

2023-2024 NORTHWEST HIGH SCHOOL

COURSE DESCRIPTION GUIDE



Graduation Requirements

English	40 credits	4 years	
Math	30 credits	3 years	
Science	30 credits	3 years	
Social Studies	25 credits	2 ½ years	
Government	5 credits	1 semester	
PE	5 credits	1 semester	
Health	5 credits	1 semester	
Computer Science	5 credits	1 semester	Starting with Class of 2027
Communications	5 credits	1 semester	
Personal Finance	5 credits	1 semester	
Practical/Fine Arts*	20 credits		
Electives	90 credits		85 credits- Starting with Class of 2026
Total	260 credits		
40 Hours of Community Service also Required			

**Practical/Fine Arts = Ag, Art, Business, Drama, Engineering, Family & Consumer Science, Health Science, Industrial Tech, Music, Newspaper, Speech and Yearbook*

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QUICK REFERENCE - COURSE LISTING

For more class details please refer to the pages following this chart.

English/Speech- 4 years of English and 1 semester of Communication required			
English 9	Year	9	
English 10	Year	10	
Adv. English 10	Year	10	Teacher recommendation
Communication	Semester	10 (9th allowed)	Required
Adv. American Literature	Year	11	Reading MAP score in 88th % or teacher approval
American Literature	Year	11	
Literature 11A	Year	11	Teacher recommendation, NOT accepted by Univ of NE system or NCAA
Mythology & Cont. Lit	Semester	11,12	elective
College Prep English	Year	12	80% or above in Amer. Lit, teacher recommendation
Senior English	Year	12	NOT accepted by Univ of NE system or NCAA
CCC English Composition	Fall	12	ACT Reading & Writing 18+, paperwork, tuition costs
CCC Eng. Comp 2/Amer. Lit	Spring	12	ACT Reading & Writing 18+, paperwork, tuition costs
Communication Arts 12	Year	12	Teacher rec., NOT accepted by Univ of NE system or NCAA
Math- 3 years of Math required			
Algebra A	Year	9	
Algebra B	Year	10	Algebra A
Algebra I	Year	9,10	Algebra B
Geometry	Year	9,10,11,12	Algebra 1
Algebra II	Year	10,11,12	Algebra I and Geometry
Trig/Pre-Calculus	Year	11,12	Geometry and Alg II with a 78% or higher or teacher permission
Discrete Math	Sem/Year	11,12	Algebra II
AP Calculus	Year	12	Trig/Pre-Calculus with a 78% or higher or teacher permission
CCC College Algebra	Spring	12	Trig/Pre-Calculus, ACT Math 22+ is required for CCC credit
CCC Applied Statistics Math	Fall	12	Trig, ACT Math 22+ is required for CCC credit
NE Math Readiness	Year	12	Attending comm. college, teacher recommendation
Science- 3 years of Science required			
Integrated Physical Science	Year	9	
Integrated Biology	Year	10	
Chemistry	Year	11	
Advanced Chemistry	Year	12	Chemistry- 80% or higher
Physics	Year	11,12	Algebra II- 87% or higher
Anatomy & Physiology	Year	11,12	Biology- 86% or higher, teacher permission
CCC Biology	Year	12	Jr. Level Science- 86% or higher, teacher permission

<u>Social Studies-3 years of Social Studies required</u>			
Social Studies 1 & 2	Year	9	
AP American History	Year	10,11	Social Studies- 87% or higher, teacher recommendation
American History	Year	11(Limited 10th)	
Government	Semester	12	
CCC Macroeconomics	Semester	11,12	Micro, previous or concurrent AP class or Trig/Pre-Calculus
CCC Microeconomics	Semester	11,12	Previous or concurrent AP class or Trig/Pre-Calculus
60's and Beyond	Semester	10,11,12	
Psychology	Semester	11,12	
Sociology	Semester	11,12	
Performance Psychology	Semester	11,12	Not accepted by NCAA for social studies credit
Holocaust & Genocide Studies	Semester	11,12	*Reading intensive
<u>Agriculture</u>			
Intro to Ag. Sciences	Year	9,10	
Animal Science	Semester	10,11,12	
Companion Animals	Semester	10,11,12	
Veterinary Science	Spring	11,12	B or higher in Anim. Science and Companion Animals
Horticulture	Semester	10,11,12	
Plant Science	Semester	10,11,12	
Wildlife Management	Semester	10,11,12	
Agri Business	Year	10,11,12	
Sup. Ag Experience	Year	12	Instructor permission
<u>Art</u>			
Art I	Semester	9,10,11,12	
Art II	Semester	9,10,11,12	Art I
Art III	Sem/Year	10,11,12	Art II
Art IV	Sem/Year	11,12	Art III
Art V	Sem/Year	12	Art IV
<u>Business/Career</u>			
Intro to Bus,Mar,Mmt	Semester	9,10	
Personal Finance	Semester	10	Required
Careers	Semester	10	Required
Information Tech App	Semester	9,10,11,12	
Information Tech App II	Semester	10,11,12	Info. Tech App
Accounting	Year	10,11,12	
Advanced Accounting	Year	11,12	Accounting
Business Law	Semester	10,11,12	
Career Essentials	Semester	11,12	2 period block, have driver's license and transportation

Marketing	Sem	10,11,12	
Entrepreneurship	Sem	10,11,12	
Sports Marketing & Entertainment	Year	10,11,12	
<u>Drama</u>			
Drama 1	Semester	9,10	
One-Act Play Production	Fall	9,10,11,12	
<u>Engineering/Computer Sciences Pathway</u>			
Intro to Engineering Design	Semester	9,10,11,12	
Foundations of Computing	Semester	9,10	Required for class of 2027
Computer Science Principles	Year	9,10,11,12	
Computer Science Applications	Year	10, 11,12	Computer Science Principles
Game Design I & II	Sem or Year	10,11,12	
Cybersecurity	Semester	11,12	
Robotics	Year	10,11,12	
<u>Family Consumer Science</u>			
Fundamentals of Food & Nutrition	Semester	9,10,11	
Baking & Pastry Arts	Semester	10,11,12	Fundamentals of Food
Culinary Arts & Management 1	Semester	10,11,12	Fundamentals of Food
Culinary Arts & Management 2	Semester	10,11,12	Culinary Arts & Man 1
Human Development	Semester	9,10,11,12	
Performance Nutrition	Semester	11,12	
Intro to Education & Training	Semester	11,12	
Human Dev & Cognition	Semester	11,12	Intro to Education
Best Practices in Edu. & Training	Semester	11,12	Human Dev & Cognition
Intro to Design Principles	Semester	10,11,12	
Home Design & Interior	Semester	10,11,12	Intro to Design Principles
Fashion Design	Semester	10,11,12	Intro to Design Principles
Reality 101	Semester	12	
<u>Health Science</u>			
Intro Health Science	Semester	9,10,11	
Prin of Biomedical Science	Year	10,11,12	C or higher overall GPA
Medical Interventions	Year	12	PBS and A & P-78%+ (can be taken at same time), teacher permission
Intro to Sports Medicine	Year	10,11,12	
Intro to Medical Terminology	Semester	11,12	
CCC Certified Nursing Assistant	Semester	11,12	90% cumulative GPA, counselor permission, tuition costs

<u>Industrial Technology</u>			
Exploring Construction & Manufacturing	Semester	9,10	Safety glasses
Construction Systems	Semester	10,11,12	Safety glasses
Carpentry	Year	11,12	Con. Sys. and teacher permission
Ag Mechanics	Semester	10,11,12	Safety glasses
Drafting & Design	Semester	10,11,12	
Home Maintenance	Semester	10,11,12	Safety glasses
Welding 1	Semester	10,11,12	Safety glasses
Welding 2	Sem/Year	10,11,12	Welding 1
Woods 1	Semester	10,11,12	Safety glasses, lab fee
Woods 2	Semester	11,12	Tape measure and safety glasses required, project fee
Concept of Electronics	Semester	11,12	CCC cost- \$45
Intro to Instrumentation	Semester	11,12	CCC cost- \$45
Career Pathways Institute	Year	11,12	Programs in Auto, Manufacturing, Info. Tech, application required
CCC Welding	Sem/Year	12-Nov	Tuition and materials cost
<u>Journalism / Media Arts</u>			
Digital Media 1	Semester	10,11,12	
Digital Media 2	Sem/Year	10,11,12	Dig. Media 1 and teacher permission
Digital Broadcasting	Year	11,12	Digital Media 1, Teacher permission
Newspaper	Year	10,11,12	
Yearbook	Semester	9,10,11,12	
Photography	Semester	10,11,12	
Intermediate Photography	Semester	10,11,12	Photography
<u>Misc</u>			
ACT Prep Course	Semester	9,10,11,12	
Kitchen Aide	Sem/Year	9,10,11,12	Permission from Foods Service Manager
<u>Music</u>			
Band	Sem/Year	9,10,11,12	Previous instrumental experience preferred
Freshmen Music	Sem/Year	9	
Freshmen Choir	Sem/Year	9	
Percussion Ensemble	Sem/Year	9,10,11,12	
Music History	Sem	9,10,11,12	
Pop Music History	Sem	9,10,11,12	Offered alternating years
Instrumental Music Lessons	Sem	9,10,11,12	No experience necessary, desire to learn new instrument
Beg. Guitar	Sem	9,10,11,12	Guitar
Beg. Piano	Sem	9,10,11,12	
Rock Band	Sem	9,10,11,12	No experience required
Wind Ensemble	Sem	10,11,12	Audition
Orchestra	Year	9,10,11,12	Previous string experience required

Musical Theater	Sem/Year	9,10,11,12	
Production	Sem	9,10,11,12	
Music Theory I, II, III, or IV	Year	10,11,12	
Vocal Music	Sem/Year	10,11,12	Choirs are selected by audition
Small Ensemble	Year	10,11,12	Audition
Online Classes			
CCC, UNL, NCTA, Wayne, Peru	Sem	10,11,12	Registration, cost, placement test with qualifying scores
Physical Education/Health- 1 year required for Class of 2017-2019, 1 sem. PE & 1 sem. Health class of 2020+			
Fitness Education	Sem/Year	9,10,11,12	
Lifetime Sports & Rec	Sem	9,10,11,12	Successful completion one semester of Fitness Education, ST or SP
Health	Semester	9	
Sports Performance	Sem/Year	9,10,11,12	Summer Lifting sessions and teacher permission
Strength Training	Sem/Year	9,10,11,12	Athletic shoes, shorts, t shirt, all, must be school appropriate, lock required
World Languages			
French 1 & 2	Year	9,10,11	
French 3 & 4	Year	10,11,12	French 1 & 2
Spanish 1 & 2	Year	9,10,11	
Spanish 3 & 4	Year	10,11,12	Spanish 1 & 2
Spanish 5 & 6	Year	11,12	Spanish 3 & 4
Spanish 7 & 8	Year	12	Spanish 5 & 6
Senior Options			
Career Exploration	Sem/Year	12	
Central Community College	Sem/Year	12	ACT, required paperwork
Cooperative Education Prog.	Sem/Year	12	Job required before starting program, teacher permission
Teacher Apprentice Program	Sem/Year	12	Student must furnish own transportation

AGRICULTURE

INTRODUCTION TO ENVIRONMENTAL AND AG SCIENCES (Year)

Level: 9, 10

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

AGRI BUSINESS (Year)

Level: 10, 11, 12

This course covers skills necessary for entry into employment or furthering education in an agricultural business. The course includes the study of business planning, creating and analyzing financial information, developing business plans, and using sales and marketing principles. Classroom and laboratory activities are supplemented through supervised agricultural experiences and leadership programs and activities.

