

Graduation Requirements

To receive a high school diploma from the St. Edward High School, it shall be the general procedure that an individual successfully completes with a passing grade, 260 hours of work in grades 9-12.

(1 Semester = 5 Credit hours)

English	8 Semesters	40 Credit hours
Social Science	6 Semesters	30 Credit hours
Mathematics	6 Semesters	30 Credit hours
Science	6 Semesters	30 Credit hours
Computer Education	4 Semesters	20 Credit hours
Fine Arts	3 Semesters	15 Credit hours (2 Sem. Classroom required)
PE and/or Health	2 Semesters	10 Credit hours
Personal Finance	1 Semester	5 Credit hours
Elective Hours	16 Semesters	80 Credit hours

Total Hours needed to Graduate: 260 Credit hours

Graduation

Students classified as seniors will be given official notice of graduation status at the completion of the first semester. All graduating seniors must have successfully completed the graduation requirements required by both the local school district as well as the State of Nebraska. Failure to complete this prescribed program will allow the student to participate in graduation exercises, and that student will receive a certificate of attendance for the graduation exercise. Notification of failure to complete the prescribed course of study will be given in ample time.

-----**LANGUAGE ARTS**-----
40 credits of Mathematics are required for graduation

English 9* (English I):

Grade: 9 Length: year

Prerequisite: English 8

NDE Course Code- 050021

Study concerned with developing: 1) an understanding of the language system, 2) proficiency and control in the use of the English forms and 3) appreciation of the variety of literary forms, etc. 4) an understanding of the spoken language and professional style presentations. The normal goals of instruction are an understanding of the use of composition, language and literature by the students.

English 10* (English II):

Grade: 10 Length: year

Prerequisite: English 9

NDE Course Code- 050022

Study concerned with developing: 1) an understanding of the language system, 2) proficiency and control in the use of the English forms and 3) appreciation of the variety of literary forms, etc. 4) an understanding of the spoken language and professional style presentations. The normal goals of instruction are an understanding of the use of composition, language and literature by the students.

English 11* (English III):

Grade: 11 Length: year

Prerequisite: English 10

NDE Course Code- 050023

Study concerned with developing: 1) an understanding of the language system, 2) proficiency and control in the use of the English forms and 3) appreciation of the variety of literary forms, etc. The normal goals of instruction are an understanding of the use of composition, language and literature by the students. Special focus on American literature and ACT preparation.

* Indicates it is a required course for graduation

English 12* (English IV):

Grade: 12 Length: year

Prerequisite:

NDE Course Code- 050024

Study concerned with developing: 1) an understanding of the language system, 2) proficiency and control in the use of the English forms and 3) appreciation of the variety of literary forms, etc. The normal goals of instruction are an understanding of the use of composition, language and literature by the students. Special emphasis on job related skills, and scholarship writing.

College English IV:

Grade: 12 Length: year

Prerequisite: English III; recommendation from teacher

NDE Course Code-050024

Study concerned with developing: 1) an understanding of the language system, 2) proficiency and control in the use of the English forms and 3) appreciation of the variety of literary forms, etc. The normal goals of instruction are an understanding of the use of composition, language and literature by the students.

Journalism I & II:

Grade: 9-12 Length: year

Prerequisite: Must be in grade 9-12

NDE Course Code-050401

This course introduces students to the concept of newsworthiness and press responsibility; develops students' skills in reading, writing and editing stories, headlines, and captions; and teaches students the basis of production design, layout, and printing of a publication such as school newspapers, yearbooks and literary magazines.

Speech:

Grade: 9-12 Length: year

Prerequisite: Must be in grade 9-12

NDE Course Code - 050501

An introductory course in oral communication. Emphasized are intra and inter- personal communication through activities in group discussion, audience analysis, speech organization and delivery.

* Indicates it is a required course for graduation

-----MATHEMATICS-----

30 credits of Mathematics are required for graduation

PreAlgebra:

Grade: 8 Length: year

Prerequisite: Math 7

NDE Course Code-110299

This course is designed to prepare students for a standard high school algebraic class. Learners are introduced to integers, fractions, square roots, step equations, linear equations, and decimals. They will also learn how to solve basic equations using variables.

Algebra I*:

Grade: 8-12 Length: year

Prerequisite: Math 7 or Pre Algebra

NDE Course Code-110300

This course introduces students to variables, algebraic expressions, equations, inequalities, functions, and all their multiple representations.

