

Chetek-Weyerhaeuser High School



“BULLDOGS”

2024-25 **Course Planning Guide**

“Where quality learning is the focus of the future.”

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The Chetek-Weyerhaeuser High School Course Planning Guide is available online at
<https://www.cwasd.k12.wi.us/highschool/forms.cfm>

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CHETEK-WEYERHAEUSER MISSION, VISION, AND VALUES

CWHS/MS Mission Statement

At Chetek-Weyerhaeuser High School/Middle School, students will learn and perform at high levels by engaging in a wide variety of rigorous courses and high quality extra-curricular activities.

CWHS/MS Vision Statement

Chetek-Weyerhaeuser High School/Middle School will become the highest performing school in the state.

CWHS Value Statements

- Relationships – We take care of ourselves and each other.
- Respect – We respect ourselves, others, and the environment.
- Responsibility – We take ownership of our actions and learning and provide a safe environment for students and staff.

PLANNING YOUR FUTURE

This booklet contains scheduling information, educational planning information as well as the 2024-2025 course descriptions available to Chetek-Weyerhaeuser High School students. The schedule is based upon a trimester structure in which students have the opportunity to sign up for five classes each trimester, not including band or choir. The total year provides for fifteen possible course sections. Some of the courses are a single trimester in length (1/2 credit) and will require only one of the fifteen sections. Other courses that are two trimesters in length (1 credit) will require two of the fifteen possible sections. The scheduling process will require students to choose courses that will utilize all fifteen sections available in three trimesters.

Students are encouraged to develop and follow a four-year plan that guides their instruction based on their interests, strengths, and post-secondary goals. Students must challenge themselves academically to prepare for the world beyond high school. We are proud of the academic opportunities students have at Chetek-Weyerhaeuser High School and encourage students to take advantage of them.

I encourage the entire family to engage in academic planning. Students need solid guidance from parents to ensure that a challenging and appropriate four-year plan is developed and followed. Students are also encouraged to make good use of other resources they have access to: school counselor, teachers, and administrators. Planning carefully when filling out the registration form is essential. A student's schedule may not be changed after the registration process unless a change is determined necessary by the guidance department and administration.

I wish you luck as you build your future and pursue your dreams by utilizing the high-quality instruction available at Chetek-Weyerhaeuser High School. If you ever need assistance, have questions, or would like to discuss the planning process, do not hesitate to contact me.

Sincerely,

Tyler Nelson
HS/MS Principal

SCHEDULING OF CLASSES

IMPORTANT THINGS TO REMEMBER

This course description book will help you plan your four-year high school career at Chetek-Weyerhaeuser High School. It is our hope that your planning will be based on career aspirations and interests. The time you spend planning your schedule will help to ensure you reach your goals. Courses that are listed as .5 credit will meet for one trimester. Courses that are listed as 1 credit will meet for two trimesters.

Graduation requirements are designed to give you a well-balanced program, which will help with the skills and understanding necessary to become a well-educated individual. A wide range of electives are available to help you explore and develop your interests and abilities. The responsibility for this planning rests primarily with you and your family, but you are also encouraged to seek help from your teachers and counselor. Be sure to consider the following:

1. PLAN AHEAD

Read the course descriptions before selecting a subject to be sure it fits your needs and interests.

Consult with teachers in specific subject areas for more detailed information.

Balance your course selections. Avoid crowding all of your academic courses into your freshman, sophomore, and junior years. Allow yourself the freedom to take elective subjects each year; they form a valuable part of your total education.

Remember to make sure you have satisfied the prerequisites for taking a particular course. A prerequisite means that one or more courses must be successfully completed before the course can be taken.

Be sure to take courses which will give you the best possible preparation for your future plans.

2. KNOW REQUIREMENTS

Know what the graduation requirements are before you start planning. If you have questions about credits for graduation, college, or career entrance, see your counselor.

3. HOW TO COMPLETE YOUR SCHEDULE

A. Class meetings will be held to assist students with this process. Students will fill out a Student Course Selection worksheet. The completed worksheet will be reviewed by high school staff for accuracy and completeness. Be certain to fill in all information. Remember that all courses worth 1 credit require two blocks on your selection worksheet. If possible, get recommendations from teachers as to what courses you should take.

B. **Have your parent or guardian review and sign your Student Course Selection worksheet.**

C. Turn in your completed Student Course Selection worksheet to the high school guidance office.

SINCE STUDENT COURSE SELECTIONS ARE A PRIMARY FACTOR IN DETERMINING THE MASTER SCHEDULE, STUDENTS ARE ENCOURAGED TO CHOOSE CAREFULLY.

GRADUATION REQUIREMENTS

Academic and Career Planning ½ credit

English 4 credits

Must include: English 9 – 1 credit
English 10 – 1 credit
American Literature – ½ credit or AP English Language – 1 ½ credits
English 12 – 1 credit or AP English Literature – 1 ½ credits
English Elective – ½ credit

Health ½ credit

Mathematics 3 credits

Must include: Algebra I – 1 credit
Geometry – 1 credit
Algebra II or Technical Math – 1 credit

Personal Finance ½ credit

Physical Education 1 ½ credits

Science 3 credits

Must include: Physical Science – 1 credit
Biology I – 1 credit
Science Elective – 1 credit

Social Studies 3 ½ credits

Must include: American History – 1 credit
World History-Ancient – ½ credit
World Geography – ½ credit
World History-Modern – ½ credit
Civics – ½ credit or AP US Government – 1 credit
Social Studies Elective – ½ credit

Plus enough elective credits to total at least 27 credits.

Please note that some universities and technical colleges may have additional admission requirements.

FOUR-YEAR COLLEGE ENTRANCE REQUIREMENTS

If your plans after graduation include attending a four-year college, keep in mind these major factors upon which your college admission is based:

1. The quality and rigor of your course of study while in high school
2. The grades earned in these courses and resulting grade-point average and class rank
3. Your score on the ACT and/or SAT test.
4. Activities both in and out of school (an important factor when scholarships are awarded)

Colleges have their individual requirements regarding admissions, and they may change yearly. Thus, you should identify these requirements as early as possible to ensure you are meeting them by high school graduation. Below are the minimum course requirements for the UW-System. Private and out-of-state schools may have additional requirements. All University of Wisconsin System institutions require you to complete at least 13 credits in the core subjects, plus four credits in subjects you choose.

Thirteen Core College Prep Credits:

4 credits of English

3 credits of Social Studies

3 credits of Natural Science

3 credits of Math including Algebra I, Geometry, and Algebra II (The University of Minnesota requires 4 credits of math).

Four Elective Credits:

These can be chosen from the above core college prep areas, foreign language, art, music, computer science, or other academic areas. Technical and career courses may also be accepted for a portion of your elective credits.

Foreign Language:

In the University of Wisconsin system, University of Wisconsin-Madison is the only college that requires two years of the same foreign language (typical for admission is four years). Other University of Wisconsin schools strongly recommend it. Schools in the University of Minnesota system also require two years of the same foreign language. Although many colleges may not require foreign language for admission, many college programs require a cultural diversity component or foreign language. It is important to research the university and your intended major to make an informed decision.

There are 13 four-year campuses in the University of Wisconsin system:

UW-Eau Claire

UW-Oshkosh

UW-Stout

UW-Green Bay

UW-Parkside

UW-Superior

UW-La Crosse

UW Platteville

UW-Whitewater

UW-Madison

UW-River Falls

UW-Milwaukee

UW-Stevens Point

TWO-YEAR COLLEGE ENTRANCE REQUIREMENTS

Students may start their education at a two-year college and then transfer to a four-year college to earn a bachelor's degree. After fulfilling certain credit and grade point requirements, students who participate in the Guaranteed Transfer Program are guaranteed admission into the University of Wisconsin university of their choice. The transfer program guarantees admission to the baccalaureate institution only and not to the specific program or major.

Two-year colleges are different from technical schools. In Wisconsin, the two-year colleges belong to the University of Wisconsin System. University of Wisconsin Eau Claire-Barron County in Rice Lake is an example of a two-year college. Entrance requirements include the following:

1. Must have graduated from a recognized high school, have a Certificate of GED, or present other evidence of ability to begin.
2. Have a minimum of 17 college prep credits. Thirteen of the seventeen credits must be distributed as follows:

- 4 credits of English
- 3 credits of Social Studies
- 3 credits of Natural Science
- 3 credits of Math (must include at least 1 credit of Algebra and 1 credit of Geometry)

The remaining four credits can be chosen from the above areas, foreign language, fine arts, computer science, or other academic areas.

3. Submitting an ACT or SAT score.

If you are admitted and if your high school record, placement test scores, or other previous academic performance indicate that you may have difficulty with university work, you will be required to participate in special programs aimed at preparing you to succeed at university-level coursework. Please note that some of these courses may not count toward your college degree.

There are 13 two-year campuses in the University of Wisconsin Colleges System:

UW-Eau Claire-Barron County	UW-Green Bay, Manitowoc Campus
UW-Green Bay, Marinette Campus	UW-Green Bay, Sheboygan Campus
UWM at Washington County	UWM at Waukesha
UW-Oshkosh, Fond du Lac Campus	UW-Oshkosh, Fox Cities Campus
UW-Platteville Baraboo Sauk County	UW-Platteville Richland
UW-Stevens Point at Marshfield	UW-Stevens Point at Wausau
UW-Whitewater at Rock County	

TECHNICAL COLLEGE ENTRANCE REQUIREMENTS

Technical colleges provide affordable, career-oriented programs for many high-skilled, technical jobs in the state. Small class size, flexible scheduling, and a high job placement rate are all attractive features of these schools. Students spend most of their class time in job-related settings where they receive hands-on training from experienced instructors. Degrees offered range from short-term programs and certificates to technical diplomas and associate degrees, which take one to two years to complete. Northwood Technical College in Rice Lake is an example of a technical college.