ANIMAL SCIENCE (Semester)

Level: 10, 11, 12

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

COMPANION ANIMALS (Semester)

Level: 10, 11, 12

This class focuses on companion animals (dogs, cats, horses, and small animals) and Pre-Veterinary Science. Instruction includes production, care and management of animals including animal health, nutrition, animal reproduction, breed identification, anatomy, disorders and grooming aspects. Students will also use basic veterinary science skills and vocabulary.

PLANT SCIENCE (Semester)

Level: 10, 11, 12

This course examines the scientific concepts related to plant systems. Students will examine plant classification and Identification, anatomy, physiology, and asexual and sexual propagation. Crop and pest identification and machinery. 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 leadership programs and activities. This course introduces business procedures, design principles, and production techniques used in retail and wholesale floral businesses. Classroom and laboratory activities are supplemented through supervised agricultural experiences and leadership programs and activities.

HORTICULTURE (Semester)

Level: 10, 11, 12

This course focuses on the broad field of horticulture, with an emphasis on scientific and technical knowledge for a career in horticulture. Topics in this course include plant growth and development, plant nutrition, media selection, basic plant identification, pest management, chemical disposal, and customer relations. Business procedures, design principles, and production techniques used in retail and wholesale floral businesses. Classroom and laboratory activities are supplemented through supervised agricultural experiences and leadership programs and activities.

VETERINARY SCIENCE (Semester)

Level: 11, 12

Prerequisite: Animal Science AND Companion Animals classes passed with at least a B

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

WILDLIFE MANAGEMENT/NATURAL RESOURCES (Semester)

Level: 10, 11, 12

This course has an emphasis on the conservation of natural resources including outdoor recreation topics and provides students with the opportunity to understand and appreciate the importance of maintaining the land and ecological

systems that enable non-domesticated animals to thrive. Classroom and laboratory activities are supplemented through supervised agricultural experiences and leadership programs and activities.

SUPERVISED AG EXPERIENCE (SAE) (Year)

Level: 12 – This is a course offered by Permission of the Ag Instructor only.

Students will apply class time to developing and updating existing SAE Projects and records, applying for area, state and national FFA awards and scholarships, design, develop and do research on an agricultural related subject. Students will be required to document all progress and activities completed during the semester.

ART

ART I (Semester)

Level: 9, 10, 11, 12

This course is an introduction to the beginning art elements and principles while learning about some of the following topics: drawing techniques, color, design, sculpture, painting, watercolor, and pottery. Students will exhibit artwork at the end of the year.

ART II (Semester)

Level: 9, 10, 11, 12

Prerequisite: Completion of Art I.

This course is a continuation of Art 1. Students will continue to learn about the art elements and principles while continuing to learn new mediums. Students will exhibit artwork at the end of the year.

ART III (Semester or Year)

Level: 10, 11, 12

Prerequisite: Completion of Art II.

This course focuses on developing a higher skill level with the different mediums, while relating the elements and principles to these mediums. Students will exhibit artwork at the end of the year.

ART IV (Semester or Year)

Level: 11, 12

Prerequisite: Completion of Art III.

Within this course, students are given more freedoms as an artist. Students will learn advanced techniques and work on a larger scale. Students will exhibit artwork at the end of the year.

ART V (Semester or Year)

Level: 12

Prerequisite: Completion of Art IV.

This course is an independent course where students are encouraged to experiment with mediums of their own choice in an independent study or to work towards a college portfolio. Students will exhibit artwork at the end of the year.

BUSINESS/CAREER

ACCOUNTING (Year)

Level: 10, 11, 12

This two semester course is designed to give high school students an overview of an online computerized accounting software. This course has critical thinking activities, real world applications, and enhanced technology to help you make informed business decisions. Students will analyze transactions, journalize, post, and complete financial statements. Students will work with service and merchandising businesses, sole proprietorships, partnerships, and corporations.

ADVANCED ACCOUNTING (Year)

Level: 11, 12

Prerequisite: Accounting

This two semester course is designed for high school students to refresh, improve, and broaden knowledge mastered in Accounting. This course will continue the online computerized accounting software and deeper understanding of financial statements. The course includes departmentalized accounting, payroll, adjustments, corporations, management, and analysis

BUSINESS LAW (Semester)

Level: 10, 11, 12

A course designed to present the study of the legal rights and responsibilities necessary to be informed and productive citizens. Key concepts include: contracts and torts, the role of courts, litigation, and constitutional issues including civil and criminal law. A field trip to the courthouse is included.

CAREERS 10 (Semester)

Level: 10 required

Students will explore career and college options while learning about themselves. Students will take personal assessments and learn what the assessments mean in relation to future career opportunities, explore various career clusters, research different types of colleges, and complete a job unit—filling out a job application, creating a resume and a separate page with references, writing a cover letter, participating in mock interviews, and writing a thank you letter. In addition, college visits and guest speakers are part of the class.

CAREER ESSENTIALS (Semester, 2-Period Block)

Level: 11 or 12 (1st Semester age 16 by August 25)

Students will alternate time in the classroom with on-site work-based job shadowing experiences. Students will demonstrate progress/proficiency of the Nebraska Career Readiness Skills, which are an expectation in today's workforce. They will apply the career and college planning process using the Nebraska Career Education Model and resources extending upon what they learned in the sophomore Careers class. Students will have the opportunity to observe and gain valuable real-life experiences at numerous local businesses. A coordinator will help students schedule and will supervise job shadowing experiences with Northwest High School's Business Partners. Must furnish own transportation.

INTERNSHIP (Semester)

Level: 12

Prerequisite: Career Essentials or administrative/teacher approval

An internship is a personalized "extension" of what a student has learned. The student is placed at a workplace for a defined period of time to participate in and observe work firsthand within a given industry. The internship is personalized to a student's individual objectives and defined between the business/employer and the school. A coordinator will help students schedule and will supervise the internship experience with Northwest High School's Business Partners. Must furnish own transportation.

INFORMATION TECHNOLOGY APPLICATIONS I (Semester)

Level: 9, 10, 11, 12

Students will get hands-on experience with the latest technology to gain a competitive edge in today's job market or the next step in their academics. As a result, students will demonstrate skills required to earn their Microsoft Office Specialist (MOS) Certification in Word, Excel, and/or PowerPoint. Students will become familiar with and learn the features of Google Docs, Sheets, Slides, and other Google Apps and Extensions. Internet Safety, Digital Citizenship and basic Computer Science concepts will be covered throughout the course. In order to take Information Technology Applications II, this course is required.

INFORMATION TECHNOLOGY APPLICATIONS II (Semester)

Level: 10, 11, 12

Prerequisite: Info Tech I

In this course, students will develop advanced skills in word processing, spreadsheet, presentation, desktop publishing, and integrated applications while using various platforms. Database applications will be covered. Students will demonstrate skills required to earn their Microsoft Office Specialist (MOS) Certification in Word, Excel, PowerPoint, and/or Access. The majority of the course will be hands-on learning, practical in nature. Internet Safety and Digital Citizenship will be followed throughout the course.

INTRODUCTION TO BUSINESS, MARKETING AND MANAGEMENT (Semester)

Level: 9, 10

This course is designed to inform students about today's business world. This course is an overview of the Business, Marketing, and Management Career Field. Units of study include economic systems, forms of business ownership, the management functions of operating a business, the marketing mix, business math, career opportunities in business, and more.

MARKETING

Level: 10, 11, 12

Students will explore the basic functions of marketing; pricing, promotion, product planning, and place/distribution; the marketing mix. The curriculum provides the foundation skills and knowledge in economics, communications skills/interpersonal skills, professional career development, business management, and entrepreneurship. Students will create various marketing projects to demonstrate understanding of curriculum.

ENTREPRENEURSHIP

Level: 10, 11, 12

Entrepreneurship is a course designed for students who have a career interest designed for entrepreneurship. Emphasis is placed on the evaluation of the business skills and commitment necessary to successfully operate a venture and review the challenges and rewards of running your own business. The role of entrepreneurship in the United States economy will be explored. Students will have the opportunity to work with and interview entrepreneurs from the community. Instructional strategies may include the development of a business plan, operation of school-based business, or actual creation of the student run business.

SPORTS & ENTERTAINMENT MARKETING (Year)

Level: 11, 12

Prerequisite: Marketing

Students will develop skills in the areas of event management, sponsoring, ticket marketing, branding, roles of public relations, and career opportunities as they relate to the sports and entertainment industry. Sports and Entertainment Marketing is a specialized course to develop marketing knowledge and skills related to the growing sports and entertainment industry. Students will also work with coaches of school sports programs to help run social media pages and are required to work the school store.

PERSONAL FINANCE (Semester)

Level: 10 required

The goal of personal finance is to help students become financially responsible, conscientious members of society. This course develops student understanding and skills in consumer rights and responsibilities, money management; banking, savings, use of credit, investments, insurance, and international trade. EverFi Computer Modules are used throughout the semester.

REALITY 101 (Semester)

Level: 12

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, effective communication, leadership, personal finance, consumer skills, and personal wellness.

DRAMA

DRAMA 1 (Semester)

Level: 9, 10

This course is designed for beginning actors. It includes the introductory areas of acting, basic character development, and stage terminology. Students may participate in a performance of a play.

ONE-ACT PLAY PRODUCTION (Semester)

Level: 9,10,11,12

The primary focus of this class is to prepare for the competitive One-Act play during the fall semester. During class, students will be involved in the creation of set/props for the One-Act, planning through blocking of the show, working on memorizing lines, learning the different types of stages, safety procedures on stage, and directing their own scenes. Since this class is directly tied with the NSAA activity of Play Production, participants will be required to travel to competitions in November and early December and be available for practices scheduled in advance at the discretion of the directors.

ENGINEERING / COMPUTER SCIENCE

INTRODUCTION TO ENGINEERING DESIGN (Semester)

Level: 9, 10, 11, 12

This course gives students the opportunity to develop skills and an understanding of engineering. Students will learn about various elements of engineering design and how engineering requires systematic thinking. Topics will include safety, tools, math and science concepts, and engineering principles and processes.

****COMPUTER SCIENCE & TECHNOLOGY ACT- NEW STATE REQUIREMENT-** Starting with the class of 2027, all students in the state of Nebraska are required to take a computer science course. Students should complete this requirement during their 9th or 10th grade year. Students can select from one of the three classes below based on their interest level.

