COURSE: College Now Independent Study AREA OF STUDY: Independent

Study

COURSE LENGTH: One or Two Semesters

**COURSE TYPE:** Elective

PREREQUISITE: Parent Permission and Behavior/Student Contract Signed

GRADE AVAILABILITY: 11 and/or 12

**COURSE DESCRIPTION:** 

This is an opportunity for students to take online college classes as electives while they are in high school. Independent Study can be done outside of school day or done for one period a day during the school day as (CNIS). Students may enroll in CNIS for the entire year (this means the student will enroll in a Fall Term MCC class, a Winter Term MCC class, and a Spring Term MCC class) online. Students may also enroll in CNIS for a single semester (either fall or spring) but will are required to take a minimum of two sequential terms of MCC classes—this will create an overhang effect!! The cost of the reduced (1/2 price) college tuition and the required textbooks are all at the student's own expense. Students will meet with the counselor to identify potential college courses to register for and how they can articulate on to other places/programs in the future. The students' grades are based on the grade assigned by the college professor and following the IS online student expectations contract.

COURSE: Teacher's Aide AREA OF STUDY: Elective

COURSE LENGTH: Typically one year but might be One Semester with teacher approval

COURSE TYPE: Elective PREREQUISITE: NA

GRADE AVAILABILITY: 12

**COURSE DESCRIPTION:** 

This course is designed to provide students with opportunities to grow as people and to learn to work with others. In this class, students will be assigned to work under the supervision of a teacher, or other school personnel (building secretary, counselor, school nurse). They will be expected to do typing, filing, duplicating, assisting in preparation of non-student, non-confidential records, etc. They may be assigned to do other such projects such as creating, preparing and posting bulletin boards and making room or hall displays and working with individual students in a supervised setting. In specialized areas such as shop, science labs, etc., they must be able to assist in maintenance and repair of equipment and/or taking care of laboratory supplies and equipment. Students will be graded in a variety of ways including preparatory self-analysis, weekly journals, quarterly projects, and their supervising teacher's evaluation of their work and personal growth.

COURSE: Metro Community College Academy AREA OF STUDY: Elective

COURSE LENGTH: One Year

**COURSE TYPE:** Elective

**PREREQUISITE:** Selection to the Academy (application due to MCC in February each

year) and must

be on target to graduate on time and in good standing with FCHS

GRADE AVAILABILITY: 11 and/or 12

**COURSE DESCRIPTION:** 

This course is a multi-period course designed to allow the student to participate in the Career Academy program at Metropolitan Community College in Omaha. These academies are designed to

offer specific technical career preparation at a half price rate for high school students. Students must apply and be accepted to MCC's academy program. Once the student has been selected their schedule will reflect four classes at Fort Calhoun High School with the rest of their day assigned to Metro Community College Academy. The reduced tuition, cost of books/tools, and the transportation to the Metro Community College campus are all at the student's own cost. If the days that Academy classes do not meet, Fort Calhoun High School students will still be released from school, to compensate them for the extra time they are putting into their college class(es). For more information please go online to: https://www.mccneb.edu/Prospective-Students/Enrollment/Secondary-Partnerships/Career-Academy.aspx

COURSE: Guided Study Hall AREA OF STUDY: Academic

Assistance

COURSE LENGTH: Two Semesters & Study

Halls

**COURSE TYPE:** Elective

**PREREQUISITE:** Must qualify for services under Special Education or 504 Plan

GRADE AVAILABILITY: 9, 10, 11, & 12

**COURSE DESCRIPTION:** 

Focusing on diverse learning styles, students will be provided with academic assistance and strategies, as well as study skills; all to provide them with the ability to become independent learners and self-advocates.

COURSE: Art 1 & 2 (Composition & Form) AREA OF STUDY: Art

COURSE LENGTH: Two Semesters

COURSE TYPE: Elective PREREQUISITE: None

GRADE AVAILABILITY: 9, 10, 11, & 12

**COURSE DESCRIPTION:** 

Develop knowledge of the elements of art. Develop skills so that students can draw realistically through a series of exercises (units) that will enable the students to draw what they see. Students will then put these skills together to create unique works of art. Drawing will be at the foundation of the course, but a large variety of subjects and media's will be introduced throughout the course. The idea is to expose the students to a large variety of media's in smaller and shorter lessons, and then expand and combine those media's in future art courses.

This information will be presented through the use of presentations, demonstrations, reading, vocabulary words, examples of other artists, and guided work time. A review will precede each test given. The review will cover the material taught in the class.

COURSE: Art 3 & 4 (Color & Value) AREA OF STUDY: Art

COURSE LENGTH: Two Semesters

COURSE TYPE: Elective PREREQUISITE: Art 1 & 2

GRADE AVAILABILITY: 10, 11, & 12

**COURSE DESCRIPTION:** 

Expand on the knowledge gained in Art 1 & 2. Gain an understanding of the elements of art and the principles of design. Develop skills in watercolor, acrylic paints, colored pencils, chalk pastels, oil pastels, ink, markers, and pencils. Students will use these skills to express themselves. This information will be presented through the use of presentations, demonstrations, reading, vocabulary words, examples of other artists, and guided work time. A review will precede each test given. The review will cover the material covered in class.

COURSE: Art 5 & 6 (2D & 3D Design) AREA OF STUDY: Art

COURSE LENGTH: Two Semesters

**COURSE TYPE:** Elective

PREREQUISITE: Art 1 & 2 and Art 3 & 4

GRADE AVAILABILITY: 11 & 12

**COURSE DESCRIPTION:** 

Expand on the knowledge gained in previous art courses. Develop a better understanding of the elements and principles of design. This will be accomplished by using different medias with each project having an emphasis on one or more of the elements of art or principles of design. Some of the medias to be used will involve pencils, markers, ink, pastels, watercolors, acrylics, computers, cameras, digital photography, clay, plaster, and collages. Students will also develop an understanding that art is a visual language. Students will be evaluated over this information as well as critique themselves and one another.

COURSE: Independent Art AREA OF STUDY: Art

**COURSE LENGTH:** Two Semesters

**COURSE TYPE:** Elective

PREREQUISITE: Art 1, 2, 3, 4, 5, 6 & Independent Art

GRADE AVAILABILITY: 12

**COURSE DESCRIPTION:** 

This course is an in-depth studio experience for the student who desires further work in advanced art skills. The course will culminate with preparation of a portfolio, which will assist in the entrance into a post-secondary art program.

COURSE: Independent Art AREA OF STUDY: Art

COURSE LENGTH: Two Semesters

**COURSE TYPE:** Elective

PREREQUISITE: Art 1 & 2, Art 3 & 4, Art 5 & 6

GRADE AVAILABILITY: 12

**COURSE DESCRIPTION:** 

This course is set up on a contract basis. The contract includes 4 projects per quarter, a sketchbook, and weekly progress logs. Students will explore their areas of interest in the field of art.

