techniques and elements including: imagery, characterization, one-act plays, children’s stories, mood writing, memoir writing, reflection writing, poetry including Slam, and fairy tales.

English 12 (Grade 12)

Course Length: fall and spring semester

This course is intended to help students prepare for the working world and to assist them in becoming active citizens in this state and country. The students will be taught how to properly complete personal, legal, and business forms; write business letters, reports, and technical problems; investigate a career or field of their choice; handle personal introductions and their telephone communication skills; analyze their potential as prospective employees; prepare a resume and cover letter; conduct themselves during an employment interview; examine the impact of media and advertising; and work in groups cooperatively and maturely. Students will:

- Read to acquire information
- Create writing to communicate with different audiences for a variety of purposes
- Plan, revise, edit, and publish clear and effective writing
- Prepare and deliver oral presentations appropriate to specific purposes and audiences
- Participate effectively in discussion
- Comprehend and discuss oral communications

NIACC Composition I (ENG-105) – 12th Grade

Course Length: fall semester

Prerequisite: English ACT of 18 or COMPASS Writing score of 53

Improvement of skills in reading, writing, and listening with an emphasis on expository methods of development and personal experience as supporting material. Students may be requested to use word processors and the Writer's Workbench analyses programs, the Writer's Workbench STEPS programs, and the structuring sentences video series. Students must meet minimum competency requirements in writing to receive a grade of C or higher. **A student also receives 3 hours of NIACC credit for this class.**

NIACC Composition II (ENG-106) – 12th Grade

Course Length: spring semester

Prerequisite: Successful completion of Composition I (at least a 'C')

Students must have earned a C or higher grade in Composition I before enrolling in Composition II. A continuation of ENG-105, Composition I, with emphasis on argumentative and persuasive writing, on research methods, and on language. Students may be requested to use word processors, Writer's Workbench analysis, Writer's Workbench STEPS, and sentence structuring videos. Students must meet minimum competency requirements in writing to receive a grade of C or higher. **A student also receives 3 hours of NIACC credit for this class.**

ELA Enhancement

Course Length: year long

The purpose of Literacy Skills is to rapidly accelerate the rates at which students comprehend fiction and non-fiction materials. This class will remediate existing reading deficits and prepare students for successful completion of secondary level academic work. Students will:

- Engage in extensive reading at their recreational level.
- Work extensively on vocabulary development.
- Address comprehension of multiple levels.
- Engage in writing activities as a means to assist comprehension.

This course will be required for those in 9-11 grade who do not meet proficiency in their Iowa Test of Educational Development scores. This does not count as an English credit.

Mathematics

Math**

Course Length: year long

Grade Level: 9-12

Math** is a mathematics course developed and differentiated to meet the academic needs of those high school students who have an Individualized Educational Plan (IEP) with identified challenges and/or deficits in the study and mastery of math. Using the foundations of the Iowa Core standards and grade level expectations, math and special education team members will create and deliver math curriculum designed to facilitate individual student mastery of the math concepts and skills specific to their respective IEP math goals. Achievement data, both formative and summative, will be both collected and documented for all students enrolled in this particular course of instruction. The overall goal and intent of this course of instruction is to close the identified mathematic achievement gap for these students, relative to their respective peers, and to move them towards achieving grade level expectations.

Basic Math

Course Length: year long

Grade Level: 9-12

General Mathematics courses reinforce and expand students' foundational mathematic skills, such as arithmetic operations using rational numbers; area, perimeter, and volume of geometric figures, congruence and similarity, angle relationships, the Pythagorean theorem, the rectangular coordinate system, sets and logic, ratio and proportion, estimation, formulas, solving and graphing simple equations and inequalities.

Consumer Math

Course Length: year long

Consumer Mathematics is designed for secondary students who have a basic grasp of mathematical computation but require additional instruction for applying these skills as a wise consumer. Instruction is provided using a variety of realistic, consumer-oriented applications. These applications reinforce and extend students' mastery of basic mathematics concepts. A scientific calculator is required for this class. Students will:

- Understand problem solving techniques
- Understand personal financial record keeping
- Understand financial concepts that allow the them to be a responsible consumers
- Understand investments and borrowing money

Algebra A

Course Length: year long

Grade Level: 9-12

This is course covers the traditional Algebra 1 material over the course of two years: a study of solving equations and inequalities, graphing, writing equations of lines, systems of linear equations, factoring polynomials, and application of algebra topics. This course is designed for students that need the content and would benefit from a slower pace with more practice on each topic.