Technical colleges currently have an open enrollment policy. Specific programs have specific requirements for admittance. Some programs may require that specific prerequisite courses be taken in high school or at the technical college prior to admittance. It is very important to check the specific program requirements in the college catalog or on the college website at <http://witechcolleges.org>.



CAREER PLANNING & TESTING

Individual Conferences with the High School Guidance Counselor

Parents, guardians and students are welcome to make appointments with the counselor anytime throughout the year to discuss academic and career planning.

Academic and Career Plans

The State of Wisconsin mandates that all students in grades 6-12 have an academic and career plan (ACP). The ACP is a student-driven planning and monitoring tool that helps students create programs of study that are aligned with high school graduation requirements, personal interests, and individually defined career goals. An ACP can refer to both a process that helps students engage in career development activities and a product (document/portfolio) that is created and maintained for the student's academic, career, and personal advancement. ACP's will be developed collaboratively by students, parents, and school staff, including teachers and counselors; updated as students' personal, educational, and career goals change. An ACP for all students is something that CWHS is committed to and excited about.

College and Career Exploration Tools

All students in grades 9-12 will be provided with Xello accounts. Xello is an Internet-based career exploration and planning tool used to explore career and college options and develop a career plan. Xello can be accessed from school, from home, or wherever there is access to the Internet. Features of the program include:

- Career, personality, and learning style assessments
- Explore careers, schools, and majors that match your interests
- In depth career information, employment outlook, and matching to personal skills and abilities
- Goal setting
- My Plans (online portfolio)

College Admission Tests

ACT: The ACT is the preferred admissions test of four-year colleges and universities throughout the Midwest. All 11th grade students are required by the state of Wisconsin to take the ACT Plus Writing. The testing will occur during regularly scheduled school days at no cost to the students. Students may find more information about the ACT at www.actstudent.org.

SAT (Optional): The SAT test is a college entrance exam that is accepted at most colleges and universities. Some students are curious about their performance on the SAT or are interested in a college that encourages taking the SAT. Interested students may find information about the SAT or where the test is offered at www.collegeboard.org. Students are responsible for registering for and paying for the exam on their own.

PreACT Secure: The State of Wisconsin requires 9th and 10th grade students to take the PreACT in the areas of reading, math, science, writing, and English. Students will take the summative assessment in the spring.

CAREER PLANNING & TESTING

ACT Plus Writing: Required by the State of Wisconsin for all 11th grade students. The test will be given on a regularly scheduled school day. Students may use their results for college admission requirements and may send the results to up to four colleges at no cost to the student. The ACT Plus Writing includes five sections: English, math, science, reading, and writing.

PSAT/NMSQT (Optional): The PSAT/NMSQT (Preliminary Scholastic Aptitude Test/National Merit Scholarship Qualifying Test) is offered to 11th grade students in October. Some students may want to take the PSAT to practice taking a standardized college entrance exam. Students with very high PSAT/NMSQT scores may qualify for the National Merit Scholarship Program.

ASVAB (Optional): The ASVAB (Armed Services Vocational Aptitude Battery) is free and is offered during the school day to interested 11th and 12th grade students. The test includes a vocational component which many students use in the career development process. The ASVAB is administered at CWHS/MS by military personnel. Students considering military options after high school may want to take the ASVAB. A career seminar is scheduled afterwards to explore interest and strengths based on ASVAB results.


Wisconsin Forward: The Wisconsin Forward Exam will be administered to 10th grade students in the area of social studies.

YOUTH APPRENTICESHIP

Youth Apprenticeship (YA) is a highly successful talent acquisition strategy in which employers hire high school juniors or seniors for a one or two-year apprenticeship. During the apprenticeship, the student continues toward high school graduation and takes courses related to the profession as a way of enhancing what is being learned on the job. The YA Program is coordinated locally by regional consortia and overseen by the Wisconsin Department of Workforce Development (DWD). Each consortium typically includes several participating high schools.

How Does A Student Become a Youth Apprentice?

- Meet with Mrs. Volker to learn about program requirements
- Students secure employment with an employer willing to hire youth apprentices and provide the required training. Schools do not place students at work sites. The school will assist with helping to complete the YA paperwork, but it is up to the students to obtain a work position.
- Complete the required paperwork with parent, student, employer, and school signatures.

Agriculture, Food, and Natural Resources 11 pathways	Finance 3 pathways	Manufacturing 7 pathways
Architecture and Construction 9 pathways	Health Science 12 pathways	Science, Technology, Engineering, and Mathematics (STEM) 5 pathways
Arts, Audio Visual Technology and Communications 4 pathways	Hospitality and Tourism 3 pathways	Transportation, Distribution, and Logistics 12 pathways
Business Administration 2 pathways	Information Technology (IT) 4 pathways	
Education 2 pathways	Marketing 5 pathways	

CHETEK-WEYERHAEUSER HIGH SCHOOL FOUR-YEAR COURSE PLAN

NAME: _____ DATE: _____

Fill in all 15 slots, in each grade level, in order to have a full class schedule. Do not list band, choir or resource as part of the 15 slots. Use pencil so you can make changes if necessary.

9th Grade					
Required classes: English 9 American History Physical Science or Biology Algebra I or Geometry Phy. Ed. 9-10 Teen Health	English 9 A	American History A	Science A	Math A	Teen Health
	English 9 B	American History B	Science B	Math B	
	Phy. Ed.				
10th Grade					
Required classes: English 10 World Geography World History – Ancient Academic & Career Planning Science Math Phy. Ed.	Science A	English 10 A	Math A	World Geography	World History - Ancient
	Science B	English 10 B	Math B	Academic & Career Planning	Phy. Ed.
11th Grade					
Required classes: American Literature English Elective or AP English Lang World History – Modern Social Studies Elective Math Science Elective Phy. Ed.	American Literature <u>or</u> AP English Language & Composition	Eng. Elective <u>or</u> AP English Language & Composition	Math A	World History - Modern	Science Elective
		Phy. Ed.	Math B	SS Elective	Science Elective
12th Grade					
Required classes: Civics or AP US Government English 12 or AP English Lit Personal Finance	English 12 A <u>or</u> AP English Lit & Composition	English 12 B <u>or</u> AP English Lit and Composition	Civics <u>or</u> AP US Government	Personal Finance	

Art Course Map						
3D Arts		2D Arts			Digital Arts	
Intro to Art					Graphic Design	Photography
Ceramics and Mixed Media I <i>*Intro to Art (Grade 9 Only)</i>		Drawing and Painting I <i>*Intro to Art (Grade 9 Only)</i>				
Ceramics and Mixed Media II <i>*Intro to Art, Ceramics and Mixed Media I</i>		Drawing and Painting II <i>*Intro to Art, Drawing and Painting I</i>			Independent Study-Advanced Art <i>Graphic Design, Photography, and one 3D or 2D Arts Course</i>	AP - 2D <i>Graphic Design, Photography</i>
Independent Study-Advanced Art <i>*Intro to Art, Ceramics and Mixed Media I, Ceramics and Mixed Media II and one 2D or Digital Arts Course</i>	AP-3D Art <i>*Intro to Art, Ceramics and Mixed Media I, & Ceramics and Mixed Media II</i>	Independent Study-Advanced Art <i>*Intro to Art, Drawing and Painting I, Drawing and Painting II, and one 3D or Digital Arts Course</i>	AP-2D Art <i>*Intro to Art, Drawing and Painting I, Drawing and Painting II</i>	AP-Drawing <i>*Intro to Art, Drawing and Painting I, Drawing and Painting II</i>	<i>*All Independent Study Courses Require Application and Meeting with Course Teacher</i>	

**REQUIRED PREREQUISITES*

ART

AP STUDIO ART: 2-D

Grades 11-12

Prerequisite: Drawing and Painting II

1 ½ credits

AP Studio Art: 2-D Art and Design has been developed to accommodate serious art students who have expressed an interest in completing the AP 2-D Art and Design Portfolio. Through studio practice, application of design concepts and informed decision making, these students will assemble a body of artwork that demonstrates a high level of quality and growth over time of content, technique, and process. AP work is not based on a written exam; instead, students are required to submit portfolios for College Board evaluation at the end of the school year. Students will investigate all three parts of their portfolios as required by the AP College Board: Quality, Concentration, and Breadth. All work will be documented through-out the year by digital photos and a google slide presentation.

ART

AP STUDIO ART: 3-D

Grades 11-12 Prerequisite: Ceramics II

1 ½ credits

AP Studio Art: 3-D Art and Design has been developed to accommodate serious art students who have expressed an interest in completing the AP 3-D Art and Design Portfolio. Through studio practice, application of design concepts and informed decision making, these students will assemble a body of artwork that demonstrates a high level of quality and growth over time of content, technique, and process. AP work is not based on a written exam; instead, students are required to submit portfolios for College Board evaluation at the end of the school year. Students will investigate all three parts of their portfolios as required by the AP College Board: Quality, Concentration, and Breadth. All work will be documented through-out the year by digital photos and a google slide presentation.