Geometry*:

Grade: 9-12 Length: year

Prerequisite: Algebra 1

NDE Course Code-111200

This course will cover various Geometry topics and principles, including coordinate and spatial geometry, introductory trigonometry, angles, parallel lines, congruent and similar triangles, polygons and other figures, circles, the Pythagorean Theorem, etc. We will also focus on problems that serve to review our Algebra skills and continue to develop our critical thinking skills through various problem-solving and real-world situations.

Algebra II*:

Grade: 9-12 Length: year

Prerequisite: Algebra I

NDE Course Code-110306

This course is an advanced course using hands-on activities, applications, group interactions, and the latest technology. Students will learn about polynomials, quadratic equations, linear, nonlinear, exponential and logarithmic functions, sequences, probability and statistics, and inequalities.

* Indicates it is a required course for graduation

PreCalculus:

Grade: 11-12 Length: year

Prerequisite: Successful completion of Algebra II and teacher recommendation

NDE Course Code-111300

This course completes the formal study of the functions begun in Algebra I and Algebra II. Students focus on modeling, problem solving, data analysis, trigonometric and circular functions and their inverses, polar coordinates, complex numbers, conics, and quadratic relations.

Calculus:

Grade: 12 Length: year

Prerequisite: Successful completion of PreCalculus and teacher recommendation

NDE Course Code-110600

This introductory calculus course covers differentiation and integration of functions of one variable, with applications. Topics include: Concepts of Function, Limits and Continuity. Differentiation Rules, Application to Graphing, Rates, Approximations, and Extremum Problems.

College Algebra:

Grade: 12 Length: year

Prerequisite: Successful completion of PreCalculus and/or Calculus and teacher recommendation

NDE Course Code-110622

This is a dual-credit course offered by Northeast/Central Community Colleges for students to develop math sciences required in career/technical fields. This course includes a review of arithmetic operations, exponents, algebraic operations and right triangle trigonometry with emphasis on placed applications.

-----SCIENCE-----

30 credits of Science are required for graduation

Physical Science*:

Grade: 9 Length: year

Prerequisite:

NDE Course Code-130300

Physical Science is the study of matter, energy, and the changes that matter and energy undergo. The course is divided into two main branches of study, chemistry and physics. The basic chemistry that will be covered is the study of the particles that make up everything around us and the ways these particles interact. The basic concept of physics will study how and why objects move, the characteristics of sound and light, and the workings of electricity and magnetism. Labs and/or investigations are used to provide hands-on learning and application.

Biology*:

Grade:10 Length: year

Prerequisite:

NDE Course Code-130201

Biology is the study of the living world. The course will have students cover the science of biology and chemistry, ecology, cellular structure and function, cellular processes, genetics, evolution, and organization of structure and function of living organisms. Dissection labs and activities provide hands-on learning and application.

Must also choose one of the following:

Physics:

Grade: 11/12 Length: 1 year

Prerequisite: Biology & Physical Science

NDE Course Code-130303

Physics is the study of the physical world. There are several areas of study that will include motion and its causes, forces, thermodynamics of heat and temperature, vibrations and wave phenomena, light, electromagnetism, relativity, and quantum mechanics. Labs and projects are used to provide hands-on learning and application.

* Indicates it is a required course for graduation

Anatomy/Physiology:

Grade: 11/12 Length: 1 year

Prerequisite: Biology & Physical Science

NDE Course Code- 130210

Anatomy and Physiology will introduce students to the structure and function of the human body. Students will study anatomical terminology, names of major body areas and systems, and explain brief overviews of functions that must be performed to sustain life. Dissection labs and activities provide hands-on learning and application.

Chemistry:

Grade: 11/12 Length: 1 year; offered every other year

Prerequisite: Biology & Physical Science

NDE Course Code-130301

Chemistry is the study of the properties of matter and how matter changes. Topics of study will be the periodic table, the mole concept, stoichiometry, chemical reactions and bonds, and nomenclature. Labs and/or investigations are used to provide hands-on learning and application.

General Science:**

Grade: 11/12 Length: 1 year

Prerequisite: **Must have teacher and administrative approval

NDE Course Code-130216

Anatomy students will be introduced to the structure and function of the human body. Students will study main anatomical terminology, names of major body areas and systems, and briefly explain life functions of body systems. Dissection labs and activities provide hands-on learning and application.