FOUNDATIONS OF COMPUTING (Semester)

Level: 9,10

This class serves as a starting point for computer science. Students will explore the impact of computing on society. Beyond learning the fundamentals of programming, students will build computational-thinking skills by applying computer science to collaboration tools, modeling and simulation, and data analysis.

INFORMATION TECHNOLOGY APPLICATIONS (Semester)

Students will learn how to format various documents on the computer using Microsoft Office, including Word, Excel, PowerPoint and Publisher software. Students will become familiar with and learn features of Google Docs, Sheets, Slides, and other Google Apps and Extensions. Several photo editing software platforms will be introduced also. Internet Safety and Digital Citizenship will be covered throughout the course. In order to take Information Technology Applications II, this course is required.

COMPUTER SCIENCE PRINCIPLES (Year)

Level: 9,10,11,12

Computer Science Principles (CSP) is an entry level course for high school students interested in the field of computer science. Throughout the class, students learn the fundamentals of coding, data processing, data

security, and task automation, while learning to contribute to an inclusive, safe, and ethical computing culture. The course promotes computational thinking and coding fundamentals and introduces computational tools that foster creativity. Computer Science Principles also aims to build students' awareness of the tremendous demand for computer scientists and those who have computational thinking skills. By the end of the course, students will be able to:

- Write code using the Blockly and JavaScript programming language.
- Have confidence in sitting for the AP exam and submitting a performance task.
- Understand and communicate how computing innovations of today impact our lives.

COMPUTER SCIENCE APPLICATIONS (Year)

Level: 10, 11, 12

Prerequisite: Computer Science Principles

Students cultivate their understanding of coding through analyzing, writing, and testing code as they explore concepts like modularity, variables, and control structures. Computer Science A is designed with alignment to the College Board Computer Science A framework. Fundamental topics in this course include the design of solutions to problems, the use of data structures to organize large sets of data, the development and implementation of algorithms to process data and discover new information, the analysis of potential solutions, and the ethical and social implications of computing systems. The course emphasizes object-oriented programming and design using the Java programming language. AP Computer Science A is an introductory college-level computer science course. By the end of the course, students will be able to:

- Understand and communicate how to develop a program.
- Write code using the Java programming language.
- Have confidence in sitting for the AP Computer Science A exam.

***GAME DESIGN I and II (Semester)**

Level: 10, 11, 12

Game Design in Unity teaches the fundamentals of designing a game using the most widely accessed and preferred editing engine in the world. The intent of this course is to prepare high school students with the industry related skills needed for the workplace and higher learning environments. By the end of this course, they will understand the design planning process, be knowledgeable of industry related careers, and be able to navigate the Unity environment in order to create 3D games. Semester 1 will focus on basics of the software, including the industry, game design, and legal considerations. If time, students will also work on projects within the VR realm of game design. Semester 2 will see the students focusing on the details within game design as well as working on their own design project. This will include story-boarding, prototyping, and beta testing. The main coding language for this class will be C#

CYBERSECURITY (Semester)

Level: 11, 12

This course is designed to lay a foundation for students in the basics of Cyber Security and understanding the threats posed in today's technologically advanced world. These include risk assessment, cryptography, and use of cybersecurity tools. Using online curriculum, students will learn to recognize threats and terminology related to cyber-attacks and study real world examples to discuss preventative measures. Students will learn how to use the Linux operating system and the commands associated with its use. Hands-on labs using the US Cyber Range will also be used to show students what complex security programming looks like as well as simulating hacking events in a safe and secure virtual machine.

By the end of the course, students will be able to:

- Understand the concepts behind Cybersecurity
- Practice a variety of Cybersecurity Skills
- Be able to sit for the COMP TIA Security+ Exam

ROBOTICS (Year)

Level: 10, 11, 12

Students in this course will focus on the design, engineering, construction, and programming of VEX robots within the scope of the yearly competitive game. Students will design a robot based on parameters of a task to be completed and use that robot to compete against other schools in challenges based on skills. Students will also need to code their robot to be both autonomous and human controlled. Students will have the option to learn the C++ coding language with their robot programming and use it in the field of play. Focus on the engineering process including the design and physics calculations will be an important focus of the daily activity.

ENGLISH

ENGLISH 9 (Year)

Level: 9 required

Students will read and differentiate among the various genres of literature. Language study will include, but is not limited to, understanding sentence structure and parts of the sentence, along with recognizing and correcting errors in usage, capitalization, and punctuation. Students will compose various written works utilizing the Six Traits of Writing. A demonstration speech will be given. Novels to be read include: *To Kill a Mockingbird* and *Of Mice and Men*.

ENGLISH 10 (Year)

Level: 10 required

Prerequisite: English 9

This course will be divided into two main areas of study - literature and composition. Students will be reading a Shakespeare play, a variety of short stories and three books chosen by the instructor. While there will be several writing assignments throughout the year, a 3-5 page informative research paper will be required for first semester. As students begin to prepare for life outside of high school, English usage and conventions will be reviewed over the year.

ADVANCED ENGLISH 10 (Year)

Level: 10

Prerequisite: MAP test scores in Reading at the 88th percentile or teacher approval.

This course will develop advanced language, literature, and analysis skills. Students will study all aspects of literature including Shakespeare, poetry, non-fiction, short stories and drama. Literary analysis, expressive writing, persuasive techniques, and a research paper are required. Evidence of higher-level thinking and independent work is expected and required.

COMMUNICATION (Semester)

Level: 10 (9th possible) (Required)

Students will learn the basics of Speech Communication. They will learn basic communication skills (voice, posture, confidence, etc.). They will present different types of speeches ranging in length. In doing so, students will also research, write and arrange their work for presentation. Students will cover extemporaneous and impromptu speaking to learn the skill of thinking on their feet as well as keeping calm and organized under high-pressure situations. Students will also learn basic business conversation and email communication skills.

ADVANCED AMERICAN LITERATURE (Year)

Level: 11

Prerequisite: MAP test scores in Reading at the 88th percentile or teacher approval.

This is an advanced study of American Literature with an emphasis on persuasive and argumentative writing. The class offers a survey of American writers from the seventeenth through the twenty-first century with an in-depth study of specific authors and works (poems, short stories, and novels) from each period. The focus is on analysis of various genres of literature as well as the development of analytical writing techniques. The class includes a review of grammar usage and mechanics. Students will present two oral reports/speeches, complete at least two written literary analysis, write a researched persuasive essay, and several other persuasive essays.

AMERICAN LITERATURE (Year)

Level: 11

Prerequisite: English 10

First semester is a study of expository composition and language with an emphasis on the argumentative research paper. Second semester is an historical survey and interpretation of various genres of American Literature focusing on the thematic, artistic, and philosophical development of American writers.

LITERATURE 11A (Year)

Level: 11

Prerequisite: Instructor recommendations. This class is NOT accepted by the Nebraska University system or by the NCAA Clearinghouse as an approved English course.

The course will be divided into three (3) main areas of study – Survey of American Literature, Composition, and the process of writing a Research Paper.

MYTHOLOGY & CONTEMPORARY LITERATURE (Semester) (elective)

Level: 11,12

In this semester-long elective course, students will be introduced to mythological literature (Greek, Norse, etc.) and its connection to contemporary literature (Harry Potter, Percy Jackson, etc.). Students will read and analyze myths and modern texts to find the influences. Students will also be responsible for reading a novel of their choice and discovering if there are connections to mythology.

COLLEGE PREPARATORY ENGLISH (Year)

Level: 12

Prerequisite: Junior English teacher recommendation or instructor permission. Must have 80% or above average in American Literature

As the title suggests, this course is an intensive reading and writing that is designed for students who need to prepare for college. Students will analyze and study works from the literary masters of the world from a variety of genres. The class will focus on the historical and social elements, themes, philosophies and genres of the works studied. Additionally, the writing will include various forms of college writing such as personal writing, creative writing, report writing, analytical writing and persuasive writing. Students will study structure, style and research techniques.

CCC English Composition (ENGL 1010) (Semester)

Level:12

Prerequisite: Reading and English ACT score 18+, minimum grade, registration and payment through CCC

This class offers instructional practice in the techniques of effective writing. The process of planning, writing, revising, and editing essays for particular audiences and purposes and research-related skills are also emphasized.

CCC English Composition II (ENGL 1020) (Semester)

Level:12

Prerequisite: CCC English Composition (ENG 1010), registration and payment through CCC

Students will read and analyze various texts and respond with research-based argumentative essays that demonstrate information literacy, critical-reading, and source integration. A significant research project is required.

COMMUNICATION ARTS 12 (Year)

Level: 12

Prerequisite: Recommendation by teacher/counselor using previous performance and scores. This class is NOT accepted by the University system or by the NCAA Clearinghouse as an approved English course.

Communication Arts 12 is for those seniors who need further instruction in basic communication skills. Focus of instruction is on reading, writing, and speaking skills that will help the student make a transition to technical school and work.

SENIOR ENGLISH (Year)

Level: 12

Prerequisite: Successful completion of American Literature or Literature. This class is NOT accepted by the University system or by the NCAA Clearinghouse as an approved English course.

This course is designed for the non-college bound student. This course concentrates on basic reading, writing, and grammar skills. The reading assignments include high-interest novels, newspapers, plays, poems, and short-stories. The writing includes personal writing, poetry, reports, expository compositions, the research paper, and a short story. The grammar unit is a study of basic usage.

FAMILY & CONSUMER SCIENCE

FUNDAMENTALS OF NUTRITION & CULINARY ESSENTIALS (Semester)

Level 9, 10, 11,12

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

BAKING & PASTRY ARTS (Semester)

Level: 10, 11, 12

This course focuses on developing the skills used to plan, prepare, and market pastries and baked goods building on concepts from the introductory and intermediate courses. Topics include understanding the function of ingredients, scaling recipes, measurement systems, and baking and pastry management principles.

CULINARY ARTS & MANAGEMENT 1 (Semester)

Level: 10, 11, 12

This intermediate course focuses on culinary skills development building on concepts from the introductory course. Culinary exploration in salads/dressings, sandwiches/pizza, soups/sauces, baking, menu planning, and culinary techniques and tools provides a foundation for success. Focuses on career opportunities for chefs and restaurant managers. Classroom, laboratory, and educational leadership activities combine culinary arts and management principles including an introduction to restaurant operations. ServSafe Food Handler certification is included through the National Restaurant Educational Foundation ProStart Program.

CULINARY ARTS & MANAGEMENT 2 (Semester)

Level: 10, 11, 12

Prerequisite: Students will have passed Culinary Arts & Management 1.

This capstone course focuses on the application of culinary skills building on concepts from the introductory and intermediate courses. Topics covered include the culinary exploration of eggs/dairy products, breakfast cookery, fruits/vegetables, potatoes/grains/pasta, meat/poultry/seafood, and baking/desserts. Classroom, laboratory, and educational leadership activities combine marketing, costing, and problem-solving concepts to ensure business success. ServSafe Manager certification is offered by the National Restaurant Educational Foundation ProStart Program. Successful completion of Culinary Arts & Management 1 and 2 national exams and a 400-hour internship results in a National Restaurant Educational Foundation Certificate of Achievement.