AP STUDIO ART: DRAWING

Grades 11-12 Prerequisite: Drawing and Painting II

1 ½ credits

AP Studio Art: Drawing has been developed to accommodate serious art students who have expressed an interest in completing the AP Drawing Portfolio. Through studio practice, application of design concepts and informed decision making, these students will assemble a body of artwork that demonstrates a high level of quality and growth over time of content, technique, and process. AP work is not based on a written exam; instead, students are required to submit portfolios for College Board evaluation at the end of the school year. Students will investigate all three parts of their portfolios as required by the AP College Board: Quality, Concentration, and Breadth. All work will be documented through-out the year by digital photos and a google slide presentation.

ADVANCED STUDIO ART

Grades 10-11-12 Prerequisite: Ceramics II or Drawing and Painting II

½ credit

In this course, students will continue to gain an understanding of Art History and Contemporary Art and the influence it has on the development of the artwork made. Students will build upon the drawing, painting and ceramics skills learned in previous classes. Students will pursue artistic expression on an individual basis with instructor guidance to help develop their own style within thematic units. Students will lead with their own artistic style and voice. A variety of mediums will be explored along with more complex artistic styles, techniques, and concepts. This class involves a high level of critical thinking and creative problem solving.

CERAMICS AND MIXED MEDIA I

Grades 9-10-11-12 Prerequisite: Introduction to Art (Grade 9 only)

½ credit

This is a basic course in ceramics with an emphasis in hand-built forms. The methods of pinch, slab, coil, and hump will be used to familiarize the student with clay and clay building. Students will learn the language and terminology used in ceramics. Through various projects, students will gain confidence with observational analysis; technical, interpretive, and inventive skills; self-expression; and personal interests. Students will learn the stages of clay from its origin in the ground through the firing and glazing stages. Group and individual critiques will be included in the course to increase awareness, questioning and self-evaluation. Through research, the student will demonstrate an awareness of and appreciation for the works of ceramic artists from our culture and other cultures. The student will develop knowledge about the early history of ceramics.

ART

CERAMICS AND MIXED MEDIA II

Grades 9-10-11-12 Prerequisite: Ceramics and Mixed Media I

½ credit

This course builds upon prior knowledge from Ceramics I, while developing creativity, craftsmanship, and design skills. Specific projects will be assigned with an emphasis given to design and craftsmanship. Form and design will be emphasized. Glazing and decorating techniques, as well as combining thrown and hand-built forms, will be considered to further emphasize form and design. Students will increase awareness, questioning and self-evaluation through demos, group and individual critiques, and research of ceramic artists.

DRAWING & PAINTING I

Grades 9-10-11-12 Prerequisite: Introduction to Art (Grade 9 only)

½ credit

This introductory course will focus on the fundamentals of drawing and painting. Emphasis will be placed on the drawing process (seeing vs. looking). Students will work with a variety of different drawing and painting media, and learn and experiment with many techniques. Drawing and painting will focus on a variety of media and techniques with emphasis on form and content as well as design elements, history, and appreciation.

DRAWING AND PAINTING II

Grades 9-10-11-12 Prerequisite: Drawing and Painting I

½ credit

In this course, students will gain an understanding of Art History and how it influences and informs the development of the artwork they make, as well as artwork around the world. Students will build upon the basic drawing and painting skills they learned in Drawing or Painting 1, and start to focus on the development of strong compositions, as well as their own artistic style and voice. Students will work in a variety of mediums, and will be exploring more complex artistic styles, techniques, and concepts. This class involves a high level of critical thinking and creative problem solving.

GRAPHIC DESIGN

Grades 9-10-11-12

½ credit

This course introduces the interaction of text and image and the fundamental components of graphic communication. Students will develop and hone skills in working with text and image as they create solutions to a series of design problems. Visual literacy will be increased through exposure to contemporary design issues and graphic design history. Students will be expected to expand their proficiency in all aspects of the design process, including the use of formal design principles, type as image, creative brainstorming, conceptualizing, critical thinking, collaboration, and presentation. Students will learn how to use industry standard design software, including Adobe Photoshop, Adobe Illustrator, and Adobe InDesign.

ART

INTRODUCTION TO ART

Grades 9-10-11-12

½ credit

This course is designed to be an introduction to all art classes. Students will be introduced to the Elements and Principles of Design, Ceramics, Drawing and Painting, Graphic Design, Photography, Mixed Media and Collaborative artwork.

PHOTOGRAPHY

Grades 9-10-11-12

½ credit

This course is an introduction to photographic techniques and digital imagery including the basic techniques of digital camera operation, image scanning devices and computer software editing. Throughout the course, technical skills and conceptual understanding will be major goals in the weekly hands-on assignments. Through lectures, presentations, reading, projects, discussions and portfolios students gain insight into contemporary theory and historical heritage of digital photography. Students will be provided with a digital camera they can check out or they can bring their own.

INDEPENDENT STUDY

Grades 11-12

Prerequisites: All other related courses

½ credit

Independent study courses are made available for students who have taken all of the standard course offerings related to the topic of study. The successful completion of these classes will be evaluated based on a check list for each area. Students wishing to enroll in an independent study course must complete an application and meet with the instructor to develop an approved check list. The following content areas are the only independent study options for the art department.

Business/Career Planning/Marketing Course Map		
Career Planning	Marketing	Business
Academic & Career Planning	Marketing	Business I
Personal Finance		Accounting I <i>*Introduction to Business/Business I</i>
		Accounting II <i>*Introduction to Business/Business I</i> <i>*Accounting I</i>
		Entrepreneurship <i>*Introduction to Business/Business I</i>
		Business Law <i>*Introduction to Business/Business I</i>

**REQUIRED PREREQUISITES*

BUSINESS/CAREER PLANNING/MARKETING

ACADEMIC AND CAREER PLANNING

Grade 10

½ credit

This course will provide students with the opportunity to learn strategies to create success in school and in life. Career planning activities include career research, post-secondary options, job applications, resumes, cover letters, and mock interviews. Students will have the opportunity to learn about lifelong success skills like responsibility, self-motivation, self-management, interdependence, self-awareness, life-long learning.

ACCOUNTING I

Grades 10-11-12 Prerequisite: Business I (Introduction to Business)

½ credit

Did you know accounting is one of the majors most in demand in the country? Accounting is a course in which the student learns how to keep financial records, an important part of operating any business. Any student pursuing a degree in business (major or minor) should take this course. A study of accounting assists in preparing students for post-secondary business programs, for employment in entry-level positions, or for using accounting for personal transactions. Accounting I introduces students to the accounting cycle in a service business.

ACCOUNTING II

Grades 10-11-12 Prerequisite: Business I (Introduction to Business) and Accounting I

½ credit

Accounting II introduces students to the accounting cycle for a merchandise business. In addition, students will look at payroll, depreciation, cost of goods sold, inventory, and more.

BUSINESS I (INTRODUCTION TO BUSINESS)

Grades 9-10-11-12

½ credit

This course will provide an overview of the world of business. Students will explore a variety of topics including types of business ownership, marketing, entrepreneurship, ethics, management, human resources, finance, and the economy. Students may use the industry of their choice in order to show evidence of learning the various concepts.

BUSINESS LAW

Grades 10-11-12 Prerequisite: Business I (Introduction to Business)

½ credit

This course introduces students to the legal environment of business. Students will explore a variety of topics including contract law, employment law, and business organization. Students will apply legal principals, critical thinking, research, and collaboration through debates, mock trials, and case analysis.

ENTREPRENEURSHIP

Grades 9-10-11-12 Prerequisite: Business I (Introduction to Business)

½ credit

This course is an in depth look at entrepreneurship. Students will look at what it takes to be an entrepreneur while exploring different aspects of business ownership. Students may use the business industry of their choice in order to show evidence of learning the various concepts.

BUSINESS/CAREER PLANNING/MARKETING

MARKETING

Grades 9-10-11-12

½ credit

This course will explore the activities necessary to plan, distribute, price, and promote goods and services. Students will apply marketing concepts through Build-A-Burger project with a local restaurant. Successful completion of this course will allow students to understand the marketing concept and how it impacts individuals and organizations.

PERSONAL FINANCE

Grade 12

½ credit

Our complex marketplace demands educated consumers. This course encourages students to gain the information that will help them succeed in life. Course concepts include personal money management strategies including how to plan, develop, use and maintain a personal budget, building and using personal wealth, credit and debt management, financial goals, saving and investing; consumer rights and responsibilities including advertising, marketing, laws and consumer protection organizations, and risk management including the role of insurance as a critical part of personal financial planning.

<i>Cybersecurity</i>			<i>System Admin/IT</i>		<i>Video Game Designer</i>		<i>Software Engineer/Programmer</i>		
Intro to Cybersecurity	Programming I	ITE I & II	Programming I	ITE I & II	Programming I	Drawing and Painting I	Programming I		
		PC Pro I & II		PC Pro I & II	Programming II		Programming II		
		Networking I & II		Networking I & II	Intro to Video Game Design		AP Computer Science A	AP Computer Science Principles	Programming III
		CyberDefense I & II			Advanced Video Game Design				

COMPUTER SCIENCE

AP COMPUTER SCIENCE A

Grades 10-11-12 Prerequisite: Computer Programming I & II

1 ½ credits

This is an introductory college-level computer science course. Students cultivate their understanding of coding through analyzing, writing, and testing code as they explore concepts like modularity, variables, and control structures.