COURSE: Accounting I AREA OF STUDY: Business &

**Technology** 

COURSE LENGTH: Two Semesters

**COURSE TYPE:** Elective

**PREREQUISITE:** Personal Finance

# GRADE AVAILABILITY: 11, 12

## **COURSE DESCRIPTION:**

Any student considering a business focus after high school should take this course. Students will learn to analyze business transactions, record them in journals and prepare financial statements for businesses. Major areas to be studied include the accounting cycle, payroll procedures, and subsidiary ledger. Students receive realistic experience by completing business simulations. The course provides and excellent background for students entering any type of business as well as those interested in business administration or accounting a s a major in college. An "Accounting Simulation" packet will also be completed. Grading is based upon application problems, tests, quizzes and various projects.

COURSE: Accounting II AREA OF STUDY: Business &

Technology

COURSE LENGTH: Two Semesters

**COURSE TYPE** Elective

PREREQUISITE Accounting I GRADE AVAILABILITY: II,

**COURSE DESCRIPTION:** 

This is the second level of accounting. This course gives attention to partnership and corporate accounting, the use of departmental accounts, and an overview of cost accounting. An "Accounting Simulation" packet will also be completed. Grading is based upon application problems, tests, quizzes and various projects.

COURSE: Advanced Info Tech AREA OF STUDY: Business & Technology

COURSE LENGTH: One Semester

COUARSE TYPE: Elective
Prerequisite: Info Tech
Grade Availability: 10, 11, 12

**Course Description:** 

This course is designed for those students who enjoy working with different software to develop multimedia projects. Students will learn how to design and create movie, music, Web pages, create animated graphics, edit and manipulate digital images and utilize various software available. Computers, iPads, and other multimedia applications will be used during the course. Programs that will be used are iMovie, GarageBand, Photoshop, Flash, Fireworks, Illustrator. Students will also learn how to code using Hyper-Text Markup Language (HTML) and Cascading Style Sheets (CSS) using a variety of websites and coding programs. Grades will be determined by classroom participation and quality and creativity of projects.

COURSE: Info Tech AREA OF STUDY: Business & Technology

COURSE LENGTH: One Semester

COURSE TYPE: Required PREREQUISITE None

GRADE AVAILABILITY: 9, 10, 11, 12

**COURSE DESCRIPTION:** 

This course is designed to give the entry-level student a basic knowledge of applications used on the computer and iPad. Digital Citizenship will also be taught which help students/technology users understand how to use technology appropriately. Digital Citizenship will help prepare students/technology users for a society full of technology. Students will learn the basic applications using Work Processing, Spreadsheets, Graphs and Presentations using Pages/Work, Numbers/Excel, Keynote/PowerPoint using Computers and iPads. Students will also learn about and how to use Google Drive, Docs, Sheets, Slides, Drawing, and Sites. Students will learn how to create and edit music in GarageBand, and create movies using iMovie. Coding will also be introduced to students using a variety of websites. Daily work/practice, Tests and Projects will make up the graded activities. Participation and attendance are critical for success.

COURSE: Marketing AREA OF STUDY: Business & Technology

COURSE LENGTH: One Semester

**COURSE TYPE:** Elective

PREREQUISITE: Personal Finance GRADE AVAILABILITY: 11, 12

**COURSE DESCRIPTION:** 

This class is for students with interest in the exciting world of marketing. Topics covered include: economics, consumer markets, market research, distribution methods, product planning and the four P's Produce, Price, Place and Promotion. The course provides an excellent background for students entering any type of business as well as those interested in business administration or marketing as a major in college.

COURSE: Personal Finance AREA OF STUDY: Business & Technology

COURSE LENGTH: One Semester

COURSE TYPE: Elective PREREQUISITE: None

GRADE AVAILABILITY: 9, 10, 11, 12

**COURSE DESCRIPTION:** 

Financial literacy is essential in meeting the financial challenge of the 21<sup>st</sup> Century. The competencies, which form the basis for the semester course, enable students to analyze their personal financial decisions, evaluate the cost and benefits of their decisions, recognize their rights and responsibilities as consumers, and apply the knowledge learned in school to financial situations encountered later in life. This course will help students gain knowledge of banking services, how to use credit wisely, plan savings and investments, set personal finance goals, select appropriate insurance coverage, and develop techniques for personal financial management.

COURSE: Principles of Business AREA OF STUDY: Business & Technology

COURSE LENGTH: One Semester

**COURSE TYPE:** Elective

**PREREQUISITE:** Personal Finance

GRADE AVAILABILITY: 11, 12 COURSE DESCRIPTION:

The course is designed to provide information in business concepts and skills students need in today's competitive business environment. Units of study include major business concepts, such as finance, marketing, operations, and management. Students gain valuable information and skills for the workplace. Grading is based on daily assignments, Quizzes, tests and projects. Topics to be

covered: Business in the global economic environment; business organization and management; business operations and technology; personal financial management; managing your career

COURSE: English 9 AREA OF STUDY: English

COURSE LENGTH: One Semester

COURSE TYPE: Required PREREQUISITE: None

GRADE AVAILABILITY: 9

**COURSE DESCRIPTION:** 

9<sup>th</sup> Grade English is designed to develop students' reading literacies of a variety of genres through fiction and nonfiction texts. Students will also learn and apply the writing process to plan, draft, revise, edit, and publish writing using correct spelling, grammar, punctuation, and other standard conventions. Students will be required to participate in class discussions, activities, and group work.

COURSE: English 10 AREA OF STUDY: English

COURSE LENGTH: One Semester

COURSE TYPE: Required

PREREQUISITE:

GRADE AVAILABILITY: 10

**COURSE DESCRIPTION:** 

In English 10 we will study literature with a strong focus on developing your written, reading, oral, and comprehension skills to further building strategies for successful critical thinking and analysis. Students will also reflect individually on their own learning and experiences to connect literature to their own skills in relation to the topics being explored and literature engaged in.

COURSE: English II AREA OF STUDY: English

COURSE LENGTH: One Semester Each

COURSE TYPE: Required PREREQUISITE: English 10 GRADE AVAILABILITY: 11 & 12

**COURSE DESCRIPTION:** 

This course provides students with a thorough grounding in American Literature spanning from the early (Native American) to contemporary (29<sup>th</sup> Century +) periods. Through the readings in the course textbook, novels, and supplemental literature, students will explore and become familiar with a variety of genres, literary devices/techniques, authors and their purpose, cultural/societal influences, and our personal connections with the readings. Students will do a variety of writing assignments, both formal and informal, with the integration of one, some, or all aspects of the Six Traits of Writing and MLA Style/Format. Grammar, usage, vocabulary, and group projects will be incorporated into the course as well.

COURSE: English 12 AREA OF STUDY: English

**COURSE LENGTH:** One Semester

COURSE TYPE: Elective PREREQUISITE: English II GRADE AVAILABILITY: II & 12

### **COURSE DESCRIPTION:**

English 12 explores a variety of genres from short stories and memoirs, to classics such as Shakespearean dramas. Students will analyze literary devices/techniques, authors and their purpose, and cultural/societal influences. Students will do variety of writing assignments, both formal and informal, with the integration of one, some, or all aspects of the Six Traits of Writing and MLA Style/Format. And particularly, students will write analytical compositions that explore the literature read. Grammar, usage, vocabulary, and group projects will be incorporated into the course as well.