Algebra B

Course Length: year long

Grade Level: 9-12

Algebra B takes an entire year to cover the second semester of an Algebra course. It allows us to understand some concepts more in depth. It starts off with a review of Systems of Equations from Algebra A. After that it goes into a Unit of Exponents and Quadratics. Then we go into advanced functions like Radical and Rational Equations. Then we will end on a Unit over Statistics and Probability.

Algebra I

Course Length: year long

Grade Level: 9-12

Algebra I provides the foundation for higher level courses in mathematics, science, and technology. The course will teach the language and structure of algebra, algebraic expressions, solutions and application of equations and inequalities, graphing, rational expressions, and polynomials and factoring. A strong emphasis will be placed on visualizing and solving word problems. Success in this course comes from concentrated daily effort. This course will encourage students to develop their knowledge of calculators. A scientific calculator is required. Students will:

- Use a variety of strategies to understand new mathematical content
- Construct algorithms for multi step and non routine problems
- Use formal mathematical language and notation to represent ideas
- Be able to understand the properties of the real number system and understand the discrepancy between actual and estimated answers
- Be able to interpret data from a variety of sources
- Be able to understand and apply basic and advanced concepts of probability

Geometry

Course Length: year long

Grade Level: 9-12

Geometry is a study of simple figures – building from points, lines, and planes up to prisms, pyramids, cylinders, cones, and spheres. The course includes development and organization of proofs and constructions. Those students who set aside time daily to study and learn to organize a body of facts will be successful. Geometry is targeted for students who have already taken Algebra I and plan to continue on with their math education. A scientific calculator, compass, protractor, and ruler are required for this course. Students will:

- Use a variety of strategies to understand new mathematical content
- Construct algorithms for multi step and non routine problems
- Use formal mathematical language and notation to represent ideas
- Be able to understand the properties of the real number system and understand the discrepancy between actual and estimated answers
- Be able to interpret data from a variety of sources
- Be able to understand and apply basic construction concepts
- Be able to use the Pythagorean Theorem to solve mathematical and real world problems

Algebra II

Course Length: year long

Grade Level: 10-12

Algebra II begins with a review of the concepts covered in Algebra I. New topics will include properties of relations and functions – including linear, quadratic, trigonometric, logarithmic, exponential, and rational. Many of the topics covered in Algebra II carry over into Chemistry, and Physics. Students will:

- Use a variety of strategies to understand new mathematical content
- Construct algorithms for multi step and non routine problems
- Use formal mathematical language and notation to represent ideas
- Be able to understand the properties of the real number system and understand the discrepancy between actual and estimated answers
- Be able to interpret data from a variety of sources
- Be able to understand and apply basic and advanced concepts of probability
- Be able to understand appropriate terminology and notation used to define function and their properties

Pre-Calculus

Course Length: year long

Grade Level: 11-12

Pre-Calculus is broken up into three main topics. Students will begin by reviewing the basic concepts of algebra that are needed for the study of functions and their graphs. Students will cover polynomial, rational, exponential, and logarithmic functions. Students will then spend extensive time studying trigonometric function, or those that are periodic in nature. The third area of study for this class is an introduction to Calculus. Students will study matrices, determinants, conic sections, sequences, mathematical induction, and transformations. Students will:

- Use a variety of strategies to understand new mathematical content
- Construct algorithms for multi step and non routine problems
- Use formal mathematical language and notation to represent ideas
- Be able to understand the properties of the real number system and understand the discrepancy between actual and estimated answers
- Be able to interpret data from a variety of sources
- Be able to understand and apply basic and advanced concepts of probability
- Be able to understand appropriate terminology and notation used to define function and their properties
- Be able to understand and apply the concepts and identities of trigonometry
- Be able to understand the appropriate terminology and the uses of the unit circle

NIACC Applied Math A, B, C & D (MAT-801, MAT-802, MAT-803 & MAT-804)

Course Length: fall or spring semester

Prerequisite: Math ACT of 16 or COMPASS Pre-Algebra of 49

This course covers essential topics in algebra, including ratio and proportion, as well as unit conversions, and order of operations. It will also cover word problems, basic statistics, plane and solid geometry, and essential topics in trigonometry. **A student also receives 4 hours of NIACC credit for this class.**

NIACC Math for Liberal Arts (MAT-110)

