# Course Description

Keya Paha County School

# TABLE OF CONTENTS

(updated 5/19)

	Page
Introduction	3
Graduation Requirements	4
Art	5
Business	6
Career Education	7
English	8
Eoreign Language	9
Health and Physical Education	10
Agricultural Education	11
Mathematics	12
Music	13
Science	14
Social Studies	16
Distance Learning Classes	17
Course Work Recommended for Post-Secondary Education	17

#### **INTRODUCTION**

The course descriptions contained in this booklet serve as general guidelines for the classes available at Keya Paha County Junior/Senior High School. However, the information is subject to change to best meet the needs of the students. In addition, the school district reserves the right to limit the enrollment in certain elective classes. In general, seniors and juniors will be given first option.

A student attending Keya Paha County High School must earn 260 credit hours in four years to earn a diploma. In addition, each student must earn a minimum number of credit hours in the following courses:

Language Arts	40 credit hours
Social Studies	40 credit hours
Mathematics	30 credit hours
Science	30 credit hours
Added Mathematical or Science class	. 10 credit hours
Computers	10 credit hours
Physical Education	10 credit hours
Health	10 credit hours
Electives	80 credit hours
Career Education.	5 credit hours
Speech	5 credit hours

Transfer students shall pick up as many required courses as the schedule will allow. Any deviations shall be approved by the Administration,

All students are required to take at least five academic classes, Band, chorus, music lessons are not considered academic classes.

Students must earn twenty credit hours in health and physical education to graduate. All students taking a physical education class are required to have a physical.

# **GRADUATION REQUIREMENTS**

Language Arts	40 credit hours
English I (9 <sup>th</sup> grade)	
English II (10 <sup>th</sup> grade)	
English III (11 <sup>th</sup> grade)	
English IV (12 <sup>th</sup> grade)	
Social Studies	
World Geography (9 <sup>th</sup> grade)	
World History (10 <sup>th</sup> grade)	
American History (11 <sup>th</sup> grade)	
American Government (12 <sup>th</sup> grade)	
Mathematics	30 credit hours
Algebra I (9 <sup>th</sup> grade)	
Algebra Π (11 <sup>th</sup> grade)	
Geometry (10 <sup>th</sup> grade)	
Science	30 credit hours
Physical Science	
Biology	
Added Mathematics or Science	10 credit hours
Pre-Calculus	
Computers	10 credit nours
Keyboarding	
Physical Education	10 credit hours
Physical Education	
•	
Health	10 credit hours
Health	
Career Education	5 credit hours
Career Education (10 <sup>th</sup> grade year)	
Speech	5 credit hours
Speech (10 <sup>th</sup> grade year)	
Electives	80 credit hours

#### **ART**

COURSE TITLE: Art I GRADE LEVEL: 9–12 PREREQUISITES: None

**LENGTH OF COURSE:** 2 Semesters **CREDIT HOURS:** 5 per semester

#### **COURSE DESCRIPTION:**

Art I provides comprehensive arts experiences to empower all first year art students, to enrich their understanding of themselves and the world, and to embrace the extraordinary potential of art for communication, celebration, and creativity. The students in Art I will explore the importance of arts in their own lives and surrounding. They will explore the importance of the arts in their own learning and creative processes. The students will explore art and artists of the past, present, and future. They will explore art as a means of expression and response to others. The students will develop standards for evaluating artwork. They will identify similarities between art and other subjects. The students will explore many techniques for creating, interpreting and evaluating art. They will use art to solve problems. The students will explore and create art in a variety of mediums; clay, sculpture, drawing, painting, collage, assemblage, mixed media, photography, fibers and printmaking.

COURSE TITLE: Art II GRADE LEVEL: 10–12 PREREQUISITES: Art I

**LENGTH OF COURSE:** 2 Semesters **CREDIT HOURS:** 5 per semester

#### **COURSE DESCRIPTION:**

Art II provides comprehensive arts experiences to empower all second year art students, to enrich their understanding of themselves and the world, and to embrace the extraordinary potential of art for communication, celebration, and creativity. The students in Art II will explore the similarities between art and their own lives and surroundings. They will explore the importance of arts in their learning and creative processes. The students will explore art and artists of the past, present, and future. They will explore art as a means of expression and response to others. The students will develop standards for evaluating artwork. They will identify similarities between art and other subjects. The students will explore many techniques for creating, interpreting, and evaluating art. They will use art. They will use art to solve problems. The students will advance and create art in a variety of mediums; clay, sculpture, drawing, painting, collage, assemblage, mixed media, photography, fibers, and printmaking.

COURSE TITLE: Art 3/Art 4

**GRADE LEVEL:** 11-12

**PREREQUISITE:** Art I and Art II

CREDIT HOURS: 5 per semester LENGTH OF CLASS: 1 or 2 semesters

#### **COURSE DESCRIPTION:**

Art 3/Art 4 provides comprehensive arts experiences to empower all third year art students, to enrich their understanding of themselves and the world, and to embrace the extraordinary potential of art for communication, celebration, and creativity. The students in Art 3/Art 4 will explore the similarities between art and their own lives and surroundings. They will explore the importance of the arts in their own learning and creative processes. The students will explore art and artists of the past, present, and future. They will explore art as a means of expression and response to others. The students will develop standards for evaluating artwork. They will identify similarities between art and other subjects. The students will explore many techniques for creating, interpreting and evaluating art. They will use art to solve problems. The students will advance and create art in a variety of mediums; clay, sculpture, drawing, painting, collage, assemblage, mixed media, photography, fibers, and printmaking.

