| COURSE CODE |  | GARRISON HIGH SCHOOL 9-12 COURSES |
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|  | COURSE TITLE | COURSE DESCRIPTION |
|  |  | English |
| 05031 | American Literature | American Literature focuses upon commonly known American authors and theirwork. Students improve theircritical-thinking skills as they determine the underlying assumptions and values within the selected works andastheyunderstandhowtheliterature reflectsthe society of the time. Oral discussionis an integral partofliterature courses, and written compositions are often required. |
| 05077 | College Comp | AdvancedEnglishteaches critical readingandanalysis ofliterature; advanced techniques of formal written composition; personal writing in a variety ofliterary forms; and self-designed oral presentations and techniques of group discussion. |
| 05091 | College Speech | Speech I is an introduction to various types of oral communication situations: conversation, group discussion, and problem solving, interpersonal communication, nonverbal communication, and public address. Exploration and application of skills such as: gathering information, speech planning, speech organization, delivery techniques, listening skills, communication theory, and understanding persuasion. |
| 05071 | English I | English 9 builds upon students' prior knowledge of grammar, vocabulary, word usage, and the mechanics of writing and usually include the four aspects of language use: reading, writing, speaking, and listening. Typically, this course introduces and defines various genres of literature, with writing exercises often linked to reading selections. |
| 05072 | English II | English 10 usually offers a balanced focus on composition and literature. Typically, students learn about the alternate aims and audiences of written compositionsby writing persuasive, critical, and creative multi-paragraph essays and compositions. Through the study of various genres of literature, students can improve their reading rate and comprehension and develop the skills to determine the author's intent and theme and to recognize the techniques used by the author to deliver his or her message. |
| 05074 | Senior English | English 12 blends composition and literature into a cohesive whole as students write critical and comparative analyses of selected literature, continuing to developtheirlanguage arts skills. Typically, students primarily write multi-paragraph essays, but they may also write one or moremajorresearch papers. |

## Math

Algebral includes the study of properties and operations of the real number system; evaluating rational algebraic expressions; solving and graphing first degree equations and inequalities; translating word problems into equations; operations with and factoring of polynomials; and solvingsimplequadratic equations.

Algebra II

Algebra la \& lb

AP Calc

Dual Credit College Alg.

Algebra II topics typically include field properties and theorems; set theory; operations with rational and irrational expressions; factoring of rational expressions; in-depth study of linear equations and inequalities; quadratic equations; solving systems of linear and quadratic equations; graphing of constant, linear, and quadratic equations; properties of higher degree equations; and operations with rationalandirrational exponents. Thecoursemayintroducetopicsin discrete math, elementary probability and statistics; matrices and determinants; and sequences and series.

Mathematics Intervention is designed to assist students who are struggling and/or failing in a mathematics course. This course should be provided in conjunction with the regular mathematics course to preteach, re-teach, or provide enrichment to the student in order to prevent the need to modify the school's existing mathematics curriculum. Thiscourse should beastructured class period which will build upon the existing mathematics skills needed for students to achieve the opportunity for success in their current and/or future mathematics courses.

The AP Calculus AB is roughly equivalenttoafirstsemestercollege calculuscoursedevoted totopicsindifferentialandintegral calculus. The AP coursecovers topics intheseareas, including concepts and skills of limits, derivatives, definite integrals, and the Fundamental Theorem ofCalculus. Thecourseteachesstudentstoapproach calculusconcepts and problems when they are represented graphically, numerically, analytically, and verbally, and to make connections amongstthese representations. Studentslearnhowtouse technology tohelpsolve problems, experiment, interpret results, and support conclusions.

ConsumerMath reinforces generalmathtopics(suchasarithmetic using rational numbers, measurement, ratio and proportion, and basic statistics) and applies these skills to consumer problems and situations. Applications typically include budgeting, taxation, credit, banking services, insurance, buying and selling products and services, home and/or car ownership and rental, managing personal income, and investment.

NEED QUALIFYING SCORE OF 21 ON ACT OR ACCUPLACER. Covering topics from both Algebra and Analytic Geometry, this course prepares students for eventual work in calculus. Topics include the study of polynomial, logarithmic, exponential, and rational functions and theirgraphs; vectors; set theory; Boolean algebra and symbolic logic; mathematical induction; matrix algebra; sequences and series; and limits and continuity; the polar coordinate system; equations and graphs of conic sections; rotations and transformations; and parametric equations.