* Indicates it is a required course for graduation

-----SOCIAL SCIENCE-----

30 credits of Social Science are required for graduation

Must also choose one of the following:

World History

Grade: 9-12 Length 1 Year

Prerequisites: None

NDE Course Code:150800

This course is a survey of World History. We will focus on the civilizations that have arisen around the world. We will look at different areas of the world and the civilizations that have had a lasting impact on the world.

Geography

Grade: 9-12 Length 1 Year

Prerequisites: None

NDE Course Code:150700

In this course we will explore the world. We will focus on the physical geography and the human geography of the different regions of the world. We will look at both where things happen, and what happens there.

American History*

Grade: 11 Length 1 Year

Prerequisites: None

NDE Course Code:150820

This course is a survey of American History. We will journey through the American experience from the discovery of the New World up to the Modern times. We will look at the important people and events that shaped America into the country that it is today.

Government*

Grade:12 Length: 1 Year

Prerequisites: None

NDE Course Code:151110

This course is a survey of the American government system. We will explore the origins and workings of the American government system. We will focus on the Constitution and the three branches of government.

* Indicates it is a required course for graduation

Modern Problems

Grade: 9-12 Length 1 Year

Prerequisites: None

NDE Course Code:151103

An advanced course dealing with the analysis of economic, social, political, cultural, and other issues which influence the economic, social, political, and cultural change and development of modern societies, specifically American society.

-----COMPUTER SCIENCE-----

20 credits of Computer Science are required for graduation

Computer Applications I*:

Grade: 9 Length: year

Prerequisite: None

NDE Course Code- 270501

This course introduces students to the essential computer applications used in nearly all industries around the world. After completing this course, the student will be prepared to be able

to communicate by means of two of the most important computer applications used today:

Microsoft Word and Microsoft PowerPoint. This course culminates with a

Capstone Project in which the students create a project using these two major computer applications to prove proficiency.

Computer Applications II*:

Grade: 10 Length: year

Prerequisite: Computer Applications I

NDE Course Code- 270502

Students will explore computer skills and applications needed on a personal, school/college, and career level. The focus of this course is to provide knowledge and skills associated with Microsoft Office applications including: Word, PowerPoint, Excel, and Access. Students will create various documents: reports, business letters, tables, databases, spreadsheets, and brochures. In addition, students will expand their knowledge of computer terminology, parts of a computer, and search strategies on the Internet.

* Indicates it is a required course for graduation

-----**FINE ARTS**-----

15 credits of Fine Arts are required for graduation

ART I:

Grade: 9-12 Length: 1 year (or 1 semester depending on grades and behavior?)

Prerequisite: None

NDE Course Code- 020100

Visual Arts Comprehensive I - Visual Arts—Comprehensive courses enable students to explore one or several art forms (e.g., drawing, painting, two- and three-dimensional design, and sculpture) and to create individual works of art. Initial courses emphasize observations, interpretation of the visual environment, visual communication, imagination, and symbolism. Courses cover the language, materials, media, and processes of a particular art form and the design elements used. Advanced courses encourage students to refine their skills while also developing their own artistic styles following and breaking from traditional conventions. Courses may also include the study of major artists, art movements, and styles.

ART II:

Grade: 10-12 Length: 1 year (or 1 semester depending on grades and behavior?)

Prerequisite: None

NDE Course Code- 020200

Visual Arts Comprehensive II - Visual Arts—Comprehensive courses enable students to explore one or several art forms (e.g., drawing, painting, two- and three-dimensional design, and sculpture) and to create individual works of art. Initial courses emphasize observations, interpretation of the visual environment, visual communication, imagination, and symbolism. Courses cover the language, materials, media, and processes of a particular art form and the design elements used. Advanced courses encourage students to refine their skills while also developing their own artistic styles following and breaking from traditional conventions. Courses may also include the study of major artists, art movements, and styles.

* Indicates it is a required course for graduation

ART III:

Grade: 11-12 Length: 1 year (or 1 semester depending on grades and behavior?)