**COURSE TITLE:** Independent Art

**GRADE LEVEL:** 11-12

PREREQUISITES: Art I and II

**LENGTH OF CLASS:** 1 or 2 Semesters

**CREDIT HOURS:** 5 per semester

#### **COURSE DESCRIPTION:**

Independent Art provides comprehensive arts experiences to empower all advanced art students, to enrich their understanding of themselves and the world, and to embrace the extraordinary potential of art for communication, celebration, and creativity. The students in Independent Art will explore the similarities between art and their own lives and surroundings, They will explore the importance of the arts in their own learning and creative processes. The students will explore art and artists of the past, present, and future. They will explore art as a means of expression and response to others. The students will develop standards for evaluating artwork. They will identify similarities between art and other subjects. The students will explore many techniques for creating, interpreting and evaluating art. They will use art to solve problems. The students will advance and create art in a variety of mediums; clay, sculpture, drawing, painting, collage, assemblage, mixed media, photography, fibers, and printmaking.

#### **BUSINESS**

(Computer Applications and Info Tech I is Required for Graduation)

**COURSE TITLE:** Accounting II

**GRADE LEVEL:** 11-12

PREREQUISITES: Accounting I LENGTH OF CLASS: 1 year CREDIT HOURS: 10 per year

#### **COURSE DESCRIPTION:**

The second year accounting class will pick up where Accounting I left off. It will expand on the basic accounting cycle and will teach the variations in record keeping based on business type. Uncollectible accounts, company stock, acquiring capital, taxes, depreciation, asset handling, inventory management, and fiscal year reporting are topics that will be covered in this class. If you liked Accounting I, Accounting II is the next step. Students who plan to go to school for business or plan to be self-employed will benefit tremendously by taking Accounting I and II!

GRADE LEVEL: K-6 Keyboarding

PREREQUISITES: None LENGTH OF CLASS: 1 year

**CREDIT HOURS:** 

COURSE DESCRIPTION:

This course is aimed to develop students' keyboarding skills. Students begin in Kindergarten on paper keyboards and then move up to utilizing computers for keyboarding in the 3rd grade. We utilize the online program Keyboarding for Kids. Advanced students move onto typing Wikipedia articles and business letters. Form is stressed in keyboarding and is more important than speed and accuracy. Those will come with correct form. This class meets once a week throughout the school year and works to progressively develop skill.

**COURSE TITLE: Computers Applications** 

GRADE LEVEL: 7 (required) LENGTH OF CLASS: 1 year CREDIT HOURS: 10 per year PREREQUISITES: None COURSE DESCRIPTION:

This is a keyboarding course that utilizes Microsoft Word to introduce students to professional writing while practicing their keyboarding skill. Students learn to prepare letters, memos, faxes, reports, agendas, flyers, itineraries, envelopes, perform mail merges, etc. Students increase their keyboarding accuracy and skill while building their knowledge of real world professional writing. Students also spend time being introduced to PowerPoint, Excel, and 10-key.

COURSE TITLE: Information Technology I

GRADE LEVEL: 9 (required) LENGTH OF CLASS: 1 year CREDIT HOURS: 10 per year PREREQUISITES: None COURSE DESCRIPTION:

This course builds upon Computer Applications. It reviews the use of Microsoft Office programs such as Word, Excel, Publisher, and PowerPoint to deepen student understanding and use. This course also deepens students' understanding of themselves as digital citizens. Learners research and show understanding using multiple applications including Google Apps, Blogger, Canva, etc.

COURSE TITLE: Accounting I

GRADE LEVEL: 10-12 PREREQUISITES: None LENGTH OF CLASS: 1 year CREDIT HOURS: 10 per year COURSE DESCRIPTION:

The first year accounting class will provide students with a thorough background in the basic accounting procedures used to operate a business. Accounting is based on basic math, but uses a system of procedures that is very unique. The procedures presented will serve as a sound background for employment in office jobs, preparation for studying business courses in college, and in service to community organizations. The complete accounting cycle is covered, and it is easy to see how each employee's job fits into an accounting cycle for a business. This is an important qualification that employers look for from their future applicants.

**COURSE TITLE: Personal Finance** 

**GRADE LEVEL: 9-12** 

CREDIT HOURS: 5 per year semester LENGTH OF CLASS: 1 Semester

PREREQUISITES: None COURSE DESCRIPTION:

Personal Finance will teach students how to make their money work. From the basics of a budget to investing in retirement plans, they will learn how money works. This is a course that everyone should take. Whether students are planning to get a job and work after high school or go to college, this class will be beneficial for all of them. Students will examine financial documentation including (but not limited to) mortgage documents, insurance policies, tax forms, 401K plans, mutual funds, stocks, and different types of bank accounts. They will learn the vocabulary involved in the world of money. Last but not least, students will learn about common financial downfalls and how to protect themselves from making unwise financial decisions! This class will assist students in becoming financially literate.