COMPUTER SCIENCE

AP COMPUTER SCIENCE PRINCIPLES

Grades 10-11-12 Prerequisite: Computer Programming I & II

1 credit

AP Computer Science Principles is an introductory college-level computing course that introduces students to the breadth of the field of computer science. Students learn to design and evaluate solutions and to apply computer science to solve problems through the development of algorithms and programs.

COMPUTER PROGRAMMING I

Grades 9-10-11-12

½ credit

In this student-paced course, students will learn to program using the Python programming language. Programs will be depicted in art form by giving commands in the form of syntax to Tracy the Turtle. Programming concepts will include For Loops, Comments, Functions, Top Down Design, Variables, User Input, If/Else Statements, While Loops and more. Students will write, edit, compile, debug, and run programs to solve real-world challenges.

COMPUTER PROGRAMMING II

Grades 9-10-11-12 Prerequisite: Computer Programming I

½ credit

Successful completion of Computer Programming I will set the stage for this exciting student-paced course blending computer programming and problem-solving. Students will study Conditionals, Looping, Functions and Exceptions, Strings, Creating and Altering Data Structures and more. Students will design algorithms to solve real-world challenges and puzzles. Programming challenges will be infused throughout the course.

COMPUTER SCIENCE EXPLORATIONS

Grades 9-10-11-12

½ credit

This is an introductory course designed to touch base on various topics in the Computer Science world. This overview course will touch upon the following topics: The Internet (how it works), Digital Information (various number systems), Intro to Computing (Hardware/Software), Cryptocurrency (How it works), and more.

INTRODUCTION TO CYBERSECURITY

Grades 9-10-11-12

½ credit

This student-paced course prepares students with crucial skills to be responsible citizens in a digital future. It is designed for beginner computer science students with no specific course prerequisites. Students will learn foundational cybersecurity topics including digital citizenship and cyber hygiene, the basics of cryptography, software security, networking fundamentals, and basic system administration.

COMPUTER SCIENCE

INFORMATION TECHNOLOGY ESSENTIALS I

Grades 9-10-11-12

½ credit

Students will have the opportunity to learn about the following topics: Select the appropriate computer components to build, repair, or upgrade personal computers; Explain how to correctly use tools and safely work in a lab; Install components to build, repair, or upgrade personal computers; Explain how to perform preventive maintenance and troubleshooting on personal computers; Install Windows operating systems; Perform management and maintenance of Windows operating systems; Configure computers to communicate on a network; Configure devices to connect to the Internet and Cloud services; Explain how to use, configure, and manage laptops and mobile devices; Explain how to configure, secure, and troubleshoot mobile, macOS, and Linux operating systems; Install and share a printer to meet requirements; Implement basic host, data, and network security; Explain the roles and responsibilities of the IT professional.

ROBOTICS I

Grades 9-10-11-12

½ credit

This is a beginning course in robotics. We will be utilizing Lego EV3 Robotics kits. This course will lead students to create robots that will explore various learning missions, build pre-designed robots, explore creative designing by building robots that can complete specific tasks, and explore robotics in the real world. Students will be building and programming robots in all projects.

ROBOTICS II

Grades 9-10-11-12 Prerequisites: Robotics I

½ credit

This course will advance the students' knowledge of robotics using the Lego EV3 Robotics kits. Topics include advanced designs of pre-built robots, creative designing for solving advanced tasks, team designing, remote controlling robots, and exploring robotics in the real world. Students will continue to expand their knowledge on building and programming their robots.

VIDEO PRODUCTIONS

Grades 9-10-11-12

½ credit

Students will cover an array of exciting topics, starting with an exploration of the rich history of video production and progressing into the intricacies of camera equipment, visual storytelling, and scriptwriting. Throughout the pre-production phase, students will master essential skills such as storyboarding, planning, and production design. As they transition to the production phase, they will delve into advanced camera techniques, lighting, sound, directing, and on-set etiquette. The post-production segment focuses on refining editing skills, adding special effects, and mastering sound editing. Students will also gain insights into distribution platforms and the business aspects of video production.

COMPUTER SCIENCE INDEPENDENT STUDY

Independent study courses are made available for students who have taken all of the standard course offerings related to the topic of study. The successful completion of these classes will be evaluated based on a check list for each area. Students wishing to enroll in an independent study course must complete an application and meet with the instructor to develop an approved check list. The following content areas are the only independent study options for the computer science department.

APP DESIGN

Grades 9-10-11-12

½ credit

Students are introduced to the mobile apps course and its program structure/ syntax. Students also preview some of the tools and technologies they will use to build and run their apps. This course introduces students to programming technologies, design and development related to mobile applications. Topics include accessing device capabilities, industry standards, operating systems, and programming for mobile applications.

COMPUTER PROGRAMMING III

Grades 10-11-12 Prerequisite: Computer Programming I & II

½ credit

In this student paced course, students will be able to choose from a list of pre-approved coding languages and work towards a learning and mastery of that language. Languages include: Javascript, Java, HTML/CSS, C++, etc.

CYBERDEFENSE I

Grades 10-11-12 Prerequisite: Networking I & II

½ credit

This course is designed to prepare you to pass the TestOut CyberDefense Pro and CompTIA CySA+ certifications. This certification measures not just what you know, but what you can do to evaluate a system's security and make recommendations that make the system more secure. Topics include Threat Intelligence, Risk Mitigation, Social and Physical Security, Reconnaissance and Enumeration.

CYBERDEFENSE II

Grades 10-11-12 Prerequisite: CyberDefense I

½ credit

A continuation of CyberDefense I. Topics include: Vulnerability Management, IAM, Cybersecurity Threats, Infrastructure Security, Wireless and IoT Security, Infrastructure Analysis, Software Assurance, Data Analysis, Incident Response. Students will prepare for and take the CompTIA CySA+ Cert Exam.

INFORMATION TECHNOLOGY ESSENTIALS II

Grades 10-11-12 Prerequisites: IT Essentials I

½ credit

Students will continue their work from IT Essentials A and work towards preparing and passing the IT Fundamentals Industry Certification. Topics covered include: Networking, Databases, Programming, Information Systems, Cybersecurity and IT Career Preparation. This course will be student paced.

NETWORKING I

Grades 10-11-12 Prerequisites: PC Pro II

½ credit

Students will learn the basic network structures that allow everything to operate. Topics covered include: Networking Basics, Networking Cabling and Hardware Devices, Network Addressing and Services, Ethernet, Firewalls and Intrusion Detection, and Specialized Networks. This course is the first part of a prep course preparing students for the CompTIA Network+ Certification. This is a student paced course.

NETWORKING II

Grades 10-11-12 Prerequisites: Networking I

½ credit

Students will continue their work from Networking A and work towards preparing and passing the CompTIA Network+ Industry Certification. Topics covered include: Wireless Networking, Wide Area Networks, Network Operations and Management, Network Security, Hardening and Update Management, Network Optimization and Troubleshooting. This is a student paced course.

PC PRO I

Grades 10-11-12 Prerequisite: IT Essentials II

½ credit

This course is designed to equip individuals with the foundational knowledge and skills needed to excel in the field of Information Technology (IT). Whether you're aspiring to launch a career in IT support or seeking to enhance your technical expertise, this course provides comprehensive training that covers essential concepts in computer hardware, software, networking, security, and troubleshooting. Topics include: computer components, OS, computing devices, networking infrastructure and Data/file management.

PC PRO II

Grades 10-11-12 Prerequisite: PC Pro I

½ credit

This course is a follow up to PC Pro I and it helps prepare you for the CompTIA A+ certification. Topics include: System Management, IT Support, Security, Cloud and Virtualization, Troubleshooting, Planning and Communication, and CompTIA A+ Test Prep.

VIDEO GAME DESIGN

Grades 10-11-12 Prerequisite: Computer Programming I & II

½ credit

Students learn how to create simple video games in JavaScript in this high-level, introductory course. Its curriculum teaches the foundations of computer science and basic programming, with an emphasis on helping students develop logical thinking and problem-solving skills. After learning the basics of JavaScript, students will learn how to create classic games such as Block Breaker, Snake, Tic Tac Toe, and more.

ADVANCED VIDEO GAME DESIGN IN UNITY

Grades 10-11-12 Prerequisite: Video Game Design

½ credit

The Advanced Video Game Design in Unity course 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 and utilize the Unity environment in order to create 3D games.

Family and Consumer Sciences Course Map	
Restaurant and Food Services	Child Development Studies
Culinary Arts I	Parents and Children
Culinary Arts II <i>*Family, Foods & Society I or Culinary Arts I</i>	Foundations of Early Childhood Education <i>*Parents and Children</i>
Culinary Arts III <i>*Family, Foods & Society II or Culinary Arts II</i>	

**REQUIRED PREREQUISITES*

FAMILY AND CONSUMER SCIENCES

CULINARY ARTS I

Grades 9-10-11-12

½ credit

This course is the first in a series of three providing the beginning content for careers in the food service industry. Units covered include successful customer relations in the foodservice environment, safety and sanitation, basic kitchen procedures and equipment, culinary math, food preparation techniques and beginning knife skills. Lab experiences include basic cooking and baking techniques.