Stats
Geometry

Prealgebra

Pre Calculus

Geometry, emphasizing an abstract, formal approach to the study of geometry, typically includes topics such as properties of plane and solid figures; deductive methods of reasoning and use of logic; geometry as an axiomatic system including the study of postulates, theorems, and formal proofs; concepts of congruence, similarity, parallelism, perpendicularity, and proportion; and rules of anglemeasurementin triangles.

Prealgebra increases students' foundational math skills and prepare them for Algebra I by covering a variety of topics, such as properties of rational numbers(i.e., numbertheory), ratio, proportion, estimation, exponents and radicals, the rectangular coordinate system, sets and logic, formulas, and solving firstdegree equations and inequalities.

Precalculuscombinesthestudy ofTrigonometry,ElementaryFunctions, Analytic Geometry, and Algebratopics as preparation for calculus. Topicstypically include the study of complexnumbers; polynomial, logarithmic, exponential, rational, right trigonometric, and circular functions, and their relations, inverses and graphs; trigonometric identities and equations; solutions of right and oblique triangles; vectors; the polar coordinate system; conic sections; Boolean algebra and symboliclogic; mathematical induction; matrix algebra; sequences and series; and limits and continuity.

Probability and Statistics introduces the study of likely events and the analysis, interpretation, and presentation of quantitative data. Course topics generally include basic probability and statistics: discrete probability theory, odds and probabilities, probability trees, populations and samples, frequency tables, measures of central tendency, and presentation of data (including graphs). Course topics may also include normal distribution and measures of variability.

## Science

HumanAnatomy (Science)presentsanin-depthstudyofthehuman body and biological system. Students study such topics as anatomical terminology, cells, and tissues and typically explore functional systems, such as skeletal, muscular, circulatory, respiratory, digestive, reproductive, and nervous systems.

Usually taken after a comprehensive initial study of biology, Advanced Biology covers biological systems in more detail. Topics thatmay be explored include cell organization, function, and reproduction; energy transformation; human anatomy and physiology; and the evolution and adaptation oforganisms.

Physics

Biology is designed to provide information regarding the fundamental concepts of life and life processes. This course includes (but are not restricted to) such topics as cell structure and function, general plant and animal physiology, genetics, andtaxonomy.

Chemistry involves studying the composition, properties, and reactions of substances. This coursetypically exploressuchconcepts asthe behaviors of solids, liquids, and gases; acid/base and oxidation/reduction reactions; and atomic structure. Chemical formulas and equations and nuclear reactions are also studied.

Ecology provides students with a basic understanding of living things. Topics covered may include ecology and environmental problems such asoverpopulationand pollutionaswellascells, types oforganisms, evolutionary behavior, and inheritance.

Students will learn the methodology needed to evaluate a crime scene, the properlab mechanics needed to evaluate evidence, and how to compare between aknown and unknown. Topics may include the history offorensic science, collecting of evidence, analyzing results and hands-onapplication ofmanylaboratorytechniquesusedinsolving crimes.Emphasiswouldbeplacedontheapplicationofthescientific method to life-long skills and problem solving.

Physical Science involves the study of the structures and states of matter. Typically (but not always) offered as introductory survey courses, they may include such topics as forms of energy, wave phenomenon, electromagnetism, and physical andchemical interactions.

Physics involves the study of the forces and laws of nature affecting matter, such as equilibrium, motion, momentum, and the relationships between matter and energy. The study of physics includes examination of sound, light, and magnetic and electric phenomena.

## Social Studies

World Area Studies examines the history, politics, economics, society, and/orculture ofone ormore regions ofthe world, such as Africa, Latin America, the former Soviet Union, Far East Asia, and the Middle East. This course may focus primarily on the history of a particular region or maytake an interdisciplinary approach tothe contemporary issues affecting the region. Furthermore, thiscourse may emphasizeone particular country (other than the United States), rather than emphasizing a region or continent.