COURSE TITLE: Intro to Business

GRADE LEVEL: 9-12 PREREQUISITES: None LENGTH OF CLASS: 1 year

**CREDIT HOURS:** 

COURSE DESCRIPTION:

This course is an overview of everything business. We cover different types of businesses, marketing, management, economics, etc. Weekly business articles are read and reported upon. The theme of this class is "The biggest business you are ever going to run is yourself." We parallel business with recognizing and building personal traits that will help students market and manage themselves in the future. This goal of this class is to stretch each student as an individual and also to give them a basic overview of the business world!

COURSE TITLE: Yearbook GRADE LEVEL: 9-12 PREREQUISITES: None LENGTH OF CLASS: 1 year

**CREDIT HOURS:** 

COURSE DESCRIPTION:

Students in yearbook learn and utilize several skills. Skills include uploading, downloading, and managing pictures. Students work together to make formatting and layout design decisions for the yearbook. Students fundraise by selling yearbook ads to local businesses and ranchers. They take photos at events, edit, and categorize them. Students select a theme, backgrounds, accents, borders, clip art, etc. to embellish their yearbook. They also give photo credit to those who provide pictures and also manage the users of the yearbook.

**COURSE TITLE: Computer Science Principles** 

**GRADE LEVEL: 912** 

PREREQUISITES: Algebra 1 is recommended.

LENGTH OF CLASS: 1 year

**CREDIT HOURS:** 

**COURSE DESCRIPTION:** 

"Code.org's Computer Science Principles (CS Principles) curriculum is a full-year, rigorous, entry-level course that introduces high school students to the foundations of modern computing. The course covers a broad range of foundational topics such as programming, algorithms, the internet, digital privacy and security, and the societal impacts of computing. Computing affects almost all aspects of modern life, and all students deserve an education that prepares them to pursue the wide array of intellectual and career opportunities that computing has made possible. This course seeks to provide foundational knowledge and skills to meaningfully participate in our increasingly digital society, economy, and culture." - Code.org This class may be taken as an AP course.

# **CAREER EDUCATION**

(5 semester hours Required for Graduation)

COURSE TITLE: Career Education GRADE LEVEL: 10 (required) PREREQUISITES: None

**CREDIT HOURS:** 5 per semester **LENGTH OF CLASS:** 1 Semester

#### **COURSE DESCRIPTION:**

The Career Education class serves as an introduction to career opportunities that will be available to students. This class will enable students to begin making decisions about their future career goals through evaluating their interests, values, hobbies, personalities, skills, knowledge, etc. Throughout the semester, students will learn to effectively use the basic communications skills needed for getting and keeping jobs. In addition to selecting career possibilities, the students will begin thinking about post-secondary education and/or training that will be required for their selected career choices. They will complete activities to prepare to take the ACT and Everfi Financial Literacy Program.

#### **ENGLISH**

(Language Arts)

(40 Credits of English and 5 Credits of Speech are Required for Graduation)

COURSE TITLE: English I GRADE LEVEL: 9 (required) CREDIT HOURS: 10 per year LENGTH OF CLASS: 1 year PREREQUISITES: None

#### **COURSE DESCRIPTION:**

This yearlong course emphasizes a comprehensive study and use of the English language introducing Shakespearean literature through the study of his drama, *Romeo and Juliet*. The elements of grammar, usage, mechanics, and speech are stressed. Students will be called upon to use the language properly in both a written and verbal manner. Students will complete short research paper. A variety of literature, including fiction, nonfiction, short stories, novels, poetry, and drama will be explored. All students will be able to identify and utilize a level of vocabulary words through the comprehension of their spelling and definitions. Students will evaluate research methods and techniques to determine appropriate formats in given situations. This course is required for graduation.

COURSE TITLE: English II GRADE LEVEL: 10 (required) CREDIT HOURS: 10 per year PREREQUISITES: English I LENGTH OF CLASS: 1 year

#### **COURSE DESCRIPTION:**

This course includes a comprehensive study of language arts. Students will be exposed to higher levels of complexity in the use of both written and oral language. A variety of literature including poetry, short stories, essays, novels, plays will be covered. They will read different novels which may include *Black Elk Speaks*, *Night*, *Of Mice and Men* by great American and Nebraska authors. Students will review basic grammar mechanics, segueing into usage applicable in writing paragraphs and essays. All students will be able to identify and utilize a level of vocabulary words through the comprehension of their spelling and definitions. Students will evaluate research methods and techniques to determine appropriate formats in given situations. This course is required for graduation.

**COURSE TITLE:** English III **GRADE LEVEL:** 11 (required) **CREDIT HOURS:** 10 per year

PREREQUISITES: English II & English I

**LENGTH OF CLASS:** 1 year **COURSE DESCRIPTION:** 

In a survey of American Literature from Native American times to modern age, students will study essays, poetry, novels, plays, and short stories. They will read several novels which may include *The Scarlet Letter*, *s*, *The Great Gatsby*,, and *To Kill A Mockingbird* by great American and Nebraska authors. Students will study grammar and mechanics as well as master sentence and paragraph construction with a focus on persuasive writing. Completing these studies will help prepare students for the English section of the ACT test and for their senior year of English studies. All students will be able to identify and utilize a level of vocabulary words through the comprehension of their spelling and definitions. Students will format written material intended to reach a variety of audiences through a variety of designs. Students will evaluate research methods and techniques to determine appropriate formats in given situations. This course is required for graduation.

