

North Bend Central High School

Course Guide

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SOME SUGGESTIONS FOR PARENTS

“There are only two lasting bequests we can hope to give our children: one is roots; the other, wings.” -HODDING CARTER

DEMONSTRATE A PERSONAL INTEREST IN LEARNING

You set an example every day of the value you place on learning. These are ways you can show your child that you consider education a pleasant life-long habit.

- Watch the television news broadcasts.
- Read the daily newspaper.
 - Read magazines, both news and special interest.
- Watch television documentaries.
- Read books, fiction and nonfiction, classics and best sellers.
- Attend concerts, foreign films, and political forums.
- Keep up on issues of local, state, national, and international concern.
- Speak about school experiences in a positive tone.

BECOME INVOLVED IN YOUR CHILD’S SCHOOL LIFE

Because many of the outside factors influencing your child are connected with school, you can increase your control in this area by becoming more aware of what happens there.

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| <ul style="list-style-type: none"> ● Learn the names of your child’s teachers and their subjects. ● Attend open school nights. ● Read the book assigned to your child and discuss them with him or her. ● Ask specific questions each day about what happened in school. ● Attend school functions (assemblies, games, concerts). | <ul style="list-style-type: none"> ● Become involved in school fund-raising activities. ● Help your child set each year’s schedule of classes. ● Know report card dates and talk about grades. ● Learn the signs of drug and alcohol abuse with your child. ● When you have concerns, meet with teachers and counselors. |
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Think of the school as a partner in raising your child. The teachers and counselor are doing everything they can to meet the academic needs of your child, but remember that they deal with hundreds of students a day. They cannot possibly be as aware of your child’s strengths and weaknesses as you are. When you see a problem, make an appointment, and work as a team to discuss solutions.

Read through the annual registration handbook to understand school policies about attendance and class schedules. With the help of this guide, help your child choose courses that suit his or her needs, neither too easy or too challenging. Rather than narrowing post-high school options, you should encourage the selection of classes to help them to become well-rounded.

NBC COURSE GUIDE

This guide was developed for use by parents and students in hopes of helping with course planning. The following booklet will help you become more familiar with courses offered at North Bend Central. This guide can be used to map out your four years of high school, or looked at for each semester registration.

This guide is divided into departments (English, Math, etc.). Subjects are listed under each department (i.e., American Literature, Algebra I, etc.). The length of the courses (1 or 2 semesters), the grades for which the course is offered, any prerequisites or lab fees for the course, and a short course description.

A page of requirements for graduation from North Bend Central has been included. This will enable parents and children to keep a closer eye on their orderly progress through high school. Keep it in a readily available place and parents can check off required courses as they are passed from semester to semester. There is no reason parents and students should face graduation with any apprehension if this course is followed. We do invite your personal inquiries about student progress, however.

Pay particular attention to the course sequence in the booklet. We have attempted to list all the courses that students may be permitted to take in a particular grade year. We have also designated whether the course will be available the first semester, second semester, or both semesters. In some subject areas, courses are offered on alternate years. It therefore falls upon the student to plan a program that will enable them to take these courses on alternate years and not cause confusion in meeting required courses or arranging elective courses to meet the 220 credit graduation requirement.

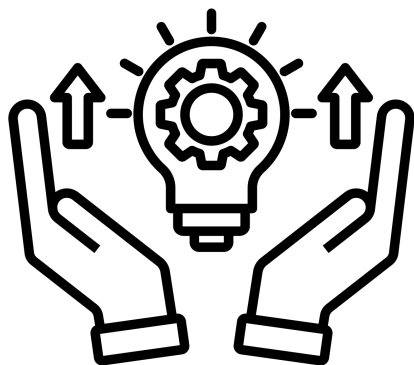
When you receive a booklet, read and study it carefully. Parents and students together should consider or discuss what the student should probably register for or is interested in as a possible career. This will enable the student to consider classes for their future value rather than ease of passing. Additions, deletions, or adjustments to the curriculum and schedule offerings will be made as the need arises.

Graduation Requirements

Courses	Credits	
English	40 Credits	(4 years)
Math (must include Algebra I)	30 Credits	(3 years)
Science (must include Biology)	30 Credits	(3 years)
Social Studies (must include American History and American Government)	30 Credits	(3 years)
Physical Education/Health	10 Credits	(1 year)
Business, Marketing & Information Technology (must include Personal Finance & Computer Science)	10 Credits	
Required Hours	150 Credits	
Electives/Other Courses	80 Credits	

220 CREDITS Required for Graduation





Planning for your future!

Have you considered what your future career might be? Have you looked at all the educational options that will prepare you for your chosen career? Are you planning to enter the work force or military following high school graduation, or are you college bound?

Although college cannot offer all things to all students, it can meet a great variety of needs and expectations. As you begin to make plans, it is important for you to identify what you need and expect.

Some students don't really think about why they are going to college until they are well along in their college careers. By that time, they may find that the program they really want is unavailable at their college, or they may feel that they have somehow "wasted" their time doing something they weren't interested in. They may even decide that college wasn't for them at all.

It is natural for a student to rethink goals while in college. Part of the process of going to college is discovering what one's true interests are. We believe that by honestly answering certain questions now, the student can more efficiently make some important decisions later.

The following questions should be answered and discussed by the student and his parents:

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| <ul style="list-style-type: none"> • What are you like now? • What academic successes and difficulties have you had? • What skills have you developed? • How much academic challenge are you comfortable with? • What careers seem to fit your skills and interests? • What clubs, hobbies, and sports interest you? • What social activities are important to you? | <ul style="list-style-type: none"> • What skills have you developed? • How much academic challenge are you comfortable with? • What careers seem to fit your skills and interests? • Do you make the best of what comes or do you search for what you want? • Do you prefer to work alone or with others? • Do you go your own way or stay close to your family? |
|--|--|

After looking at yourself, now you can focus more clearly on what you want from life.