Course Length: fall semester

Prerequisite: Math ACT of 21 or COMPASS Algebra of 56

Math for Liberal Arts provides a survey of mathematics topics that includes sets, logic, statistics, number theory, geometry, critical thinking skills, metric system, and consumer math. This course will fulfill 3 hours of Natural Science requirement for the A.A. Degree. **A student also receives 3 hours of NIACC credit for this class.**

Students will:

- Understand problem solving techniques and critical thinking skills
- Use a variety of strategies to understand new mathematical content
- Understand critical thinking skills
- Understand financial concepts that allow the them to be a responsible consumers
- Understand metric system

NIACC College Algebra (MAT-121)

Course Length: fall semester

Prerequisite: Math ACT score of 21 or COMPASS Algebra score of 76

This course is intended for students majoring in business, social science, biological sciences, liberal arts, and those mathematics students with insufficient background to begin the study of calculus. The course is a study of various classes of functions, their graphs, associated equations and inequalities, and applications. These include linear, polynomial, rational, root, inverse, exponential and logarithmic functions. Also included are systems of equations and inequalities, matrices, sequences and series, and the Binomial Theorem. **A student also receives 4 hours of NIACC credit for this class.**

NIACC Introduction to Statistics (MAT-156)

Course Length: spring semester

Prerequisite: Math ACT score of 21 or COMPASS Algebra score of 76

This course is intended to introduce students to basic statistical concepts. It covers descriptive and inferential statistical methods, probability, hypothesis testing on the mean and proportion, and linear regression. Students are also introduced to technology as it applies to introductory statistical methods. A graphing calculator is required.

A student also receives 3 hours of NIACC credit for this class.

Music

Instrumental Music (Grades 9-12)

Course Length: year long

Instrumental music offers opportunities to perform in several types of musical settings.

The core of our instrumental music program is Concert Band. In Concert Band, students rehearse as a group several times a week in preparation for two concerts given during the year. The Concert Band will also perform at Large Group contests in the spring, as well as additional contests/clinics to be announced. Instruction for this class is based on rehearsal, and includes lessons on vocabulary, music theory, sight-reading, and other academic pursuits as they relate to the music field. Participants will study music from classic and modern composers.

Students will be required to come to a weekly individual/group lesson scheduled out of another class. This will be in the grade requirements.

Marching band is required of all students enrolled in Instrumental Music. This group rehearses during class time and performs at football games and occasional parades in the spring and fall. For the duration of the marching season, students will study music in the popular genre and perform a number of marching skills.

The Jazz Band is an auditioned group which holds rehearsals outside the school day. Students involved with the Jazz Band will study various forms of jazz from the early 1900's – present. The group will perform at NCIBA District Contests and IHSM State contests, as well as other contests/clinics/concerts to be announced.

Participation in instrumental music affords opportunities to perform as part of a small group or as a soloist. If a student chooses, he/she may participate in Small Group contests in the spring, as a soloist or part of a duet, trio, or other small ensemble.

Nomination for Honor Ensembles is solely at the director's discretion. Students are nominated for Honor Ensembles based upon ability, dedication, and responsibility.

Secondary Vocal Music (9-12)

Course Length: year long

Choral music is a semester course offering students a variety of opportunities for performance in choir, small groups, musicals and as soloists. Students rehearse several times a week to prepare for each semester concert. The choir also produces a musical each year. Participation is required for these performances as well as for Large Group contest in the spring. Evaluation is based on participation/effort, attitude/behavior, attendance/promptness and improvement/understanding. This includes two required voice lessons per quarter. Students sign up for these lessons weekly. Choral students will:

- Sing a selected section of a musical piece
- Sight-read new music or sections of music
- Be aware of the various genres in the music world
- Learn about various cultures through a variety of composers and pieces

Small group contest in the spring, festivals and singing in small groups at sports events are not required for the course, but they are offered by audition. To sing in a small group at contest or otherwise, students are required to pass an audition test in which they sing their part against another vocal part. Placing students in small groups will be at the director's discretion.

Students who perform in groups that are not required need to be aware that rehearsal will be mandatory and often be scheduled outside of the regular school day. *The musical is an example of a performance that is both required and extra curricular. It is required that all students help in some way and learn the songs as they are taught during class time. It is also a requirement to attend the musical being produced by the choir. However, participation in the cast and outside time is not required of all choir members.

Physical Education

Physical Education

Course Length: year long

High School Physical Education consists of two components: A workout phase followed by an activity phase. Students will be given a choice of what type of workout regime they want to follow. The Activity phase of the Physical Education course will consist of team sports, lifetime activities, and fun/cooperative games. The purpose of the activity portion of class is to teach kids to work together and learn to respect others. We want students to have a broad knowledge of physical activity which they can use throughout their lifetime.