COURSE TITLE: English IV GRADE LEVEL: 12 (required) CREDIT HOURS: 10 per year LENGTH OF CLASS: 1 year

PREREQUISITES: English III, English II & English I

#### **COURSE DESCRIPTION:**

This classical world literature course is designed to prepare students for college level reading and writing. Students will read and analyze difficult classic literature, and various philosophies will be examined. Genres include ballads, epics, plays, short stories, essays, poetry, and novels. Students will approach the readings in a critical fashion and write essays in a critical fashion.

All twelfth grade students will be able to identify and utilize a level of vocabulary words through the comprehension of their spelling and definitions. Students will assess and apply twelfth grade grammar skills in editing and written works which include college applications and scholarship writing, Students will format written material intended to reach a variety of audiences through a plethora of designs. Students will evaluate research methods and techniques to determine appropriate formats in given situations. This course is required for graduation.

COURSE TITLE: Speech
GRADE LEVEL: 10 (required)
CREDIT HOURS: 5 per semester
LENGTH OF CLASS: 1 Semester

**PREREQUISITES:** None

#### **COURSE DESCRIPTION:**

This course will be a combination of speech theory and speaking. Concepts, skills, and techniques essential for effective speaking and interactive listening, in both formal and informal situations, will be stressed. The students will develop their own speeches and present an average of two speeches per week of varying types and lengths. Goals include sharpening organizational skills, developing a positive attitude towards and becoming comfortable with public speaking.

# FOREIGN LANGUAGE

**COURSE TITLE:** Spanish I

**GRADE LEVEL:** 11

CREDIT HOURS: 10 per year LENGTH OF CLASS: 1 year PREREQUISITES: None

#### **COURSE DESCRIPTION:**

Spanish I serves as an introduction to the study of language learning through the areas of listening, speaking, reading, and writing. Students will progress steadily to the goal of linguistic and cultural proficiency. Primary emphasis in the first year will be building a Spanish vocabulary, from situations of meeting people, school schedules, foods and several others, using this vocabulary in written phrases, dialogues,, and understanding spoken phrases, from fellow classmates, the instructor and online resources. Also, learning grammar as it pertains to the Spanish language.

**COURSE TITLE:** Spanish II

**GRADE LEVEL: 12** 

**CREDIT HOURS:** 10 per year **LENGTH OF CLASS:** 1 year **PREREQUISITES:** Spanish I

#### **COURSE DESCRIPTION:**

Spanish II is a continuation of the Spanish I program, with emphasis on listening, speaking, reading, and writing. More extensive use of the language, in new tenses such as, the preterite and progressive. Level two students will be expected to do more writing and reading, plus speaking with complete sentences. Spanish culture will also be continued in each chapter as we move through the Latin American Countries, South America and Spain. Grammar still plays an important role as we use more of the language. A review of Spanish I will be made at the beginning of this class as we ease into the next level.

#### **HEALTH & PHYSICAL EDUCATION**

(10 Credits in Each Area are Required for Graduation)

**COURSE TITLE:** Health

GRADE LEVEL: 10 (required)
PREREQUISITES: None
GRADE LEVEL: 10 per year

#### **COURSE DESCRIPTION:**

This course encourages students to look closely at their own lifestyles, learn the skills necessary for changing negative behavior, and set goals for improving their well-being. Students sharpen their judgment as they consider health issues and learn how to apply decision-making skills to their own lives. Specific topics covered include: Social and Emotional Health, Physical Health — The eleven systems of the body, Drug Use and Abuse, Disease Prevention, The Life Cycle, First Aid and Safety, and Global Issues,

**COURSE TITLE:** Physical Education **GRADE LEVEL:** 9 (requirement)

PREREQUISITES: None LENGTH OF CLASS: 1 year CREDIT HOURS: 10 per year

#### **COURSE DESCRIPTION:**

The Physical Education class teaches the development and appreciation of lifetime and recreational activities along with the concepts of team sports. It is designed to provide the student with the knowledge and appreciation of different activities through the understanding of the rules, fundamentals, equipment, game procedures and personal development.

**COURSE TITLE:** Physical Education II

**GRADE LEVEL:** 10-12

**PREREQUISITES:** Physical Education

**CREDIT HOURS:** 10 per year **LENGTH OF CLASS:** 1 year

#### **COURSE DESCRIPTION:**

PE II is a strength conditioning class which entails identifying muscles and recognizing certain lifts which target specific muscle groups. This calls will teach students how to build an aerobic and anaerobic fitness program. Along with developing this knowledge the students will be able to follow their program throughout the course of the year and be able to adjust it according to their individual needs. Students will become more familiar with their bodies and develop a positive self-image about themselves.

# AGRICULTURAL EDUCATION

**COURSE TITLE:** 7th Grade Agriculture

GRADE LEVEL: 7 PREREQUISITES: CREDIT HOURS: 5

**LENGTH OF CLASS:** 1 semester

#### **COURSE DESCRIPTION:**

The introductory course for the Agriculture, Food and Natural Resources Career Cluster provides a knowledge base and technical skills in all aspects of the industry. Learners will be exposed to a broad range of agriculture, food and natural resources careers, cluster foundation knowledge and skills, introduction to leadership development, the FFA organization and career exploration. Classroom and laboratory activities are supplemented through supervised agricultural experiences and leadership programs and activities.