Prerequisite: Must have taken ART I or ART II

NDE Course Code- 020300

Visual Arts Comprehensive III - Visual Arts—Comprehensive courses enable students to explore one or several art forms (e.g., drawing, painting, two- and three-dimensional design, and sculpture) and to create individual works of art. Initial courses emphasize observations, interpretation of the visual environment, visual communication, imagination, and symbolism. Courses cover the language, materials, media, and processes of a particular art form and the design elements used. Advanced courses encourage students to refine their skills while also developing their own artistic styles following and breaking from traditional conventions. Courses may also include the study of major artists, art movements, and styles.

ART IV:

Grade: 11-12 Length: 1 year

Prerequisite: Must have taken 2 art classes (ART I, ART II, ART III). Demonstrated high art skills, respect for materials, and task initiation.

NDE Course Code- 029930

Visual Arts Comprehensive IV- Visual Arts—Comprehensive courses enable students to explore one or several art forms (e.g., drawing, painting, two- and three-dimensional design, and sculpture) and to create individual works of art. Initial courses emphasize observations, interpretation of the visual environment, visual communication, imagination, and symbolism. Courses cover the language, materials, media, and processes of a particular art form and the design elements used. Advanced courses encourage students to refine their skills while also developing their own artistic styles following and breaking from traditional conventions. Courses may also include the study of major artists, art movements, and styles.

Digital Imaging (ART V):

Grade: 11-12 Length: 1 year, contingent upon progress made in class

Prerequisite: Must have taken 3 or more art classes. Students have access to digital art technology (personal iPads, phones, cameras, or computers). Show a strong interest in digital art and have vast knowledge on how to create digital art.

NDE Course Code- 020601

Digital Imaging courses explore the creative and conceptual aspects of designing and producing digital imagery, graphics, and photography. Students study the techniques, genres, and styles from multiple mediums and forms. Topics may include aesthetic meaning, appreciation, and analysis; composing, capturing, processing, and programming of imagery and graphical information; their transmission, distribution, and marketing; and contextual, cultural and historical aspects and considerations.

Chorus:

Grade 9-12 Length 1 year

NDE Course Code- 120400

Chorus courses develop students' vocal skills within the context of a larger choral ensemble in which they perform a variety of styles of repertoire. These courses are designed to develop students' vocal techniques and their ability to sing parts and include experiences in creating and responding to music. Students are encouraged to audition for and participate in Honor Choirs throughout the year. We are a performing group and perform throughout the school year.

Concert Band and Marching Band:

Grades 7-12 - Length 2 Semesters

Prerequisite: Must know how to read music, your fingerings, how to count music and be willing to practice to improve skills.

NDE Course Code: 120505

Band is both concert and marching, just dependent on the season. Courses in Concert Band are designed to promote students' technique for playing brass, woodwind, and percussion instruments and cover a variety of band literature styles, primarily for concert performances and also include experiences in creating and responding to music.

Courses in Marching Band are intended to develop students' technique for playing brass, woodwind, and percussion instruments and cover appropriate band literature styles, primarily for marching performances.

We are a performance class and perform throughout the year July- May.

Students are encouraged to audition and participate in Honor Bands/Camps throughout the year.

* Indicates it is a required course for graduation

-----PE/HEALTH-----
10 credits of PE / HEALTH are required for graduation

Physical Education

Health and Fitness *

Grade: 9 preferred but open to 9-12

Length 1 year

Prerequisites: None

NDE Course Code: 0801

The course focuses on positive health practices emphasizing wellness for optimal health. Students will be able to understand the functioning of their body and the importance of making wise decisions to protect their health and well-being. The course is spent in both the classroom and in the gym/fitness center performing physical activities.

Weights and Conditioning

Grade: 9-12 Length 2 semester

Prerequisites: None

NDE Course Code:

This course is to teach the basics of weight training to students. They will learn proper form and follow a program developed to either their in season sport or an offseason program. Within weight training, students will not only build muscle but develop core strength, balance, flexibility, and mental strength.

* Indicates it is a required course for graduation

-----PERSONAL FINANCE-----

5 credits of Personal Finance is required for graduation

Personal Finance*

Grade: 9-12 Length 1 semester

Prerequisites: None

NDE Course Code: 033000

This course is designed to teach the basics of personal finance. Topics that will be covered include; checking and savings accounts, student loans, home loans, managing money, renting, and other topics that will help students be prepared to be on their own after high school. Students will learn information that will help them better manage money and begin to become more independent.