COURSE: Senior English AREA OF STUDY: English

**COURSE LENGTH:** Two Semesters

COURSE TYPE: English PREREQUISITE: English 11 GRADE AVAILABILITY: 12 COURSE DESCRIPTION:

Senior English is a required course that will enable students to become skilled readers of a wide range of literature. Students will explore various genres including Contemporary Literature and British literature through novels, short stories, and various other media. Students will read and respond to a variety of texts—independently, in-group discussions, and in writing. All facets of language arts—listening, speaking, reading, and writing will be covered. Students will write in various modes using the Six Traits model. Students will be expected to be active class participants

COURSE: Advanced Speech and Debate AREA OF STUDY: English

COURSE LENGTH: One Semester

COURSE TYPE: Elective PREREQUISITE: None

GRADE AVAILABILITY: 9, 10, 11 & 12

**COURSE DESCRIPTION:** 

Advance Speech and Debate is a one-semester course aimed at further developing skills in communication, public speaking, dramatic interpretation, and persuasion. Students will continue to refine diction, articulation, enunciation, and projection skills while applying more advanced techniques of public speaking. Students will also fine-tune researching, argumentation, questioning and rebuttal skills. Additionally, students will apply skills of evaluation and analysis of presentations and performances.

COURSE: Webmasters AREA OF STUDY: English

COURSE LENGTH: Every Other Year

COURSE TYPE: Elective PREREQUISITE: None

GRADE AVAILABILITY: 9, 10, 11 & 12

**COURSE DESCRIPTION:** 

This is a class that is designed around technology and journalism. This class will provide you with ample opportunities to mesh English skills with the use of technology. This will be a workshop=based class where the students take ownership of the classes content. Students will create and run a school website posting various products as assigned.

COURSE: Workplace Writing AREA OF STUDY: English

COURSE LENGTH: One Semester

COURSE TYPE: Elective PREREQUISITE: None

GRADE AVAILABILITY: 9, 10, 11 & 12

**COURSE DESCRIPTION:** 

This is a one-semester course for students who wish to develop their skills in working with frequently used workplace documents and genres in both traditional and electronic formats. Students will also explore career options based on personality and skills. Course activities and assessments help students learn to create structurally effective, grammatically accurate and contextually appropriate documents. Target genres will include business letters, emails, newsletters, and professional portfolios. Coursework will emphasize the development of grammatical accuracy, effective writing from evidence, and reader-centered business writing. Students will also develop skills in creating effective public presentations and interpersonal communications.

COURSE: Contemporary Literature AREA OF STUDY: English

COURSE LENGTH: One Semester

COURSE TYPE: Elective PREREQUISITE: None

GRADE AVAILABILITY: 9, 10, 11 & 12

**COURSE DESCRIPTION:** 

This course challenges students to improve their written and oral communication skills, while strengthening their ability to understand and analyze literature in a variety of genres. Students will read primarily novels with supplemental texts that go along with those novels, as well as be exposed to contemporary film genre. The course guides students in the close reading and critical analysis of works of literature, and helps them appreciate the texts and the connections made to major themes of literature. Literary selections range from classic works such as Fahrenheit 451 to the young adult novel Paper Towns.

COURSE: College English Dual Credit MCC AREA OF STUDY: English

COURSE LENGTH: Two Semesters

**COURSE TYPE:** Elective

PREREQUISITE: Permission and grades of "C" or higher in all high school level English courses.

GRADE AVAILABILITY: 12 COURSE DESCRIPTION:

English Composition I (1010) and II (1020) are workshop classes in essay writing designed to prepare you for higher learning at the collegiate level. Students improve their critical reading skills and learn processes and strategies for writing in a variety of genres. Students develop and support a main idea for a particular audience. Students practice strategies for selecting a topic, collecting and focusing ideas, organizing your thoughts, supporting your ideas with evidence, and revising and editing to strengthen your writing skills and style. In 1010, students develop rhetorical knowledge; practice critical reading, thinking, and writing; and use a writing process to draft, revise, and edit texts in a variety of genres with an emphasis on thesis-driven essays. In 1020, students further develop the skills learned in ENGL 1010 as they interpret, synthesize, and organize primary and secondary sources of information for the purpose of composing a research report.

COURSE: Communications AREA OF STUDY: English

COURSE LENGTH: One Semester

COURSE TYPE: Required PREREQUISITE: None GRADE AVAILABILITY: 9 COURSE DESCRIPTION:

Communications is a one-semester course aimed at introducing you to the basic concepts of communication. You will learn skills and techniques essential to effective communication in settings that include: Intrapersonal (with yourself), interpersonal (face-to-face), small group (face-to face with a few), and public speaking (one to many). You will apply these skills and techniques through practical exercises that will enable you to incorporate them into your daily life.

COURSE: Creative Writing AREA OF STUDY: English

COURSE LENGTH: One Semester

COURSE TYPE: Elective PREREQUISITE: None

GRADE AVAILABILITY: 9, 10, 11 & 12

**COURSE DESCRIPTION:** 

This course is designed to give students the opportunity to think and write creatively and to expose you to various forms of writing without the restrictions of a regular English class. The goal is to encourage you to love writing and to guide you as you refine your craft. Writing can clarify, heal, excite, encourage, remind, inspire, and make the world a better place. This class is the beginning for you to be a poet, a free-lance writer, a storyteller, and essayist, a non-fiction writer, or whatever you choose to become as a writer.

COURSE: Introduction to Theatre AREA OF STUDY: English

COURSE LENGTH: One Semester

COURSE TYPE: Elective PREREQUISITE: None

GRADE AVAILABILITY: 9, 10, 11 & 12

**COURSE DESCRIPTION:** 

Introduction to Theatre/Drama is designed to introduce students to the various arts that create a complete theatrical production: acting, sets, costumes, lights, sound, make-up, etc. This course provides opportunities for students to explore theatre skills and techniques. Students will learn the fundamentals of theatre through projects, including the creation and performance of short scenes and ensemble acting. Additional studies will include technical theatre and theatre critique and analysis.

COURSE: Yearbook AREA OF STUDY: English

COURSE LENGTH: Two Semesters

COURSE TYPE: Elective PREREQUISITE: None

GRADE AVAILABILITY: 9, 10, 11, & 12

**COURSE DESCRIPTION:** 

Yearbook is a course in which the students develop and design the content of the school yearbook online. An emphasis is placed on layout design, taking photographs, and writing captions, headlines, and copy that is accurate, interesting and informative to the readers.

COURSE: Spanish 1 AREA OF STUDY: Foreign Language

COURSE LENGTH: One Year

COURSE TYPE: Elective PREREQUISITE: None

GRADE AVAILABILITY: 9, 10, 11, & 12

**COURSE DESCRIPTION:** 

In Espanol I you will be able to understand the basic elements of the language and culture. Through short dialogues using everyday vocabulary, you will begin to speak, read, write, and understand spoken Spanish. You will also be engaged in a variety of activities to foster a better understanding of the importance of learning a second language.

