



# COURSE INFORMATION

## 2022-2023

**Make your course selections for next year very carefully.** Preparing for your future is serious business which deserves as much attention as you can give. Whether after graduation you plan to seek a job, go on for further vocational/ technical training, or go to a four year college, doing well in high school will increase your chances for success. Getting a good education NOW will make an important difference in your future. We are fortunate to have an outstanding educational system and it is up to you to take advantage of the opportunities it offers.

By getting the most out of your high school years, you will be prepared in those areas employers consider essential for success on the job: reading, writing, speaking, and listening; problem solving and critical thinking skills; mathematics, science; social studies, vocational skills, and computer literacy. In high school, you should also develop good study habits, positive work attitudes, employment skills, and an ability to get along with other people.

Pursuant s.118.13 Wis. Statute the Bruce School District does not discriminate on the basis of sex, race, origin, ancestry, creed, pregnancy, marital or parental status, sexual orientation, or physical, mental, emotional, or learning disability.

### BRUCE HIGH SCHOOL GRADUATION REQUIREMENTS

<p><b>ENGLISH</b>..... 4 credits  <b>HISTORY</b>..... 3 credits  <b>MATH</b>..... 3 credits  <b>SCIENCE</b>..... 3 credits  <b>PHY-ED</b>..... 1.5 credits  <b>HEALTH</b>..... .5 credit  <b>PERSONAL FINANCE</b>..... .5 credit  <b>ELECTIVES</b>..... 15.5 credits</p> <p><b>TOTAL</b>..... 31 credits</p>	<p><b>Elective Sub Categories:</b>  <a href="#">Agricultural Education</a>  <a href="#">Art</a>  <a href="#">Business Education</a>  <a href="#">Family and Consumer Science Education</a>  <a href="#">Foreign Language</a>  <a href="#">Music</a>  <a href="#">Technology Education</a></p> <p>Bruce High School coursework of study will exceptionally prepare you for the workforce or military. Specific course planning can prepare you further, if desired.</p>
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<p style="text-align: center;">BEST Preparation for University</p> <p>4 credits of English  4 credits of Mathematics:  4 credits of Science  4 credits of History  2 credits of a Foreign Language  1.5 credits of Phy-Ed  .5 credits of Health  .5 Personal Finance  10.5 credits of electives in field of interest  Total of 31 or more credits</p>	<p style="text-align: center;">BEST Preparation for Technical College</p> <p>4 credits of English  3 credits of Mathematics:  3 credits of Science  3 credits of History  1 additional credits of Math or Science  1.5 credits of Phy-Ed  .5 credits of Health  .5 Personal Finance  14.5 credits of electives in field of interest  Total of 31 or more credits</p>
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**Quick links for:**

- [Elective List](#)
- [Pathways of Study](#)
- [Senior Options](#)