CULINARY ARTS II

Grades 9-10-11-12 Prerequisite: Family, Foods & Society I or Culinary Arts I

½ credit

This is the second of three courses for students interested in the food service industry. It builds upon skills and concepts learned in Culinary Arts I. Units include intermediate knife skills, menu planning, advanced food preparation techniques, plating and garnishing. Lab experiences include fish, meat and poultry cooking techniques along with advanced baking and dessert preparation.

CULINARY ARTS III

Grades 10-11-12 Prerequisite: Family, Foods & Society II or Culinary Arts II

½ credit

This is the last course in the Culinary Arts series designed to prepare students for careers in the food service industry. It builds on skills and concepts learned in Culinary Arts I and II. Units include menu planning and management, food and labor costing/purchasing as well as restaurant sustainability, marketing and service. Students will participate in and lead catering experiences in the school and community. Advanced lab experiences will be an integral part of this course.

FAMILY AND CONSUMER SCIENCES

FOUNDATIONS OF EARLY CHILDHOOD EDUCATION

Grades 10-11-12 Prerequisite: Parents and Children

½ credit

In this course, students will gain practical experience working with children while earning a state certification: Assistant Child Care Teacher. Units of study include the Early Childhood Education Profession, History of ECE, Early Childhood Programs, Curriculum Models and Anti-Bias Education. Students will be constructing classroom activities and curriculum by developing projects to be used in a child care setting. In order to achieve certification, students must earn a C or better, be present for 85% of the course content, and complete 10 hours of job shadow experience. Certification allows students to work as an Assistant Child Care Teacher at any licensed day care at the age of 17. **Upon successful completion of this course, students will earn three (3) college credits from Northwood Technical College.**

PARENTS AND CHILDREN

Grades 9-10-11-12

½ credit

This course emphasizes the development of children and parenting responsibilities. Students will explore pregnancy and birth, physical growth and development, emotional, social and intellectual development, parenting styles and career options. Theories of development, positive guidance, and utilization of community resources make this an excellent course for students interested in pursuing a career in the field of education, childcare, and for students interested in preparing for their own future parenting role. This course is a prerequisite for the Foundations of Early Childhood Education class.

INDEPENDENT STUDY

Grades 11-12 Prerequisites: All other related courses

½ credit

Independent study courses are made available for students who have taken all of the standard course offerings related to the topic of study. The successful completion of these classes will be evaluated based on a check list for each area. Students wishing to enroll in an independent study course must complete an application and meet with the instructor to develop an approved check list. The following content areas are the only independent study options for the Family and Consumer Sciences department:

Culinary Arts Independent Study
Baking Independent Study
Introduction to Education Independent Study

FOREIGN LANGUAGE

SPANISH I

Grades 9-10-11-12

1 credit

The students will be introduced to the fundamental elements of the Spanish language. Emphasis will be on basic speaking, listening, reading, and writing. Students will learn vocabulary, grammar, and culture through the use of various supplementary learning media and materials. Cultural topics may change depending on the interest of the students. Upon completion, students will have the ability to communicate in the target language with simple conversation and basic Spanish grammar structure. Students will be strongly encouraged to use only target language as they progress through the semester.

FOREIGN LANGUAGE

SPANISH II

Grades 9-10-11-12 Prerequisite: Spanish I

1 credit

This course will focus on further development of speaking, listening, reading and writing skills. More emphasis is placed on informal conversations and moving toward formal conversation. Students will need to communicate in target language and will be encouraged to use only the target language at various times. Some instruction may still be in English; however, as students' progress, more target language will be used. The students will be able to comprehend and respond with increased proficiency to spoken and written Spanish and will be able to demonstrate further cultural awareness. Vocabulary, grammar, communication, and culture will all be connected to themes chosen by students making connections of when and where Spanish may enhance their future. Students will have a stronger voice in topic choices and presentation styles.

SPANISH III

Grades 10-11-12 Prerequisite: Spanish II

1 credit

In this course we will cover topics pertaining to student's choice and making the connection to the culture and history of the target language with strong emphasis on speaking formal and informal conversations. Topics can include interest of the student in historical, social-political, economic, or artistic areas and may be connected to other disciplines or other topics in which the student may show an interest. Students will show evidence of learning in a format of their choice. Connection for understanding cultural differences will be emphasized. Vocabulary, grammar, communication, and culture will be covered in this course in written and oral forms. Class is mostly conducted in Spanish with a strong focus on speaking. Daily speaking and sharing work and interest are done in Spanish.

SPANISH IV

Grade 11-12 Prerequisite: Spanish III

1 credit

This course is a continuation of Spanish III with stronger emphasis on conversations. Students will be required to present their learning in target language. Students will be able to communicate completely in Spanish. Topics will be centered around the interest of the student and making connection to Spanish culture, history, social-political, economic, and artistic areas and may be connected to other disciplines. Students will be able to choose modes of presentation to show evidence of learning. Upon completion of this course, students will be able to discuss topics, express ideas and opinions clearly, and engage in formal and informal conversation. This course is mainly speaking, all assessments are centered around the ability to speak formally and informally.

Language Arts Course Map			
Grade 9	Grade 10	Grade 11	Grade 12
English 9	English 10	American Literature or AP English Language & Composition	English 12 or AP English Lit & Composition
21 st Century Communications*	Creative Writing*	Creative Writing*	Creative Writing*
	Journalism*	Journalism*	Journalism*
	21 st Century Communications*	21 st Century Communications*	21 st Century Communications*

*Electives

LANGUAGE ARTS

AMERICAN LITERATURE

Grade 11

½ credit

This course introduces students to fiction and nonfiction authors, selections, and themes in literature that are a part of our American heritage. Students will read, analyze, and discuss the unique and universal qualities of American literature. Assignments will provide opportunities to use the writing process and to demonstrate the six traits of good writing.

AP LANGUAGE AND COMPOSITION

Grade 11

1 ½ credits

This three-trimester course encourages and engages students in becoming skilled readers and writers who compose for a variety of purposes, with a concentration on persuasive composition. This course is organized according to the requirements and guidelines of the current AP English Course Description. Students are expected to read critically, think analytically, and communicate clearly in writing. College credit may be earned by passing the AP Exam. **This course may be taken as an alternative to American Literature and an English elective course.**

AP LITERATURE AND COMPOSITION

Grade 12

1 ½ credits

This three-trimester alternative to English 12 exposes college-bound students to the rigorous course of study required in a college introductory literature class. Students will develop their powers of analytical thinking through the critical analysis of literary masterpieces and critical essays and hone their skills in expository writing through rhetorical exercises based on class readings. Students registering for this class must be willing to devote time and energy, both within and outside the class, to meet the intellectual demands of the course. College credit may be earned by passing the AP Exam. **This course may be taken as an alternative to English 12 and an English elective course.**

LANGUAGE ARTS

CREATIVE WRITING

Grades 10-11-12

½ credit

This English elective course focuses on creative writing as both process and product. This course will provide opportunities for the student to create several forms of writing while discovering his/her unique voice. Students write every day in a relaxed, open environment.

ENGLISH 9

Grade 9

1 credit

This required two-trimester freshman English course provides students with a strong foundation of a language arts curriculum, which will prepare them for success in all areas of reading, writing, speaking, and listening.

ENGLISH 10

Grade 10

1 credit

This two-trimester course will focus on a variety of literature, oral communication, and rhetorical writing. One trimester will emphasize researching and research skills based on literary topics. MLA format, plagiarism and reliable sources will be topics of instruction.

ENGLISH 12

Grade 12

1 credit

This two-trimester class will review and polish fundamental writing skills in order to achieve proficiency in oral and written communication. The class will study selected literature and do writing that is connected to that literature, as well as some technical writing. Students will work independently on assignments, which include a research project.

JOURNALISM

Grades 10-11-12

½ credit

This sophomore-senior elective English course will cover all aspects of journalistic writing and conventions. Students will be able to research and interview effectively, as well as write various types of news stories. Students will also examine the role of media in contemporary society by analyzing media narratives through the use of rhetorical strategies and close reading.

21ST CENTURY COMMUNICATIONS

Grades 9-10-11-12

½ credit

This class will focus on the written and verbal communication skills needed in today's rapidly changing world. Students will explore social media, current events, popular culture and entertainment, and any other forms of relevant communication. This class will allow students to develop assessments in various formats (podcasts, videos, websites) used in today's diverse communities. This is an opportunity for students to join reading, writing, and public speaking skills with 21st Century media.

MATHEMATICS

ADVANCED MATH

Grades 10-11-12 Prerequisite: Geometry and Algebra II 1 credit

This course sets students up for the study of higher-level mathematics and advanced sciences such as physics. Topics of study include a review of functions, mapping angles in rotation, the unit circle, trigonometric functions, graphs of trigonometric functions, periodic functions, trigonometric proofs and identities, and the composition of waves and wave models. A complete understanding of the uses of logarithms and solving exponential equations will be developed through a unit in mathematical models as students will explore functions and how to figure out equations to model mathematical situations. A study of conic sections and matrices will follow as well as an introduction to polar coordinates and graphing. Graphing calculator technology is utilized and stressed throughout this course.

ALGEBRA I

Grades 9 1 credit

This course provides an understanding of algebra in six basic areas. These areas are problem solving, graphing, writing equations, ratios, solving equations, and symbol manipulation. Each unit takes a spiral approach in which concepts are reviewed and expanded to help student understanding. Upon completion of this course, students will be able to understand the basic building blocks of algebra, apply problem solving techniques to real world problems, and learn to work effectively with others to find answers.