1. What abilities do you want to develop?
2. What career interests do you want to pursue?
3. What new experiences and new people do you want to encounter?
4. What personal goals have you set for yourself

9th Grade Course Offering

Language Arts

English 9
Spanish I

Mathematics

Algebra I
Geometry

Natural Sciences

Physical Science

Social Science

Geography

Fine Arts

Art
Band
Chorus
Photography

Physical Education

Physical Education/Health
Weights

Skilled & Technical Sciences

Intro to STS

Agriculture

Agriscience

Family and Consumer Science

Child Development
Parents and Families
Sports Nutrition
Fundamentals of
Nutrition/Culinary Essentials
Culinary I
Introduction to Design
Health Sciences
Medical Terminology

Business, Marketing & Information Technology

Computer Science
Sports Marketing & Design
Information Technology I & II

9th Grade Course Planning	
1. English 9 2. Physical Science 3. Physical Education 4. Geography 5. Math: _____ 6. _____ 7. _____	Choose the Math class you will take. Pick two other classes from those listed above. <u>GRADUATION REQUIREMENTS:</u> English - 4 years Math - 3 Years (Algebra I) Science - 3 Years (Biology) Social Studies - 3 Years (American History & American Government) Physical Education - 1 year Personal Finance - 1 sem. (preferably 11th or 12th) Computer Science - 1 sem.

10th Grade Course Offering

Language Arts

English 10
Spanish I
Spanish II
Yearbook

Mathematics

Algebra II
Geometry

Natural Sciences

Biology

Social Science

World History
Leadership

Fine Arts

Art
Band
Chorus
Photography

Physical Education

Weights

Skilled & Technical Sciences

Intro to STS
Welding II
Woods II
Ag Technology
Mechanics
Small Engines
Fabrication

Business, Marketing & Information Technology

Computer Science
Sports Marketing & Design
Accounting I
Personal Finance
Digital Media
Information Technology I & II

Family and Consumer Science

Child Development
Parents and Families
Sports Nutrition
Fundamentals of Nutrition/Culinary Essentials
Culinary I
Event Management
Introduction to Design
Health Sciences
Medical Terminology

Agriculture

Animal/Plant Science

10th Grade Course Planning	
1. English 10	Choose the Math class you will take based on the sequence of classes. Keep in mind the graduation requirements. <u>GRADUATION REQUIREMENTS:</u> English - 4 years Math - 3 Years (Algebra I) Science - 3 Years (Biology) Social Studies - 3 Years (American History & American Government) Physical Education - 1 year Personal Finance - 1 sem. (preferably 11th or 12th) Computer Science - 1 sem.
2. Biology	
3. Math: _____	
4. _____	
5. _____	
6. _____	
7. _____	

11th Grade Course Offering

(* indicates dual credit course)

Language Arts

English 11
Yearbook
Spanish I
Spanish II

Social Science

American History
World History
Leadership

Business, Marketing & Informational Technology

Computer Science
Sports Marketing & Design
Accounting I
Accounting II
Personal Finance
Digital Media
Information Technology I & II

Mathematics

Algebra II
Pre-Calculus *

Fine Arts

Art
Band
Chorus
Photography

Agriculture

Agriscience
Animal/Plant Science
Natural Res/Wildlife Mgmt.
Adv. Animal Science /Vet.
Science
Ag. Leadership
Greenhouse Management &
Horticulture

Skilled & Technical Sciences

Welding II
Woods II
Ag Technology
Mechanics
Small Engines
Fabrication

Natural Sciences

Biology II *
Chemistry I
Earth Science

Physical Education

Weights

Career Education

Career Ed- Work Based Learning

Family and Consumer Science

Child Development
Parents and Families
Sports Nutrition
Fundamentals of
Nutrition/Culinary Essentials
Culinary I
Event Management
Introduction to Design
Health Sciences
Medical Terminology

11th Grade Course Planning	
1. English 11	Choose the Math class you will take based on the sequence of classes. Keep in mind the graduation requirements. <u>GRADUATION REQUIREMENTS:</u> English - 4 years Math - 3 Years (Algebra I) Science - 3 Years (Biology) Social Studies - 3 Years (American History & American Government) Physical Education - 1 year Personal Finance - 1 sem. (preferably 11th or 12th) Computer Science - 1 sem.
2. American History	
3. Math: _____	
4. Science: _____	
5. _____	
6. _____	
7. _____	

12th Grade Course Planning	
1. English 12 or College English	Keep in mind the graduation requirements. <u>GRADUATION REQUIREMENTS:</u> English - 4 years Math - 3 Years (Algebra I) Science - 3 Years (Biology) Social Studies - 3 Years (American History & American Government) Physical Education - 1 year Personal Finance - 1 sem. (preferably 11th or 12th) Computer Science - 1 sem.
2. American Gov / _____	
3. _____	
4. _____	
5. _____	
6. _____	
7. _____	

12th Grade Course Offering

(* indicates dual credit course)

Language Arts

12th Grade English *
College English *
Fund. of Speech *
Contemporary Literature
Yearbook
Spanish I
Spanish II

Social Science

American Government
Criminal Justice
Psychology
Economics
Leadership

Business, Marketing & Informational

Technology

Information Tech I & II
Digital Media
Sports Marketing & Design
Accounting I & II
Computer Science
Personal Finance

Mathematics

Pre-Calculus *
Calculus
Math Readiness
Probability/Statistics

Fine Arts

Art
Band
Chorus
Photography

Agriculture

Agriscience
Animal/Plant Science
Natural Res/Wildlife Mgmt.
Adv. Animal Science /Vet.
Science
Ag. Leadership
Greenhouse Management &
Horticulture

Skilled & Technical Sciences

Welding II
Woods II
Ag Technology
Mechanics
Small Engines
Fabrication

Natural Sciences

Physics
Biology II *
Chemistry I
Anatomy & Physiology

Physical Education

Lifetime Sports
Weights

Career Education

Career Ed- Work Based Learning

Family and Consumer Science

Child Development
Parents and Families
Sports Nutrition
Fundamentals of
Nutrition/Culinary Essentials
Culinary I
Event Management
Introduction to Design
Health Sciences
Medical Terminology

FINE ARTS



ART I (Two Sem.)