# BRUCE HIGH SCHOOL ELECTIVE COURSE LIST

DC = Dual Credit with Technical College

<p><b>Agriculture</b></p> <ul style="list-style-type: none"> <li>9-12 Ag Construction</li> <li>10-12 Advanced. Ag Construction</li> <li>9-12 Animal Science (Science Equivalent)</li> <li>10-12 Biotechnology</li> <li>9-12 Conservation of Natural Resources</li> <li>10-12 Forestry</li> <li>9-12 Horticulture</li> <li>10-12 Advanced Horticulture</li> <li>10-12 Power Mechanics</li> <li>10-12 Production Agriculture</li> <li>9-12 SAE Immersion</li> <li>9-12 Small Engine Maintenance (DC)</li> <li>10-12 Wildlife Management</li> </ul> <p><b>Art</b></p> <ul style="list-style-type: none"> <li>9-12 Art I</li> <li>10-12 Art II</li> <li>11-12 Art III</li> <li>12 Art IV</li> <li>9-12 Design Photography (DC)</li> <li>10-12 Introduction to Drawing (DC)</li> <li>10-12 Sculpture (2023-24)</li> <li>11-12 Sculpture II (2023-24)</li> <li>10-12 Yearbook</li> </ul> <p><b>Business Education</b></p> <ul style="list-style-type: none"> <li>11-12 Employability Skills (every year)</li> <li>11-12 Youth Apprenticeship (rotational years) (2022-23)</li> <li>9-12 Accounting I (DC)</li> <li>10-12 Accounting II</li> <li>9-12 Marketing I</li> <li>9-12 Online Content Creation</li> <li>9-12 Game Design &amp; Development</li> <li>9-12 Website Design (rotational years) (2023-24)</li> <li>9-12 Business Law</li> <li>9-12 Future Business Leaders of Am.</li> <li>9-12 Introduction to Business (DC)</li> <li>9-12 Microsoft Office</li> <li>9-12 Sports and Entertainment Marketing</li> </ul> <p><b>Post-Secondary Programs and Courses</b></p> <ul style="list-style-type: none"> <li>12 "FRESHMAN FAST FORWARD"</li> <li>12 Financial Services Customer Rep</li> <li>12 Pre-Nursing and Healthcare</li> <li>12 IT - Software Development Specialist</li> <li>12 Commercial Driver's License (CDL)</li> <li>12 Welding</li> <li>12 Gen. Anat &amp; Phys</li> <li>11-12 Medical Terminology</li> </ul>	<p><b>English</b></p> <ul style="list-style-type: none"> <li>11-12 Advanced Literature</li> <li>10-12 Creative Composition</li> <li>12 English Conventions</li> <li>9-12 Introduction to Theater/Drama</li> <li>11-12 Novels</li> <li>12 Senior College Prep</li> <li>9-10 Speech Communications</li> <li>10-12 Yearbook</li> </ul> <p><b>Family &amp; Consumer Science Ed</b></p> <ul style="list-style-type: none"> <li>9-12 Basic Foods</li> <li>10-12 Advanced Foods</li> <li>10-12 Career Foods</li> <li>11-12 Food Science (Science Equivalent)</li> <li>10-12 Child Development</li> <li>10-12 Early Childhood Education</li> <li>9-12 Clothing Construction</li> <li>10-12 Advanced Clothing Construction</li> <li>9-12 Housing &amp; Interior Design</li> <li>10-12 Human Relations</li> </ul> <p><b>Math</b></p> <ul style="list-style-type: none"> <li>9-12 Sports Math</li> <li>11-12 Algebra II A &amp; B</li> <li>11-12 Technical Math A &amp; B</li> <li>11-12 Advanced Math A &amp; B</li> </ul> <p><b>Music</b></p> <ul style="list-style-type: none"> <li>9-12 Instrumental Music</li> <li>9-12 Vocal Music</li> </ul> <p><b>Physical Education</b></p> <ul style="list-style-type: none"> <li>9-12 Individual Fitness</li> <li>9-12 Individual Sports</li> <li>9-12 Strength &amp; Conditioning</li> <li>9-12 Team Sports</li> </ul>	<p><b>Science</b></p> <ul style="list-style-type: none"> <li>12 Anatomy &amp; Physiology</li> <li>11-12 Chemistry</li> <li>12 Chemistry II</li> <li>11-12 Ecology</li> <li>11-12 Physics</li> <li>11-12 Zoology</li> </ul> <p><b>Social Studies</b> (rotational years)</p> <ul style="list-style-type: none"> <li>9-12 Psychology (2023-24)</li> <li>9-12 Philosophy (2023-24)</li> <li>9-12 The Holocaust (2023-24)</li> <li>9-12 Social Issues Research</li> <li>9-12 Legal Studies</li> <li>10-12 US History II</li> </ul> <p><b>Spanish</b></p> <ul style="list-style-type: none"> <li>9-12 Spanish I</li> <li>10-12 Spanish II</li> <li>11-12 Spanish III</li> <li>12 Spanish IV</li> </ul> <p><b>Technology Education</b></p> <ul style="list-style-type: none"> <li>9-12 AutoCADD Inventor</li> <li>9-12 CAD Basics (DC)</li> <li>9-12 Robotics</li> <li>9-12 General Metals I</li> <li>10-12 General Metals II</li> <li>10-12 Machine &amp; Tool (DC)</li> <li>10-12 Welding</li> <li>10-12 Manufacturing</li> <li>10-12 Print Reading – Machine Trades &amp; Welding Trades (DC)</li> <li>9-12 Architecture</li> <li>10-12 Building Modeling</li> <li>9-12 Home Maintenance</li> <li>9-12 Woodworking Technology</li> <li>10-12 Home Wood Furnishing</li> <li>10-12 Cabinetmaking</li> </ul>
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# CAREER PATHWAYS OF STUDY