* Indicates it is a required course for graduation

-----**ELECTIVES**-----

80 credits of Electives are required for graduation

FAMILY & CONSUMER SCIENCES

Family and Consumer Sciences (FCS)

Grade: 9-12 Length: 1 year

Prerequisites: None

NDE Course Code:090101

It builds students'; independent living skills and prepares them for success beyond high school. Throughout the course, students will prepare for independent living, develop interpersonal and management skills, recognize healthy food choices, and much more.

Foods I

Grade: 9-12 Length: 1 year

Prerequisites: None

NDE Course Code:090107

This introductory course provides students with foundational knowledge and skills in food preparation and nutrition planning. Topics covered include career exploration, global food systems, six essential nutrients, dietary recommendations, kitchen and food safety and sanitation, food preparation skills, and meal planning concepts.

Foods & Nutrition (Foods II)

Grade: 9-12 Length: 1 year

Prerequisites: None

NDE Course Code:090124

This intermediate course provides students with an introduction to the science of nutrition building on concepts from the introductory course. Topics covered include careers in nutrition, digestion and metabolism, functions of the six essential nutrients, nutrient recommendations, diets, meal planning, creating accommodations for consumers, and impacts of the national food system on production and consumerism. Food safety will also be reinforced in this course through hands-on learning opportunities.

* Indicates it is a required course for graduation

Life and Career Readiness

Grade: 11-12 Length: 1 year

Prerequisites: None

NDE Course Code:090104

This course is designed to prepare students for responsibilities in a home, family, and work environment. Personal and career development will be expanded. Topics covered include adult roles and responsibilities, goal setting, decision making, communication, leadership, personal finance, consumer skills, and personal wellness.

Interpersonal Relationships

Grade: 10-12 Length: 1 year

Prerequisites: None

NDE Course Code: 090116

This course uses the Safe Dates curriculum, the class deals with attitudes and behaviors associated with dating abuse and violence. It is to raise student's awareness of what constitutes healthy and abusive relationships, causes and consequences of dating abuse. Students will be provided skills and resources to help themselves or friends in abusive dating relationships.

Parenting and Families

Grade: 9-12 Length: 1 year

Prerequisites: None

NDE Course Code:090117

This intermediate course will evaluate the effects of parenting roles and responsibilities building on concepts from the introductory course. Topics covered will include influences on parenting, decisions to parent, support services for parents, parenting theories, and family adjustment to parenthood. Emphasis will be placed on positive actions to support the physical, emotional, intellectual, and social development of family members.

Apparel Production and Construction

Grade: 9-12 Length: 1 year

Prerequisites: None

NDE Course Code: 090103

This intermediate course provides an understanding of garment and apparel construction building on concepts from the introductory course. Topics covered will include career exploration, textile and apparel design, creation, alteration, selection, and maintenance. This course integrates knowledge, skills, technology, and practices required for careers in the apparel and textiles industry.

* Indicates it is a required course for graduation

Work-Based Learning

Grade:12 Length: 1 year

Prerequisites: Students must have successfully completed course work through 11th grade and be in good academic standing with at least a 'B' average. Prior administrative approval is required. Employers will evaluate student progress.

NDE Course Code: 320700

A class that provides students the opportunity to connect what they learn in school with worksite application. Students are placed in an occupation that best relates to their career interest and aptitude. The school and business community work together to plan activities that will enable each student to apply the knowledge, attitudes and skills learned in the classroom to actual business situations and positions.

FOREIGN LANGUAGE

World Language Spanish I

Grade: 9-12 Length: 1 year

Prerequisites: None - Need to see teacher if failed Spanish 8

NDE Course Code: 060241

This beginning course includes the study of speaking, listening, reading, writing, and culture of the people. Students will be able to understand and produce familiar words and basic phrases concerning themselves, their family, immediate surroundings, and other familiar topics. This course should help students gain insight into the nature of their own language and culture and apply the language and cultural knowledge within and beyond the school setting.

World Language Spanish II

Grade: 10-12 Length: 1 year

Prerequisites: Successful completion of Spanish I, or prior educator approval

NDE Course Code: 060242

This course enables students to understand phrases and commonly used vocabulary related to areas of personal relevance and recognize the main point in short, clear, simple messages and announcements. Students can communicate in routine tasks requiring a direct exchange of information on familiar topics and activities in the present and past tense. This course should help students gain insight into the nature of their own language and culture and apply the language and cultural knowledge within and beyond the school setting.