Basic knowledge of art acquired by learning perspective, composition, color and design. Students will study drawing, acrylic painting, watercolor, clay, soft pastel, oil pastel, collage, calligraphy, silk screen and macramé.
(Grade Level: 9-12 * Prerequisite: None)

ART II (Two Sem.)

Concentrated course in drawing, painting, perspective letters, watercolor, clay, tempera, charcoal, silk screen, wall hangings, architecture and India ink.
(Grade Level: 10-12 * Prerequisite: Art I)

ART III (Two Sem.)

Advanced work in portrait drawings and paintings, watercolor, sculpture in clay, potter's wheel, mixed media; construct a 3-D design, outdoor sketching and painting in oil, stretching canvas and framing. Students may establish a sketch book for reference. (Grade Level: 11-12 * Prerequisite: Art I & II)

ART IV (Two Sem.)

This is the area of specialization and preparing a portfolio for use in acquiring scholarships or entrance into Art College. All mediums represented. This is precision work at the top level of high school art.
(Grade Level: 12 * Prerequisite: Art I, II, & III)



BAND (Two Sem.)

Members of the band form the marching band, pep band, concert band, jazz band, and perform solos and ensembles. This group performs many times in the year for community events as well as public concerts and athletic events.
(Grade Level: 9-12 * Prerequisite: None)



CHORUS (Two Sem.)

This class is designed for the student who enjoys singing, is interested in improving his/her singing ability, and wants to be part of a performing group.
(Grade Level: 9-12 * Prerequisite: None)



BASIC PHOTOGRAPHY (One Sem.)

This class is designed for students to learn the basics of digital photography and the genres associated with professional skills in this area, as well as how to use those photos in basic post processing (Photoshop) and graphic design (InDesign, Canva) projects. (Grade Level: 9-12 * Prerequisite: None)

MATHEMATICS



ALGEBRA I (Two Sem.)

The course begins with a review of basic number theory concepts. Students will be required to solve equations in the first and second degree, perform factoring operations, solve inequalities, and operate with square roots. Graphs of linear combinations and substitutions will be used to solve systems of equations. (Grade Level: 9-12 * prerequisite: Good math background)

ALGEBRA II (Two Sem.)

The course stresses the structure of algebra and the development of computational skills. Algebra I concepts are renewed and expanded upon. Equations and inequalities will be analyzed, solved and graphed. Conic sections will be analyzed. Matrices, sequences, and logarithms will be introduced. (Grade Level: 9-12 * Prerequisite: Algebra I)



GEOMETRY (Two Sem.)

Using an inductive approach, students learn geometry through investigation and observation. Students develop visual thinking and inductive reasoning skills. This course covers the basics of geometry, vocabulary, proofs, parallel and perpendicular lines, triangles, quadrilaterals, circles, polygons, congruence, similarity, area, surface area, and volume. (Grade Level: 9-12 * Prerequisite: Algebra I)

MATH READINESS PROJECT (Two Sem.)

This course will consist of preparing for college whether it be the two-year or 4-year route. This will be an online course through Central Community College which applies to all Nebraska community colleges. The Nebraska Math Readiness Project provides a bridge to success for high school seniors to improve their math skills before entering and completing a college-level math course. Upon successful completion of the course, students will not need to take foundation level math classes in college. Instead they will be able to directly enroll in college-credit math classes upon acceptance into a partnering community college. The intermediate algebra course will be a review of algebra I and II and will count towards college credit. This class is ideal for seniors that are college-bound, either 2 or 4 years, that have not taken precalculus. (Grade Level: 12 *Prerequisite: Algebra I, II, & Geometry)

PRECALCULUS (COLLEGE ALGEBRA & TRIGONOMETRY) (Two Sem.)

This is a dual-credit class. Pre-calculus is a year-long course for college bound students. Approximately twelve weeks is devoted to the study of trigonometric functions. The remaining portion consists of the study of functions, conic sections, exponents and logarithms, sequences and series, statistics and probability. (Grade Level: 11-12 * Prerequisite: Algebra I,II, & Geometry)



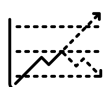
Calculus (Two Sem.)

Calculus students will utilize algebraic, numerical and graphical approaches to discover the basic components of Calculus concepts and their applications. The four fundamental concepts their study will be centered on are: limits, derivatives, definite integrals and indefinite integrals. Students will utilize graphing calculator technology on a constant basis. (Grade Level: 12 * Prerequisite: Algebra I,II, Geometry & Trig.)



STATISTICS (ONE SEM.)

Statistics is an elective course that aims to help students apply statistics ideas to real-world situations. Students will learn about designing studies, exploring different types of data, modeling data, making inferences and justifying conclusions. This course is ideal for seniors that are employment-bound or college-bound but whose choice of study does not require calculus. (Grade Level: 12 * Prerequisite: Algebra I, II, & Geometry)



PROBABILITY (ONE SEM.)

Probability is an elective course where students will learn about randomness, random variables, sampling distributions, and estimating parameters. This course is ideal for seniors that are employment-bound or college-bound but whose choice of study does not require calculus. (Grade Level: 12 * Prerequisite: Algebra I, II, & Geometry)

LANGUAGE ARTS



ENGLISH 9 (Two Sem.)