ALGEBRA II

Grades 9-10-11-12 Prerequisite: Geometry (or concurrent enrollment) 1 credit

Students will continue to use strategies and knowledge of algebra, geometry, and functions to make connections to advanced mathematics. Visualizing, interpreting, and graphing functions will be stressed in a broad range of topics from linear algebra to trigonometry. Students will learn to construct convincing arguments to support or prove theories and to communicate their ideas using appropriate vocabulary. Topics include linear, quadratic, exponential, logarithmic, and trigonometric relationships.

AP CALCULUS

Grades 11-12 Prerequisite: Advanced Math A and B 1 ½ credit

This 3-trimester course is designed to give students the necessary background to succeed in college level calculus courses, test out of them, or prepare for the AP Test in May. Topics covered will include a pre-calculus review, functions and limits, differentiation, applications, and techniques of integration. This course is highly recommended for anyone entering technical fields or medical fields, business, engineering, or architecture. Students will prepare by taking practice AP exams and review much of the calculus curriculum. After the AP exam students will engage in an authentic research project. **College credit may be earned by taking and passing the AP Exam.**

GEOMETRY

Grades 9-10-11-12 Prerequisite: Algebra I 1 credit

This course is designed to emphasize the study of the properties and applications of common geometric figures in two and three dimensions. It includes the study of transformations, right triangle trigonometry, and angle relationships. Inductive and deductive thinking skills are used in problem solving situations. It also emphasizes writing proofs to solve (prove) properties of geometric figures.

MATH

STATISTICS

Grades 11-12

Prerequisite: Algebra II

½ credit

This course will study the concepts of probability and statistical inference. Topics covered will include data summary, centers and variation, and statistical decision making. Statistics is recommended for students entering business or medical fields.

TECHNICAL MATH

Grades 11-12

Prerequisites: Geometry and Teacher Recommendation

1 credit

This course will provide students the opportunity to review the math skills which are used in multiple professions. You will also get the opportunity to apply these math skills to real-life topics like income taxes, household budgeting, taking out loans for a house or car, and credit cards. This course will count as the third year of math for high school graduation, but it is NOT accepted as a math course for college admission to four-year universities.

MUSIC

BAND

Grades 9-10-11-12

¾ credit

Band is open to grades 9-12. The band will have a planned instructional program for developing music skills and will include public performance and contest participation. There are many opportunities within this organization including color guard, drum line, pep band, jazz band and marching band along with honors ensembles and small ensemble opportunities. The band has opportunities to travel for performances and concerts such as the UW-Madison Varsity Band Concert and continues to look for new opportunities. Each student will have individual lessons scheduled during school hours.

CHOIR

Grades 9-10-11-12

¾ credit

Choir is an elective course open to grades 9-12. A variety of choral literature is rehearsed, studied and performed throughout the school year. Several concerts at school, in addition to choir festivals and contests, make up the year's performances. There are opportunities for small groups of select singers to participate in vocal jazz and various vocal ensembles. Group and individual voice lessons are given on a time available basis.

GUITAR I

Grades 9-10-11-12

½ credit

Guitar Basics is an introduction to playing the acoustic guitar, intended for students with little or no guitar experience. We will learn the basic techniques of playing melodies and chords using popular song from many genres while also studying how songs are made. Singing while playing the guitar is a focal point of performance for this course. We will also learn guitar tuning, instrument care, and guitar tablature. A school instrument will be provided for use during the duration of the course. Expect to practice your instrument outside of class time to master performance learning targets.

MUSIC

GUITAR II

Grades 10-11-12 Prerequisite: Guitar I (Guitar Basics)

½ credit

Guitar II is an opportunity for those with beginning guitar skills (1st position chords, simple strumming, singing while playing) to grow into intermediate and advanced playing. Song writing using chord progressions and strumming/finger picking will focus on developing lyrics, form, and vocal and/or guitar melodies. Guitarists can expect to analyze songs by popular musicians, create their own song as a final project (solo or ensemble work: drums, bass, lead, vocals, keys, and other groupings possible), learn major and minor scales, perform for a live audience, and write music using standard staff and/or tab notation.

MUSIC THEORY I

Grades 9-10-11-12

½ credit

This is an introductory course to music theory (the reading and writing of music). Students will explore basic concepts including clefs, note and rest values, time signatures, articulations and tempo, and dynamic markings through written work and hands on piano technique. Students will learn, through practice and performance, a basic repertoire of beginning to intermediate piano music. The course is especially geared for choir and band students who want to become better music readers but is open to all students.

MUSIC THEORY II

Grades 9-10-11-12 Prerequisite: Music Theory I

½ credit

Music Theory II is a follow up course to Music Theory I. This course will study more advanced music theory concepts such as chords, scales, intervals, complex rhythms, minor scales, harmonizing along with composing, and arranging music on the computer. Music Theory II is limited to students who have successfully completed Music Theory I.

MUSIC THEORY III

Grades 10-11-12 Prerequisite: Music Theory II

½ credit

This course is a follow up to Music Theory II. Music Theory III will be studying more advanced music theory concepts including chords, minor scales, harmonizing, musical forms, and composing. The main focus of the course will be composing music on computer software. This course will also involve listening to various recordings, overview of music history and researching a historical composer. This course is limited to students who have already successfully completed Music Theory I and II.

HEALTH

TEEN HEALTH

Grade 9

½ credit

Students will identify and examine risky behavior and its health consequences for teens. Issues may include teen mental illnesses, fitness and nutrition, consequences of using tobacco alcohol and other drugs, violence/conflict resolution, stress, depression, suicide, early sexual activity and its health and legal consequences, communication, and other topics identified by the class. Students will explore these topics through technology, media, guest speakers, classroom activities, and a variety of other teaching methods.

PHYSICAL EDUCATION

PERSONALIZED FITNESS

Grades 9-10-11-12

½ credit

Students who are interested in their overall wellness may want to consider taking the personal fitness course. The curriculum in this course will include setting meaningful fitness goals to create a personalized wellness plan. Wellness plans will include physical activities that improve cardiovascular health, muscular strength and endurance, flexibility, nutrition, and personal safety in a strength training environment. Students will be required to participate in weekly cardiovascular, flexibility and strength and endurance activities. The first 4 weeks of the class will involve learning weight room safety and etiquette, proper technique and fundamentals with free weights and machines, and lastly developing an 8-week personalized fitness plan. During the remainder of the 8 weeks, students will have an opportunity to execute their fitness plans and participate in activities such as core training, plyometrics, and alternative physical activities such as yoga.

PHY. ED. 9-10

Grades 9-10

½ credit

Physical Education 9-10 is a fitness-based course and is required for graduation. This course is designed to give our freshman and sophomore students an opportunity to develop in the areas of strength, flexibility, coordination, cardiovascular endurance, and team building. While developing these skills, students will be introduced to new, enjoyable activities that will enhance lifelong physical fitness. Students will explore these areas in the gym and in the classroom. The main focus of this course is aerobic conditioning. We will spend a significant amount of class time achieving target heart rate. This will be accomplished through daily cardio workouts and game play. Depending on the season, some game play might include badminton, basketball, flag football, lacrosse, floor hockey, cooperative games, team handball, soccer, golf, and volleyball.

PHY. ED. 11-12

Grades 11-12

½ credit

Physical Education 11-12 explores activities that encourage all elements of fitness. This course is designed for upperclassmen in grades 11 and 12. Along with regular cardio development and traditional team sports, the main emphasis will be to introduce lifelong activities such as archery, bowling, cross-country skiing, biking, canoeing, and kayaking. Through each unit, information will be provided on knowledge of proper exercise technique in order to be successful with lifelong movement opportunities.

SCIENCE

AGRI-SCIENCE

Grades 9-10-11-12

½ credit

This course will explore the career opportunities in the many fields of agriculture. The areas explored will be natural resource management, integrated pest management, biotechnology, water and soil management, forestry and wildlife management, aquaculture, crop and livestock management, and food science.

SCIENCE

ANATOMY AND PHYSIOLOGY

Grades 10-11-12 Prerequisite: Biology I

1 credit

This laboratory course is designed to explore major organ systems of the human body. This elective course is recommended for students considering a career in the health sciences, life sciences, or for those who want to know more about themselves. Student evaluation will be based upon system models, laboratory investigation, case study responses, eportfolio reflection, and summative assessment.

AP BIOLOGY

Grade 11-12 Prerequisites: Biology I **and** Chemistry I

1 ½ credits

This course guides students to a deeper understanding of biological concepts including the diversity and unity of life, energy and the processes of life, homeostasis, and genetics. Students learn about regulation, communication, and signaling in living organisms, as well as interactions of biological systems. Students carry out a number of learning activities, including readings, interactive exercises, extension activities, hands-on and virtual laboratory experiments, and practice assessments. These activities are designed to help students gain an understanding of the science process and critical-thinking skills necessary to answer questions on the AP Biology Exam. **College credit may be earned by taking and passing the AP Exam.**

AP CHEMISTRY

Grades 11-12 Prerequisite: Chemistry I

1 ½ credits

This 3-trimester lab course is designed to take all of the course work in Chemistry I and add AP Chemistry curriculum to prepare students for the AP Chemistry exam in May. Students will prepare by taking practice AP exams and expanding on much of the chemistry curriculum with topics that include Atomic Structure, Bonding, Stoichiometry, Reactions, Kinetics, Thermodynamics, Equilibrium, Acid and Bases, and Electrochemistry. This course is recommended for students planning to take Chemistry or related courses in college, especially those majoring in the sciences. **College credit may be earned by taking and passing the AP Exam.**

BIOLOGY I

Grade 10 Prerequisite: Physical Science

1 credit

Introductory biology focuses on molecular cell biology. Students will look at the world through a microscopic lens and truly understand how each component of the bigger system works. Themes of this course include, but are not limited to: scientific research, macromolecules, cellular components and systems, genetics, and building blocks of life.