| 15060 | Economics | Economics is the study of economic principles and their application. This may include types of business ownership, theory of the free enterprise system, general economic principles, role of the government, cooperative marketing, economic terms and definitions, world conditions and how they affect the American Free Enterprise Systems. |
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| 15111 | Government | American Government provides an overview of the structure and functions of the U.S. government and political institutions and examines constitutional principles, the concepts of rights and responsibilities, the role of political parties and interestgroups, and the importance of civic participation in the democratic process. This course may examine the structure and function ofstate and local governments and may cover certaineconomic and legal topics. |
| 15118 | Law \& Justice | Law \& Justice courses examine the workings of the U.S. criminal and civil justice systems, including providing an understanding of civil and criminal law and the legal process, the structure and procedures of courts, and the role of various legal or judicial agencies. Although this course emphasizes the legal process, it may also cover the history and foundation of U.S. law (the Constitution, statutes, and precedents). Course content may also include contemporary problems in the criminaljustice system. |
| 15085 | US History | U.S. History provides students with an overview of the history of the United States, examining time periods from discovery or colonialism through World War II or after. This course typically includes a historical overview of political, military, scientific, and social developments. Coursecontentmayincludeahistory ofthe NorthAmericanpeoples before European settlement. |
| 15020 | Modern History | World Area Studies examines the history, politics, economics, society, and/orculture ofone ormore regions ofthe world, such as Africa, Latin America, the formerSoviet Union, Far East Asia, and the Middle East. This course may focus primarily on the history of a particular region or maytakeaninterdisciplinary approach tothe contemporary issues affecting the region. Furthermore, this course may emphasize one particular country (other than the United States), rather than emphasizing a region or continent. |
| 15401 | ND Studies | NorthDakotaStudies courses examine the history, politics, economics, society, and/or cultures ofthe state in the United States. This course may focus primarily on the history of this state or may take an interdisciplinary approach to the contemporary issues affecting it. |
| 15120 | Psychology | Psychologyintroduces studentstothe study ofindividual human behavior. Course content typically includes (but is not limited to) an overview of the field of psychology, topics in human growth and development, personality and behavior, and abnormal psychology. |

World History

Sociology introduces students to the study of human behavior in society. This course provides an overview of sociology, generally including (butnot limited to) topics such as social institutions and norms, socialization and social change, and the relationships among individuals and groups in society.

World History provides students with an overview of the history of human society from early civilization to the contemporary period, examining political, economic, social, religious, military, scientific, and cultural developments. World History may include geographical studies, but often these components are not as explicitly taught as geography.

## FACS

09027

09136

09135

Clothing \& Textiles

Cultures \& Cuisine

Foods II

This course introduces studentsto basic consumerskills regarding fabric, design, construction, and maintenancetechniques. Instruction may include costanalysis, wardrobeplanning, basic sewing and fiber terminology, equipment for hand and/or machine sewing, reading and using a pattern, and care and maintenance of fabrics and garments.

This course will explore cultures in various parts of the world in relation to ethnic foods, food supply, preparation methods and traditions. Current, historical and futurist issues related to food patterns and theglobal society will be an integral componentof the coursewhich may include suchtopics as famine, contamination, religious rites and practices, celebrations and cultural cuisine. Labs will combine the familiar with the exotic to create foods of the world

This course will examine the nutritional needs of the individual, emphasizing the relationship of diet to health. Enhanced cooking terms andtechniques, kitchen and meal management, time and resource managementandfood preparationtechniques will beexplored. This course may include food trends and lifestyleoptionssuch as organic foods, vegetarian diets, and convenience foods, eating out, lactose and gluten intolerance and nutrition supplements. Lab experiences will align with and enhance the course content using a variety of foods and preparation methods.

To explore the impacts housing has on families and the variety of ways in which individuals and families meet their needs for shelter. Content may include: the meaning of home; determining personal housing needs; selecting housing to meet needs; legal and financial aspects of housing; housing for individuals with special needs; the home as work site; personal expression through home decoration; household equipmentselection, care, anduse; maintainingsafeenvironment; home repairs and improvements; energy and resource consumption and conservation;technology forhome andfamily life; societal and environmental impacts ofdecisions; sources ofsupportand assistance forindividuals andfamilies; currentissues relatedtofamily housing; related careers; leadership development.

To prepare students for responsibilities involved in becoming selfsufficient young adults preparing for life away from the parental home during or immediately following high school. Course content may include: living independently; supporting oneself; making financial decisions ${ }^{* *}$; making choices about housing, nutrition and food, clothing, transportation, health and wellness; using time to achieve personal goals; finding balance in life; current issues that affect personaldecisions; societalandenvironmentalimpactsofpersonal decisions; sources of support and assistance in the community; leadership development.

Toincreasestudents'knowledgeofhowchildrengrowanddevelop, andtofosteracquisition ofskillsthatpromotehealthydevelopmentof the individual. Content may include: processes in individual development; culturalandethnicdifferences andsimilarities in child care; how children learn; age-appropriate activities for children; family development and preparation for parenthood; prenatal development; changing relationships within the family; currentissues relating to children and families; sources of support and assistance; related careers; leadership development.

## Physical Education

08010

08043

Health

Outdoor Activities

Topics covered within Health Education courses may vary widely, but typically include personal health (nutrition, mental healthandstress management, drug/alcohol abuse prevention, disease prevention, and first aid) and consumerhealth issues. The course may also include brief studies of environmental health, personal development, and/or community resources.