Students study the basics of grammar. Literature reading (which involves short stories, novels, and poetry) is another major part of the course. Study skills and effective reading skills are included. (Grade Level: 9 * Prerequisite: None)

ENGLISH 10 (Two Sem.)

Students study short stories, poetry, essays, drama, vocabulary and compositions. Students will complete a major writing project. (Grade Level: 10 * Prerequisite: None)

English 11 (Two Sem.)

Students will study various forms of literature: memoirs, novels, poetry, short stories, drama, essays. Students will also engage in a variety of writing modes: reading reflections, short-answer responses, persuasive/argumentative essay, personal essay, etc. MLA guidelines will be reviewed and required for most writing assignments. ACT prep for the English and Reading portions of the test will be included in the 3rd quarter. (Grade Level: 11 * Prerequisite: English 9 & 10)



**COLLEGE
ENGLISH
(Two Sem.)**

This is a dual-credit class. Students who successfully complete the requirements will receive both high school credit and six (6) hours of credit from Peru State College. Peru State enrollment guidelines require that students meet at least one of the following in order to enroll in this class: 1) have a cumulative GPA of 87% or better, 2) rank in the top half of their high school class, 3) earn an ACT composite score of at least twenty (20) or an equivalent score on another valid assessment.

The first semester of this class is English 101: English Composition. The second semester is English 202: Appreciation of Literature.

ENG 101 | English Composition (3 credit hours) This course is a study of the principles of clear and effective expression as applied to the sentence, paragraph, and the whole composition. It includes a review of MLA formatting guidelines, grammar, mechanics, and correct usages. Students will write at least four papers including but not limited to the following: reaction paper (contemporary issues), literary analysis, research-informed personal essay, scholarship essay.

ENG 202 | Appreciation of Literature (3 credit hours) This course meets a General Education requirement designed to increase the student's appreciation of literature with an emphasis on modern literary forms. Students will read independently, participate in and lead discussions, write insightful reflections, etc. After studying imagery and descriptive writing in literature, students will also write their own poetry for publication in *The Prowling Pen* literary journal.

Behavior reflecting a collegiate-level dedication to academic excellence will be expected. Students enrolling in this class must be prepared to meet deadlines, be attentive to detail in all assignments (MLA format, grammar, spelling, etc.), make meaningful contributions to class discussions, manage time wisely, work well both independently and with peer partners/groups, and be receptive to constructive criticism. (Grade level: 12 *See above for prerequisites.)



**COLLEGE
SPEECH
(Two Sem.)**

A study of oral communication including its history, theories and fundamentals. Activities include areas of public speaking and group communication skills. (Grade Level: 11-12 * Prerequisite: None)

**SENIOR
ENGLISH
(Two Sem.)**

The first semester is the *Applied Communications* (ENGL1225) course curriculum through Metro Community College, covering the fundamental development and implementation of oral and written workplace/business communication skills.

NOTE: in order to earn college credit, students must be accepted and enrolled through MCC's Early College program, meeting all entrance requirements. Students can choose to take the course for high school credit only.

Second semester aims to ensure students develop a stronger mastery of the various forms of communication using the Nebraska Department of Education's Language Arts Standards for reading, writing, speaking/listening, and digital literacy.

**YEARBOOK
(Two Sem.)**

Students will learn the fundamentals of photography, design, and journalism as they work collaboratively to produce a high-quality yearbook that reflects the unique spirit of their school. Throughout the course, students will develop essential skills in photography, including composition, lighting, and editing techniques. They will also learn graphic design principles to create visually appealing layouts and pages. Additionally, students will explore the art of storytelling through feature articles, interviews, and captions, ensuring that every aspect of the yearbook tells a compelling narrative. (Grade Level: 10-12)

**CONTEMPORARY
LITERATURE
(Two Sem.)**

This course explores major themes in contemporary novels and non-fiction texts. Students will read, discuss, and analyze literary selections. They will examine authors' techniques and will gain awareness of how literature reflects society. The course will help students become more culturally literate and globally aware while developing vocabulary and reading comprehension skills. Students will utilize the Goodreads platform to document their reading progress, share their reviews, and explore titles, authors, and genres. In addition, students will examine how ebooks and audiobooks impact reading in modern day society. (Grade Level: 11 & 12. *Prerequisite: English 9 & 10)

This class is an elective course and will not replace English 11, English 12, or College English. It also cannot be used to make-up credit for English 9 or English 10.



**SPANISH I
(Two Sem.)**

This course is a beginning level Spanish course dealing with basic conversation skills and vocabulary with an emphasis on verb conjugation and usage. It also contains multicultural lessons related to misconceptions and presumptions. (Grade Level: 9-11 * Prerequisite: None)

**SPANISH II
(Two Sem.)**

This course deals with an intermediate level of Spanish language acquisition through increased dialogue. More emphasis is placed on dialog usage and orally usage of the Language. (Grade Level: 10-12 * Prerequisite: Spanish I)

**SPANISH III
(Two Sem.)**

This course deals with an advanced level of Spanish language acquisition through increased dialogue. More emphasis is placed on dialog usage and orally usage of the Language. (Grade Level: 11-12 * Prerequisite: Spanish I, Spanish II, & teacher recommendation)

PHYSICAL EDUCATION



PHYSICAL EDUCATION/ HEALTH (Two Sem.)

A class designed to maintain a high level of fitness as related to adult living and the complex society in which we live. (Grade Level 9-12 * Prerequisite: None)



WEIGHTS (Two Sem.)

Students learn the proper use of weight equipment and exercises; develop an understanding of wellness. (Grade Level: 9-12 * Prerequisite: None)

LIFETIME SPORTS (Two Sem.)