Toning and cardiovascular workout:

Students will learn various types of exercises and exercise programs that are designed to work their cardiovascular system, core stability, flexibility, and general muscle strength.

Muscle Strength and power workout:

Students will learn and work on basic free weight exercises that are designed to increase muscle strength and muscle power.

Health

Course Length: year long

Eligibility: 9-12 grade

This course is intended to prepare students for the decisions and actions that are inherent in performance enhancement management and fitness practice as well as everyday life issues. There is a great deal of misinformation and opinions around health, wellness, and fitness in the United States and worldwide. Not only will this course be on the development of the physical self, but the entire person ranging in topics from stress management to leadership. It is this broad focus that will allow students to improve their quality of life thus helping to spread quality information to others within their area of influence.

Course Objectives

- Know the difference between health, wellness, fitness, and sickness
- Understand the 6 components of health and how each fits to make a balanced person
- Relevant goal setting practice, Character Development and Leadership
- Establish a stronger sense of self and how it relates to mission, values, and ethics
- Research relevant nutritional plans and the different attributes each possess
- Examine the structure and function of the human body's skeletal muscle system
- Know appropriate methods to manage stress as it comes throughout daily life
- Research and practice first aid and Cardiopulmonary Resuscitation (CPR)

Personal Growth and Development

Course Length: year long

Grade Level: **Required** during 9th Grade

The high school years can be a challenging time for young people living in today's world. This generation has more pressures and stress than any other that has come before them. Social media, financial pressures, time management/study habits, and goal setting are merely a few of the struggles that these young people feel each day. Some students are equipped with the skills necessary to be successful through the environment that they have been raised, while others are left to acquire these traits on their own. This course will help to develop the students' character and leadership, as well as, enhancing their morals, ethics, and values so that each student is prepared to cope with all that life can bring.

Core Values

Course Length: Spring Semester

Grade Level: Elective during 12th Grade

The final phase for the senior in high school is filled with excitement and apprehension about the future and what is to come. Students who graduate high school will be met with the challenge of creating a life for themselves that they are proud of and one that will foster the success they all want. The life that awaits them after high school will be the ultimate test. This course will give seniors the skills and habits necessary to take firm control of their lives as young adults. Students will be provided a structure of systems that will take them to the next level and to meet the requirements that life brings to them. Grading for this class will be Pass/Fall.

Science

General Science

Course Length: year long—**Required**

Grade Level: 9

This class provides a general overview of chemistry and physics concepts including: scientific method and measuring, properties and classification of matter, structure of the atom, chemical reactions and bonding, acids and bases, forces and motion, work and mechanical energy, Sources of energy (renewable and non-renewable), and nuclear change. Physical science 100 is only available by teacher recommendation.

Honors Physical Science 100

Course Length: year long—**Required**

Grade Level: 9

This class provides a general overview of chemistry and physics concepts including: scientific method and measuring, properties and matter, structure of the atom, chemical reactions and bonding, acids and bases, forces and motion, work and mechanical energy, Sources of energy (renewable and non-renewable), and nuclear change. Honors Physical Science takes a more in-depth look at all of the above topics; performing more experiments and working at a much faster pace. Honors students are expected to complete more assignments and go through more units in the same one year time period. Students must maintain a “B” average in the course to continue in Honors class, or will be transferred to regular course.

Biology

Course Length: year long—**Required**

Grade Level: 10

This course involves the study of living organisms. Topics studied include cell biology, genetics, basic zoology (invertebrates to mammals), botany (plant structure, plant classification), microbiology, and basic ecology.

Students will

- Understand and apply the skills of scientific inquiry.
- Understand and apply concepts, principles and theories pertaining to life and its interactions.
- Understand and apply concepts and theories pertaining to matter, its composition, and forces that govern it.
- Learn how scientific knowledge develops and changes over time
- Understand personal and societal changes and responsibilities that affect health, world resources and the earth’s environment

Honors Biology 200

Course Length: year long—**Required**

Grade Level: 10

This honors course will challenge and be taught in a more accelerated manor than regular Biology; and involves the study of living organisms. Topics studied include cell biology, genetics, basic zoology (invertebrates to mammals), botany (plant structure, plant classification), microbiology, basic ecology, and organic chemistry. Students must maintain a “B” average in the course to continue in Honors class, or will be transferred to regular course.