COURSE: Spanish 2 AREA OF STUDY: Foreign Language

COURSE LENGTH: Two Semesters

COURSE TYPE: Elective PREREQUISITE: Spanish 1

GRADE AVAILABILITY: 10, 11, & 12

**COURSE DESCRIPTION:** 

In Espanol II you will be able to review and expand skills obtained at the beginning level. Greater emphases will be placed upon speaking, reading, writing and listening in Spanish. Through longer dialogues using everyday and more complex vocabulary and students will increase their input and output through a variety of engaging activities.

COURSE: Spanish 3 and 4 AREA OF STUDY: Foreign Language

COURSE LENGTH: Two Semesters

**COURSE TYPE:** Elective

PREREQUISITE: Spanish 1 and 2

GRADE AVAILABILITY: 10. II. & 12

**COURSE DESCRIPTION:** 

In this course, you will start to feel confident about your ability to communicate in everyday situations. You can describe people and provide personal information about yourself and others, family, home, and daily activities. You can sort out everyday situations such as ordering food, traveling, giving directions, shopping and much more.

COURSE: Spanish 4 AREA OF STUDY: Foreign Language

COURSE LENGTH: Two Semesters

COURSE TYPE: Elective PREREQUISITE: Spanish 3

GRADE AVAILABILITY: 10, 11, & 12

### **COURSE DESCRIPTION:**

Advanced Spanish will review, reinforce and expand the communication skills learned at the previous level. More advanced exercises require original composition work and self-instruction through personal investigation of the Spanish language. Spanish journal and computer use enable students to advance more independently. The workbook and CD exercises involve listening to Spanish and responding orally, reading Spanish, and in writing prepared original compositions for each chapter. Authentic Spanish literature is included at this level for reading and comprehension. The third and fourth year level students teach Spanish at the elementary school one class period per week for approximately three quarters for the school year. A cooperative project relating to the Spanish or the Hispanic culture will also be completed. This course would be helpful for students in all careers.

Grading: Class participation, daily work, quizzes, major projects and tests.

Careers: Hospitality and tourism, human services, government and public administration, education and training, business, management, and administration, architecture and construction, marketing, law, public safety, security, and corrections.

COURSE: College Psychology AREA OF STUDY: History

COURSE LENGTH: One Semester

COURSE TYPE: Elective PREREQUISITE: None

GRADE AVAILABILITY: 11 & 12

**COURSE DESCRIPTION:** 

The student learns a broad overview of the general field, fundamental principles and methods of psychology. This course is designed to be a transferable course. Main topics include physiological psychology, learning, memory, human growth and development, personality, motivation and emotion, social psychology, abnormal behavior and therapeutic approaches.

COURSE: College Sociology AREA OF STUDY: History

COURSE LENGTH: One Semester

COURSE TYPE: Elective PREREQUISITE: None

GRADE AVAILABILITY: 11 & 12

**COURSE DESCRIPTION:** 

This course involves an introduction to the scientific study of society and human social behavior; focuses on the concepts of research methods, research findings, sociological theories, society, institutions, groups, social structure, culture, social interaction, socialization, social problems, social inequality, and social change; and is designed to be transferable.

COURSE: Modern Problems AREA OF STUDY: History

**COURSE LENGTH:** One Semester

COURSE TYPE: Required PREREQUISITE: None GRADE AVAILABILITY: 12 COURSE DESCRIPTION:

This course focuses on the public policy process in the United States: how potential ideas for government action are translated from concepts into reality. Students will know what public policy problems are, some theoretical explanations for why they happen, and how we solve them through political processes. Students will study public policy problems of current importance and perspectives on what to do about them, and be able to compare and analyze solutions to policy problems from various approaches to policy analysis. Students will also be able to clearly communicate ideas through writing and classroom discussions.

COURSE: World Geography AREA OF STUDY: History

COURSE LENGTH: One Semester

COURSE TYPE: Required PREREQUISITE: None

GRADE AVAILABILITY: 9 & 10

**COURSE DESCRIPTION:** 

World Geography will present you with opportunities to learn about places, regions, physical systems, human systems and environments, and applying geography to specific events and places.

COURSE: World History AREA OF STUDY: History

COURSE LENGTH: One Semester

COURSE TYPE: Required PREREQUISITE: None

GRADE AVAILABILITY: 9 &10

**COURSE DESCRIPTION:** 

This course will present you with opportunities to learn about places, regions, religions, specific events, concepts, eras, and human themes throughout human's existence in the world.

COURSE: American History AREA OF STUDY: History

COURSE LENGTH: Two Semesters

COURSE TYPE: Required PREREQUISITE: None

GRADE AVAILABILITY: 11

**COURSE DESCRIPTION:** 

American History will start at the Civil War and end in current times. Students will study the major events and their impact on the United States. Students will discuss people, events, culture and legacies of history. Study and discussion will come through reading, research, tests and presentations.

COURSE: American Government AREA OF STUDY: History

COURSE LENGTH: One Semester

COURSE TYPE: Required PREREQUISITE: None

GRADE AVAILABILITY: 12

**COURSE DESCRIPTION:** 

American Government is the study of our American political system, analyzing its structure, function, and dependent relationship using the Constitution as our guide. Students will study the citizens' role in the political system and the affect of their participation. Students will stay current

with the political news using the Omaha World-Herald and national magazines. Students will also study in detail the state government of Nebraska.

COURSE: Modern Problems AREA OF STUDY: History

COURSE LENGTH: One Semester

COURSE TYPE: Required PREREQUISITE: None

GRADE AVAILABILITY: 12

COURSE DESCRIPTION:

Students will explore subjects such as geography, anthropology, sociology and government. International Affairs is the study of foreign governments, cultures, leadership and its impact on the United States. Students will use maps to discover country locations and climate. Students will stay current with international affairs using newspapers, magazines and the Internet. Students will be responsible for a senior research presentation.

COURSE: Advanced CAD AREA OF STUDY: Industrial

**Technology** 

**COURSE LENGTH: Two Semesters** 

**COURSE TYPE: Elective** 

PREREQUISITE: Drafting 1 & 2 GRADE AVAILABILITY: 11 & 12

**COURSE DESCRIPTION:** 

This course will instruct students on the operation of (Computer Aided Drafting Software) systems used in the drafting and manufacturing fields. Students will learn to interpret many different types of drawings and be able to use this information to convert a complex machine part into a working drawing. Students will also extend their skills in architectural and civil areas. Mode of presentation: Lecture, group work, demonstrations and lab work. Grading procedures: Tests, quizzes, lab projects and daily work. Student skills, knowledge to be gained: to demonstrate skills and knowledge in mechanical, architectural, and civil drawing; to develop confidence in solving complex drafting problems; to identify hidden features in various drawings; to demonstrate quality work with emphasis on accuracy; to incorporate math and English skills in conveyance of drawings; to attain a vocabulary in alignment with design careers.