A study of the rules and terminology of various sports and recreational activities. Student fee and participation is necessary.
(Grade Level: 12 * Prerequisite: None)

SKILLED AND TECHNICAL SCIENCES



Intro to STS (Year Long)

Throughout this year-long course, students will develop a strong foundation in welding and woods. They will explore various welding processes, while emphasizing proper safety practices in the shop. In addition, students will learn basic equipment maintenance and repair, understand and interpret welding symbols, and gain hands-on experience with tools and machinery commonly used in agricultural/welding settings. This course is designed to build practical skills and confidence in working with metal and mechanical systems. Students will learn the fundamentals of woodworking through hands-on projects and practical skill development. The class will cover shop safety, tool identification and use, measuring and layout techniques, and more. Students will gain experience working with both hand and power tools as they complete a variety of individual and group woodworking projects. Emphasis will be placed on craftsmanship, problem-solving, and attention to detail. By the end of the course, students will have a strong foundation in woodworking skills and an appreciation for the planning and precision involved in working with wood.
(Grade Level: 9-12 * Prerequisite: None)

Welding 2
(One Semester)

This semester-long course is designed for students who have a foundational knowledge of welding and are ready to advance their skills through independent, hands-on work. Students will begin by reviewing shop safety protocols and welding best practices to ensure a safe and efficient work environment. Following this, they will revisit and refine their skills in multiple welding processes, such as MIG, TIG, Stick, and Oxy-Acetylene. After the review period, students will design and complete a semester-long welding project of their choice, using the welding process they are most interested in. These projects will require planning, material selection, fabrication, and final finishing. Students will be assessed on craftsmanship, safety, time management, and overall project quality. The course aims to strengthen students' technical abilities while encouraging creativity, independence, and problem-solving. (Grade Level: 10-12 * Prerequisite: Intro to STS)

Woods 2
(One Semester)

Advanced Woods is a hands-on, project-based course designed for students who have a solid foundation in woodworking and are ready to take their skills to the next level. The semester begins with a comprehensive review of shop safety, proper tool usage, and equipment maintenance. Students will revisit both hand tools and power tools, with an emphasis on precision, efficiency, and safe operation. Following the review, students will choose an individual woodworking project that aligns with their interests and skill level. They will be responsible for planning their project, creating a materials list, and managing their time throughout the build process. Projects may range from furniture to custom decor or functional items, depending on student creativity and ambition. This course encourages independence, problem-solving, and attention to detail. Students will be assessed on their craftsmanship, work ethic, adherence to safety standards, and the completion of their chosen project. (Grade Level: 10-12 * Prerequisite: Intro to STS)

Ag Technology
(One Semester)

Agricultural Technology is a hands-on, exploratory course that introduces students to the innovative tools and technologies shaping the future of agriculture. Students will gain experience using cutting-edge equipment such as the 3D printer, drones, and other digital tools available at the school. The course focuses on how these technologies are applied in modern ag industries including precision farming, design and fabrication, data collection, and problem-solving. Through individual and group projects, students will develop technical skills while also learning about real-world applications of ag technology. Emphasis will be placed on creativity, critical thinking, and collaboration as students design, test, and reflect on their work. This course is ideal for students interested in STEM, ag mechanics, or future careers in ag innovation and technology. (Grade Level: 10-12 * Prerequisite: Intro to STS)

**Mechanics
(One Semester)**

Basic Mechanics is a hands-on course designed to teach students essential mechanical skills that are useful in everyday life and valuable for future careers. Students will learn how to perform routine maintenance and basic repairs on vehicles and small engines. Topics will include how to safely change a tire, check and change oil, replace air filters, inspect belts and hoses, check fluid levels, and understand basic tools and their uses. The course will emphasize safety, responsibility, and proper technique. Students will work individually and in teams on real-world tasks and will leave the class with confidence in their ability to handle basic mechanical issues on their own. (Grade Level: 10-12 * Prerequisite: Intro to STS)

**Small Engines
(Semester 2)**

This hands-on Small Engines course introduces students to the fundamentals of small engine operation, maintenance, and repair using the Briggs & Stratton curriculum. Over the semester, students will explore the internal workings of a small engine, develop a strong understanding of engine systems, and gain practical skills through teardown, inspection, and reassembly activities. Students will follow Briggs & Stratton's industry-recognized training modules, which include multimedia lessons, detailed service procedures, and step-by-step guides. Emphasis will be placed on safety, tool usage, precision, and troubleshooting. By the end of the course, students will have a solid foundation in small engine mechanics. (Grade Level: 9-12 * Prerequisite: Mechanics)

**Fabrication
(One Semester)**

Fabrication is a hands-on, project-based course that challenges students to apply their skills in welding, woodworking, metalwork, and design to plan and build a custom project of their choice. Students will begin the semester by reviewing shop safety, proper tool usage, and material handling. From there, they will develop a project proposal—including sketches or CAD drawings, materials lists, and a timeline—for instructor approval. Once approved, students will work as a class to fabricate their project using available shop tools, equipment, and processes. The course emphasizes problem-solving, precision, time management, and creativity. Students will document their progress and reflect on the challenges and successes of their build. (Grade Level: 10-12 * Prerequisite: Intro to STS)