**COURSE TITLE:** 8th Grade Agriculture

GRADE LEVEL: 8 PREREQUISITES: CREDIT HOURS: 5

**LENGTH OF CLASS:** 1 semester

#### **COURSE DESCRIPTION:**

The introductory course for the Agriculture, Food and Natural Resources Career Cluster provides a knowledge base and technical skills in all aspects of the industry. Learners will be exposed to a broad range of agriculture, food and natural resources careers, cluster foundation knowledge and skills, introduction to leadership development, the FFA organization and career exploration. Classroom and laboratory activities are supplemented through supervised agricultural experiences and leadership programs and activities.

**COURSE TITLE:** Introduction to Agriculture, Food, and Natural Resources

**GRADE LEVEL: 9-10** 

PREREQUISITES: Varies based on course

**CREDIT HOURS: 10** 

LENGTH OF CLASS: 1 year

#### **COURSE DESCRIPTION:**

The introductory course for the Agriculture, Food and Natural Resources Career Cluster provides a knowledge base and technical skills in all aspects of the industry. Learners will be exposed to a broad range of agriculture, food and natural resources careers, cluster foundation knowledge and skills, introduction to leadership development, the FFA organization and career exploration. Classroom and laboratory activities are supplemented through supervised agricultural experiences and leadership programs and activities.

**COURSE TITLE:** Animal Science

**GRADE LEVEL:** 10-12 **PREREQUISITES:** AFNR **CREDIT HOURS:** 10

**LENGTH OF CLASS:** 1 Year

#### **COURSE DESCRIPTION:**

A course focusing on the basic scientific principles and processes that are involved in animal physiology, breeding, nutrition, and care in preparation for an animal systems career. Topics include animal diseases, introduction to animal science, animal nutrition, animal science issues, career opportunities and animal evaluation. Classroom and laboratory activities are supplemented through supervised agricultural experiences and leadership programs and activities.

**COURSE TITLE:** Plant Science/ Horticulture

GRADE LEVEL: 10- 12
PREREQUISITES: AFNR

**CREDIT HOURS:** 5

**LENGTH OF CLASS:** 1 Semester

#### **COURSE DESCRIPTION:**

This course focuses on knowledge, information, and skills related to the science of plant production and agronomy and provides the necessary skills for careers in horticulture, agricultural production and management, and science. The content includes plant growth and reproduction, biotechnology and research, fertilizers, plant and tree identification, controlling weeds and pests, and proper use of agricultural chemicals. Classroom and laboratory activities are supplemented through supervised agricultural experiences and leadership programs and activities.

**COURSE TITLE:** Landscaping and Design

**GRADE LEVEL: 10-12** 

PREREQUISITES: Plant Science

**CREDIT HOURS: 5** 

**LENGTH OF CLASS:** 1 Semester

#### **COURSE DESCRIPTION:**

This course goes through the principles of landscape and design. Line, form, texture, color, balance, repetition, emphasis, and unity will be some of the topics discussed and practiced in the course of this class. Classroom and laboratory activities are supplemented through supervised agricultural experiences and leadership programs and activities.

**COURSE TITLE:** Power, Structure, and Technical Systems Fundamentals

**GRADE LEVEL:** 10-12 **PREREQUISITES:** AFNR **CREDIT HOURS:** 10

**LENGTH OF CLASS:** 1 Year

#### **COURSE DESCRIPTION:**

This course introduces selected major areas of agricultural mechanics technology including small engine operation, repair Learning activities include basic understanding, skill development and problem-solving. Classroom and laboratory activities are supplemented through supervised agricultural experiences and leadership programs and activities.

**COURSE TITLE:** Veterinary Science

**GRADE LEVEL:** 11-12

PREREQUISITES: Animal Biology and AFNR

**CREDIT HOURS:** 10

**ŁENGTH OF CLASS:** 1 Year

#### **COURSE DESCRIPTION:**

Introduces students to the basics of animal care. Topics covered include terminology, disease, parasites, feeding, shelter, grooming, and general animal care. Classroom and laboratory activities are supplemented through supervised agricultural experiences and leadership programs and activities

COURSE TITLE: Welding I GRADE LEVEL: 11-12 PREREQUISITES: AFNR CREDIT HOURS: 10

**LENGTH OF CLASS:1 year** 

**COURSE DESCRIPTION:** At the end of this course, students will be proficient in arc welding and MIG welding. Students will also be proficient in the plasma and oxy cutting processes. This course is also an introduction for TIG welding and Oxy welding processes.

**COURSE TITLE:** Metals and Fabrication

**GRADE LEVEL:** 11-12

**PREREQUISITES:** Welding 1

**CREDIT HOURS: 10** 

LENGTH OF CLASS: 1 Year

**COURSE DESCRIPTION:**A study of the processes used by modern industry to manufacture consumer products, safety, measurement, planning, machining, fabrication processes, and finish processes will be included. Career opportunities will also be explored.