Career Pathways are clusters of occupations that are grouped because people in them share similar interests and strengths. Students should look at their interests, abilities, talents, and educational/career goals when choosing career pathways and then consider possible careers in each pathway. The intent is not for students to choose a specific occupation for the rest of their lives, but to explore career opportunities that are associated with each career path. Listed below are the courses and programs that align with the Pathway you are most interested in.

<b>BUSINESS</b>	<b>ENGINEERING, MANUFACTURING &amp; TECHNOLOGIES</b>	<b>HEALTH SCIENCE</b>	<b>MEDIA ARTS</b>	<b>AGRICULTURE, FOOD &amp; NATURAL RESOURCES</b>
Accounting I, II	Manufacturing	Chemistry	Video Game Design & Development	Horticulture/ Advanced
Future Business Leader of America	CAD Basics	Anatomy and Physiology	Website Design	Forestry
Intro to Business	Architecture	Biotechnology	Online Content Creation	Wildlife Management
Business Law	AutoCADD Inventor	Advanced Math	Introduction to Theater & Drama	Animal Science
Microsoft Office	Print Reading for Machine and Welding Trades	Calculus	Art I, II	Production Agriculture
Legal Studies	Robotics	Medical Terminology	Design Photography	Food Science I, II
Marketing I	Physics	Pre-Nursing & Healthcare Academy	Music	Basic/Advanced Foods
Financial Services Customer Rep - Technical Diploma	Biotechnology			Career Foods
	Tech Math			Biotechnology
	Advanced Math			
	IT - Software Development Specialist Technical Diploma			
	Welding - Technical Diploma			

# SENIOR OPTIONS

Visit Mrs. Tremblay during Sophomore and Junior year to plan for these opportunities.

Students will need to maintain a 2.0 GPA (3.5 for Freshman Fast Forward), have good school attendance, and have no failing grades to be able to participate in these specialized opportunities.

## **"FRESHMAN FAST FORWARD"**

Northcentral Technical College (NTC) - Start College Now

Students will complete a number of general education requirements needed for your Freshman year in a four-year university.	10809198 Intro to Psychology	3 cr.
	10809196 Intro to Sociology	3 cr.
	10809172 Intro to Diversity Studies	3 cr.
	10801136 English Composition 1	3 cr.
	10801196 Oral Communications	3 cr.
	10809195 Economics	3 cr.
	<b>TOTAL</b>	<b>18 cr.</b>
Students will be required to take from teachers at Bruce High School:		
- Social Problems - Civics		