HUMAN GROWTH AND DEVELOPMENT (Semester)

Level: 9, 10, 11, 12

This course provides students with an understanding of human development in the areas of physical, social, emotional and intellectual development from infancy through the entire lifespan. Students will learn how to develop positive interactions with others and how development can be guided at each age.

PERFORMANCE NUTRITION (Semester)

Level: 11,12

This course is designed to give students an introduction to professional or support careers in the field of Performance and Sport Nutrition. This course includes instruction on the principles and science of basic nutrition; its relationship to individual health throughout the entire life cycle; how nutrients have an effect on personal health; how nutrients can both positively and negatively impact the human body before, during and after performance.

INTRODUCTION TO EDUCATION & TRAINING (Semester)

Level: 11,12

This course is designed to introduce students to career opportunities and related skills in the Education and Training career field, including teaching and professional educational training. Students will explore topics related to the foundation and history of education, the philosophy of education, roles of educators, instructional and assessment methods, diversity of cultures and communities related to educational settings, learner development, and professional development. Classroom, laboratory, and educational leadership activities are supplemented through Nebraska Educators Rising, a career and technical student organization. **Dual credit through Wayne State available EDU150**

HUMAN DEVELOPMENT & COGNITION (Semester)

Level: 11,12

Prerequisite: Intro to Education & Training

Students gain an understanding of the growth and development of learners. Physical, cognitive, and socio-emotional development are explored in order to better understand the importance of the nurturing role of the teacher in human development and learning. Students begin to understand the human learning process and individual differences in how learners think and behave based on their unique characteristics. This course will include field experience. **Dual credit through Wayne State available EDU250**

BEST PRACTICES IN EDUCATION & TRAINING (Semester)

Level: 11,12

Prerequisite: Intro to Education & Training, Human Development & Cognition (before or concurrent with)

This course is a continuation of the Introduction to Education and Training course and is the second course in a three-course sequence. Students will further engage in topics related to instructional and assessment methods, including differentiation of instruction. Students will also develop active listening skills necessary for educators, and demonstrate positive feedback techniques. Students will gain skills related to planning for instruction, which will be utilized in the field experience (the third course in this sequence). **Dual credit through Wayne State available EDU275**

INTRODUCTION TO DESIGN PRINCIPLES (Semester)

Level: 10,11,12

Students explore the definition and application of elements and principles of design in both living spaces and clothing and textiles. In this course, students will also evaluate the use of elements and principles and suggest improvements. Students are also exposed to career opportunities and the skills necessary for these career fields. Classroom, laboratory, and educational leadership activities are supplemented through the Nebraska FCCLA career student organization (ex. Fashion Design and/or Interior Design).

HOME DESIGN & INTERIORS (Semester)

Level: 10,11,12

Prerequisite: Students will have passed Introduction to Design Principles.

This course provides instruction in the physical, physiological and social influences of housing styles and options; exterior and interior design; selection, use, and care of home furnishings and equipment; use of available resources for achieving improved living space to meet individual and family needs; and exposure to careers related to housing and interior design. Classroom, laboratory, and educational leadership activities are supplemented through the Nebraska FCCLA career student organization (ex. Interior Design)

FASHION DESIGN (Semester)

Level: 10,11,12

Prerequisite: Students will have passed Introduction to Design Principles.

Fashion Design explores the evolving field of the clothing we wear and why we wear it. Students will examine fashion design through historical and current frameworks, consider the process of a design from concept to consumer purchase, and identify key components of fashion pieces that distinguish it from others. Classroom, laboratory, and educational leadership activities are supplemented through the Nebraska FCCLA career student organization (ex. Fashion Design and Fashion Construction).

HEALTH SCIENCE

INTRODUCTION TO HEALTH SCIENCE (Semester)

Level: 9, 10, 11

Are you interested in a career in Health Science? This class will introduce students to the vast array of careers within the Health Science Field. Students will be introduced to medical terminology and math skills used in the Health Science Field. Possible field trips and guest speakers may be incorporated into the class. Students will be introduced to the Project Lead the Way Curriculum – Biomedical Sciences.

Project Lead the Way (PLTW) Biomedical Sciences Program prepares students to take advantage of the tremendous career opportunities available in health science. The hands-on, project-based curriculum engages students and allows them to explore the wide variety of healthcare and science career options. These courses will equip students with the knowledge and skills necessary to succeed in any postsecondary biomedical sciences program. The PLTW Biomedical Sciences Program is offered in a three-course sequence, each year building on the previous year. Each class uses technology equipment and involves individual and project work to learn the material.

Principles of Biomedical Science (PBS)

Level: 10,11,12

Prerequisites: Overall GPA of a "C" or better. Successful completion of the previous semester will determine advancement to the next class.

In this course, students explore concepts of biology and medicine as they take on roles of different medical professionals to solve real-world problems. Over the course of the year, students are challenged in various scenarios including investigating a crime scene to solve a mystery, diagnosing and proposing treatment to patients in a family medical practice, to tracking down and containing a medical outbreak at a local hospital, stabilizing a patient during an emergency, and collaborating with others to design solutions to local and global medical problems.

Human Body Systems (HBS) - Anatomy & Physiology is the replacement course for this class.

Level: 11,12

Prerequisite: Principles of Biomedical Science- C or higher

Students will engage in the study of the processes, structures, and interactions of the human body systems. Students will design experiments, investigate the structures and functions of body systems. Students will work through real world cases and often play the role of biomedical professionals to solve medical mysteries.

Medical Interventions (MI)

Level: 11,12

Prerequisite: Principles of Biomedical Science and either Human Body Systems or Anatomy & Physiology- C or higher. Student can take Anatomy & Physiology at the same time as Medical Interventions. Teacher permission required.

Students follow the life of a fictitious family as they investigate how to prevent, diagnose, and treat disease. Students explore how to detect and fight infection; screen and evaluate the code in human DNA; evaluate cancer treatment options; and prevail when the organs of the body begin to fail. Through real-world cases, students are exposed to a range of interventions related to immunology, surgery, genetics, pharmacology, medical devices, and diagnostics.

INTRODUCTION TO SPORTS MEDICINE (Year)

Level: 10, 11, 12

This course will provide students a basic background of Sports Medicine and Athletic Training. Topics which may be covered include Roles & Responsibilities in Athletic Training, Injury Assessment and Management, Anatomy and Physiology in respect to preparing students to work with athletes and athletic needs relating to training, injury protection and injury rehabilitation, and CPR/First Aid.

INTRODUCTION TO MEDICAL TERMINOLOGY (Semester)

Level: 11, 12

This course introduces the vocabulary, abbreviations, and symbols used in the language of medicine. Emphasis is placed on building medical terms using prefixes, suffixes, and word roots. Upon completion, students should be able to pronounce, spell, and define accepted medical terms. This class is recommended for students going into any area of medicine.

CERTIFIED NURSING ASSISTANT (Semester)

Level: 11, 12

Prerequisite: Students must be 16 years or older. 90% cumulative GPA or counselor recommendation. Cost is \$425, which includes workbooks and certification test.

This is a basic nursing knowledge and skills course for nursing assistants in health care settings. Classes meet federal and state requirements and are taught by qualified, approved instructors using the HCA curriculum accepted by the Nebraska Department of Health. Upon completion of the 76 hours, Central Community College will administer the required written and skills tests. Students must be 16 years or older to participate in class. They should contact local facilities to verify their hiring age requirements. This is a college credit only class, it is not for high school credit.

INDUSTRIAL TECHNOLOGY

CONSTRUCTION SYSTEMS (Semester)

Level: 10, 11, 12

Prerequisite: Students must purchase Z87 approved clear safety glasses

In this course, students will review measuring, safety, tool applications, careers, building material identification, framing methods, roofing, concrete and specialized tools, steel studs and alternate methods. Typically students will build a garden shed. Participation grades are based on safety, attendance, attitude, willingness to try new things, and sometimes a timesheet. Students in this course will work towards receiving and OSHA 10-hour Safety Certification. The \$25 fee for the certification will be covered by the school. If the student must retake the certification course, the expense will become the responsibility of the student.

CARPENTRY (3 Class Periods per day, Year)

Level: 11, 12

Prerequisite: Completion of Construction Systems AND permission of the teacher ONLY. Students will also become a member of the SkillsUSA Program \$25. You will be expected to provide a clean driving record, driver's license with parental written permission to drive or ride to off campus work areas. Students must be able to work in a team environment and wear proper attire for the elements. Students must provide personal basic hand tools: Safety glasses tape measure, hammer, tool belt, etc.

This course is designed to help students experience and develop skills in the many different areas common to the construction trades. Residential construction skills will be learned in a hands-on setting as the class builds a home from the ground up. The class members will work on a Year home building project. Typical work will include rough framing, roofing, installing doors and windows, and exterior and interior finishing methods. Student will also work towards getting a 10hr OSHA card

Curriculum will come from SkillsUSA which has been created with cooperation from industry. This will also prepare the students for the SkillsUSA State Competition.

AG MECHANICS (Semester)- formerly Consumer Auto

Level: 10, 11, 12

This course is designed to provide students with introductory-level experiences in selected major areas of agricultural mechanics technology which may include small engines, agricultural structures, hydraulics, and power equipment operation and maintenance. Learning activities include information, skill development, and problem-solving. Students will build a basis of knowledge of technology utilized in the various components of crop and livestock production.

DRAFTING AND DESIGN (Semester)

Level: 10, 11, 12

This class focuses on using design software to create graphical models of structures and components. Students will learn to use AutoDesk and AutoDesk Revit to sketch drawings that show the detail necessary to be used as building and manufacturing plans.

EXPLORING INDUSTRIAL TECH (Year- 4 quarter long classes)(Construction, Welding, Comp. Drafting, Comp. Coding)

Level: 9, 10

Prerequisite: Students must purchase Z87 approved clear safety glasses

This year-long class focuses on four major areas of technology, construction, manufacturing, design, and engineering. Students will learn how to safely work and operate tools in various technology labs, as well as effectively communicate project specifications and design principles.

HOME MAINTENANCE (Semester)

Level: 10, 11, 12

Prerequisite: Students must purchase Z87 approved clear safety glasses

Students will learn about basic residential electricity, drywall techniques, and plumbing. Students will complete a sample electric wall including a switched receptacle, a light fixture switched by multiple switches and follow code while doing so. Students will complete a sample plumbing scenario. Students will learn how to cut, fasten and apply drywall compound to the wall. Students will use PVC, copper, black pipe, and pex to demonstrate plumbing joints. Students will also demonstrate measuring, practice safety, tool use applications, and explore careers. Students will be graded on participation, cooperation, safety, a clean environment, and quizzes and tests over class material.