COURSE: Building Construction AREA OF STUDY: Industrial

**Technology** 

**COURSE LENGTH: Year - 2 Period Class** 

**COURSE TYPE: Elective** 

PREREQUISITE: Woods Class

GRADE AVAILABILITY: 10, 11, 12

**COURSE DESCRIPTION:** 

The students will experience basic residential construction activities. The lab time will be spent on and off campus, depending on the project and the time of year. Unprotected work such as placing concrete, block and brick laying and exterior framing are fall and spring activities. Cabinet making, Construction Shop cleanliness and upkeep, and interior finishing are examples of activities that can be done indoors. Students in architecture and construction should take this class. Grading procedure: Tests, quizzes, major projects, paper/essays, lab projects class participation, and

Cleanliness. Student skills, knowledge to be gained: To safely operate tools and equipment; to perform concrete placement; to demonstrate and understanding of block and brick laying; to understand rough framing; to understand exterior carpentry; to understand interior carpentry; to demonstrate the knowledge of electrical construction; to gain knowledge of land surveying; to attain knowledge of site preparation and building layout.

COURSE: Construction Management AREA OF STUDY: Industrial Technology

**COURSE LENGTH: One Semester** 

COURSE TYPE: Elective PREREQUISITE: Woods

GRADE AVAILABILITY: 10, 11 & 12

**COURSE DESCRIPTION:** 

This course will introduce the student to the world of construction. The student will explore all areas of construction; including blue print reading, operation of basic construction tools, design, estimating, and planning. The class will also cover the various operations of the construction industry including; basic masonry, carpentry practices, framing interior and exterior finishing. The class will involve in-class study as well as basic lab skill development.

COURSE: Drafting I AREA OF STUDY: Industrial

**Technology** 

**COURSE LENGTH: One Semester** 

COURSE TYPE: Elective PREREQUISITE: None

GRADE AVAILABILITY: 10, 11 & 12

**COURSE DESCRIPTION:** 

Drafting is designed to introduce students to basic drafting methods on paper as well as the computer. Students will learn to operate the CAD program Vector Works. Some of the drawings drawn will include; orthographic projections, isometric, working drawings, detail representation, title blocks, bill of material, charts, graphs and much more. This class will primarily consist of multi-view drawings. Students interested in architecture, construction and manufacturing should take this class. Mode of presentation: Lecture, film, video, Internet, group work, student projects, demonstrations, and lab work. Grading procedures: Tests, quizzes, lab projects and daily work. Student skills, knowledge to be gained: To gain knowledge in design and drafting career area; to develop skills in sketching; to understand geometric constructions, angles arch, ellipses; to draw orthographic and isometric drawings, to draw development or intersections; to draw section views; to draw revolutions; to draw with multiple scales; to draw threads and fasteners.

COURSE: Drafting II AREA OF STUDY: Industrial Technology

**COURSE LENGTH: One Semester** 

COURSE TYPE: Elective PREREQUISITE: None

GRADE AVAILABILITY: 10, 11 & 12

**COURSE DESCRIPTION:** 

Drafting II will continue to use CAD software to develop drafting skills as in Drafting I however the drawing will be primarily architectural and civil. A few examples of the drawings represented in this class are as follows; floor plans, details, renderings, landscapes, lighting, elevation views, heating

and cooling, electrical, driveways, roads, bridges. Mode of presentation: Lecture, film, video, Internet, group work, student projects, demonstrations, and lab work. Grading procedure: Tests, quizzes, lab exer5cises and daily work. Student skills, knowledge to be gained; To draw floor plan of a house; to draw basement plans; to draw elevation views; to draw furniture plans; to draw dimensioning plans; to draw plot plans; to draw framing plans; to draw roof plans; to draw decks and patios.

COURSE: Metals 1-4 AREA OF STUDY: Industrial Technology

**COURSE LENGTH: One Semester Each** 

COURSE TYPE: Elective PREREQUISITE: None

GRADE AVAILABILITY: 9, 10, 11 & 12

**COURSE DESCRIPTION:** 

Metals I will expand knowledge in basic metal working skills, such as foundry work, oxygenacetylene welding, brazing and forging. Students interested in manufacturing are encouraged to take this class. Mode of presentation: Lecture, discussion, film, video, Internet, demonstrations, lab work and whiteboard/chalkboard exercises. Student skills, knowledge to be gained: To safely use tools and equipment, to weld with SMAW (arc/stick), to weld with MIG, to weld with TIG, to understand brazing, to understand foundry work and to demonstrate bending and cutting bench metal and Shop cleanliness.

COURSE: On the Job Training AREA OF STUDY: Industrial Technology

COURSE LENGTH: Two Semesters for either one or two class periods

**COURSE TYPE: Elective** 

PREREQUISITE: Senior enrolled in Diversified Occupations and employed during the school year.

GRADE AVAILABILITY: 12 COURSE DESCRIPTION:

This is the lab activity used with the Diversified Occupations class. Students work outside of the school for a minimum of 10 hours per week in a vocational area of their interest. The activity provides real life experiences that are supported by the classroom. Mode of presentation: Student projects and lab work. Grading procedures: Papers, essays, and lab projects. Student skills and knowledge to be gained: To follow all safety rules, to demonstrate the ability to adapt to changing job situations, to use problem solving skills, to demonstrate the ability to follow directions; to demonstrate dependability; to demonstrate the use of people skills; to demonstrate honesty.

COURSE: Power & Energy AREA OF STUDY: Industrial Technology

**COURSE LENGTH: One Semester** 

**COURSE TYPE: Elective** 

PREREQUISITE:

GRADE AVAILABILITY: 10, 11 & 12

**COURSE DESCRIPTION:** 

This class is the study of a wide array of energy sources and how these sources are controlled to produce usable power. Each student will be exposed to the integration and reinforcement of basic skills within many energy sources. Students will be working with small engine repair, the basics of automotive engines, and Drone Technology. Students will also be exposed to areas such as

Mechanical Power, Electrical Power. Mode of presentation: Lecture, film, video, Internet, group work, demonstrations, lab work, white board and chalkboard exercises. Grading procedures: Tests, quizzes, major projects, papers, essays, lab projects, cleanliness and class participation. Student skills and knowledge to be gained: To safely use all tools and equipment; to demonstrate knowledge of the engine systems; to demonstrate acceptable troubleshooting procedures, to gain knowledge of routine care and maintenance; to repair or replace worn or broken parts; to gain knowledge of the importance of the engine manual; and to control and produce usable power through a wide array of energy sources.

COURSE: Metals 1-4 AREA OF STUDY: Industrial Technology

**COURSE LENGTH: One Semester Each** 

COURSE TYPE: Elective PREREQUISITE: None

GRADE AVAILABILITY: 9, 10, 11 & 12

**COURSE DESCRIPTION:** 

This course is designed to develop proficiency in theory and operation of arc welders, wire welders, gas equipment, and others. Students will be required to complete various welds to demonstrate their welding competencies. Students interested in manufacturing should take this class. Mode of presentation: Lecture, discussion, film, video, Internet, demonstrations, lab work and whiteboard/chalkboard exercises. Grading procedures: Tests, quizzes, major projects, lab exercises, cleanliness and class participation. Student skills, knowledge to be gained: To safely use tools and equipment, to demonstrate SMAW welding (arc/stick), to demonstrate MIG welding (wire), to demonstrate use of TIG welding, and to understand use of oxyacetylene welding.