Lifetime Fitness Education emphasizes acquiring knowledge and skills regarding lifetime physical fitness; content may include related topics such as nutrition, stress management, and consumer issues.Studentsmaydevelopandimplementapersonalfitness plan.

08040
Weight Training

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Music Appreciation

PhysicalEducation providesstudentswithknowledge,experience,and an opportunity to develop skills in more than one of the following sports or activities: team sports, individual/dual sports, recreational sports, and fitness/conditioning activities.

Weight Training helps students develop knowledge and skills with free weights and universal stationswhileemphasizing safety and proper body positioning; they may include other components such as anatomy and conditioning

## Music

Instrumental Music (Band) develops students' technique for playing brass, woodwind, and percussioninstruments and coveravariety of non-specified band literature styles (concert, marching, orchestral, and modern styles).

Vocal Music (chorus) provides the opportunity to sing a variety of choral literature stylesformen'sand/orwomen's voices andaredesignedto develop vocal techniques and the ability to sing parts

Music History and Appreciation surveys different musical styles and periods with the intent of increasing students' enjoyment of musical styles and/or developing their artistic or technical judgment. Music History and Appreciation may also focus on developing an understanding of a particular style or period.

## Foreign Languages

## German I

German II

Designed to introduce students to German language and culture, German Iemphasizes basic grammarand syntax, simple vocabulary, and the spokenaccentsothatstudents can read, write, speak, and understandthelanguage atabasiclevelwithinpredictableareas of need, using customary courtesies and conventions. German culture is introduced through the art, literature, customs, and history of the German-speaking people.

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

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

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

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

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

## ITV Classes

TheHealth Science II course is availabletostudentswhohavetaken Health Science l and wish to further investigate their interest in the medical field. This course will allow students to study subject matter covered inHealthSciencelfurtherandindepth. Students willexpand their skills and knowledge in specific areas of interest as well as have the opportunity for job shadowing experiences in areas of their interest. Emphasis on academics, professional development, leadership, and organizational skills are discussed and practiced throughout this course.

| 02021 | Art 1 | Fundamental of Art provides students with the knowledge and opportunity to explore an artform and to create individual works of art. This coursemayalso provide adiscussionand exploration of career opportunities in the art world. Initial courses cover the language, materials, and processes of a particular art form and the design elements and principles supporting a work of art. As students advance and become more adept, the instruction regarding the creative process becomes more refined, and students are encouraged to develop their own artistic styles. Although this course focuses on creation, it may also include the study of major artists, art movements, and styles |
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| 02020 | Art II | Artfocuses on drawing and painting. In keeping with this attention on two-dimensional work, students typically work with several media (such as pen-and-ink, pencil, chalk, watercolor, tempera, oils, acrylics, and so on), but some courses may focus on only one medium. |
| 02011 | Art III | ArtHistory introduces students to significantworks of art, artists, and artistic movements that have shaped the art world and have influenced or reflected periods of history. This course often emphasizes the evolution of art forms, techniques, symbols, and themes. |
| 02022 | Art IV | Colorharmony combinations, designelementsfromline, geometric form construction, and theories of balance, both symmetrical and asymmetrical. Styles of design patterns for various cultures-American Indian, Oriental, other ethnic groups-should be included. |
| 17812 | Aviation | Toprovide studentsforemploymentintheaviationfield. The course covers fundamentals of flight, flight operations, aviation weather, performance and navigation. The course also explores careers in air traffic control, flight dispatching and airport management. Units of instruction include; safety of flight, airport layout, aeronautical charts, radar, radio procedures, airplane power plant, aerodynamics, weather patternsandhazards.Emphasisonappliedacademicsinmathand science are integrated throughout the curriculum along with decisionmaking principles as it applies to flight-related factors. |
| 17072 | Graphic Design \& Photo I | Commercial Artlintroducestudentstothe skills requiredtobecomea commercial artist. Application of art to the design of commercial products for decorative, aesthetic effects and currentstyling will be introduced. Software applications will beintroduced sostudents are able to develop products electronically. The Commercial Art course is a prerequisite to Commercial Art II. |

Intro To Emergency Medical Responders

Intro to Information Technology

Intro to Nursing Assistant

Medical Careers I

Commercial Art II continues skill development in design and aesthetic effects of products. Advanced software applications and training is incorporated. The course also includes orientation to production methods and productknowledge. TheCommercial Artprogram prepares students to enter college commercial art programs.