WELDING 1 (Semester)

Level: 10, 11, 12

Prerequisite: Students must purchase Z87 approved clear safety glasses

Students will learn the basics of stick arc welding, mig welding and oxyacetylene welding. Students will complete the basic types of welds, straight bead, butt, t and lap welds. Students will also learn to use the OA torching systems as well as the plasma arc cutting systems. Students will also complete a small class-welding project. Throughout the class, students will review measuring, safety, tool applications, and explore relevant careers. Students will be graded on participation, cooperation, a clean environment, and quizzes and tests over class material. Students in this course will work towards receiving and OSHA 10-hour Safety Certification. The \$25 fee for the certification will be covered by the school. If the student must retake the certification course, the expense will become the responsibility of the student.

WELDING 2 (Semester or Year)

Level: 10, 11, 12

Prerequisite: Welding 1. Students will also need their OSHA card completed and Z87 approved clear safety glasses

Students will work to review the basic welds, study project design and then complete their own project. Throughout the class, students will review measuring, safety, tool applications, and explore relevant careers. Students will

be graded on participation, cooperation, a clean environment, the student's finished project and quizzes and tests over class material.

WOODS 1 (Semester)

Level: 10, 11, 12

Prerequisite: Z87 approved clear safety glasses and a quality tape measure are required. Lab Fee \$30

In this class, students will review measuring, safety, tool applications, and careers. Students will study wood species identification, wood characteristics, wood joining techniques and types and applications. Wood staining, finishing, and preservation will be studied. Introduction to European and traditional hardware and applications along with synthetic materials will be studied. Students will build a small cabinet with a door and drawer.

WOODS 2 (Semester)

Level: 11 or 12

Prerequisite: Woods 1, Z87 approved clear safety glasses and a quality tape measure are required. Students will need to purchase any materials for personal projects.

In this class, students will review safety, concentrate on planning, estimating, and organization. Students will build "Cabinetry" projects for the school, themselves, or sponsors. Students will work independently and/or in groups. Students will be challenged to raise their level of detail. Participation grades are based on a timesheet that each student is required to keep track of and be peer checked.

CCC CONCEPTS OF ELECTRONICS I (Semester)

Level: 11 or 12

This concept of electronics course is a combination of Lecture and Hands on learning using custom built trainers. During this course you will learn Electrical Principles such as OHM's Law, DC circuits, and measuring electricity, as well as how to use a Multimeter while building and testing DC electrical circuits found in industry. Students will learn to build, measure, and troubleshoot electrical circuits in a similar environment to industry. **Dual credit available through CCC Columbus \$15/credit hour. 3 credit class=\$45. INDT1100**

CCC INTRODUCTION TO INSTRUMENTATION (Semester)

Level: 11 or 12

This is a hands-on course where you will learn terminology, and basic principles of instrumentation. Included are job descriptions, working conditions, and safety considerations for those employed in the field of industrial instrumentation. Students will build an instrumentation trainer and then wire it so they can control temperature and flow of the water. **Dual credit available through CCC Columbus \$15/credit hour. 3 credit class=\$45. INDT1800**

CCC INTRO TO PROGRAMMABLE LOGIC CONTROLLERS (Semester)

Level: 12

Prerequisite: CCC Intro to Instrumentation

A hands-on course designed to inform students of the theory and applications of Programmable Logic Controllers (PLC's) commonly used in industrial automated or instrumentation environments. The student will learn entry level programming and how to turn various components on and off with the state of the art plc trainer. Students will learn the Ladder coding language to manage physical elements on the trainer. **Dual credit available through CCC Columbus \$15/credit hour. 3 credit class=\$45**

CCC SENSORS (Semester)

Level: 12

Prerequisite: CCC Intro to Programmable Logic Controllers

A hands-on course designed to inform students of the theory and applications of many sensing devices commonly used in industrial automated or instrumentation environments. Students will learn the function of all the application of common types of discrete operating proximity sensors including optical, inductive, capacitive

and ultrasonic sensing devices. These will simulate an actual production environment found in industry. **Dual credit available through CCC Columbus \$15/credit hour. 3 credit class=\$45**

CCC WELDING (Year- 3-4 periods)

Level: 11 or 12

This program is for students who want to start working toward a Welding Degree or Certificate. The class meets every day for 2 hours 45 minutes at Central Community College in Grand Island. Students are required to buy their own tools and pay for credits. It is a dual credit program.

WELDING APPRENTICE PROGRAM (Year)

Level: 11 or 12

Prerequisite: Enrolled with CCC Welding

Registered Apprenticeship is an industry-driven, high quality career pathway where employers can develop and prepare their future workforce, and individuals can obtain paid work experience, receive progressive wage increases, classroom instruction, and a portable, nationally-recognized credential. Registered Apprenticeships are industry-vetted and approved and validated by the U.S. Department of Labor. Northwest works with local industry to facilitate this program.

CAREER PATHWAYS INSTITUTE (Year)

Level: 11,12

Prerequisite: Students must complete an application through the Grand Island Public School system and be accepted into the program. Students must provide their own transportation and tuition, fees, and books through CCC if applicable.

This program allows a NW student to take classes in Automotive, Manufacturing, Carpentry, Engineering, Welding or Information Technology through this cooperative program with GISH. It is possible for the student to earn college credit through Central Community College. Once the applicant is accepted into the program, a schedule will be established. Students will spend 4 periods per day at CPI and 4 periods at Northwest High School.

JOURNALISM

DIGITAL BROADCAST JOURNALISM (Year, but can be taken as a semester course [not preferable])

Level: 11, 12

Prerequisite: Dig. Media 1, Teacher permission

This is a news production class in which Viking Media staffers will record and edit video to report school news and events in a bi-monthly format. Students will learn interviewing skills, video and audio recording skills, video and audio editing skills, public speaking skills, and journalistic storytelling skills. Students will create video news “packages” to cover school events and subjects of interest to their peers. Prospective staffers should be self-motivated, self-driven, and well-organized. Course may be repeated.

DIGITAL MEDIA 1 (Semester)

Level: 10, 11, 12

Students will learn introductory skills using industry standard software (Adobe Photoshop, Premiere Pro, and Animate) to develop media for entertainment and/or educational use. Students will create, edit digital photos, shoot, edit and create videos, create animations, and work with sound. Basic rules of composition in photography are also covered. Hands on use of cameras, microphones, lighting and green screen. Students will practice the production process from live shoot to final edit.

DIGITAL MEDIA 2 (Semester or Year)

Level: 11, 12

Prerequisite: Digital Media 1 and Teacher Approval

Students will independently learn programs of the Adobe Creative Cloud Suite. Programs include Photoshop, Premiere Pro, Illustrator, Animate, Dreamweaver, etc. Students will focus on a program that interests them and find projects to work on to master skills in that program. Over the semester, students may be asked to help with other projects for teachers or the school.

NEWSPAPER PRODUCTION (Semester or Year)

Level: 9, 10, 11, 12

Students will learn the basics of interviewing, news writing, design, photography, copy editing, and ad sales through monthly production of the official student newspaper, the Viking Saga. Students must be willing to put in occasional time outside of class to conduct interviews, write, and edit their assignments in order to meet deadlines. They are also expected to assist in distributing the publication four times a semester during advisement. Course may be repeated.

PHOTOGRAPHY (Semester)

Level: 10, 11, 12

Students will learn the basics of photography, starting with the history of photography and studying many of the masters of photography. Students will learn basic photography composition: what makes a “good” photo. Students will also learn the basics of photo editing; how to edit and manipulate photos, along with the ethical considerations that come with digital photography. Students will learn how to take effective portrait photography. Students will learn how to utilize the basic settings of a Digital SLR (Single-Lens Reflex) camera, what the Exposure Triangle is, and how the different settings on the camera can affect how a photo looks.

INTERMEDIATE PHOTOGRAPHY (Semester)

Level: 10, 11, 12

Prerequisite: Photography, teacher permission

In this course, students will expand their knowledge of photography by learning how to properly light subjects; shoot in a variety of styles, including product, portrait, sports, architectural, and wildlife photography; and present photos they’ve put together in a portfolio and matted.

YEARBOOK PRODUCTION (Semester or Year)

Level: 9, 10, 11, 12

Students will work as a team to create a historical record of the current year at GINW. Primarily, students will learn the basics of interviewing, news/feature writing, design, photography, and copy editing. Students must be willing to put in occasional time outside of class to conduct interviews, write, and edit their assignments in order to meet deadlines. Course may be repeated.

MATH

Based on how the student did in their 8th grade math class along with the teacher’s recommendation, students will be placed in the appropriate math classes. A math test may also be given.

If you are interested in attending one of the state’s universities, students and parents need to be aware of the math requirements. UNL requires students to take Algebra I (or B), Geometry, Algebra II, and Trigonometry/Pre-Calculus or another college class accepted by the University. UNO and UNK both require Algebra I (or B), Geometry, and Algebra II plus other required standards. The math teachers will be making recommendations for the appropriate math class for your son/daughter. Parents are encouraged to contact one of the math instructors for more specific information about the math program.

Mathematics Pathway

Freshman	Sophomore	Junior	Senior
Algebra 1A	Algebra 1B	Geometry	NE Math Readiness Algebra 2
Algebra 1	Geometry	Algebra 2	Trig/Pre-Calc Discrete Math NE Math Readiness (2yr college)
Geometry (Has taken Algebra 1)	Algebra 2	Trig/Pre-Calc	Calculus (Math ACT 25) CCC College Algebra (Math ACT 22) CCC Stats (Math ACT 22) Discrete Math NE Math Readiness (2yr college)
Algebra 2 (Has taken Geometry)	Trig/Pre-Calc	Calculus (Math ACT 25)	CCC College Algebra (Math ACT 22) CCC Stats (Math ACT 22) Calc 2 at CCC

EXTENDED ALGEBRA (2 years)

Level: 9 and 10

ALGEBRA 1A (year 1 - freshmen)

This course is designed for the students that are not quite ready for the regular pace and rigor of an Algebra I course at the freshman level. These students will learn the same material from the Algebra I book just at a more appropriate pace and level. They will cover solving equations/inequalities, graphing, formulas and functions, exponents and polynomial simplification. Students who pass this course are expected to transition into Algebra B the following year..

ALGEBRA 1B (year 2 - sophomore)

This course is an extension of Algebra A. Students will continue to develop material in the Algebra 1 book such as solving quadratics, linear systems and radicals. Students will also be introduced to Geometry. The incorporation of geometry terms, theorems, properties of triangles, and transformations. After these two years students will be prepared for Geometry.

ALGEBRA I (Year)

This class will consist of arithmetic operations extended to using variables, sets, and real numbers. It will also cover polynomial simplification, solving equations and inequalities, graphs, quadratic equations, formulas and functions, exponents, linear systems, and number theory. The student will use problem solving strategies.

GEOMETRY (Year)

Prerequisite: Algebra I with a grade of 78% or permission from the Algebra I teacher

This class is a study of plane geometric figures such as triangles, circles, special polygons, parallel lines and properties of such figures. Study will include proofs (logical deductive reasoning). Students will also learn topics in solid, coordinate, and transformational geometry.