* Indicates it is a required course for graduation

World Language Spanish III

Grade:11-12 Length: 1 year

Prerequisites:Successful completion of Spanish II, or prior educator approval

NDE Course Code: 060243

- Dual credit course through Wayne State College: SPA 110 - 3 Credit hours
 - It is not required that students take the course for dual credit.
- Students will prepare for and take the AAPPL exam, which qualifies students for the Nebraska Seal of Biliteracy on their High School Diploma and transcripts.

This course enables students to understand main points in a conversation on familiar matters regularly encountered in work, school, leisure, etc. Students are able to enter into conversations on topics that are familiar and connect phrases in order to describe experiences and events. Students will be able to write paragraphs of connected text on a variety of topics. This course should help students gain insight into the nature of their own language and culture and apply the language and cultural knowledge within and beyond the school setting.

Spanish IV

Grade:12 Length: 1 year

Prerequisites:Successful completion of Spanish III, or prior educator approval

NDE Course Code: 060244

- Dual credit course through Wayne State College: SPA 120 - 3 Credit hours
 - It is not required that students take the course for dual credit.
- Students will prepare for and take the AAPPL exam, which qualifies students for the Nebraska Seal of Biliteracy on their High School Diploma and transcripts.

This course enables students to understand extended conversations provided the topic is reasonably familiar. Students will be able to read articles and literary prose in which the writers adopt particular attitudes or viewpoints. Students will be able to present clear, detailed descriptions and write clear, detailed texts on subjects related to their interests. This course should help students gain insight into the nature of their own language and culture and apply the language and cultural knowledge within and beyond the school setting.

AGRICULTURAL EDUCATION

***Prerequisites for Intermediate and Capstone courses may also be determined with teacher's discretion.**

Introduction to Agriculture, Food, and Natural Resources

Grade: 9-10 preferred Length: Yearlong Offered: Every year

Prerequisites: None

NDE Course Code: 011000

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

AGRICULTURAL POWER, STRUCTURE, & TECHNOLOGY

Welding (Semester 1 of Welding I)

Grade: 10-12 Length: Semester

Prerequisites: Introduction to AFNR

NDE Course Code: 016004

This course provides an in-depth study of welding principles and applications in a classroom/agricultural laboratory/shop setting to help students understand and prepare for the opportunities in current welding and agricultural associated careers. Through hands-on applications and comprehensive technical content students will develop foundational knowledge and skills for welding processes. Classroom and laboratory activities are supplemented through supervised agricultural experiences, and FFA leadership programs & activities.

Metals & Fabrication (Semester 2 of Welding I)

Grade: 10-12 Length: Semester

Prerequisites: Introduction to AFNR & Welding

NDE Course Code: 016005

This course provides an in-depth study of metals and fabrication with metal products. It also provides the opportunity to develop, design, and construct metal fabrication projects. Classroom and laboratory activities are supplemented through supervised agricultural experiences, and FFA leadership programs & activities.

Power, Structural, and Technology Systems Fundamentals (Semester 1 of Welding II)

Grade: 11-12 Length: Semester

Prerequisites: Introduction to AFNR & Welding

NDE Course Code: 016000

This course is designed to provide students with introductory level experiences in selected major areas of agricultural mechanics technology which may include woodworking, agricultural structures, electrical wiring, introductory arc welding, oxy/fuel cutting and welding processes, and power equipment operation and maintenance. Learning activities include information, skill development, and problem solving. Classroom and laboratory activities are supplemented through supervised agricultural experiences, and FFA leadership programs & activities.

Advanced Power, Structural, and Technology Systems (Semester 2 of Welding II)

Grade: 11-12 Length: Semester

Prerequisites: Introduction to AFNR, Welding, and Power, Structural, & Technology Systems Fundamentals

NDE Course Code: 016003

This course is designed to build on previous courses so the student can apply principles and applications of physical science, design, and safety to a project-based learning environment. Learning activities include creating and following plans, project construction, and problem solving. Classroom and laboratory activities are supplemented through supervised agricultural experiences, and FFA leadership programs & activities.