AGRICULTURE

AGRISCIENCE (Two Sem.)	A year-long course to study the broad perspective of today's agriculture. Topics such as natural resource management, plant and animal science, horticulture, food science and leadership development will be covered. Agriscience will be offered every year. (Grade Level: 9-10 * Prerequisite: None)
AGRIBUSINESS/ ADVANCED AGRIBUSINESS (Two Sem.)	The first semester deals with the study of business organizations, business structures, marketing, selling, displaying, management and entrepreneurship skills. The second semester deals with various economic principles and business agricultural management concepts which are involved in the decision making process when organizing a farming/ranching operation. Advanced Agribusiness is also offered for college credit as AGRI 1410 Intro. to Farm Management Records. (Grade Level: 11-12 * Prerequisite/Corequisite: Accounting and Economics - may be waived with instructor's approval - offered every year)
ANIMAL SCIENCE/PLANT SCIENCE (Two Sem.)	The first semester will deal with the production of major species in the livestock industry: beef swine, sheep, poultry, horses and dairy.. The second semester deals with plant processes, growth and development, disease identification and control. (Grade Level: 10-12 * Prerequisite: None)
 NATURAL RESOURCES/ WILDLIFE MANAGEMENT (Two Sem.)	In depth study into water, air, and land management, outdoor recreation, and woodlot management. The second semester will be focused on wildlife management, habitat development and aquaculture. (Grade Level: 10-12 * Prerequisite: None)
AGRICULTURAL LEADERSHIP (Two Sem.)	Includes leadership in a community, leadership concepts/applications, characteristics of an effective leader/manager and related practicum. Agriculture leadership is also offered for college credit as AGRI 1420 Interpersonal Skills (Grade Level: 11-12 * Prerequisite: None)
 HORTICULTURE/ LANDSCAPING (Two Sem.)	The first semester will develop basic knowledge in all areas of horticulture, such as greenhouse crops, plant pests and disease, gardening and floral design. The second semester will deal primarily with the landscaping aspect of horticulture. Specific areas to be covered are container grown plants, designing landscapes and lawn establishments and maintenance. (Grade Level: 10-12 * Prerequisite: None)
ADVANCED ANIMAL SCIENCE/ VETERINARY SCIENCE (Two Sem.)	The first semester deals with animals and how they function. Livestock diseases, nutrition, feeding, genetics, and meat technology will be studied. The second semester will deal with introducing students to the basics of animal care. Topics covered include disease, parasites, feeding, shelter, grooming and general animal care. Advanced Animal Science is also offered for college credit as AGRI 1010 Animal Science (Grade Level 11-12 * Prerequisite/Corequisite: Animal/Plant Science * Offered odd years beginning 2009)

BUSINESS, MARKETING & INFORMATION TECHNOLOGY



INFORMATION TECHNOLOGY I AND II (One Sem.)

The Information Technology class offers students a comprehensive introduction to the exciting world of technology and its applications. In this class, students will explore various aspects of information technology, including computer systems, programming, networking, and digital literacy. Throughout the course, students will develop a strong foundation in computer hardware and software, gaining hands-on experience with different operating systems, software applications, and computer peripherals. They will learn how to troubleshoot common computer issues and develop essential skills in computer maintenance and security. The class will also delve into the fundamentals of programming, where students will learn programming languages such as Python, Java, or HTML/CSS. They will acquire problem-solving skills and logical thinking abilities as they design and develop their own programs and applications.

(Grade Level: 9-12 * Prerequisite: None)

DIGITAL MEDIA (One Sem.)

This class is an exciting opportunity for students to explore the world of digital creativity and develop essential skills in multimedia production. In this class, students will learn to harness the power of the Adobe suite, a leading industry-standard software package used by professionals in various creative fields. Throughout the course, students will gain hands-on experience with Adobe Photoshop, Illustrator, InDesign, Animate, and other tools to create and manipulate digital images, graphics, videos, and publications. In addition to technical skills, students will also develop a strong foundation in design principles, such as color theory, typography, composition, and visual storytelling. They will learn how to effectively communicate ideas and messages through digital media, whether it's designing stunning graphics, editing videos, or creating visually appealing publications.

(Grade Level: 10-12 * Prerequisite: Information Technology I)



ACCOUNTING I (Two Sem.)

This class offers students a comprehensive introduction to the principles and practices of financial accounting. This course is designed to provide a solid foundation in accounting concepts and techniques, preparing students for future studies or careers in finance, business, or related fields. Throughout the course, students will learn the fundamental principles of accounting, including the recording, analyzing, and reporting of financial transactions. They will gain a deep understanding of financial statements, such as balance sheets, income statements, and cash flow statements, and how these statements are used to assess the financial health of a business. Students will also explore topics such as budgeting, cost analysis, and financial decision-making.

(Grade Level: 10-12 * Prerequisite: None)



ACCOUNTING II (Two Sem.)

The advanced course expands the topics introduced in Accounting I while adding new topics of instruction. Students continue to demonstrate competency by applying the accounting cycle to partnerships and corporations - both merchandising and manufacturing. The instructional content includes the procedures and practices related to management accounting, cost accounting, not-for-profit accounting, and financial statement analysis. Special features throughout the curriculum provide context for accounting learning and real-life information about business coupled with critical thinking questions and discussions to energize students about accounting-related issues.

(Grade Level: 11-12 * Prerequisite: Accounting I)

PERSONAL FINANCE (One Sem.)

This Personal Finance class is a comprehensive course designed to equip students with the knowledge and skills necessary to make informed financial decisions throughout their lives. In this class, students will explore various aspects of personal finance, including budgeting, saving, investing, credit management, financial planning and more. Through engaging lessons and practical activities, students will learn how to create and manage a personal budget, understand the importance of saving and investing, and make informed decisions about credit and debt. They will also explore topics such as taxes, insurance, and retirement planning, gaining a solid foundation in financial literacy and paying for college. (Grade Level: 11-12 * Prerequisite: None)

COMPUTER SCIENCE (One Sem.)

The Computer Science class offers students a comprehensive introduction to the exciting world of computer science. This course is designed to provide a solid foundation in computer programming, problem-solving, and computational thinking skills. It aligns with the Nebraska Computer Science Standards to ensure students meet the necessary learning objectives. Throughout the course, students will explore various programming languages to develop their coding skills. They will learn the fundamentals of programming, including variables, data types, control structures, and functions. Students will also gain hands-on experience in designing and implementing algorithms to solve real-world problems. (Required starting with graduating class of 2027)



SPORTS MARKETING/ DESIGN (One Sem.)