BIOLOGY II

Grades 10-11-12 Prerequisite: Biology I

1 credit

This elective laboratory course is designed for students who desire more depth of knowledge in topics of Biology. Complexity of life is explored through intensive zoology studies. Research and writing in science allow students the opportunity to understand how important research is when communicating about science. Introduction to microbiology focuses on pathogen identification and isolation.

SCIENCE

CHEMISTRY I

Grades 10-11-12 Prerequisites: Biology I (or concurrent enrollment) and Algebra I 1 credit

Chemistry is the study of the composition, structure, and properties of matter, the processes that matter undergoes, and the energy changes that accompany these processes. The course topics include scientific measurement, structure of the atom, quantum model of the atom, periodic properties and electron configurations, chemical bonding, chemical equations and reactions, stoichiometry, kinetic theory, gas laws, and properties of solutions. The course is designed to prepare students for future chemistry coursework and give students a better understanding of the natural world.

ENVIRONMENTAL SCIENCE

Grades 9-10-11-12 1 credit

Environmental science is a multi-disciplinary field that draws from all the sciences and other fields, to study the relationships between humans and the world. The course will apply principles of pure science, such as chemistry, geology, mathematics, and biology to achieve an understanding of the natural world and resource use. The course will focus on three main areas: 1) conservation and natural resource protection, 2) environmental education, 3) communication and environmental research. The school forest will be utilized as a study site and outdoor classroom. The course will provide an opportunity to practice techniques and instruments utilized in the study of ecology and environmental science.

FORENSIC SCIENCE

Grade 11-12 Prerequisites: Biology and Chemistry I ½ credit

Forensic Science is a crime lab science. Even though crime seems to have increased, so has the ability to catch the criminals. This is due largely to the much-improved investigative methods of the investigators--the forensic scientists. This course presents numerous opportunities to integrate knowledge accumulated from other courses, such as biological and physical sciences, mathematics, social sciences, and others. Students may expect activities such as these: studying state-of-the-art methods of analysis, examination of classic and unique criminal cases, and lab analysis of physical evidence (such as soil, hair, glass, fibers, DNA, ballistics, fingerprints, and blood).

PHYSICAL SCIENCE

Grade 9 1 credit

This course, designed for the freshman level, involves the study of the physical world. It gives students a practical understanding of the scientific world to help meet graduation requirements and assessments. The course will be divided into two major units: the study of fundamental physics and chemistry. Chemistry will involve the study of matter, including atomic structure, the periodic table, and chemical reactions. Physics will involve the study of forces, motion, and energy.

SCIENCE

PHYSICS

Grades 11-12

Prerequisite: Algebra II

1 credit

Physics is the study of matter and energy. It is a required course for many professions ranging from architecture and engineering to many health-related careers. Topics of study include motion, rocket flight, collisions, planetary motion, gravity, sound, light, magnetism, and electricity. Physics is a lab science and is required for admission to many programs of further study. Many of the labs completed are very in-depth studies of the above topics and integrate mathematics, science, technical writing, and the use of computer technology. **Physics is very dependent on the use of mathematics. Students must have a minimum of a scientific calculator.**

SURVEY OF EARTH AND SPACE SYSTEMS

Grades 9-10-11-12

½ credit

This course is an introductory earth science course. We will investigate the concepts of earth and space systems and their connections to the life and physical sciences. Students can expect an advanced study of the systems of earth and space as they take a journey from earth to the farthest corners of the known universe.

SOCIAL STUDIES

AMERICAN HISTORY

Grade 9

1 credit

This class will cover the second half of the 19th century through the present. The major events of emphasis will be Westward Expansion, Industrialization, Progressive Era, Imperialism, WWI, the Roaring Twenties, the Great Depression, the New Deal, WWII, the Cold War, Civil Rights Movement, Fall of Communism, and War on Terrorism.

AP PSYCHOLOGY

Grades 11-12

Prerequisites: Psychology **or** Sociology

1 ½ credits

AP Psychology surveys the major topics in the field of psychology as well as terminology, methodology, and the historical and current understanding of human behavior and thought processes. Concepts, terminology, and research findings are presented at the level of an introductory college psychology course. Students learn how psychologists analyze human experiences and apply what they have learned. The course presents the following 9 Units: the scientific foundations of psychology, the biological basis of behavior, sensation and perception, learning, cognitive psychology, developmental psychology, motivation and emotion, clinical psychology, and social psychology. The course prepares students to take the Advanced Placement Psychology exam.

SOCIAL STUDIES

AP U.S. GOVERNMENT

Grades 11-12 Prerequisite: American History

1 credit

This course presents an analytic perspective on American politics, covering the ideals, institutions, and processes that direct the daily operations of government and shape public policy. Students will examine the constitutional structure of government, participatory politics, the formal institutions of power, and the extra-constitutional influences on government institutions. Student will interpret and analyze the political landscape to develop an understanding of the strength and weaknesses of the U.S. system of government. This course addresses the following topics among others: American political culture, the Constitution, federalism, civil liberties, civil rights, public opinion, media, political parties, campaigns and elections, interest groups, Congress, the presidency, the federal bureaucracy, and the federal courts. Students selecting this course should have strong skills in reading and written composition. **This course may be taken as an alternative to Civics.**

CIVICS

Grade 12

½ credit

This is a one trimester course which explores the historical, cultural, and social importance of government in America. Local, county, state, and federal government will be thoroughly explored while emphasizing our rights, duties, privileges, and obligations as citizens in a free democratic society.

CURRENT ISSUES

Grades 9-10-11-12

½ credit

This course will examine international, national, state, and local issues that cover the wide spectrum of life in our constantly changing world. Each class day will explore current issues and the conflicts they create in our lives. Using magazines, IMC resources, television, and newspapers, students will study such topics as politics, conflict, the economy, lifestyles, social problems, and environmental concerns.

HISTORY OF AMERICAN CULTURE AND MUSIC

Grades 9-10-11-12

½ credit

In this course, students will explore the history of different genres of music in the United States and how it relates to society, culture and history. Through reading, research and discussions, students will make connections between music, pop culture, politics and the historical events of the early twentieth century to the present. Types of music will include the following: Country, Rock & Roll, The Blues, Folk, Hip Hop, Jazz, Pop, Bluegrass, Metal, Big Band and Gospel, for example. Research on the origins of the music and how it transformed into other branches of styles of music will also be discussed as well as how the use of technology has impacted music as a whole. Students will work on a trimester-long individual project that will be based on their personal interests.

SOCIAL STUDIES

PSYCHOLOGY

Grades 10-11-12

½ credit

This course is designed for students who plan on attending a post-secondary institution. Students are expected to do outside readings, research, critical thinking, role playing, and hands-on activities to enrich the classroom instruction. Students will explore different theories which try to explain why humans behave the way they do. Specific units covered in this course are history of psychology and research methods, parts of the brain and how they affect behavior, how sensations influence human perceptions, comparing theories of learning, differing views of intelligence, elements of memory and forgetting, and abnormal behavior.

SOCIOLOGY

Grades 10-11-12

½ credit

This course is designed to help students gain a better understanding of the forces that influence their daily behavior. It is meant for students who plan on attending a post-secondary institution. Students will examine patterns of interactions based on social structures. Specific units that are covered in this course are theoretical approaches to society, elements of culture, socialization of individuals, deviant behavior of individuals, social stratification, racial/gender inequalities of America, and social institutions. Students are expected to do outside readings and blogs, analysis of data, role playing, and hands-on activities to enrich the classroom instruction.

WORLD GEOGRAPHY

Grade 10

½ credit

In this required sophomore class, students will utilize physical and cultural perspectives to examine people, places, and environments at local, regional, national, and international levels. Students will describe the influence of geography on the events of the past and present with emphasis on contemporary issues. A significant portion of the course centers around the political, economic, and social processes that shape cultural patterns of regions; the distribution of movement of world population; relationships among people, places, and environments; and the concept of religion. Students will identify the processes that influence the world's political divisions and they analyze how different points of view affect the development of public policies. Students will use problem-solving and decision-making skills to ask and answer geographic questions.

WORLD HISTORY-ANCIENT

Grade 10

½ credit

This required course provides a cultural, geographical, and historical overview of ancient world civilizations and an understanding of the western medieval period. Civilizations studied include but are not limited to ancient Egypt, Mesopotamia, Hebrews, India, Greece, and Rome. Philosophy and literature are components of this course.

SOCIAL STUDIES

WORLD HISTORY-MODERN

Grade 11

½ credit

In this course, students will examine historical developments that have shaped the modern world. Students will view themselves relative to the changes in political, economic, social, cultural, and geographic developments of contemporary history. Units of study in this course include the following: A) The effects of the Crusades, Black Death and Renaissance on Europe, B) World Revolutions C) World Imperialism D) The Cold War.