Students enrolling in this course will complete training in CPR for Health Care Providers and the Nationals Curriculum Emergency Medical Technician-Basic Course. The course prepares the studentto respond toawiderangeofemergenciessuchasheartattacks, autoaccidents, and diabetic problems. Students participate inextensive"hands-on" practical sessions using modern prehospital care equipment under the instruction of paramedicsfromthelocal paramedicservice. Students also receive exposure to a wide array of health careers through the use of professional guest speakers. Upon completion of the course, students are eligible for ND State licensure testing and they will have extensiveknowledgeandexperiencetoaid theminchoosingahealth care career

An exploratory level course that provides anexposure to careers and issues ininformationtechnology. Students will developSCAN skills including teamwork, communication, entrepreneurship, and personal management. Students willalso gainhands-onexperience in three major IT areas including:

- Hardware and Software: Safety and tools, numbering systems and basic electricity, operating systems, troubleshooting, etc. •Networking: LAN fundamentals, peer-to-peernetworking, IP addressing, troubleshooting, etc. $\quad$ Programming/Interactive-media:
Visual Basic and HTML basics

The Nursing Assistant Training program offers classroominstructionand clinical practice to those preparing for employment as a certified nursing assistant in a skilled nursing facility, acute care or home health care. This programincludessupervisedpracticaltrainingandclinical practice as required by the North Dakota Board of Nursing. A certificate is issued upon completion of the class. Students also have the opportunity to take the state CNA board exam to acquire state certification.

The Health Science course is an introduction course to subject matter that pertains to medically related careers. This introduction course is to helpstudentsinterestedinthemedical field indeterminingifamedical career is appropriate for their interests and capabilities. This course will cover subject matter such as History of Medicine, Health Care Systems, Careers in Healthcare and CareerExploration, Personal Qualities and Employability Skills, CPR/First Aid training, Infection Control, IntroductiontoAnatomy and Physiologyand Disease Processes, Safety in Healthcare, Legal and Ethical in Healthcare, Fundamentals of Nutrition, and Growth and Development of the Human Body.

07034
Sports Med. - Prevention \& Care of Injuries

This class is designed to introduce students to the health information technologyfield. Students will learn prefixes, suffixes and rootwords for medical terms. This will include meanings, spellings and pronunciations. Emphasis is on building a working medical vocabulary based on body systems. Anatomy and physiology of majororgans, pathological conditions, laboratorystudies, clinical procedures and abbreviationsarestudiesforeachbody system. Thestudentwillalso learn medical terminology as it relates to pathology, diagnostic, surgical, clinical and laboratory procedures, and common abbreviations andacronymsbybodysystems.

Provides the studentwith abackground in athletic training and basic health care. The course emphasizes injury prevention, first responder managementdaily for athleticinjuries and skillstofulfillthe activities of daily living. Students will be able in one semester to complete the requirements to become a student athletic trainer.

## Business \& Computer

Business Fundamentals

Coding with JAVA

Coding with Python

Computer Apps

StudentsinBusinessFundamentalswill beintroducedtotheworld of business and prepare for the economic roles of consumer, worker, and citizen. The content may include a study of the business environment and strategies for creating, financing, marketing and managing a business. This course will also serve as a background forotherbusiness courses you may take in high school and college.

TheFundamentals of JAVA Programming Language course providesa conceptual understanding of Object-Oriented programming. The course alsoteachesstudents how to use JAVA's Conditional Control Structures, Loop Structures and Strings, Classes and Object-Oriented Development, Inheritance and Polymorphism, Arrays, GUIS and Event-Driven Programming.

The aim of the course is to familiarize the student with general computer programming concepts like conditional execution, loops, Python programming language syntax, semantics, and the runtime environment, as well as with general coding techniques and objectoriented programming.

Students in Business Computer Applications will continue to develop skills in various computer applications and using various inputand output devices in order to gather information, design, present, and evaluate projects. The course will include ethical uses of computers and information. The course would be helpful for all students.

Cybersecurity

Desktop Publishing

Financial Literacy
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Cybersecurity is becoming a major concern for any business that uses the Internet for any part of their business. This course will introduce students to best practices businessesuse to protect their information as well as techniques individuals can use to protect themselves using social media. Identification of cybercrime, security principles, technologies and security principles to defend networks will be covered and build skills and knowledge for sturdents to pursue careers in cybersecurity.

Students in Desktop Publishing will use desktop publishing software to create publications such as newsletters, banners, catalogs, brochures, letterheads, business cards, and programs. They will learn design techniques using multimedia integration, formatting skills, page layout, and templates. Students will explain the purposes, functions, and common features of desktop publishing software.