Biology 200 is only available by teacher recommendation. Students will

- Understand and apply the skills of scientific inquiry.
- Understand and apply concepts, principles and theories pertaining to life and its interactions.
- Understand and apply concepts and theories pertaining to matter, its composition, and forces that govern it.
- Learn how scientific knowledge develops and changes over time
- Understand personal and societal changes and responsibilities that affect health, world resources and the earth’s environment

Chemistry

Course Length: year long

Grade Level: 11-12

Prerequisite: General Science, Algebra I, Algebra II (or currently enrolled)

This is a college prep course that covers the following topics: the language of chemistry, formulas, equations, stoichiometry, atomic structure, periodicity, bonding, gas laws and the kinetic theory, solutions (acids, bases, and salts), equilibrium and reaction kinetics, oxidation-reduction reactions.

A scientific calculator is required. Students will:

- Use the conventions of chemistry to represent elements, compounds, and chemical change.
- Classify common examples of matter as element, mixture, solution or compound.
- Understand basic concepts of structure of atom and how this structure governs the physical and chemical properties of matter.
- Understand how elements are arranged on the periodic table, and how this arrangement shows repeating patterns among elements with similar properties.
- Understand how electron configuration of atoms governs how atom interacts with other atoms during chemical change.
- Understand mole concept as a way to represent quantity of matter and can make conversions from moles, to grams, to count of number of particles.
- Understand the development of the atomic theory from Democritus to the present wave model of the atom.
- Understand the basic laws (conservation of mass/energy) that govern the universe.
- Know the forces that exist between and within atoms.
- Understand how scientific knowledge changes and accumulates over time.
- Plan and conduct simple investigations.
- Use technology and mathematics to perform accurate scientific investigations.
- Use the kinetic theory to explain the properties of gases and solve problems using the gas laws.

Environmental Science / Ecology

Course Length: year long

Grade Level: 11-12

Prerequisite: Biology

This class will investigate the environment as a whole and will specifically look at human interaction with the natural world. Environmental issues will be discussed in depth including environmental careers, field studies, and historical viewpoints. Students will:

- Understand and apply the skills of scientific inquiry.
- Understand and apply concepts, principles and theories pertaining to life and its interactions.
- Learn how scientific knowledge develops and changes over time
- Understand personal and societal changes and responsibilities that affect health, world resources and the earth's environment

Anatomy & Physiology

Course Length: year long

Grade Level: 11-12

Prerequisite: Biology

The major systems of the body will be covered. Students will link anatomy, histology and physiology of all the major organs and systems in the human body. Various health related topics and careers will be included. Students will:

- Understand and apply the skills of scientific inquiry.
- Use appropriate tools to gather, analyze, and interpret scientific data
- Understand and apply concepts, principles and theories pertaining to life and its interactions.
- Understand personal and societal changes and responsibilities that affect health, world resources and the earth's environment
- properties of gases and solve problems using the gas laws.

Physics

Course Length: year long

Grade Level: 11-12

Prerequisite: Geometry and Algebra II

This college prep course will cover the following topics: Kinematics, dynamics, energy and its conservation, kinetic theory and heat, waves, sound, and light, and astronomy. A scientific calculator is required. Students will:

- Understand velocity and acceleration and can analyze these motions.
- Understand and analyze free fall motion.
- Interpret distance-time, velocity-time and acceleration-time graphs.
- Understand vectors and can use vectors to analyze motion.
- Explain Newton's three laws of motion.
- Understand impulse and change of momentum.
- Understand universal gravitation and its relationship between bodies on Earth and in the universe.
- Understand motion in two dimensions, including uniform circular motion, projectile motion and simple harmonic motion.
- Relate law of conservation of energy and matter to work, power, potential energy, kinetic energy, collisions.
- Understand energy types, sources, and conversions, and their relationship to heat and temperature.
- Solve problems involving heat transfer.
- Investigate properties of wave: reflection, refraction, interference, diffraction, propagation, Doppler affect.

Social Studies

Civics I

Course Length: semester offered during fall or spring (**Elective for Freshmen and Sophomores**)

The purpose of this course is to introduce students to the role of the United States citizen. The course is designed to teach students the principles of the U.S. Constitution and how it affects the daily lives of citizens. The course will help students understand the multiple roles that citizens take on in an American democracy. Topics covered in the class will include, but not limited to, foundations of the American political system and the changes over time.