The NBC Sports Marketing class is designed to provide students with a comprehensive understanding of the principles and strategies involved in marketing within the sports industry. Through a combination of theoretical knowledge and practical applications, students will explore various aspects of sports marketing, including branding, sponsorship, event management, and fan engagement. Students will gain an overview of the sports industry, its economic impact, and the role of marketing in promoting sports events and products. Students will also learn how to create and manage a strong brand identity for sports teams, athletes, and events. (Grade Level 9-12)

FAMILY AND CONSUMER SCIENCES



CHILD DEVELOPMENT (One Sem.)

This course provides an overview of developmental stages in the prenatal period through early childhood years. Topics covered include how young children attain knowledge, behaviors, and skill and theories of child development to identify the effects of parenting practices, social, cultural, and linguistic diversity. The impact of quality child care and early childhood education on child growth and development will also be explored.

(Grade Level: 9-12 *Prerequisite: None)

PARENTS AND FAMILIES (One Sem.)

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 parents, support services for parents, parenting theories, and family adjustment to parenthood. Students also have the opportunity to care for the Real Care babies for a weekend for a true hands-on parenting experience.

(Grade Level: 9-12 *Prerequisite: None)

SPORTS NUTRITION (One Sem.)

This course provides students with an introduction to the science of nutrition, specifically the needs associated with athletics. 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. (Grade level: 9-12 *Prerequisite: None)

FUNDAMENTALS OF NUTRITION AND CULINARY ESSENTIALS (One Sem.)

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. (Grade Level: 9-12 *Prerequisite: None; Offered every other year)



CULINARY I (One Sem.)

This intermediate course focuses on culinary skills development building on concepts from the introductory course. Topics covered include planning, preparing, and marketing a variety of menu items following industry standards. Technical skills will be developed through the use of professional tools and equipment. (Ideal Grade Level: 9-12 *Prerequisite: Fundamentals of Nutrition and Culinary Essentials; Offered every other year)

EVENT MANAGEMENT (Two Sem.)

This course focuses on the evolving hospitality industry building on concepts from the introductory and intermediate courses. Topics covered include many facets of event planning such as: career opportunities, step-by-step planning, food/beverage operations, and marketing strategies. Projects include: catering

events and operating the coffee cart. (Ideal Grade Level: 10-12 *Prerequisite: Fundamentals of Nutrition and Culinary Essentials and Culinary I)



**INTRODUCTION
TO DESIGN
(One Sem.)**

This introductory course explores the definition, application, and evaluation of elements and principles of design in the interior and apparel industries. Topics covered include knowledge of textiles, apparel skills, and interior design skills. Design technology, career opportunities, and the skills necessary for careers in design will also be included. (Grade Level: 9-12 *Prerequisite: None **Offered every other year)

**HEALTH
SCIENCES I
(One Sem.)**

Health Sciences 1 is designed to give an overview of the therapeutic services, diagnostic services, support services, biotechnology research and development, and health informatics pathways. The course focuses on exploring health science pathways and careers, employability skills, ethical and legal responsibilities, safety practices and technical skills, and the history and current trends in healthcare. (Grade Level: 9-11 *Prerequisite: None **Offered every other year)



**MEDICAL
TERMINOLOGY
(One Sem.)**

This course is designed to help students learn medical language by analyzing its components. This course is a fundamental course for students who are pursuing a career in the healthcare profession.
(Grade Level: 9-12 *Prerequisite: None **Offered every other year)



**BASIC NURSE
AIDE
(One Sem.)**

Not currently offered This course is designed to meet the Nebraska Health and Human Service System training requirements for nurse aide certification and employment in long term care facilities. The course combines classroom lecture and laboratory application for the development of basic skills needed to provide safe, effective, and caring service to the elderly or chronically ill patient of any age, in a long term care facility. (Grade Level: 11-12 * Prerequisite: Introduction To Health Sciences and Medical Terminology)

CAREER EDUCATION/COOPERATIVE LEARNING WORK-BASED LEARNING

**CAREER
EDUCATION
(One Sem.)**

Available *only* to junior- and senior-level students, Career Education focuses on providing students with Field Experiences in their intended career pathways. These can come in the form of tours, guest speakers, observations, job shadows, part-time work experiences, paid/unpaid internships, and/or registered apprenticeships. These experiences form through highly-structured agreements between NBC and businesses/organizations/entities in the North Bend and surrounding communities to observe/complete work firsthand within a given industry in the student's intended career path. These experiences require students to select approved field experience plans and submit schedules, timecards, and all appropriate documentation to facilitate a mutually-beneficial work based learning/cooperative education experience each semester.

NATURAL SCIENCES

**PHYSICAL
SCIENCE
(Two Sem.)**

A study of material energy, and their relationship through application of physical laws and chemical processes. An introduction for students planning on taking Chemistry and Physics. (Grade Level: 9-10 * Prerequisite: None)



**BIOLOGY I
(Two Sem.)**

Specific areas of study are the science and engineering practices, ecology, evolution, aspects of cell life, homeostasis, and genetics. The class relates all forms of life from bacteria to human with basic principles of structure and life processes.

(Grade Level: 10-12 * Prerequisite: Physical Science)

**BIOLOGY II -
Dual Credit
Option
(Two Sem.)**

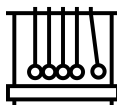
A study of all aspects of life, including cell growth and division, DNA, RNA, protein synthesis, genetics, human heredity, genetic engineering, evolution of populations, viruses, prokaryotes, protists, fungi, plants, and animals.

(Grade Level: 11-12 * Prerequisite: Biology I [B Average]).