**COURSE TITLE:** Agricultural Business

**GRADE LEVEL:** 11-12 **PREREQUISITES:** AFNR **CREDIT HOURS:** 5

**LENGTH OF CLASS:**1 Semester

**COURSE DESCRIPTION:**At the end of this course, student will be able to identify agribusiness terminology, apply marketing options in agriculture, create business goals, and create a business plan. Students will also set up their Grainbridge account which will help with the application of risk management in agriculture. Students must participate in One competition dealing with agribusiness. Options include: Farm Business Management, Ag. Sales, Ag. Issues, Job Interview, Public Speaking, or enter a very well written proficiency award at the district level.

**COURSE TITLE:** Ag. Economics

**GRADE LEVEL:** 11-12

PREREQUISITES: Ag. Business

**CREDIT HOURS: 5** 

**LENGTH OF CLASS:** 1 Semester

**COURSE DESCRIPTION:**At the end of this course, student will be able to identify agricultural economics terminology, apply marketing options in agriculture, create marketing goals, and create a market plan. Students will also set up their Grainbridge account which will help with the application of risk management in agriculture. Students must participate in One competition dealing with agribusiness. Options include: Farm Business Management, Ag. Sales, Ag. Issues, Job Interview, Public Speaking, or enter a very well written proficiency award at the district level.

**COURSE TITLE:** Agricultural Leadership and Career Readiness/ Job shadow

**GRADE LEVEL:** 11-12

**PREREQUISITES:** Have a specific interest in Education, preference is Agricultural Education

- 1. Be a Senior FFA Officer
- 2. Have a GPA of 3.5 or higher
- 3. Proficient with using Agricultural Education Tracker (AET)
- 4. Have proficient knowledge about SAEs and willingness to come up with new SAE ideas
- 5. Have maintained a SAE all 3 years with completed records and have applied for at least one SAE award at the district level
- 6. Have been an active FFA member for all 3 years
  - a. Active members have to attend a minimum of one FFA activity a month
- 7. Will help implement agricultural lessons in the elementary classroom

**CREDIT HOURS: 10** 

**LENGTH OF CLASS: 1 Year** 

**COURSE DESCRIPTION:** This course is designed for students with an interest in Agricultural Education or Education understand program planning, lesson planning, and ends of outs of running a successful agricultural program. At the end of this course, student will be able to create documents to keep the agricultural department organized and run more efficiently, create effective lesson plans, complete agricultural related grants and scholarships for the agricultural program.

#### **MATHEMATICS**

(30 or 40 Credits Required for Graduation)

COURSE TITLE: Algebra I GRADE LEVEL: 9 (required) PREREQUISITES: None CREDIT HOURS: 10 per year LENGTH OF CLASS: 1 year

#### **COURSE DESCRIPTION:**

Algebra I is the study of the number systems, linear equations and inequalities, with an introduction to systems of linear equations, quadratic equations and developing mathematical models. This comprehensive program allows students to develop a solid function of basic algebra skills and concepts. Students will also develop and remember skills and strategies necessary to select a successful approach to any problem, Specific topics covered include the following: Real Numbers; Algebraic Expressions; Equations in One Variable; Inequalities in One Variable; Polynomials; Factoring Polynomials; and Rational Expressions.

COURSE TITLE: Algebra II GRADE LEVEL: 11 (required) PREREQUISITES: Algebra I CREDIT HOURS: 10 per year LENGTH OF CLASS: 1 year

#### **COURSE DESCRIPTION:**

Algebra II is the study of the more advanced linear equations and inequalities, with an introduction to systems of quadratic and exponential equations and developing more complex mathematical models. This comprehensive program prepares students to use advanced skills and concepts. It reviews and builds on the concepts learned in Algebra I. Specific topics covered include the following: Real Numbers and Equations; Equations and Inequalities; Equations and Inequalities; Functions and Graphs; Systems of Equations and Inequalities; Matrices and Determinants; Rational Expressions; Irrational and Complex Numbers; Quadratic Equations; and Polynomial Functions.

COURSE TITLE: Geometry GRADE LEVEL: 10 (required) PREREQUISITES: Algebra I CREDIT HOURS: 10 per year LENGTH OF CLASS: 1 year

#### **COURSE DESCRIPTION:**

Geometry is the study of geometric shapes and models and use of conjectures, theorems and other definitions and laws to solve problems involving geometric and algebraic principles. This program develops logical thinkers through a variety of construction and measurement activities and other practical exercises. Specific topics covered include the following: Inductive and Deductive Reasoning; Angles; Lines; Planes; Similar and Congruent Triangles: the Pythagorean Theorem; Polygons; Circles; Area; Perimeter; Volume; Constructions; Locus and Transformation

**COURSE TITLE:** Trigonometry/Pre-calc

**GRADE LEVEL: 12** 

PREREQUISITES: Algebra I, Algebra II, Geometry

**CREDIT HOURS:** 10 per year **LENGTH OF CLASS:** 1 year

#### **COURSE DESCRIPTION:**

Trigonometry/Pre-calc is the study of the laws governing the trigonometric functions and their application to real world models. It will involve the creation of models to solve real world problems. This program allows students to develop a solid foundation of trigonometric skills and concepts. Specific topics covered include the following: Trigonometric Functions; Graphing Trigonometric Functions; Right Triangle Trigonometry; Oblique Triangles; Trigonometric Identities; and Inverse Trig Functions. This course also reviews Algebra II topics that include the following: Exponents and Logarithms; Complex Numbers; Sequences and Series; Polynomials; Inequalities; Functions; Conic Sections; and Statistics and Probability.