COURSE: Robotics AREA OF STUDY: Industrial Technology

**COURSE LENGTH: One Semester Each** 

COURSE TYPE: Elective PREREQUISITE: None

GRADE AVAILABILITY: 9, 10, 11 & 12

**COURSE DESCRIPTION:** 

Robotics is a lab-based course that uses a hands-on approach to introduce the basic concepts of robotics, focusing on the construction and programming of autonomous and remote controlled mobile robots. During this class students will explore the field of robotic design using a variety of hands on activities. Mechanical concepts such as gearing, torque, speed, and power are taught and used during coursework. Google Sketchup is used as a tool for mechanical design. Course information will be tied to lab experiments, and students will get elements from STEM based curriculum. Students will work in groups to build and test increasingly more complex mobile robots, culminating in an end of the year robot contest.

COURSE: Woods 1-4 AREA OF STUDY: Industrial

Technology

**COURSE LENGTH: One Semester** 

COURSE TYPE: Elective PREREQUISITE: None

GRADE AVAILABILITY: 9, 10, 11 & 12

**COURSE DESCRIPTION:** 

Students will learn to safely operate power equipment such as: table saws, planers, jointers, band saws, lathes, etc. Students will develop many skills in working with wood in a furniture construction lab. Students interested in architecture, construction and manufacturing should take this class. Mode of presentation will be: Lecture, discussion, film, video, and Internet, student projects, demonstrations, and lab work. Grading procedures: Tests, quizzes, major projects, papers/essays, lab projects, class participation, and cleanliness. Student skills/knowledge to be gained: To safely use tools and equipment; to identify woods and their characteristics; to demonstrate quality jointing; to perform quality finishing techniques; to develop bills and materials; to develop plans of procedure.

COURSE: Intermediate Algebra 1310 (MCC Dual Enrollment) AREA OF STUDY: Math

COURSE LENGTH: One Semester

COURSE TYPE: Elective PREREQUISITE: Algebra 2

GRADE AVAILABILITY: 11 & 12

This course extends basic algebra skills and provides the background necessary for further mathematics courses. Topics included are: linear, quadratic, polynomial, radical, and rational equations; systems of linear equations; rational exponents and polynomial factoring; rational and radical expressions; complex numbers; and graphs of linear and quadratic functions.

COURSE: College Algebra 1420 (MCC Dual Enrollment) AREA OF STUDY: Math

COURSE LENGTH: One Semester

**COURSE TYPE:** Elective

PREREQUISITE: Algebra 2 as a sophomore or MCC Intermediate Algebra 1310

GRADE AVAILABILITY: 11 & 12

**COURSE DESCRIPTION:** 

This course covers advanced algebra topics that include rational expressions; solving quadratic, rational, radical, and polynomial equation: relations and functions; quadratic and polynomial functions; systems of equations and inequalities; exponential and logarithmic functions; and conic sections.

COURSE: Algebra I AREA OF STUDY: Math

COURSE LENGTH: Two Semesters

COURSE TYPE: Required PREREQUISITE: None

GRADE AVAILABILITY: 9, 10, 11, & 12

COURSE DESCRIPTION:

The student is introduced to a variety of topics using variables. The process of solving equations and inequalities, problem solving, and graphing are developed. Ratios, percents, graphs, integers, and exponents are studied and used through the course.

COURSE: Algebra 2 AREA OF STUDY: Math

COURSE LENGTH: Two Semesters

COURSE TYPE: Required PREREQUISITE: Algebra I

GRADE AVAILABILITY: 10, 11, & 12

### **COURSE DESCRIPTION:**

In Algebra 2, we further the topics that were introduced in Algebra I, including the number system, systems of linear equations and inequalities, polynomials and rational expressions. Matrices and determinants are introduced as well as upper level equations, functions, irrational numbers, and complex numbers. Graphing applications are used for graphing problems.

COURSE: Calculus AREA OF STUDY: Math

COURSE LENGTH: 1 Semester

**COURSE TYPE:** Elective

PREREQUISITE: College Algebra and Trig

GRADE AVAILABILITY: 12

**COURSE DESCRIPTION:** 

This is a one-semester course in Calculus. The 7.5-quarter hours will equate to a 5 hour semester course at other institutions. This course is an introduction to single variable calculus. Topics include: limits, continuity, differentiation, curve sketching, integration, and applications of differentiation and integration.

COURSE: College Calculus (MCC Dual Enrollment) AREA OF STUDY: Math

COURSE LENGTH: One Semester

**COURSE TYPE:** Elective

PREREQUISITE: MCC College Algebra 1420 and MCC Trigonometry 1430 with a grade of "C" or

better.

GRADE AVAILABILITY: 12

**COURSE DESCRIPTION:** 

This course studies the mathematical tools used to analyze the continuous rate of change between variables. It reviews some principles of pre-calculus and investigates limits, differentiation, and integration. The course studies applications of both differentiation and integration

COURSE: Geometry AREA OF STUDY: Math

COURSE LENGTH: Two Semesters

COURSE TYPE: Required PREREQUISITE: Algebra I

GRADE AVAILABILITY: 9, 10, 11, & 12

**COURSE DESCRIPTION:** 

In Geometry, students will look at the terms and logic of geometry, discover properties of parallel lines, quadrilaterals, polygons, and circles, as well as congruent, non-congruent and similar figures. Different kinds of geometric proofs and investigated. Properties about right triangles are discovered. Formulas of the area of polygons and surface area and volume of polyhedron are also used. Basic constructions with compasses and straight edges are taught and work is also done on the computer with Geogebra.

COURSE: Statistics 1410 (MCC Dual Enrollment) AREA OF STUDY: Math

**COURSE TYPE:** Required

COURSE LENGTH: One Semester

PREREQUISITE: MCC College Algebra 1420

GRADE AVAILABILITY: 12

**COURSE DESCRIPTION:** 

This course requires the student to develop a critical and functional understanding of data. Topics include frequency distributions: measures of central tendency and dispersion; probability and probability distributions; sampling concepts; estimating means, variances, standard deviations; proportions and percentages; hypothesis testing; and correlation and linear regression.

COURSE: Trigonometry 1430 (MCC Dual Enrollment)

AREA OF STUDY: Math

**COURSE TYPE:** Elective

COURSE LENGTH: One Semester

PREREQUISITE: MCC College Algebra 1420

GRADE AVAILABILITY: 11 & 12

**COURSE DESCRIPTION:** 

Topics include trigonometric ratios, triangles, vectors, circular functions, trigonometric identities, inverse trigonometric functions, trigonometric equations, and complex numbers.