## **CDL- A COMMERCIAL DRIVER'S LICENSE**

Northwood Technical College - **Technical Diploma**

Professional truck drivers are responsible for the safe, efficient delivery of goods between locations. Spend time behind the wheel learning how to maneuver trucks in a variety of real-world scenarios. You will develop backing and driving skills through classroom, lab, range and roadway experiences. Non-technical skills such as communications will also be discussed. Opportunities to earn additional CDL endorsements will also be available at your expense.	47458405 - CDL Permit Prep Online (through Northwood or on your own from DMV website)	
	30458304 - Truck Driving - Semi Level 1	3 cr
	30458305 - Truck Driving - Semi Level 2	3 cr
	30458303 - Truck Driving - Semi Level 3	4 cr
	<b>TOTAL</b>	<b>10 cr.</b>
The CDL test is not included within the Truck Driving program. Testing fees are set by the state of Wisconsin. To test and receive your CDL, you have the option to test at Northwood Tech or with any examiner in Wisconsin. Testing through Northwood Tech reduces some of the process for you. Please expect an additional fee for the test.	Students will be required to take from teachers at Bruce High School:	
	- Social Problems - Civics and Economics	
	- English - 2 courses	
	- Any remaining needed credits	
<ul style="list-style-type: none"> <li>Wisconsin Commercial Motor Vehicle <b>Manual</b> (CMV): <a href="https://wisconsin.gov">https://wisconsin.gov</a>.</li> </ul>	* Students must be able to arrange transportation to Northwood Tech.	

## **IT - SOFTWARE DEVELOPMENT SPECIALIST**

Chippewa Valley Technical College (CVTC) - **Technical Diploma**

Students enrolled in this academy will focus on the exploration of resolving software-based computer problems in today's digital office environments.	152-118 Introduction to Computers & Programming	3 cr.
	801-196 Oral/Interpersonal Communications	3 cr.
	152-107 Web 1-HTML & CSS	3 cr.
	152-132 Database 1	3 cr.
	152-101 Programming Fundamentals	3 cr.
	<b>PROGRAM REQUIREMENTS</b>	<b>15 cr.</b>
*A grade of C- or higher is required in all courses.	Students will be required to take from teachers at Bruce High School:	
	- Social Problems - Civics and Economics	
	- English - 1 courses	
	- Any remaining needed credits	
Credits earned through this academy may be applied to CVTC's technical degree programs.		

## PRE-NURSING AND HEALTHCARE

Chippewa Valley Technical College (CVTC)

Students are given a chance to expand their career options and get a jump-start on their post-secondary credits towards a degree in pre-nursing and healthcare.  * Prerequisite: must have completed high school Chemistry with a grade of C or higher.  * Students must be able to arrange transportation to CVTC Chippewa Falls Campus for the CNA portion of the program.	806-177 General A&P	4 cr.
	501-101 Medical Terminology	3 cr.
	806-179 Advanced A&P	4 cr.
	543-300 Certified Nursing Assistant	3 cr.
	<b>PROGRAM REQUIREMENTS</b>	<b>14 cr.</b>
	Students will be required to take from teachers at Bruce High School:	
	- Social Problems - Civics and Economics	
	- English - 2 courses	
	- Any remaining needed credits	

## FINANCIAL SERVICES CUSTOMER REPRESENTATIVE

Northwood Technical College - **Technical Diploma**

Positions available to students after graduation may include: <ul style="list-style-type: none"><li>• Bank Teller</li><li>• Customer Service Associate</li><li>• Member Services Representative</li><li>• Cashier</li><li>• Sales Associate</li><li>• Loan Analyst</li><li>• Loan Processor</li></ul> Students will learn the basic elements of financial money management. Topics studied will include credit cards, student loans, budgeting, saving, debt avoidance, debt reduction, negotiating deals, taxes, retirement, investing, buying a car, buying a house, planning or big purchases and insurance.	10101101 Financial Accounting 1	4 cr.
	10103106 MS PowerPoint	1 cr.
	10103146 MS Word A	1 cr.
	10103151 MS Excel A	1 cr.
	10103152 MS Excel B	1 cr.
	10114107 Principles of Finance	3 cr.
	10114125 Personal Finance	3 cr.
	<b>PROGRAM REQUIREMENTS</b>	<b>14 cr.</b>
	Students will be required to take from teachers at Bruce High School:	
	- Social Problems - Civics and Economics	
	- English - 2 courses	
	- Any remaining needed credits	