**CHEMISTRY I
(Two Sem.)**

Chemistry is the study of matter and its changes. This course is taught as a preparation for college chemistry. The course also includes many applications of chemistry to health, medicine, and the environment.

(Grade Level: 11-12 * Prerequisite: Physical Science)



**PHYSICS
(Two Sem.)**

A study of the relationship between matter and energy. This course emphasizes everyday applications of physical laws. A workable knowledge of algebra is a must. (Grade Level: 12 * Prerequisite: Physical Science)

**ANATOMY &
PHYSIOLOGY
(Two Sem.)**

The anatomy portion of the class involves working with the bones and muscles of the body and the special terminology required to adequately discuss them. Physiology is a study of the functioning of the major systems of the body.

(Grade Level: 11-12 * Prerequisite: Biology I)



**EARTH SCIENCE
(Two Sem.)**

This course introduces the physical processes shaping our planet, covering geology, climate change, oceanography, meteorology, and astronomy. Students will explore Earth's materials, dynamic systems, and history to develop a deeper understanding of our environment and its place in the universe. (Grade Level: 11-12 * Prerequisite: Physical Science, Teacher Recommendation & Admin Approval)

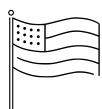
SOCIAL SCIENCES

GEOGRAPHY (Two Sem.)

This course studies the countries of the world. This class is an in depth study of their locations, their culture, their people, and their resources.
(Grade Level: 9 * Prerequisite: None)

WORLD HISTORY (Two Sem.)

This course enables the student to fix places/possibilities with the larger social and cultural structure, to understand the broad sweep of both ancient and contemporary ideas that have shaped our world, to grasp the difference between a free and repressive society and coordinate a global perspective.
(Grade Level: 10 * Prerequisite: None)



AMERICAN HISTORY (Two Sem.)

A comprehensive study of U.S. history from pre-American revolution to the present, showing how U.S. history has shaped our country and made us a world leader today. (Grade Level: Required 11 * Prerequisite: None)0

AMERICAN GOVERNMENT (One Sem.)

Students will achieve knowledge and understanding of the U.S. government and its organization; economic, political, and legal systems of the community, state, and nation. (Grade Level: Required 12 * Prerequisite: None)

ECONOMICS (One Sem.)

This course examines the United States economic system. Students will achieve knowledge by analyzing the market economy by identifying major factors that influence such an economic system. Students will compare our economic system with those of major democratic and authoritarian nations.
(Grade Level: 12 * Prerequisite: None)



PSYCHOLOGY (One Sem.)

This course deals with human development, behavior, learning, language, motivation, emotion, personality, social psychology, and careers
(Grade Level: 12 * Prerequisite: None)

CRIMINAL JUSTICE (One Sem.)

Students will explore the principles and history of criminal justice including constitutional restraints. Emphasis will be on the criminal justice official's role in the prevention and control of crime and delinquency.
(Grade Level: 12 * Prerequisite: None)



LEADERSHIP (Two Sem.)

Students will learn about the principles and values of great leaders. Students will identify and create problem solving strategies that will help them learn how to become better leaders. Students will also read and respond to different texts about leadership, problem solving, principles and values needed to be successful. (Grade Level: 10 - 12 *Prerequisite: None)

Online College Credit Course

Some colleges now offer online courses to high school students, providing valuable opportunities to earn college credit or explore career interests early. These courses may be available for a nominal fee or even free, depending on the program and subject area. If you are interested in enrolling in an online course—either independently or as part of a career education or aide period—please contact the school counselor for more information and guidance on available options.

Students on track for graduation and interested in taking an on-line course for college credit may be given independent study for on-line coursework. The school would provide the learning environment and one period a day for this program. Students would be required to pay for the credits obtained. These would not be dual credit classes.

The enrollment requirements for online college credit courses are:

- You must have a minimum high school GPA of 87% or higher.
- You must have completed your junior year of high school
- You must have an ACT composite score of 20 or higher or equivalent score on the PLAN or PSAT (This may be waived with a teacher recommendation in the course content area)

See STS instructor for Information

Mechatronics for High School through Central Community College

| NDT 1100

Concepts of Electronics I

3 credits

This web-based DC electronics course uses asynchronous multimedia featuring audio, video, and written learning resources to implement the custom-designed electrical trainer lab activities. Students explore fundamental DC electrical concepts with hands-on lab activities emphasizing skills required of practitioners in industry. Students gain experience working with digital multimeters to understand relationships between voltage, current, resistance, and power while building circuits from electrical drawings.

INDT 1800**Introduction to
Instrumentation****3 credits**

This web-based introductory instrumentation course uses asynchronous multimedia featuring audio, video, and written learning resources to complement the hands-on lab activities using a custom-designed trainer. Students gain a fundamental knowledge of instrumentation and process control while building their working portable instrumentation station. With the trainer and course instructional resources, students explore the relationships with control and measurement of { pressure, temperature, level, and allow which are vital components of process automation.

| NDT 1200**Programmable
Logic Controls****3 credits**

This web-based introductory programmable logic controls (PLC) course uses asynchronous multimedia featuring audio, video, and written learning resources to complement hands-on lab activities using a custom-designed PLC trainer. Students gain a working knowledge of basic PLC theory and applications through programming and wiring of inputs and Outputs to common industrial switches, lights, and pushbuttons included with the portable trainer. Students follow web-based instructional resources to learn how to write ladder logic software programs that integrate common

| NDT 2410**Applications of
Industrial Sensors****3 credits**

This web-based industrial sensors course uses asynchronous multimedia featuring audio, video, and written learning resources to complement hands-on lab activities with a custom-designed sensor trainer. Students explore the theory and application of commonly used discrete industrial sensors such as magnetic, inductive, capacitive, and optical proximity sensors. Additionally, students gain hands-on experience working with analog devices including ultrasonic sensors, lasers, and rotary encoders.