COURSE: Technical Math (MCC) AREA OF STUDY: Math

**COURSE TYPE:** Elective

COURSE LENGTH: Two Semester s (Potential for Early Completion)

PREREQUISITE: Geometry and Counselor/Math Instructor Approval

GRADE AVAILABILITY: 11 & 12

**COURSE DESCRIPTION:** 

This course presents basic computation skills for either review or initial mastery by students. Topics include fractions; decimals, the solutions of ratio, proportion, and percent problems; operations with integers; and basic study skills for mathematics problem-solving and estimation related to industrial occupations. Topics may also include geometry, measurement, and elementary algebra.

COURSE: Environmental Science AREA OF STUDY: Science

COURSE LENGTH: Two Semesters

COURSE TYPE: Elective PREREQUISITE: None

GRADE AVAILABILITY: 11 & 12

**COURSE DESCRIPTION:** 

Environmental science is a captivating and rapidly expanding field, and this two-semester course offers compelling lessons that cover many different aspects of the field: ecology, the biosphere, land, forests and soil, water, energy and resources, and societies and policy. Through unique activities and material, high school students connect scientific theory and concepts to current, real-world dilemmas, providing them with opportunities for mastery in each of the segments throughout the semester.

COURSE: Biology Fundamentals AREA OF STUDY: Science

COURSE LENGTH: Two Semesters

COURSE TYPE: Required

PREREQUISITE: None
GRADE AVAILABILITY: 10
COURSE DESCRIPTION:

This is a year long course that will examine the fundamental concepts of biology. We will study life on multiple levels of organization including cell, organism, and ecosystem. We will pay special attention to the functioning of humans and our role in the biosphere. This class will also include the following topics; genetics and heredity, adaptation and evolution, and ecology. There will be a lab component to the course. This course fulfills a graduation requirement for a year-long life science class.

COURSE: Biology AREA OF STUDY: Science

COURSE LENGTH: Two Semesters

COURSE TYPE: Required PREREQUISITE: None

GRADE AVAILABILITY: 10

**COURSE DESCRIPTION:** 

Biology study will begin with characteristics common to the major kingdoms of the natural world. Scientific methods, tools and techniques will be reviewed and used in the lab. We will proceed with study of organic molecules and the cell as the basic unit of structure and function in all organisms. The ecology of biomes, and energy flow through cycles such as photosynthesis and cell respiration are investigated. Principles of Mendelian genetics and human heredity will follow. The diversity of life and evolutionary theory will be presented in the second semester. A comparative study of organisms, from microscopic Protists to large invertebrates, will form the remainder of the course. Materials for student use include models, worksheets, iPad resources, and lab specimens for observation and dissection.

COURSE: Chemistry AREA OF STUDY: Science

COURSE LENGTH: Two Semesters

COURSE TYPE: Elective PREREQUISITE: Algebra

GRADE AVAILABILITY: 11 & 12

**COURSE DESCRIPTION:** 

Chemistry is the study of the characteristics and chemical changes of matter. Many areas are covered such as: measurement, data analysis, data presentation, atomic and molecular structure, the periodic table, chemical reactions, kinetic theory, stoichiometry and the properties of solutions. There is a large mathematical component involved in this course. Laboratory techniques and safety are stressed in this class. An extremely valuable class for anyone considering a career in any science, medical or engineering field.

COURSE: Integrated Chemistry AREA OF STUDY: Science

COURSE LENGTH: Two Semesters

COURSE TYPE: Required PREREQUISITE: None

GRADE AVAILABILITY: 10

**COURSE DESCRIPTION:** 

This is a year long course that will combine major chemistry topics with societal issues. Topics

covered will include properties of matter, chemical bonding and reactions, stoichiometry, thermodynamics, solutions, acids and bases, reduction and oxidation, organic chemistry, and nuclear chemistry. Each unit of study will be tied to one or more real-world issues which we will examine in a variety of ways including laboratories, projects, and presentations.

COURSE: Health Occupations AREA OF STUDY: Science

COURSE LENGTH: Two Semesters

COURSE TYPE: Elective-highly suggested for students interested in pursuing medical careers

PREREQUISITE: Biology and Algebra GRADE AVAILABILITY: 11 & 12

**COURSE DESCRIPTION:** 

The course is designed to meet the Nebraska Department of Health training requirements for nursing assistant certification and employment in long-term care facilities. The course combines classroom lecture, laboratory application and clinical experience for the development of basic skills needed to care for the elderly. Course content will focus on teaching the nursing assistant to provide safe, effective, and caring services to the elderly or chronically ill patient of any age, in a long-term care facility.

The nursing assistant course alternates with an Advanced Biology section taught by Fort Calhoun staff. A variety of human biology topics are explored, including history of disease, pathogens and resistance, cancers, and aging of the body systems. A fetal pig is dissected as a summative review of vertebrate systems. National Health Institute materials and medical apps are utilized to support the Advanced Biology section.

COURSE: College Physics AREA OF STUDY: Science

COURSE LENGTH: Two Semesters

COURSE TYPE: Elective PREREQUISITE: Algebra

GRADE AVAILABILITY: 11 & 12

**COURSE DESCRIPTION:** 

High school students will take a college level course as an extension of Peru State College to offer college credit to Fort Calhoun seniors. Students will complete PHYS 201. The stress is placed on analyzing situations and solving problems in the areas of mechanics, sound and the heat in this mathematically based physics course. This class includes required lectures problem solving and laboratory components. Trigonometry is used extensively in this course.

COURSE: Physical Science AREA OF STUDY: Science

COURSE LENGTH: Two Semesters

COURSE TYPE: Required PREREQUISITE: None

GRADE AVAILABILITY: 9

**COURSE DESCRIPTION:** 

Physical Science is the introduction to the sciences of chemistry and physics. This course samples a wide variety of topics from both disciplines with an emphasis to real -life applications. Many different laboratory and research skills are involved. Major areas of study include chemical structure and reactions, motion, energy and its uses and the study of waves. A science fair project is done to emphasize the scientific method.

COURSE: Physiology AREA OF STUDY: Science

COURSE LENGTH: Two Semesters

COURSE TYPE: Elective PREREQUISITE: Biology

GRADE AVAILABILITY: 11 & 12

**COURSE DESCRIPTION:** 

Students will be introduced to essential concepts in human anatomy and physiology. Tissue study, cell specialization, the major organ systems and their components will be studied in some depth. Some disease conditions will be explored in order to illustrate the fine mechanism of balance in the healthy human body. Throughout the course, textbook information will be supplemented by various lab activities, including dissection of specimens. Web and iPad medical interactive resources, and other models will be utilized in order to build student interest in the course.

COURSE: Choir AREA OF STUDY: Music

COURSE LENGTH: Two Semesters

COURSE TYPE: Elective PREREQUISITE: None

GRADE AVAILABILITY: 9, 10, 11 & 12

**COURSE DESCRIPTION:** 

By participating in the high school choir, you will learn to appreciate and experience many styles of music, learn proper singing techniques and work with others toward a common goal of excellence.

COURSE: Show Choir AREA OF STUDY: Music

COURSE LENGTH: Two Semesters

**COURSE TYPE:** Elective

**PREREQUISITE:** Choir and Audition

GRADE AVAILABILITY: 9, 10, 11 & 12

**COURSE DESCRIPTION:** 

By participating in the show choir, you will gain experience in singing, dancing and learn the fundamentals of showmanship and performance. There will be some competition.