## WELDING

Northwood Technical College - **Technical Diploma**

The Welding program teaches safety during all aspects of welding and cutting. The work can be physically demanding. Welding requires good manual dexterity and hand-eye coordination. Other essential employability skills include paying attention to details, working well with others in teams, having good communication skills, a positive attitude, excellent attendance and punctuality, and a good work ethic. Manual, semi-automatic and robotic welding will all continue to enjoy strong demand for the foreseeable future.  Welding graduates will be able to: <ul style="list-style-type: none"><li>• Demonstrate industry-recognized safety practices</li><li>• Interpret welding drawings</li><li>• Produce shielded metal arc welds (SMAW)</li><li>• Produce gas metal arc welds (GMAW)</li><li>• Produce flux core welds</li><li>• Produce gas tungsten arc welds (GTAW)</li><li>• Perform cutting operations</li></ul> The School District of Bruce will cover 24 of the 32 credit program. 8 of the credits will need to be covered by the family.  Student will also need to have transportation to Rice Lake for coursework for the entire school year.	<b>31442321</b> Print Reading - Welding Trades	2 CR
	<b>31442325</b> Welding Fabrication/Production (WBL)	3 CR
	<b>31442370</b> Gas Metal Arc Welding 1	3 CR
	<b>31442371</b> Gas Metal Arc Welding 2	2 CR
	<b>31442372</b> Gas Metal Arc Welding 3	1 CR
	<b>31442373</b> Shielded Metal Arc Welding 1	3 CR
	<b>31442374</b> Shielded Metal Arc Welding 2	2 CR
	<b>31442375</b> Shielded Metal Arc Welding 3	2 CR
	<b>31442376</b> Oxyfuel & Arc Cutting Processes	2 CR
	<b>31442377</b> Flux Cored Arc Welding 1	2 CR
	<b>31442378</b> Flux Cored Arc Welding 2	2 CR
	<b>31442379</b> Gas Tungsten Arc Welding 1	2 CR
	<b>31442380</b> Gas Tungsten Arc Welding 2	2 CR
	<b>32801361</b> Applied Communications	2 CR
	<b>32804303</b> Applied Math	2 CR
	<b>PROGRAM REQUIREMENTS</b>	<b>32 CR</b>
	Students will be required to take from teachers at Bruce High School:	
	- Social Problems - Civics and Economics	
	- English - 1 course	
	- Any remaining needed credits	

# AGRICULTURAL EDUCATION

- Agricultural Construction
- Advanced Agricultural Construction
- Animal Science
- Biotechnology
- Conservation of Natural Resources
- Forestry
- Horticulture
- Advanced Horticulture
- Power Mechanics
- Production Agriculture
- SAE Immersion
- Small Engine Maintenance
- Wildlife Management

These courses prepare students for careers in the science, production, and marketing of food, fiber and natural resources. The courses are arranged in a two-tiered system of introductory courses, and advanced courses. Students enrolled in these courses will benefit from FFA membership through increased learning opportunities in the course areas. FFA members develop leadership skills through contests and group projects in a recreational setting.

**Introductory** (No prerequisite required)

Horticulture, Agricultural Construction, Animal Science, Small Engine Maintenance, Conservation of Natural Resources

**Advanced** (Prerequisite class required—or instructor approval)

Biotechnology, Advanced Horticulture, Advanced Agricultural Construction, Production Agriculture, Wildlife Management, Forestry, Power Mechanics

## **AGRICULTURAL CONSTRUCTION** (1 Trimester)

Students will learn the fundamentals of agricultural structure design and construction. Structure planning and design concepts, as well as techniques, will be covered first. Students will then get the chance to apply the principles they learned in the construction of small agricultural structures. Through these methods, students will develop the skills necessary to properly use standard construction tools and techniques in framing, plumbing, electrical wiring, siding and roofing.

## **ADVANCED AGRICULTURAL CONSTRUCTION** (1 Trimester)

**REQUIRED PREREQUISITE** - Agricultural Construction OR Instructor Approval

In this class, students will continue to use the skills they acquired in Agricultural Construction in conjunction with many more advanced techniques to design and complete a construction project within the community. Students will work together as a design crew and then as a construction crew to gain simulated experience of working with co-workers.