ALGEBRA II (Year)

Prerequisite: Algebra I and Geometry

This course is designed to build on algebraic and geometric concepts. It develops advanced algebra skills such as systems of equations, advanced polynomials, imaginary and complex numbers and quadratics.

NE MATH READINESS (Year)

Prerequisite: SENIOR Going to Community College after graduation, struggles with math or low math ACT

Often, when you enter college as a freshman you have to take "prerequisite" classes. These are classes that you pay for that have to be passed prior to taking certain classes. These classes are designed to help you get the skills

needed to pass the actual class that is needed for your major, however they don't count towards your general education classes or your classes in your degree.

Next year we are offering these prerequisite classes **AT NORTHWEST**. They are college classes that are paid for by a grant....so that means they are free for you during your senior year of high school. They are **self-paced and online**. However the best part is you go at your own pace and you will have a **math teacher** available to help you every day. The goal is for you to pass these prerequisite courses so that your freshman year you only have to take the one math class that your degree requires. Potentially you could take 3 prerequisite classes for free....this would save you approximately \$1000!!

DISCRETE MATH (Semester or Year)

Prerequisite: Algebra II

This class is a branch of mathematics that focuses on countable sets. In Discrete Math, you will learn probability and combinatorics, study different theories including number theory, set theory, graph theory, platonic solids, and recursion. Students will also learn about different voting methods and election theory. Students will learn how Discrete Math is used in computer science.

TRIGONOMETRY/PRE-CALCULUS (Year)

Prerequisite: Algebra II with a grade of at least 78% or permission from the Trigonometry teacher.

This class starts as a continuation of the work done in Algebra II. Graphing and recognition of types of functions are emphasized. The course builds into the following concepts: trigonometric functions, triangle trigonometry, circle trigonometry, law of sines, law of cosines, logarithms, conic sections, sequences, series and probability.

(AP) CALCULUS (Year)

Prerequisite: Trigonometry/Pre-Calculus with a grade of at least 78% or permission from the AP teacher.

The objective of this class is to educate the student in the nature of mathematics as a logical system to present a unified treatment of the basic ideas of algebra, trigonometry, analytic geometry and calculus. Contents include: functions, limits, and continuity; topics from plane analytic geometry; differentiation of polynomial functions, trigonometric functions, and applications of the definite integral.

The student will have the option of taking the AP exam to determine if college credit can be awarded for this class. The student will be asked to decide in January if they wish to take the test or not. The cost of the exam is approximately \$80.

The student will also have the option 1st semester of taking AP Calculus with dual credit through GI Central Community College (CCC) for the cost of 5 credit hours at CCC. Students do NOT have to take the AP exam or dual credit through CCC, but will NOT receive college credits. In order to take the class for college credit, a math ACT score of 25 is required. In order for the class to be transferable, the student must earn an unweighted A, B, or C in the class.

CCC APPLIED MATH STATISTICS 2020 (Semester)

Level: 11 or 12

Prerequisite: Trigonometry/PreCalculus or CCC Intermediate Algebra. Testing must be completed prior to taking the class. An ACT math score of 22 is required to get college credit for the class.

This course enables the student to develop the knowledge to describe statistical data and the techniques used to make generalizations based on statistical data, and demonstrate the role of statistics in business, the natural and social sciences, nursing, education and a variety of other fields.

CCC COLLEGE ALGEBRA (Semester)

Level: 11 or 12

Prerequisite: Trigonometry/PreCalculus or CCC Intermediate Algebra. Testing must be completed prior to taking the class. An ACT math score of 22 is required to get college credit for the class.

This course is the study of relations, functions and their graphs, equations and inequalities, polynomial and rational functions, exponential and logarithmic functions, systems of equations and inequalities.

MISCELLANEOUS

ACT PREP COURSE (Semester)

Level: 10, 11, 12

The purpose of this course is to assist committed students in preparing for and developing the skills necessary to improve ACT scores. Students will explore the format of the ACT test and build an understanding of the types of questions found on the test using strategies presented by John Baylor. This course will emphasize test-taking techniques in addition to providing skill-building in English, mathematics, reading and science. Additional coverage will be given to study skills, how to pay for college at the lowest cost, and deciding between 2-year and 4-year colleges, and other topics related to preparing for college. This is a definite must-do course for those students desiring to attend the best college at the lowest possible cost.

KITCHEN AIDE (Year)

Level: 10, 11, 12

Prerequisite: Permission from Food Service Manager.

Students work in the cafeteria under the direction of the head cook. They receive a free lunch plus pay for their hours of work. They earn no academic credit.

MUSIC

BAND (Year)

Level: 9, 10, 11, 12

Prerequisite: Previous instrumental experience preferred. Percussionists see the "Percussion Ensemble" description listed below. You will not be registering for Band.

"Band" as a class, consists of various types of ensembles and performing opportunities. During the first quarter, the group meets as a marching band, and performs at home football games and various parades and contests. The band functions as a concert band for the rest of the year (second through fourth quarters). As a concert band, the band presents several concerts and utilizes guest clinicians and other means to improve the musicianship of the group. Throughout the year, the band plays as a pep band for volleyball and basketball games. The Wind Ensemble is an auditioned, select concert band that meets separately. The jazz band is auditioned after the completion of marching season, and meets in the mornings. Members also have the opportunity to work up solo literature; all state and other honor bands will also be available for students to audition. This course may be repeated.

INSTRUMENTAL MUSIC LESSONS (Semester)

Level: 9-12

Prerequisite: Desire to learn an instrument, no experience necessary

This course will offer individualized lessons on band or orchestra instruments. This course is geared toward students who are interested in joining band/orchestra but have never played, or students who wish to add another instrument to their skill set. This is a "performance" style course and may be repeated.

BEGINNING GUITAR (Semester)

Level: 10-12

Prerequisite: Students should provide their own acoustic guitar. School has a few for use on a first come basis. Guitars would also be available to rent.

This class is for beginners with little to no experience playing guitar. Students will learn basic chords, note reading, and concepts associated with playing the guitar.

BEGINNING PIANO (Semester)

Level: 9-12

This course is designed to give students an introduction to piano playing, music theory, and basic musicianship. Time in class will be spent both on and off keyboards. Students will work individually and in small groups to master techniques and learn pieces. Emphasis will be on collaboration, individual growth and creativity as we additionally explore musical notation, theory and composition.

FRESHMEN MUSIC (Year)

Level: 9

Students who wish to be involved in band and choir are encouraged to take "Freshmen Music". Students enrolled in this class will alternate days between band and choir. For a description of each ensemble, please see their respective course descriptions. Auditions will not be held for either ensemble.

FRESHMEN CHOIR (Semester or Year)

Level: 9

This class is offered to those students who desire to participate in vocal music only every day. This course provides the opportunity to develop your singing voice through voice training and learning to read music. Second semester enrollment in this class is suggested for students who wish to participate in the second semester musical. Attendance is required at all concerts/retreat events.

POP MUSIC HISTORY (Semester)

Level: 9-12

This course will study the history and development of jazz, rock, and blues music as well as the cultural surroundings causing the music to be written. A great deal of listening would be included in this course, as well as study of lyrics. This is an "academic" style course not "performance".

MUSICAL THEATRE (Semester)

Level: 10, 11, 12

This class is an intense study of musical theatre, its music, its history and dramatic activities. Students will be coached with musical theatre literature and must be able to perform those songs for projects. Study will also include appropriate musical theatre singing and stage direction. This class may be repeated.

PRODUCTION (Semester)

Level: 9, 10, 11, 12

A course designed to create a deeper appreciation and understanding of the technical theatre process by exploring, lighting, sound, prop creation, and set design. This class may be repeated.

MUSIC HISTORY (Semester)

Level: 9-12

An introductory course to western music history, from the medieval period through the present, with a focus on Classical idioms. This is an "academic" style course not "performance". Materials for the class would include world history, a substantial amount of recordings of music, and some light study of the music itself. An emphasis for this course is on the cultural events surrounding and causing the creation of various forms of music.

MUSIC THEORY I & II (Semester or Year)

Level: 11, 12

Music Theory I and II is a college preparation course designed to aid students desiring to continue the study of music after high school but is open to anyone interested in learning more about music. The class will cover music theory, sight singing and ear training, analysis, arranging, transposition, and composition. This course will also include basic piano/keyboard skills, designed to both assist learning music theory and to serve as a beginner piano class.

MUSIC THEORY III & IV (Semester or Year)

Level: 12

Prerequisite: Music Theory I & II

Music Theory III and IV is primarily directed toward the prospective college music major. Music theory topics will be studied in depth, including secondary dominant chords, nonharmonic tones, counterpoint, and the development of composition through music history. Analysis of music will also be discussed, including Roman numeral harmonic analysis and phraseology.

ORCHESTRA (Semester or Year)

Level: 9, 10, 11, 12

Prerequisite: Previous string experience preferred.

This "performance-based" course will teach the foundations of playing a string instrument (violin, viola, cello, or bass) in the context of the string orchestra. Performances will occur at concerts and other potential venues. This class may be repeated.

PERCUSSION ENSEMBLE (Year)

Level: 9, 10, 11, 12 Students who take this course WILL NOT be registering for Band.

Percussion Ensemble is an instrumental music ensemble for percussion students. The course will involve percussion techniques and rehearsing music for marching band, concert band, and percussion ensemble. During marching band season, this class will be to prepare battery and front ensemble percussion for the marching band's season. After marching season is over, the class will switch focus toward traditional concert percussion instruments. The repertoire will consist of percussion ensemble music (that is, music written for percussion only) and standard concert band music. Selected percussionists will join the concert band for concerts. Proper playing technique will be emphasized throughout the course. This class may be repeated.

ROCK BAND (Semester)

Level: 10-12, (9 as space permits)

Prerequisite: No experience required

This course involves students in learning typical rock/pop instruments such as guitars, keyboards, drums, vocals, etc in a more "relaxed" environment. Students' first projects are learning to "cover" existing songs. The curriculum then moves into students writing their own material as songwriters. Although this is a "performance-based" course, emphasis is not placed on public performance, but instead focuses on in-class performances. This course may be repeated as space permits.

VOCAL MUSIC (Year)

Level: 10, 11, 12

Prerequisite: The three choirs are selected by audition. After auditions, students will be assigned to the appropriate choir.

Attendance is required at all concerts/retreat events. This class may be repeated.

The three choirs are: BEL CANTO, A CAPPELLA, BELLA VOCE.

SMALL ENSEMBLE (GOLDTONES) (Year)

Prerequisite: Audition

This is the Elite Acapella Group. This group will sing a variety of music from Choral Motets to Acapella Pop. This group does not dance-but rather will be the top singing group in the department. The music will be very difficult and the expectations will be high for this ensemble.

WIND ENSEMBLE (Spring semester)

Level: 9-12

Prerequisite: Audition

This ensemble is an auditioned concert band. Members are selected by audition. Students are able choose either this class or band/percussion ensemble (although students can enroll in both if they desire). This ensemble is the instrumental music department's top performance class; high level literature is selected and performed at a high level.