World History

Course Length: year long (**Required for Sophomores**)

This is not your usual history course. This course uses an analysis of history rather than the usual reciting of historical events and dates. The course begins with the dawn of man and the Paleolithic Era. Early civilizations will be examined as well as the Greeks and Romans and their impact on Western Civilization. The course will then analyze the Middle Ages, Renaissance, and Reformation. From there, Revolution becomes the theme in the Americas and Europe setting the stage for the tumultuous 20th Century.

- Students will compare selected ancient river civilizations such as Egypt, Mesopotamia and the Indus Valley.
- Students will analyze and evaluate history of ancient Greece and Rome.
- Students compare and contrast Judaism, Christianity, Islam, Buddhism, and Hinduism.
- Students will understand the social, economic and political change in the late Medieval Period.
- Students will analyze the historical developments of the Renaissance and the Reformation.
- Students will analyze major 20th Century historical events such as World War I, World War II, the Russian Revolution, and the Cold War.

20th Century History

Course Length: year long (**Required for Juniors**)

The purpose of this course is to inform students about who they are as citizens or residents of the United States and how events of the 20th century have shaped the world we live in today. Students will come to understand how social, economic, political, and international events and decisions affected the United States in the 20th century and still affect the nation today. Major topics studied will include the U.S. becoming an international power, World War I, the 1920's, the Great Depression and the New Deal, World War II, the Cold War, the Civil Rights Movement, the Korean War, the Vietnam War, and the U.S. since 1980. As often as possible, parallels will be drawn between events from the past and recent or current situations.

Economics

Course Length: fall or spring semester (**Required for Seniors**)

The purpose of this course is to introduce students to the wide range of topics covered in the study of economics. The course is designed to teach students the principles, concepts and theories that constitute the core of the study of economics. Students will discover and be able to explain how economic principles relate to their own lives and the world around them. After a broad introduction to key economic concepts, topics will include market economies and market institutions, the national economy and public (government) policy, and international economics.

Government

Course Length: fall or spring semester (**Required for Seniors**)

The purpose of this course is to introduce students to the fundamental make-up of the American governmental system. The course is designed to teach students the principles, concepts and theories of the United States Constitution and the American democracy. The course will help students understand the rights, privileges, and obligations of a United States citizen. Topics covered in the class will include, but limited to, the United States Constitution, the Executive, Legislative, Judicial systems of the state and federal governments. This course is required for graduation.

Psychology

Course Length: Fall semester (**Elective for Juniors and Seniors**)

The purpose of this course is to introduce students to the vast and diverse field of psychology. The course is designed to teach students the principles, concepts and theories that constitute the core of the study of psychology. The course will help students understand themselves, their lives, and their communities. Topics covered in the class will include the human body and mind, learning and cognition, human development through the life cycle, personality development, gender difference and its affect on behavior, psychological health and development, and social psychology. This course is for all students, but it is strongly recommended to college bound students.

Sociology

Course Length: Spring semester (**Elective for Juniors and Seniors**)

The purpose of this course is to introduce students to diverse field of sociology. The course is designed to teach students the principles, concepts and theories that constitute the core of the study of sociology. The course will help students understand how the society they live in, its culture, and the groups they belong to may affect their behavior. Topics covered in the class will include culture and social structure, socializing agents, how society affects and treats individuals at various stages of the life cycle, deviance, race and ethnic relations, gender differences, and aging. It will also examine various social institutions such as the family, education, religion, sports and recreation.

Contemporary Issues

Course Length: Fall or Spring semester (**Elective for Juniors and Seniors**)

Contemporary Issues is a one semester class that looks into different concepts of philosophy, and common moral issues of the day. It will be research intensive, and will help students learn how to properly research, and identify bias

Course Overview:

1. The Elements of Moral Philosophy (3-4 weeks)
 - a. What is Morality?
 - b. The Challenge of Cultural Relativism
 - c. Subjectivism in Ethics
 - d. Does Morality Depend on Religion?
 - e. Ethical Egoism
 - f. The Utilitarian Approach
 - g. The Debate over Utilitarianism
 - h. Are There Absolute Moral Rules?
 - i. Kant and Respect for Persons
 - j. The Idea of a Social Contract
 - k. Feminism and the Ethics of Care
 - l. The Ethics of Virtue
 - m. What would be a Satisfactory Moral Theory Be Like?
2. Taking Sides of a Moral Issue (1 week per issue)
 - a. Clashing Views on Controversial Issues in American History
 - b. Clashing Views on Controversial Legal Issues
 - c. Clashing Views on Controversial Social Issues