# **MUSIC**

COURSE TITLE: Band GRADE LEVEL: 7–12 PREREQUISITES: None

**CREDIT HOURS:** 3 per semester

**LENGTH OF CLASS:** 1 or 2 semesters

**COURSE DESCRIPTION:** band is made up of students in grades 7-12. Band days are on Tuesday and Thursday during the first semester and the flip flop with chorus the second semester, so will meet Monday, Wednesday and Friday. Because of the large range of abilities, class involves learning playing positions, fingerings, along with notation and dynamics.

The performances of this group are the mid-winter concert, NVC Band Clinic and spring festival. Additional performances throughout the year may include the following: football games, Homecoming parade (marching band), Veteran's Day program, basketball games,, and District Contest. All students in band are expected to participate in all parts of the band program.

**COURSE TITLE:** Chorus **GRADE LEVEL:** 7–12 **PREREQUISITES:** None

**CREDIT HOURS:** 2 per semester

**LENGTH OF CLASS:** 1 or 2 semesters

#### **COURSE DESCRIPTION:**

The choir is made up of students who want to enjoy singing, better their vocal abilities, experience vocal music varieties and be a member of a large group with little stress. No experience is required. Within this class, you will be involved in a mixed group, female/male groups and/or small groups. Performances are presented throughout the year in which all members participate. These include conference clinic, Veteran's Day, mid-winter concert and spring festival, Solos, small ensembles, boys and girls glee, and mixed chorus participate in the District Contest each year. A variety of songs, genres, styles are performed throughout the year.

This group meets on days throughout the week opposite of band.

**COURSE TITLE:** Music Appreciation

**GRADE LEVEL:** 9–12 **PREREQUISITES:** None

**CREDIT HOURS:** 5 per semester **LENGTH OF CLASS:** 1 or 2 semesters

#### **COURSE DESCRIPTION:**

**Music Appreciation** is teaching people what to listen for and to appreciate different types of **music**. It involves some history lessons to explain why people of a certain era liked the **music** they did. Students will grow in their understanding of music as they listen to classics from the Baroque period through the jazz age. Students will develop their ear to identify instruments and musical pieces. Students will also learn music terminology and music theory in order to express in writing accurate descriptions of music.

Time will also be spent learning to play an instrument of their choice and practicing that instrument.

#### **SCIENCE**

(30 or 40 Credits Required for Graduation)

COURSE TITLE: Biology
GRADE LEVEL: 10 (required)
PREDECULISITES: Physical Sci

**PREREQUISITES:** Physical Science

**CREDIT HOURS:** 10 per year **LENGTH OF CLASS:** 1 year

#### **COURSE DESCRIPTION:**

Students will gain understanding in cell theory and relate it to the needs and functions of all living things. The study of cell structures, and functions such as photosynthesis, cell respiration, and cell division will support understanding of heredity, evolution, and ecology. They will survey the efforts of various individuals and relate the pursuit of science to personal and social issues.

**COURSE TITLE:** Chemistry **GRADE LEVEL:** 11-12

PREREQUISITES: Physical Science, Biology, Algebra I, and Algebra II

**CREDIT HOURS:** 10 per year **LENGTH OF CLASS:** 1 year

#### **COURSE DESCRIPTION:**

Chemistry is an introductory course to chemicals: their composition, atomic structure, physical and chemical characteristics, reactions, identification, and relationship with the universe. An in depth study of atomic theory and its relationship with the structure of chemical compounds, Proper lab procedure is emphasized and labs are utilized as learning tools. Individual elements are studied based on their characteristics and positions in the periodic table. Compounds are studied based on the elements, which compose them, the type of chemical bonds formed and the types of reactions, which they undergo. Measurement of quantities of substances based on the mole will be addressed. The relation of chemistry and other sciences will also be studied.

**COURSE TITLE:** Introductory Physical Science

GRADE LEVEL: 9 (required)
PREREQUISITES: None
CREDIT HOURS: 10 per year
LENGTH OF CLASS: 1 year

#### **COURSE DESCRIPTION:**

All freshmen students will develop skills used in scientific inquiry. Students will develop an understanding of evidence, models and explanations, Students will develop a model of the atom based on their inquiry activities. Students will demonstrate a knowledge base of major concepts and laws of nature that make up our basic scientific understanding. Students will develop an understanding of properties and changes of properties in matter. Students will develop an understanding of motion and forces. Students will develop an understanding of the transfer of energy.

**COURSE TITLE:** Physics **GRADE LEVEL:** 11-12

**PREREQUISITES:** Physical Science, Biology, Algebra I & II, and Geometry **CREDIT HOURS:** 10

per year

**LENGTH OF CLASS:** 1 year

#### **COURSE DESCRIPTION:**

Physics is an elective course intended for the college bound student. Physics is the study of mechanics, thermodynamics, waves, electricity and magnetism, and nuclear physics. Mathematical methods of laboratory measurements in scientific notation and significant digits, algebraic manipulations, and graph representations are gathered and recorded throughout the course. The themes of science are broad unifying ideas that integrate the major concepts of many disciplines. They are an important part of any teaching strategy because they help students see the importance of truly understanding concepts rather than simply memorizing isolated facts. Themes help students see connections between physics and other science courses as well as other courses offered in the high school setting.