COURSE: Instrumental Music 1-Emph: Baroque AREA OF STUDY: Music

COURSE LENGTH: One year

**COURSE TYPE:** Elective - offered every four years

PREREQUISITE: Junior High Band or Permission of Teacher

GRADE AVAILABILITY: 9, 10, 11 & 12

**COURSE DESCRIPTION:** 

Students are expected to learn various materials presented through lecture, discussion, and demonstration while in the midst and context of a performance-oriented ensemble. Material will include areas of music theory—which incorporates, among other things, the science of the properties of sound and the physics of acoustics—and music history, which is integrally tied to world history and anthropology. Performance mediums will include marching band, concert band, and pep band. As a part of a performing ensemble, students are expected to continually develop their instrumental performance skills. The Baroque Emphasis is offered every four years.

COURSE: Instrumental Music 2-Emph: Classical AREA OF STUDY: Music

COURSE LENGTH: One year

COURSE TYPE: Elective - offered every four years

PREREQUISITE: Junior High Band or Permission of Teacher

GRADE AVAILABILITY: 9, 10, 11 & 12

**COURSE DESCRIPTION:** 

Students are expected to learn various materials presented through lecture, discussion, and demonstration while in the midst and context of a performance-oriented ensemble. Material will include areas of music theory—which incorporates, among other things, the science of the properties of sound and the physics of acoustics—and music history, which is integrally tied to world history and anthropology. Performance mediums will include marching band, concert band, and pep band. As a part of a performing ensemble, students are expected to continually develop their instrumental performance skills. The Classical Emphasis is offered every four years.

COURSE: Instrumental Music 3-Emph: Romantic AREA OF STUDY: Music

COURSE LENGTH: One year

COURSE TYPE: Elective - offered every four years

PREREQUISITE: Junior High Band or Permission of Teacher

GRADE AVAILABILITY: 9, 10, 11 & 12

**COURSE DESCRIPTION:** 

Students are expected to learn various materials presented through lecture, discussion, and demonstration while in the midst and context of a performance-oriented ensemble. Material will include areas of music theory—which incorporates, among other things, the science of the properties of sound and the physics of acoustics—and music history, which is integrally tied to world history and anthropology. Performance mediums will include marching band, concert band, and pep band. As a part of a performing ensemble, students are expected to continually develop their instrumental performance skills. The Romantic Emphasis is offered every four years.

COURSE: Instrumental Music 4-Emph:20th Century AREA OF STUDY: Music

COURSE LENGTH: One year

**COURSE TYPE:** Elective - offered every four years

PREREQUISITE: Junior High Band or Permission of Teacher

GRADE AVAILABILITY: 9, 10, 11 & 12

**COURSE DESCRIPTION:** 

Students are expected to learn various materials presented through lecture, discussion, and demonstration while in the midst and context of a performance-oriented ensemble. Material will include areas of music theory—which incorporates, among other things, the science of the properties of sound and the physics of acoustics—and music history, which is integrally tied to world history and anthropology. Performance mediums will include marching band, concert band, and pep band. As a part of a performing ensemble, students are expected to continually develop their instrumental performance skills. The 20th Century Emphasis is offered every four years.

COURSE: Jazz Band AREA OF STUDY: Music

COURSE LENGTH: Two Semesters

COURSE TYPE: Elective - offered every year

PREREQUISITE: Enrolled in Instrumental Music & Audition

GRADE AVAILABILITY: 9, 10, 11 & 12

**COURSE DESCRIPTION:** 

This is primarily a hands-on lab class providing students with training and performance experience in the specialized area of jazz--the only form of music which is truly American in origin. Brief lectures will cover the basics of style, performance techniques, chord structures, improvisation, as well as notable groups and performers in the field. This is a select, auditioned class and an elite performing ensemble. Membership is restricted to instrumentation used in standard jazz literature. The class meets Thursday mornings at 7:05 a.m., with other rehearsals and performances as scheduled throughout the season. Attendance at all functions is mandatory.

COURSE: Strength & Conditioning AREA OF STUDY: Physical Education

COURSE LENGTH: One Semester

COURSE TYPE: Required for 10<sup>th</sup>/Elective for Upperclassmen

PREREQUISITE: None GRADE AVAILABILITY: COURSE DESCRIPTION:

This class is intended for the students who want to make themselves a better all-around athlete. Exercises will be done to increase agility performance, strength, vertical jump, speed, and endurance. Sport specific skills will be taught as well as skills that will help athletes of all sports.

COURSE: Health AREA OF STUDY: Physical

Education

COURSE LENGTH: One Semester

COURSE TYPE: Required PREREQUISITE: None

GRADE AVAILABILITY: 9

**COURSE DESCRIPTION:** 

This is a one semester long survey course designed to use what is known in the health sciences to help young people make healthy lifestyle choices. Students will learn how to differentiate between healthful and harmful behaviors and their impact on the body. Topics covered will include building a foundation for a healthy lifestyle, physical activity and nutrition, mental and emotional health, and personal care of bodily systems. Much of this class will entail learning basic anatomy/physiology and following up with pertinent health topics. This class is a requirement for graduation.

COURSE: Physical Education - 9 AREA OF STUDY: Physical Education

COURSE LENGTH: One Semester

COURSE TYPE: Required PREREQUISITE: None

GRADE AVAILABILITY: 9

**COURSE DESCRIPTION:** 

Freshmen physical education students will continue to work on specific skills, but the class will involve more competitive activities. Along with these activities, teamwork and sportsmanship will

be emphasized. Cardiovascular development will be continued every Wednesday. We will also introduce weight training. Rules of various sports will be taught to the students.

COURSE: Strength & Conditioning AREA OF STUDY: Physical

Education

COURSE LENGTH: One or Two Semesters - may be taken up to four semesters for high school

credit

COURSE TYPE: Elective PREREQUISITE: None

GRADE AVAILABILITY: 10, 11, & 12

**COURSE DESCRIPTION:** 

Weight training classes will teach proper technique of lifting weights. Muscle development and cardiovascular development are the two major components of the course. Our goal is to help each student improve their strength, speed, agility, endurance through participation in the course.

COURSE: Robotics AREA OF STUDY: Industrial Technology

**COURSE LENGTH: One Semester Each** 

COURSE TYPE: Elective PREREQUISITE: None

GRADE AVAILABILITY: 9, 10, 11 & 12

**COURSE DESCRIPTION:** 

*Robotics* is a lab-based course that uses a hands-on approach to introduce the basic concepts of robotics, focusing on the construction and programming of autonomous and remote controlled mobile robots. During this class students will explore the field of robotic design using a variety of hands on activities. Mechanical concepts such as gearing, torque, speed, and power are taught and used during coursework. Google Sketchup is used as a tool for mechanical design. Course information will be tied to lab experiments, and students will get elements from STEM based curriculum. Students will work in groups to build and test increasingly more complex mobile robots, culminating in an end of the year robot contest.