ONLINE COURSES

ONLINE COURSES

Level 10, 11, 12

Prerequisite: Registration, cost, placement test

CCC, Peru and UNL offer various online courses for students wanting to get a head start on their college classes. Students who qualify for the Free & Reduced Lunch program are eligible for a tuition scholarship. If you are interested in exploring this option please see your counselor.

PHYSICAL EDUCATION & HEALTH

FITNESS EDUCATION (Semester or Year)

Level: 9, 10, 11, 12

This course is designed to develop cardiovascular fitness, muscle strength, and muscle endurance. Students will also participate in team sports and activities. The curriculum is set up so that students will engage in both fitness exercises and sports/games. We will track physical improvements throughout the semester using a variety of testing methods. Students also will be taught the basic rules of popular team sports and be able to compete in those sports.

HEALTH (Semester)

Level: 9 – This class is required of ALL 9th graders.

This course is designed to provide information needed to make important decisions about health, wellness, and individual lifestyle. Topics related to health such as personal health and wellness, social and emotional health, dating violence, first aid, nutrition and physical activity, and alcohol/tobacco/other drugs will be discussed. This course will assist students in understanding that health is a lifetime commitment by analyzing individual factors and health decisions that promote health and prevent disease. Students are also encouraged to assume individual responsibility for becoming competent health consumers. A variety of instructional strategies, including technology, is used to further develop health literacy.

LIFETIME SPORTS & RECREATION (Semester)

Level: 9,10,11,12

Prerequisite: Successful completion one semester of Fitness Education, ST or SP

Students will engage in a variety of competitive sports and games. These will include both team and individual activities. The goal of the course is to improve coordination, fitness, team play and understanding of competitions.

SPORTS PERFORMANCE (Semester or Year)

Level: 9, 10, 11, 12

*Prerequisite: **Must be enrolled in the Summer Lifting and Conditioning Program and make 90% of all summer lifting/conditioning sessions as well as complete all summer testing.** Students must demonstrate leadership qualities, a strong work ethic and proper lifting technique. Missing multiple days (especially Wednesdays) and not out for a sport, the student will be moved into ST. Student/Athlete must also have **Coach McNeil's approval.***
Required: Athletic shoes, shorts, T-shirt: all must be school appropriate. Students are responsible to bring a lock. Lockers will be assigned to all students.

This is an advanced athletic performance class for students interested in building a solid athletic foundation. Class activity emphasizes improving athletic performance through functional strength, explosive power, linear and lateral speed techniques, sprint progression, agility, plyometrics, balance, flexibility, and proper functional energy system conditioning.

The program consists of functionally sound movement training, strength training and conditioning with a strong focus on proper technique. The program becomes progressively more challenging once basic techniques have been mastered.

Students will train functional movements and its uses in athletic preparation and performance. In addition, students will learn strategies to individually prepare athletes to perform his or her sport.

STRENGTH TRAINING (Semester or Year)

Level: 9, 10, 11, 12

Required: Athletic shoes, shorts, T-shirt; all must be school appropriate. Students are responsible to bring a lock. Lockers will be assigned to all students.

The purpose of this class is to improve a student's level of physical fitness with emphasis in the following areas: muscular strength, muscular endurance and power. Students will gain knowledge on proper technique when performing lifts, identifying the major muscle groups used when performing lifts, maintaining a daily record of their progress, and the acceptance of individual responsibility for the student's own fitness and strength levels.

Classes will be in the Auxiliary weight room 3-4 days per week lifting. Days outside of the weight room will focus on; cardiovascular endurance, speed and agility, flexibility and core strength training, and non-traditional strength training. Students will be tested on back squat, hang clean, bench press, incline bench press, standing long jump, vertical jump, pro agility, and flexibility.

RESOURCE

9th ACADEMIC FOUNDATIONS (Semester or Year)

Level: 9

Prerequisite: Students in the program are those in 9th grade who are referred by teachers, counselors, or parents because of academic difficulties.

The student is tested by the Central Nebraska Support Services Program. If testing and a staffing indicate that the student is qualified for services, the student may enter the program with parent permission.

This is a class set up specifically for 9th grade resource room students. The students will have structured time to work on their own or have individual or small group support from a resource teacher to assist them in regular curriculum courses. Students will be required to keep a daily work chart.

ACADEMIC FOUNDATIONS (Semester or Year)

Level: 10, 11, 12

Prerequisite: Students in the program are those in grades 10-12 who are referred by teachers, counselors, or parents because of academic difficulties.

The student is tested by the Central Nebraska Support Services Program. If testing and a staffing indicate that the student is qualified for services, the student may enter the program with parent permission.

A resource study hall is available to special education students who are verified to receive services. This class is used to give students extra time to complete regular classroom assignments with the assistance of the resource teacher as needed. Students will be required to keep a daily work chart for study skills.

READING ESSENTIALS (Year)

Level: 9, 10, 11, 12

Prerequisite: Scores below targeted goal and recommendation of a teacher and/ or IEP team.

This course provides reading intervention for students with basic reading skills who continue to need instruction in advanced decoding skills, including fluency, accurate reading of multisyllabic words and expository text. It is also focused on vocabulary, language development, and reading strategies.

SCIENCE

INTEGRATED PHYSICAL SCIENCE (Year)

Level: 9 required

This is a core science course in which students gain a conceptual understanding of physics, chemistry, earth science, and astronomy. Students accomplish this through Cooperative, Problem-Based Learning.

BIOLOGY (Year)

Level: 10 required

This is an introductory study to the processes that support life on planet Earth. The course will cover the science process, the basics of cell structure and an introduction to genetics and the DNA code of life during the first semester. The second semester will deal with the interconnectedness of life on the planet from the simplest bacteria to the most complex mammals with an emphasis on how all organisms interact with their environment from an ecological perspective. This course is a required class for sophomores and a prerequisite for Anatomy and Physiology, which can be taken as a junior or a senior.

CHEMISTRY (Year)

Level: 11

This is a college preparation course, technical in nature, as students are strongly urged to make certain they meet the mathematics prerequisite. This course is for students interested in any health related career, engineering, as well as meeting the general requirements for colleges and universities. First semester course content includes the organization of matter in topics such as atomic structure, periodic law, chemical bonding, and chemical formulas. The second semester includes chemical reactions, stoichiometry, gas laws, acids/bases, and qualitative analysis.

ADVANCED CHEMISTRY (Year)

Level: 12

Prerequisite: 80% or better in Chemistry.

This course is designed for those students who are entering careers involving the medical field and/or engineering. Emphasis will be placed on mastery of basic and advanced chemistry topics to enhance a successful experience in college. The course will include lecture/discussion sessions given in powerpoint presentations as well as laboratory experiences to develop an understanding of concepts and laboratory techniques. Students completing this course will feel prepared to take any introductory inorganic or organic college course. The first semester will present the enrichment of topics covered in the first year chemistry program as well as additional topics to develop the student's background in general chemistry. The second semester will cover each of the important functional groups in organic chemistry and their reactions.

ANATOMY & PHYSIOLOGY (Year)

Level: 11, 12

Prerequisite: Grade of 86% or above in both semesters of Biology.

This class is an in-depth study of the human body and the systems of which it is composed, including cell and tissue histology. Each system will be studied in respect to its ability to maintain homeostasis in the body. This course is an excellent follow-up to the Medical Terminology class.

PHYSICS (Year)

Level: 11, 12

Prerequisite: An average of 87% or higher in Algebra II is required for this class. A student can be taking Trig/Pre-Calc at the same time as this course.

This course includes topics in both classical and modern physics. Knowledge of algebra and basic trigonometry is required for the course; the ideas of calculus may be introduced in the theoretical development of some physical concepts, such as acceleration and work. The major goal of the course is understanding principles and problem solving.

Topics to be studied include: Newtonian mechanics, kinematics in one and two dimensions, electricity and magnetism, waves and optics, and atomic and nuclear physics.

CCC BIOLOGY (Year)

Level: 12

Prerequisite: Teacher permission and B or higher in Junior year science

This course covers fundamental processes of cells and organisms, cell structure, genetics, evolution, classification, diversity, and interaction of organisms at the molecular, cellular, organismic, ecosystems, and biosphere level. Includes lab. **Dual credit offered through CCC. 4 credit class, BIOS1010**

SOCIAL STUDIES

SOCIAL STUDIES 1 & 2 (Year)

Level: 9 required

Students will study the past events that shaped our world from 500 AD to the present. Also, in this class, students will learn physical geography, map skills and human geography.

AP AMERICAN HISTORY (Year)

Level: 10, 11 - All juniors will either take American History or AP American History. Sophomores are allowed to take this course with teacher permission.

Prerequisite: 87% or higher in Freshmen Social Studies and evaluation of potential student's GPA and class rank.

The primary goal of this course is to prepare students for college by teaching nonfiction writing and critical analysis. The AP United States History program is designed to provide students with the analytical skills and factual knowledge necessary to deal critically with American History. This experience will include evaluation of primary source material, the use of secondary sources and essay examinations. A significant amount of reading and writing is expected in this course. The student will have the option of taking the AP exam to determine if college credit can be awarded for this class. The student will be asked to decide in January if they wish to take the test or not.

AMERICAN HISTORY (Year)

Level: 10, 11 - All juniors will either take American History or AP American History. Sophomores allowed as space permits.

This class is a survey of the post-Civil War American experience. Major historical events, people and movements will be evaluated with a view of how the past shapes the present.

GOVERNMENT (Semester)

Level: 12 required

A study designed to increase knowledge of the basic principles of American government, the rights and responsibilities of citizens and the role of government in society.

CCC MICROECONOMICS / (CCC or HS credit) Fall Semester

Level: 11, 12

Prerequisite: Previous or concurrent enrollment in an Advanced Placement course OR Trig/PreCalc. Students must have either taken the ACT or the MAPS test prior to registering for CCC credit.

Microeconomics is the study of the individual and firms as economic actors. The course will focus on the fundamental concepts of scarcity, opportunity cost, supply/demand and price behavior. This is a CCC course (also available as a HS credit only course) and will be taught at a college level. Students are responsible for all tuition costs, fees and materials. **Dual credit offered through CCC, 3 credits, ECON2120**

CCC MACROECONOMICS / (CCC or HS credit) Spring Semester

Level: 11, 12

Prerequisite: Previous or concurrent enrollment in an Advanced Placement course OR Trig/PreCalc. Students must have either taken the ACT or the MAPS test prior to registering for CCC credit.

Economics is a way of thinking with the goal of getting the most from any resource- money, time or natural resources. The course will focus on the macroeconomy with particular emphasis on fiscal and monetary policy, the role of government and international trade. This is a Central Community College course (also available as a HS credit only course) and will be taught at a college level. Students are responsible for all tuition costs, fees, and the purchase of the textbook. **Dual credit offered through CCC, 3 credits, ECON2110**

60's & BEYOND (Semester)

Level: 10, 11, 12

Concepts that have helped shape America from the decades of the 60s, 70s, 80s, and 90s.