Students in Financial Literacy will study the impact of financial choices on personal and occupational goals and future earnings potential. Real world topics includechecking accounts, budgeting, saving for large purchases, using credit cards, figuring interest and fees, being a responsible consumer, earning power, learning about taxes and paycheck withholding, collegecosts, mortgages, retirementsavings, and investments. This course will provide a foundational understanding for making informed personalfinancial decisions.

IT Essentials - PC Hardware \& Operating Systems
Anintroductory level course thatfocuses onessential hardwareand operating systemcompetenciesforanentry-levelPC servicetechnician. Students will demonstrate basic knowledge of installing, configuring, upgrading, troubleshooting, and repairing microcomputer systems and operating systems. Work-based strategies appropriate for this course. ComputerHardware related careers areexplored and students are provided with opportunities to increase their communication, teamwork, and critical thinking skills. Students completing the full year program will be prepared for computer industry certification, such as CompTia's A+ certification exam or IC3 certification. (Possible curriculum: ExplorNet, HP/CiscoSponsored ITEssentialsPart 1,Aries, ComputerPrep, ElementK, etc.)

Introduction to Cybersecurity covers trends in cybersecurity and career opportunities. Course modules will define cybersecurity, explain why it'simportant, and introduceproducts and processesused tosecure data. Students will also explore why cybersecurity is critical in business and medical industries, how hackers use unsuspecting individuals to propagate malware, and why cybersecurity is a growing profession.

| 27101 | Intro to IT | An exploratory level course that provides an exposure to careers and issues in information technology. Students will develop SCAN skills including teamwork, communication, entrepreneurship, and personal management. Students will also gain hands-on experience in three major IT areas including: • Hardware and Software: Safety and tools, numbering systems and basic electricity, operating systems, troubleshooting, etc. • Networking: LAN fundamentals, peer-to-peer networking, IP addressing, troubleshooting, etc. • Programming/Interactive-media: Visual Basic and HTML basics |
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| 27265 | Intro to Networking | An introduction to networking course which introduces students to the principles and practices of designing, building and maintaining computer networks. Topics would include: networking administration and support, media and topologies, protocols and standards, network implementation, and network support. The course would prepare students for CompTIA's Network + certification. |
| 14231 | Management I | Students in Management I are introduced to the field of managementand organizational theory. Topics include:leadership, motivation, planning, teamwork, and goal setting. The course will develop a mastery of theory and research findings about organizations and people within the organizations. |
| 14232 | Management II | Students in Management II will continue the study of management functions and theories. Topics include: business organization, personal andmanagementskills, ethics and social responsibility, human resource management, technology and information management, financial decision making, industry analysis, markets and prices, and organized labor. |
| 04210 | Marketing | Marketing I is a course that develops student understanding and skills in such areas as business law, communication skills, customer relations, economics, emotional intelligence, financial analysis, human resource management, information management, marketing, operations, professional development, andstrategic management. Students acquire knowledge offundamental business activities and factors affecting business, develop verbal and written communication skills, use information literacy skills, utilize job-seeking strategies, and participate in careerplanning. |
| 14099 | Multimedia | Students in Multimedia will use digital images and videos to create meaningful documentation, production, and presentations. Images, logos, backgrounds, and navigation tools for digital display will be used in multimedia and Internet applications. The topics of imageediting, animation, file compression, digital audio/video editing, and planning for multimedia applications will also be discussed. Enhancements include proper format and appropriate use of graphics, animations, and transitions. |

04110

04081

Networking Fundamentals I

Principles of Entrepreneurship

Principles of Finance

Sports \& Entertainment Marketing

Social Media Marketing

CCNA Introduction to Networks is the first of the four courses leading to the CCNA industry certification. This course introduces the architecture, structure, functions, components, and models of the Internet and other computer networks. The principles and structure of IP addressing and the fundamentals of Ethernet concepts, media, and operations are introducedto provide afoundationforthe course. Students will beable to build simple LANs, perform basic configurati9on for routers and switches, and implement IP addressing schemes.

To provide students with an introduction to entrepreneurship business opportunities and requirements as well as related careerinformation and self-assessment opportunities. Covers entrepreneurship importance and concepts, characteristics of different types of business organizations and opportunities, entrepreneurial career examples, individual career assessment and planning, entrepreneurial projects and simulations.

To prepare students to develop and understand the skills such the value of money, financial management, investments, and economic decisionmaking. Students will understand and appreciate the need for personal financial managementand investing. The course will help students understand their role and responsibility in the financial future.