AGRIBUSINESS

CASE Agribusiness (Not offered 2024-2025)

Grade: 10-12 Length: Semester

Prerequisites: Introduction to AFNR

NDE Course Code: 018067

Agricultural Business Foundations (ABF) introduces students to business management in agriculture. Throughout the course are practical and engaging activities, projects, and problems to develop and improve business and employability skills. Additionally, students investigate and develop viable business plans in order to solve local problems. The business plan ideas are communicated to student peers and members of the professional community. Classroom and laboratory activities are supplemented through supervised agricultural experiences, and FFA leadership programs & activities.

Agriculture Communication (Not offered 2024-2025)

Grade: 10-12 Length: Semester

Prerequisites: Introduction to AFNR & CASE Agribusiness

NDE Course Code: 011017

This course focuses on identifying current issues affecting the agricultural industry and communicating about those issues effectively. This course concentrates on print, digital, and broadcast media within the agricultural industry. Students will learn various types of communications methods such as speech writing, photography, presentations, marketing, and debate. By the end of the course, students will demonstrate competency of agricultural communications and methods of effective presentation within the agricultural sector. Classroom and laboratory activities are supplemented through supervised agricultural experiences, and FFA leadership programs & activities.

ANIMAL SCIENCE PATHWAY

Animal Science

Grade: 10-12 Length: Semester

Prerequisites: Introduction to AFNR

NDE Course Code: 011004

This course focuses 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 introduction to animal science, animal reproduction, animal nutrition, animal science issues, animal evaluation, and career opportunities. Classroom and laboratory activities are supplemented through supervised agricultural experiences and FFA leadership programs & activities.

Large Animal Management

Grade: 10-12 Length: Semester

Prerequisites: Introduction to AFNR & Animal Science

NDE Course Code: 011005

This course includes advanced scientific principles and communication skills that build on the knowledge and skills learned in Animal Science. Topics include production methods, animal welfare, nutrition, biosecurity, and housing. Classroom and laboratory activities are supplemented through supervised agricultural experiences and FFA leadership programs & activities.

DIVERSIFIED AGRICULTURAL SCIENCE

Diversified Agriculture (Not offered 2024-2025)

Grade: 10-12 Length: Semester

Prerequisites: Introduction to AFNR

NDE Course Code: 011019

This course is the intermediate course in the Diversified Agriculture program of study in the Agriculture, Food, and Natural Resources (AFNR) career field. The course will further explore systems introduced in the Introduction to Agriculture, Food, and Natural Resources course, focusing on the interconnectivity of the systems. This course provides students with diverse knowledge and skills to focus on issues from a diverse standpoint. Students will explore indicators integrated within the context of Animal, Plant, and Environmental and Natural Resources Pathways. Classroom and laboratory activities are supplemented through supervised agricultural experiences and FFA leadership programs and activities.

* Indicates it is a required course for graduation

Integrated Agricultural Science (Not offered 2024-2025)

Grade: 10-12 Length: Semester

Prerequisites: Introduction to AFNR & Diversified Agriculture

NDE Course Code: 011020

Integrated Ag Science is the capstone course in the Diversified Agriculture program of study in the Agriculture, Food, and Natural Resources (AFNR) career field. The course is designed to explore the interconnectedness of agriculture, within the broad goal of creating solutions to local and global issues within AFNR systems. Students will consider current and historical issues affecting or affected by AFNR, and utilize current knowledge and technology in addressing these issues. Classroom and laboratory activities are supplemented through supervised agricultural experiences and FFA leadership programs & activities.

ENVIRONMENTAL AND NATURAL RESOURCES

Environmental and Natural Resources

Grade: 10-12 Length: Semester

Prerequisites: Introduction to AFNR

NDE Course Code: 013000

This course provides opportunities for students to increase awareness of the close ties amongst living organisms as well as natural and environmental concerns with the interrelationships of living organisms and the world around us. Students are exposed to careers related to natural resources systems. Students also examine Nebraska's natural resources and management techniques. Classroom and laboratory activities are supplemented through supervised agricultural experiences and FFA leadership programs & activities.

Wildlife Management (Not offered 2024-2025)

Grade: 10-12 Length: Semester

Prerequisites: Introduction to AFNR & Environmental and Natural Resources

NDE Course Code: 013001

This course provides students the opportunity to increase awareness of the principles of wildlife management and conservation. Students will closely examine ecological concepts, habitat management, wildlife species identification, and recreational opportunities that the environment and wildlife provide. Classroom and laboratory activities are supplemented through supervised agricultural experiences and FFA leadership programs & activities.