HOLOCAUST & GENOCIDE STUDIES (Semester)

Level: 11, 12

Prerequisite: Reading intensive

This course will be reading intensive In this course, students will study the history of anti-Semitism; the rise of the Nazi party; and the Holocaust, from its beginnings through liberation and the aftermath of the tragedy. The study of the Holocaust is a multi-disciplinary one, integrating world history, geography, American history, and civics. We will primarily focus on the Holocaust but will also look at a few other genocides.

PSYCHOLOGY (Semester)

Level: 11, 12

Psychology is the study of the complex interaction between the mind and human behavior. Topics will include: child development, perception, learning, intelligence and creativity, personality, mental illness and treatment of mental illness.

PERFORMANCE PSYCHOLOGY (Semester)

Level: 11, 12

Sports/Performance Psychology, is a specific sub-branch of psychology that studies the mental side of sports, has discovered and developed many techniques to improve athletic performance and teach leadership. These techniques apply to participation in any performance-based activity, like sports, music, dance, etc. The techniques can also be used to improve your life.

SOCIOLOGY (Semester)

Level: 11, 12

Sociology is the study of society and human relationships. This class will discuss the following topics: Culture and Social Structure, The Individual In Society, and Social Inequality.

WORLD LANGUAGE

A WORLD LANGUAGE CLASS IS NOT A GRADUATION REQUIREMENT. The prerequisite for 9th graders entering First Semester Language Classes includes having a score at the 60th% or above on the 8th Grade Language tests.

FRENCH 1 & 2 (Year)

Level: 9, 10, 11

Students will be introduced to the French language and culture. Basic grammar topics and vocabulary are emphasized. Oral work, reading, and cultural activities are included.

FRENCH 3 & 4 (Year)

Level: 10, 11, 12

Prerequisite: French 1 & 2

Recommended for sophomores, juniors and seniors who are fulfilling university language requirements. This course is a review and continuation of basic skills. Emphasis will be on developing writing and speaking skills to a further extent as well as increasing cultural awareness.

SPANISH 1 & 2 (Year)

Level: 9, 10, 11

This is a foundation course recommended for 9th – 11th graders who need to fulfill university language requirements and other students interested in the Spanish language and culture. It is not a required class to graduate from NW. There will be special emphasis placed on the four basic language skills: listening, speaking, reading and writing. Understanding spoken and written language, as well as basic structure and vocabulary of the language will be covered. Basic pronunciation and oral communication will be developed.

SPANISH 3 & 4 (Year)

Level: 10, 11, 12

Prerequisite: Spanish 1 & 2

This is an advanced course with special emphasis on the four basic language skills: listening, speaking, reading and writing. Activities are designed to reinforce the structures and concepts taught in Spanish 1 & 2. Emphasis is placed on helping the student to develop skills of communication to grow in the power to express him/her accurately and creatively in the foreign language.

SPANISH 5 & 6 (Year)

Level: 11, 12

Prerequisite: Spanish 3 & 4

This advanced course will continue the material begun in Spanish 1 & 2 and 3 & 4 and will also add advanced structures and vocabulary. Students will work on advanced communication and writing skills.

SPANISH 7 & 8 (Year)

Level: 12

Prerequisite: Spanish 5 & 6

This course is for the advanced student with a serious interest in Spanish. Students will continue to study advanced grammar and vocabulary and work on their reading, writing, listening and speaking skills.

SENIOR OPTIONS

ALL seniors will have 4 classes at Northwest each semester. Seniors are allowed to take only ONE of the following four options at a time each semester.

CENTRAL COMMUNITY COLLEGE EARLY ENTRY PROGRAM

Prerequisite: Student must take the ACT prior to registering for the program OR meet the minimum grade requirement .

All necessary paperwork must be completed in a timely manner.

Seniors have the opportunity to take college coursework at Central Community College, and earn high school as well as college credit. Courses can be for academic transfer or for general interest. Seniors are allowed to take one course each semester while taking at least four classes at Northwest. The tuition is approximately \$100 per credit hour.

Registration for the CCC class/classes will take place at Northwest as the counselors from CCC come to the school. The process will take place in April for the fall semester and in November for the spring semester.

COOPERATIVE EDUCATION PROGRAM /DIVERSIFIED OCCUPATIONS

Prerequisite: Each student enrolled in this class MUST have the Cooperative Education Teacher's signature (approval) and an acceptable job in place "BEFORE" starting this program.

This program is designed to prepare students for the future in their career interest area. Local businesses and Northwest High School join together and cooperate as a team to help students develop valuable career skills and abilities. Being in this program allows students to receive school credit for on-the-job training during the school day. Students will be dismissed one, two, or three periods (6-8th periods, 7-8th periods, or 8th period), required to work a specified amount of hours correlating to how many hours they are signed up for this program, and will be supervised by the Cooperative Education Coordinator. Several specific guidelines for the program include maintaining an acceptable job throughout the semester, attending weekly meetings, turning in weekly reports, turning in bi-monthly pay stubs, and completing other assignments as required for the program.

If a student is not fulfilling his/her obligation in the Cooperative Education Program, that student will NOT be able to leave school during his/her Cooperative Education class periods. He/She will remain in school under the supervision of the Cooperative Education Coordinator until all obligations are met.

TEACHER APPRENTICE PROGRAM

Prerequisite: Students must furnish their own transportation and expenses. No reimbursement is received.

Students interested in pursuing an opportunity in education are encouraged to participate in the Teacher Apprentice Program. Students spend two or three periods a day assisting and observing regular teachers in a nearby elementary or middle school. Students have the opportunity to study various teaching methods and work directly with the teacher and their students. Students need to dress and act appropriately and are responsible for notifying the schools in case of schedule conflicts. A senior can earn five (5) credits per semester for this opportunity. The class is graded pass/fail and will not count toward their GPA.

Seniors can take the following class for one or two semesters in addition to one of the options above.

CAREER EXPLORATION

This is a class for seniors interested in gaining knowledge and experience in a career field of interest. Students will observe and/or participate in activities at an organization/work site that will provide insight for future career decisions. Students must complete a total of 40 hours of volunteer service during the semester for an approved organization. In addition, students will also be required to complete interviews, reflection papers, and a senior project describing their acquired knowledge and experiences throughout the semester. Students will be excused either one or two periods during the day to volunteer and may be expected to serve extra time outside of school hours to meet the 40 hours required for the class. The periods designated depend on the rest of the student's schedule. These hours will be in addition to the 40 community service hours required for graduation.

2019-2020 CAREER TECHNICAL EDUCATION PATHWAYS

AGRICULTURE, FOOD AND NATURAL RESOURCES			
	Intro Course	Intermediate Course	Capstone Course
Animal Systems: Companion Animals	Intro to Agriculture, Food and Natural Resources	Animal Science/Biology	Companion Animals
Animal Systems: Veterinary	Intro to Agriculture, Food and Natural Resources	Animal Science/Biology	Veterinary Science
Plant Systems: Floriculture	Intro to Agriculture, Food and Natural Resources	Plant Science/Horticulture	Floriculture

BUSINESS, MARKETING, AND MANAGEMENT			
	Intro Course	Intermediate Course	Capstone Course
BMA: Law	Intro to Business, Marketing and Management, or Marketing or Sports and Entertainment Marketing	Accounting	Business Law
BMA: Entrepreneurship	Intro to Business, Marketing and Management, or Marketing or Sports and Entertainment Marketing	Accounting	Entrepreneurship
BMA: Academy	CCC Microeconomics	CCC Macroeconomics	Accounting
Finance: Accounting	Personal Finance		Accounting
Finance: AP Economics	Personal Finance	CCC Microeconomics	CCC Macroeconomics
Finance: Financial Management	Accounting		Advanced Accounting
Restaurants, food and Beverage Services Culinary	Fundamentals of Food and Nutrition	Culinary Skills I	Culinary Skills II
COMMUNICATION AND INFORMATION TECHNOLOGY			
Information Technology	Information Technology I	Information Technology II	Digital Media 2 (Media Production)
HEALTH SCIENCE			
	Intro Course	Intermediate Course	Capstone Course
Life Span Performance	Intro to Health Science	Anatomy and Physiology	Intro to Sports Medicine or Performance Nutrition
Project Lead the Way	Principles of Biomedical Science	Human Body Systems/Anatomy & Physiology	Medical Interventions
Health Science	Principles of Biomedical Science	Human Body Systems/Anatomy & Physiology	Nursing Assistant - CNA Certification
Human Services			
Education and Training	Human Development(Lifespan) or Intro to Education and Training	Human Development and Cognition	Best Practices in Education and Training
Design	Introduction to Design	Home Design or Fashion Design	Entrepreneurship
Energy and Engineering			
	Intro Course	Intermediate Course	Capstone Course
Engineering	Intro to Engineering Design	Robotics	Advanced Robotics
CONST - Basic Construction	Intro to Engineering Design	Construction Systems (Principles of Construction Tech)	Carpentry (Advanced Construction Technology)

Manufacturing - Welding	Intro to Skilled and Technical Science	Manufacturing-Woods	Manufacturing-Welding
Manufacturing - Construction	Intro to Skilled and Technical Science	Manufacturing-Woods	Principles of Construction
Manufacturing - Engineering Woods	Introduction to Engineering Design	Manufacturing-Woods	Advanced Fabrication and Manufacturing - Woods

SPORTS IN COLLEGE

If you are planning to play sports your freshman year of college, you need to do some planning now. In addition to high school graduation requirements and college admission requirements, there are also requirements for the sports programs.

If you are interested in a Division I or Division II college, you need to register with the NCAA Clearinghouse. If you are interested in a Division III college, you need to register with the NAIA.

UNIVERSITY REQUIREMENTS

As you and your parents are making decisions about course selection, please keep in mind that some colleges have very specific admissions REQUIREMENTS while others have RECOMMENDATIONS. The University system (the University of Nebraska at Lincoln, Kearney and Omaha) has the following admissions REQUIREMENTS:

- 4 years of approved English classes
- 3 years of approved Science classes
- 3 years of approved Social Studies classes
- 2 years of World Language classes (must be the same language)
- ACT of 20+ or that you rank in the top half of your graduating classes

AND

-4 years of approved Math classes at the University of NE at Lincoln (UNL wants Algebra I, Geometry, Algebra II, and Trigonometry/Pre-Calculus, or Discrete Math, or College Algebra/Business Statistics)

OR

-3 years of approved Math classes at the Universities of NE at Kearney or Omaha (UNK and UNO want Algebra I, Geometry, and Algebra II. If you don't take a 4th year of math, students must have an additional year in Science or Social Studies)

The Nebraska state and private four-year colleges, as well as the two-year colleges have admission RECOMMENDATIONS. They recommend certain classes for students to take but still admit you even if you haven't taken those classes. Some out-of-state colleges have specific REQUIREMENTS while others may have RECOMMENDATIONS. Students should start exploring requirements early so they are well informed. Students should challenge themselves with coursework so that a smooth transition can take place following graduation.

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