To prepare students for marketing occupations in the area of sports and entertainment. Take alook at the exciting and dynamic field of sports and entertainment marketing. One of the largest industries in the world, sport marketing provides a unique way of looking at the business world. This course will focus on the two main aspects of sports and entertainment marketing: 1) The marketing of sports and entertainment, and 2) The marketing of non-sports products and services through sports. You will discoverwhy companies pay to be associated with ateam orentertainer; how to develop ticketplans to fill the seats in the arena; why targeting your marketing efforts is so important; and more.

Social Media Marketing presents the use of online social networking as a business strategy designed to increase customer loyalty and inquiry conversion. Students will study major social media channels and marketing campaign techniques, and evaluate contemporary and emerging tools in the digital marketplace including social bookmarking and techniques to drive social media traffic. Analyses of social media effectiveness willalso beexplored.

| 27266 | Video Game Design | The course teaches the foundations of creating video games in JavaScript. The course utilizes a blended classroom approach. The content is fully web-based, with student's writing and running code online with teachers utilizing other tools and resources such as on-line videoconferencing to give focused 1-on-1 attention to students. Each unit of the course is broken down intolessons consisting of various resources, example programsto explore, andwritten programming exercises, adding up to over 100 hours of hands-on video game programming practice in total. |
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| 14022 | Web Design | StudentsinWebDesign will beintroducedtoa variety ofwaystocreate and maintain web pages. Course topics will focus on overall production processes with an emphasis on design elements involving layout, navigation, and interactivity. Understanding of proper ethics, copyright laws, social networking, and cyber security topics will be integrated. The basic language of web design and software will be taught along with the additional media inputs within a website (e.g. video, animation, sound, scrolling marquees, forms, contacts, and other additional components). |
| 14096 | Word Processing | Students in Word Processing will use word processing software to create and edit documents such as business letters, envelopes, labels, flyers, reports and newsletters. Improved productivity will be developed by using timesaving shortcuts including templates, merging, tables, and keycommands. Studentswill continuetopracticeformatting, editing, composition and proofreading. |
| 14999 | Work Experience | Provides students with a regularly scheduled, supervised employment opportunity related to Business and Office Technology Occupations in order to develop and improve work skills. The employment must be preceded by, or concurrent with, classroom instruction related to the work experience, consistent with the student's occupational goals, and related to the Business and Office Technology program area. There shall be a training agreement among all partners to the work experience (school, employer, student, and parents/guardians) outlining the expectations of each party. The instructor shall also develop a specific training plan with the employerfor each student placed. The training plan shall include provisions for assessment of student progress and for on-site visits by the instructor during the student's placement. |

10610

10610
STEM Seminar II

STEM Seminar provides students with a project based and integrated and holisticexperience withScience Technology Engineering andMath. Taught by an interdisciplinary team of teachers, the course demonstrates the blurring of content areas when solving an authentic problem. It focuses on engaging students in hands on interdisciplinary application oftheEngineeringDesignProcess. Studentsengage in authentic projects and create products, presentations, and network with local STEM industry experts. In this course students uncover and acquire a cohesive set of concepts, competencies, and dispositions of science, technology, engineering, and mathematics that they transfer and apply in both academic and real-world contexts in order to be globally competitive in the 21st Century. This course curriculum infuses academic contentfrom Math, Science, LanguageArts, and Social Studies. It utilizes state standards, technical skills and develops 21st Century Skills such as communication, networking, collaboration, decision making, creativity and critical thinking.

Students will explore concepts such as energy and power, agricultural engineering, computer programming, and medical technology. There are no textbooks, no quizzes, and no tests. All grading wil be based on the effortinthe creation of a product, participation in discussion, and use oftheengineeringdesignprocess.

## Agriculture

This course can be a continuation of01046 Agricultural Welding and Fabrication or can be offered in alternating years. This course provides students in agriculture an additional opportunity to reinforce and extendunderstanding ofappliedmechanicalapplications.Advance applications willfurtherdevelop knowledgeand skill developmentin metal joining and fabrication processes. Instruction will prepare students to select, operate, repair, fabricate andmaintain a variety of agricultural machinery and equipment. Processes covered may include: OxyfuelCutting/Heating/Welding, Shielded MetalArcWelding(SMAW), Gas Metal ArcWelding (GMAW), Flux-cored ArcWelding(FCAW), Gas TungstenArcWelding(GTAW),Air-carbonArcCutting, PlasmaArc Cutting, Safety and Metal Fabrication projects. In addition, record keeping, communication skills, employability and human relation skills will be covered. Leadership development and Supervised Agricultural Experiences (SAE's) are also integral to this course.