**COURSE TITLE:** Scientific Modeling and Fabrication

**GRADE LEVEL:** 10 - 12 **PREREQUISITES:** NONE

**CREDIT HOURS:** 

**LENGTH OF CLASS:** 1 year

#### **COURSE DESCRIPTION:**

Students will learn to use Sketchup and/or other 3D modeling computer programs. Students will design models in the program and be able to scale it in the 3D printer software. Models can then be printed in a PLA plastic filament 3D printer as a product or a prototype model. Students will learn about parameters and limits of printed objects using this technology, they will also learn about other printer types and the many uses and developments in 3D printing technology. Arduino electronics and programming kits will be used to build and program small circuits that can be incorporated with 3D printed structures.

#### **SOCIAL STUDIES**

(40 Credits Required for Graduation)

**COURSE TITLE:** World Geography

GRADE LEVEL: 9 (required)
PREREQUISITES: None
CREDIT HOURS: 10 per year
LENGTH OF CLASS: 1 year

#### **COURSE DESCRIPTION:**

World Geography is a study of the key culture regions on the face of the earth. In studying key culture regions emphasis will be put on physical geography, landforms, understanding of different cultures not just where they are physically located. We need a better understanding of world trade and resources, world cultures, and the involvement of the United States in world affairs. Emphasis will be on the Western Europe, Eastern Europe and Russia, along with Africa and the rest of Asia. This course is required for graduation.

**COURSE TITLE:** World History **GRADE LEVEL:** 10 (required)

PREREQUISITES: World Geography

**CREDIT HOURS:** 10 per year **LENGTH OF CLASS:** 1 year

#### **COURSE DESCRIPTION:**

Classical civilizations are studied, along with the Rise of Christendom, the Rise of the West, and the world in upheaval through World War I. Areas covered will deal with our beginnings, progress, building of nations, and our own involvement in international affairs. This course is required for graduation.

**COURSE TITLE:** American History **GRADE LEVEL:** 11 (required)

PREREQUISITES: World History & World Geography

CREDIT HOURS: 10 per year LENGTH OF CLASS: I year

#### **COURSE DESCRIPTION:**

This course is a survey of United States History from years to the present. Primary emphasis will be placed on the growth of the United States and its development both politically and economically. The Constitution is also studied in this class. The textbook and teacher serve as the primary instruments of instruction. This course is required for graduation.

**COURSE TITLE:** American Government

**GRADE LEVEL:** 12 (required)

PREREQUISITES: American History, World History, World Geography

CREDIT HOURS: 10 per year LENGTH OF CLASS: 1 year COURSE DESCRIPTION:

American Government is a yearlong course designed to further acquaint students with a background of our Constitution and what it means to each of us. It is important to study our American Heritage and the basic tasks of government. The concept of popular sovereignty will be stressed in that people themselves are and should be the only source of governmental power. A democratic government can succeed only to the extent to which its citizens participate, and participate intelligently, in the governing process. This course is required for graduation.

# **Distance Learning Classes**

Distance Learning Classes are classes that are made available over the distance learning system at the high School. Classes are available from other high schools and colleges. Various classes are offered with the availability of these classes coming out in the spring before the fall of the year the class is available. The class schedule may change each semester, depending on the making and request of various classes. If there is an interest in a particular class, contact the school counselor's office. The counselor's office will send the request on to the necessary party, to see if the class can be made available. Any questions contact the school counselor's office.

# COURSE WORK RECOMMENDED FOR POST-SECONDARY EDUCATION

Because the admissions standards vary greatly and are subject to change at Nebraska's colleges and universities, it is important to contact the post-secondary institution of your choice as soon as possible to determine which classes are required for admission. The following information is a guideline of courses that Nebraska's colleges and universities recommend that high school students complete.

#### University of Nebraska System

- 4 Years of English
- 3 Years of Mathematics (4 years at UNL)
- 2 Years of Foreign Language
- 3 Years of Natural Science
- 3 Years of Social Sciences
- 1 Year of an Academic Elective Course

Students must also be in the upper half of their senior class-or- have a minimum ACT composite score of 20.

#### Private Colleges/Universities

Nebraska's private colleges and universities have admissions requirements that are similar to the University of Nebraska system. However, some may also require additional course work in computers, fine arts, etc.

#### State College System

- 4 Years of English
- 3 Years of Mathematics
- 3 Years of Social Sciences
- 2 Years of Laboratory Sciences

Additional courses in foreign language, fine and performing arts, and computer literacy are also recommended.

#### Community College System

A solid foundation in English, math, and science is recommended, Experience with computers is also suggested. Incoming students are required to take the ASSET Basic Skills Assessment Test. Most programs require graduation from an accredited high school or completion of GED requirements.

#### Private Career School

Nebraska's private career schools also encourage students to have a strong background in English, math, science, and computers.

SOURCE: Information from university, state, community and private college internet sites.