WORLD WARS

Grades 10-11-12

½ credit

This course is for any student interested in modern warfare. The wars that will be covered will include WWI and WWII, Korea, Vietnam, and the Gulf War. As presented, the course will concern itself with the causes of war, actual combat methods, main battles, and the effect war had on reshaping the face of the earth.

Tech. Ed. Pathway Matrix				
Automotive/ Small Engine Maintenance	Construction & Woodworking	Design & Engineering	Machining	Welding
Computer Aided Design (CAD)	Computer Aided Design (CAD)	Computer Aided Design (CAD)	Computer Aided Design (CAD)	Computer Aided Design (CAD)
Metal Fabrication I	Woodworking I	Metal Fabrication I	Metal Fabrication I	Metal Fabrication I
Small Engines & Basic Auto <i>*Computer Aided Design</i>	Woodworking II <i>*Woodworking I *Computer Aided Design</i>	Woodworking I	Turning Fundamentals A & B <i>*Metal Fabrication I *Computer Aided Design</i>	SMAW/GMAW (Yearlong course) <i>*Metal Fabrication I *CAD or concurrent enrollment</i>
	Construction <i>*Woodworking I *Computer Aided Design</i>	Engineering Concepts <i>*Woodworking I *Metal Fab I *Computer Aided Design</i>	Milling Fundamentals A & B <i>*Turning Fundamentals A & B</i>	GTAW <i>*SMAW/GMAW</i>
			CNC Machining <i>*Milling Fundamentals</i>	Welding Related Processes <i>*Metal Fabrication I *Computer Aided Design</i>
				Metal Fabrication II <i>*All other welding courses and CAD</i>

**REQUIRED PREREQUISITES*

TECHNOLOGY AND ENGINEERING

CNC MACHINING

Grades 11-12

Prerequisite: Milling Fundamentals and CAD

½ credit

Students taking this course will learn programming and basic operations for CNC turning and milling machines. The students will interpret technical drawings and convert part features into a CNC program using common G and M codes and some canned cycles. Students will also learn how to call up programs, load and unload parts, set work and tool offsets, utilize conversational programming to machine products, and generate tool paths through CAM software.

COMPUTER AIDED DESIGN (CAD)

Grades 9-10-11-12

½ credit

This is a fun and interactive class that teaches students to design and create objects using 3D design software. Everything that is manufactured starts with a design and this class will teach students how to create amazingly realistic parts. This course is an excellent choice for students interested in the drafting, engineering, or manufacturing fields. Students will model a folding camp shovel, learn how to 3D print, and compete in the Tower Project.

CONSTRUCTION

Grades 9-10-11-12

Prerequisite: Woodworking I and Computer Aided Design (CAD)

½ credit

This course provides students with an introduction to residential construction and remodeling projects. Student activities include management, estimating, carpentry, blueprint reading, safe tool operation, and general construction skills. Students will work together to create a variety of construction projects. This is a great class for someone interested in carpentry, general construction, architecture, or anyone who might want to build or design their own house someday.

ENGINEERING CONCEPTS

Grades 9-10-11-12

Prerequisite: Computer Aided Design (CAD)

½ credit

Building upon skills acquired in the “Computer Design and Manufacturing” (CAD/Inventor) course, this course presents advanced topics in CAD software and combines them with rapid prototyping methods utilizing laser cutting and 3-D printing. Engineering Concepts will emphasize 21st century learning skills—mainly the 4 C’s—Creativity, Critical Thinking, Collaboration, and Communication through the exploration of different engineering concepts. Students will be required to follow the design process through the completion of several challenges throughout the semester. Topics that students will explore include; gear ratios, solar power, wind power, force multiplication, mechanical advantage, buoyancy, tension, compression, and simple machines through instruction and lab activities. Challenges will vary depending on the time of year the class is offered. Samples include; Solar Car, Wind Turbine, The Claw, Watercraft, Toothpick Bridge, Hovercraft, and Mousetrap Distance Car.

TECHNOLOGY AND ENGINEERING

GAS TUNGSTEN ARC WELDING (GTAW)

Grades 11-12

Prerequisite: SMAW/GMAW C

½ credit

This class is designed to build students' skills and knowledge of Gas Tungsten Arc Welding (GTAW). The students will weld using GTAW on carbon steel, stainless steel, and aluminum. The students will learn the information and concepts that are needed to perform GTAW at high levels. Upon successful completion of the AWS standards within this course, students can earn a GTAW Level I AWS welding certificate. The standards set by AWS are very high. It will take more than just passing the class to earn the AWS credentials. Students that earn this will have an industry recognized certificate. **Students taking this class will receive one (1) college level credit of advanced standing toward the following Northwood Technical College course: 31442379 – Gas Tungsten Arc Welding I.**

METAL FABRICATION I

Grades 9-10-11-12

½ credit

This course guides the students through an exploratory process of metal fabrication. Students will be introduced to metals shop safety as well as equipment identification and use. Equipment emphasis will be placed on the metal lathe, milling machine, and an introduction to welding. Students will learn about the variety of careers in the manufacturing industry.

METAL FABRICATION II

Grades 11-12

Prerequisite: SMAW/GMAW C and CAD

½ credit

The main objective of this class is to complete a capstone welding project. The course is designed to use all of the skills learned in the students' previous welding classes. The students will plan, design, and build an approved project using proper fabrication and welding techniques. The students will need to demonstrate their ability to solve problems, organize materials, and complete a professionally fabricated product.

MILLING FUNDAMENTALS (2 Period Block)

Grades 11-12

Prerequisite: Turning Fundamentals

1 credit

This course covers the introduction to the milling machines. Emphasis is on knowing the machine parts, their function, and performing simple milling operations. Introductory subjects such as related safety, maintenance, metal cutting theory, cutting tools, and work holding for the mill will be taught. Students will learn the basics of metal cutting on these machines. The course will be taught as a two-period block for one trimester **This is a college level course. See instructor for details on college credits.**

SHIELDED METAL ARC WELDING & GAS METAL ARC WELDING (SMAW/GMAW)

Grades 10-11-12

Prerequisites: Metal Fabrication I and CAD (or concurrent)

1 ½ credit

This course introduces the student to the basics of SMAW and GMAW welding operations. It includes the study of the type of metals and equipment utilized in welding. The instruction emphasizes accepted applications in butting and joining metals utilizing standard industry techniques. **This is a yearlong dual credit course. Students may need to utilize resource time to complete some of the welding labs. Upon successful completion of this course, students will earn 6 credits from Northwood Technical College courses: SMAW I (3 credits) and GMAW I (3 credits)**

TECHNOLOGY AND ENGINEERING

SMALL ENGINES

Grades 10-11-12 Prerequisite: Computer Aided Design (CAD) ½ credit

This course is designed to increase skills in engine diagnostics and repair. Students will gain understanding of complex concepts by disassembling, inspecting, and rebuilding a small engine. Students will be required to bring in a motor to diagnose. In addition to small engine diagnostics and repair, students will also study fuel economy, ethanol, hand tool identification, bolt identification, and Pascal's Principle.

TURNING FUNDAMENTALS (2 Period Block)

Grades 10-11-12 Prerequisites: CAD and Metal Fabrication I 1 credit

This course is designed to teach the beginner how to use the manual engine lathe. Students will learn about lathes, associated processes, lathe tools, and related safety/maintenance issues. The course will be taught as a two-period block for one trimester. **This is a college level course. See instructor for details on college credits.**

WELDING RELATED PROCESSES (Replaces Print Reading)

Grades 9-10-11-12 Prerequisites: Metal Fabrication I and CAD ½ credit

This course introduces the student to Oxy/Fuel torch cutting, manual and CNC plasma cutting, welding symbols, print reading, and general metal fabrication processes related to welding.

WOODWORKING I

Grades 9-10-11-12 ½ credit

Woodworking I focuses on the safe operation of power tools in the woodshop. Students will use table saws, planers, routers, jointers, band saws, compound miter saws, hand sanders, and drills in the construction of a night stand. During the construction of the night stand students will also be introduced to different materials and processes commonly found in cabinet making.

WOODWORKING II

Grades 9-10-11-12 Prerequisites: Woodworking I and CAD ½ credit

Woodworking II will focus on safe machine use and wood joinery commonly used in cabinet making shops. Students will be exposed to the use of the miter saw, jointer, planer, table saw, surface sander, router and several other machines and hand tools. Joinery covered includes dados, rabbets, grooves, and biscuit joints. The primary project will be a hanging cabinet.

TECHNOLOGY AND ENGINEERING INDEPENDENT STUDIES

INDEPENDENT STUDY

Grades 11-12

Prerequisites: All other related courses

½ credit

Independent study courses are made available for students who have taken all of the standard course offerings related to the topic of study. The successful completion of these classes will be evaluated based on a check list for each area. Students wishing to enroll in an independent study course must complete an application and meet with the instructor to develop an approved check list. The following content areas are the only independent study options for the technology education department.

Advanced CNC Milling

Advanced CNC Turning

AWS Welding Certification SMAW

AWS Welding Certification GMAW

AWS Welding Certification GTAW

AWS Welding Certification FCAW

Introduction to Pipe Welding

Advanced Woodworking

Architectural Design