Ag Mech Structures

Ag Mech Power Systems

Ag Welding \& Fabrication

Ag IV

Agricultural Mechanics courses are designed to reinforce and extend students' understanding of applied mechanical applications by associating scientific principles and concepts with relevant applications in fields associated with mechanics. Students will be exposed to mechanical, fluid, electrical, and thermal power that are associated with the field of agriculture. Course sequence is designed to provide students with applied activities which may include: metal fusion (welding), structures, surveying, electrical wiring principles, agricultural powerand equipment, plumbing, electricmotors and controls, CNC, robotics, CADD, Lasers, GIS and GPS systems. Leadership development and supervised agricultural experiences are integral tothesecourses.

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This course develops agricultural skills necessary for employment, entrepreneurship, or further education in agriculture and agricultural occupations. Units may include: crop and livestock production, farm businessmanagement, agribusiness, horticulture, natural resources, agriculturalmechanics, aquaculture, and watermanagement.
Leadership development and supervised agricultural experiences will also be emphasized. This course can be a continuation of Agriculture III or can be offered in alternating years with Agriculture III.

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This course provides the study of plant physiology and morphology and its relationship to growth, development and reproduction of crop and forage plants in the global environment. Topics include: seed identification, testing and grain grading, identification of agronomic crops and major weeds in crop production. Harvesting and handling will beemphasized. Supervisedagricultural experience programs and leadership are integrated in the course. Career opportunities and educational preparation are examined. Learning activities are varied with classroom, laboratories and field experiences.

This applied course is designed to introduce students to agriculture, its applications, and leadership development as the core foundation of the Agriculture Education program. Individual units will familiarize the student with: basic mechanical theory and skills-emphasis will be placed on safety and properuse oftools and equipment; principles of evaluation and selection of beef, swine, sheep, horse, and dairy animals; soil and plantrelationships thataffect the production offood and fiber. Topics may include: soils, irrigation, land judging, plants, crop and weed identification, range management, horticulture, nursery, diseases, insects, and chemicals. This applied course introduces students to agricultural sciences with emphasis on technical skills, entrepreneurship, and occupational opportunities. Units may also include agricultural construction, food andfiberscience, supervised agricultural experiences, and leadership development. Agricultural mechanics units are designed to develop skills in selection, operation, and maintenance of engines, hydraulics, and agricultural machinery and tractors. Skills in operation and maintenance of equipment, determining a bill of materials, construction techniques, metal fabrication, and joining processes of metals and alloys will be included. Emphasis is on problem solving and scientific reasoning applied to real world problems integrating knowledge from the life and earth sciences.

This applied course is designed to enhance student's perception of agriculture, its applications, and leadership developmentasthe core foundation ofthe AgricultureEducation program. Individual units will familiarize the student with: basic mechanical theory and skills emphasis will be placed on safety and proper use of tools and equipment; principles of evaluation and selection of beef, swine, sheep, horse, and dairy animals; soil and plant relationships that affect the production offood and fiber. Topicsmay include: soils, irrigation, land judging, plants, crop and weed identification, range management, horticulture, nursery, diseases, insects, and chemicals. This applied course introduces students to agricultural sciences with emphasis on technical skills, entrepreneurship, and occupational opportunities. Units may also include agricultural construction, food and fiber science, supervised agricultural experiences, and leadership development. Agriculturalmechanics units are designed to further develop skills in selection, operation, and maintenance of engines, hydraulics, and agricultural machinery and tractors. Skills in operation and maintenance of equipment, determining a bill of materials, construction techniques, metal fabrication, and joining processes of metals and alloys will be included. Emphasis is on problem solving and scientific reasoning applied to real world problems integrating knowledge from the life and earth sciences. Foundations of Agriculture can be a continuation of Introduction of Agriculture or can be offered in alternating years with Introduction to Agriculture.

This course provides students with a regularly scheduled, supervised employment opportunity related to agriculture occupations in order to develop and improve work skills. The employment must be preceded by, or concurrent with, classroom instruction related to the work experience, consistent with the students' occupational goals, and related to the AgricultureEducation programarea. Thereshall bea training agreement among all partners to the work experience (school, employer, student, and parents/guardians) outlining the expectations of each party. The instructor shall also develop a specific training plan with the employer for each student placed. The training plan shall includeprovisionsforassessmentofstudentprogressandforonsite visits by the instructor during the student's placement.