* Indicates it is a required course for graduation

FOOD PRODUCTS & PROCESSING

Food Science & Safety

Grade: 10-12 Length: Semester

Prerequisites: Introduction to AFNR

NDE Course Code: 014000

This course focuses on the importance of a safe, sanitary, and reliable food supply for human consumption, with a focus on food production and processing. Topics include an introduction to the food science industry and the identification of pathogenic foodborne illnesses and methods to prevent and control those illnesses. Students will explore food safety regulations and requirements in a variety of settings. Classroom and laboratory activities are supplemented through supervised agricultural experiences and FFA leadership programs & activities.

Food Products & Technology (Not offered 2024-2025)

Grade: 10-12 Length: Semester

Prerequisites: Introduction to AFNR & Food Science & Safety

NDE Course Code: 014001

This course is an in-depth study of the development of food products from a variety of agricultural industries. Students will study the nutritional value of foods along with applying scientific processes such as microbiology and chemistry to the development of food products and analyze and select appropriate storage, distribution, and consumption methods for foods. Classroom and laboratory activities are supplemented through supervised agricultural experiences and FFA leadership programs & activities.

PLANT SCIENCE

Plant Science

Grade: 10-12 Length: Semester

Prerequisites: Introduction to AFNR

NDE Course Code: 011007

This course examines the scientific concepts related to plant systems. Students will examine plant classification, anatomy, physiology, and asexual and sexual propagation. In addition, students will develop an understanding of plant nutrition and growth and production methods. Classroom and laboratory activities are supplemented through supervised agricultural experiences, and FFA leadership programs & activities.

* Indicates it is a required course for graduation

Crop Management & Agronomy (Not offered 2024-2025)

Grade: 10-12 Length: Semester

Prerequisites: Introduction to AFNR & Plant Science

NDE Course Code: 011008

This course investigates advanced crop management production and management topics. Students develop an understanding of nutrition and fertilization methods, resource management, pest management, technology use, marketing, and sustainable systems. Classroom and laboratory activities are supplemented through supervised agricultural experiences, and FFA leadership programs & activities.

Floriculture

Grade: 10-12 Length: Semester

Prerequisites: Introduction to AFNR & Plant Science

NDE Course Code: 012002

This course will provide students with the necessary knowledge to apply design principles in the floral industry. Topics include history of the floral industry, processing techniques and tools, trends, and flower and foliage identification important in the design of quality floral arrangements. Classroom and laboratory activities are supplemented through supervised agricultural experiences, and FFA leadership programs & activities.

Business Education

Accounting

Grade: 9-12 Length: 1 semester

Prerequisites: This is a course enhances business and entrepreneurship skills

NDE Course Code: 030501

This one-semester course covers a service business organized as a sole proprietorship which will include accounting principles involved in the preparation and maintenance of financial records concerned with business management and operations. It is a comprehensive introduction to basic accounting including recording, summarizing and reporting, principles of income measurement and asset valuation, and accounting systems and controls. Students are exposed to careers in the accounting field and are given the opportunity to perform accounting applications using technology.

Business Math

Grade: 11-12 Length: 1 year

Prerequisites:

NDE Course Code: 111800

This course is designed to prepare students for various life roles by offering multiple opportunities to develop and use mathematical skills. Computational skills are essential for citizens, consumers, wage earners, employers, investors, and entrepreneurs. The objectives of this course are to improve computational skills and apply them to personal business situations. Areas of study include mathematical problems dealing with interest, percentages, loans, installment buying, insurance, savings and investments, depreciation, markup and markdown, payroll, taxes, real estate and retirement.

Sports Marketing

Grade: 9-12 Length: 1 semester

Prerequisites:

NDE Course Code: 032300

This course is designed to introduce students to the Business, Marketing, and Management Career Field which focuses on organization, economics, management, marketing, financial management, and operations. Career opportunities and technology will also be used and discussed.

Website Design

Grade: 10-12 Length: 1 year

Prerequisites:

NDE Course Code: 270604

Students will demonstrate knowledge of web design and languages, including HyperText Markup Language (HTML) and Cascading Style Sheets (CSS) to create a content rich and visually pleasing website that captures and keeps visitors' interests. Focus will be given to effective page layout, image creation and manipulation, interactivity, content creation, and project management.