## **ANIMAL SCIENCE** (Science Equivalent) (1 Trimester)

In the first quarter of this course, students will explore the variation between species of animals used for pets, livestock, as well as various exotics. Body types, body systems, and how they work will be the primary focus. In the second semester, students will focus on animal care and select veterinary techniques, with the focus on common companion animals such as dogs and cats. **This course can count for .5 credits of science.**

## **BIOTECHNOLOGY** (1 Trimester)

**RECOMMENDED PREREQUISITE:** An understanding of Biology

What do Cheese, Bread, Ethanol, Biodiesel, Penicillin, Bt Corn and Fireflies have in common? They are all a part of Biotechnology! Utilize fantastic equipment to make Cheeses, fermented foods, biofuels and more. Explore the concepts used to develop medicines and make technical advances in plants and animals. This is a hands on course—be prepared to create fascinating things you never imagined possible.

## **CONSERVATION OF NATURAL RESOURCES** (1 Trimester)

Students in this class will explore the many aspects of natural resources. Identifying plant and animal species, exploring ecosystems, as well as resource conservation and management will be just a few of the topics covered. School forest resources will be utilized in this course, so students should be prepared for occasional class period long outdoor field trips. This course will serve as a prerequisite for several topic specific advanced courses as well.

## **FORESTRY** (1 Trimester)

**REQUIRED PREREQUISITE** - Conservation of Natural Resources

This course covers a range of topics including identification of economically important species, safe logging practices, management of different forest types, marketing forest products and conservation of forest resources.

## **HORTICULTURE** (1 Trimester)

Horticulture includes units on plant growth and reproduction, soil care and management, floral design (live and dried arrangements), careers, plant I.D., pest management, houseplants, and greenhouse management. Horticulture is a large and growing field with career choices in all 50 states. Examples of horticultural careers include: greenhouse and nursery management, landscape design and construction, floral design and fruit and vegetable production, just to name a few.

## **ADVANCED HORTICULTURE** (1 Trimester)

**REQUIRED PREREQUISITE** - Horticulture OR Instructor Approval

Ornamental plants can add beauty and elegance to any place, setting or occasion. This course will focus on how plants can be placed and used to create an attractive setting. Design concepts will be covered in the first quarter to develop an understanding of how to create aesthetically pleasing combinations and arrangements. Construction of floral designs and landscapes will come next with projects such as residential and commercial landscapes, annual and perennial flower beds, cut flower bouquets, as well as worn arrangements such as corsages and boutonnières.

# AGRICULTURAL EDUCATION

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## **POWER MECHANICS** (1 Trimester)

REQUIRED PREREQUISITE - Small Engine Maintenance

Students will review the basic concepts of power equipment and automobiles. Students in this class will begin the semester by reviewing engine maintenance with advanced engines. Students will learn how these machines are to be cared for differently than simple small engines. Next, students will focus on basic vehicle and equipment maintenance; students will learn to check important fluids, tire pressure and many more important vehicle and equipment specifications that every vehicle or equipment owner should know. Additional topics that will be covered include power systems, hydraulics, fuels and fuel systems.

## **PRODUCTION AGRICULTURE** (1 Trimester)

RECOMMENDED PREREQUISITE - Animal Science

Students enrolled in production agriculture will learn the fundamentals of the production of standard species of livestock, as well as how to produce the various forages and grains used to feed them. Techniques for day-to-day operation, as well as management will be the focus of this course.

## **SAE IMMERSION** (1 Trimester)

In this course, students will be able to utilize a class period daily to advance their Supervised Agricultural Experience. Supervised Agricultural Experiences or SAE's represent the independent, hands on learning component of agricultural education, and allow students to pursue exploration and experience in any topic within agriculture that they have a strong interest in. Topics are almost limitless, but can include caring for plants and animals, running their own or working for an agricultural business, or managing or assisting with one of the school's agricultural enterprises such as the greenhouse plant sale, hydroponic garden, orchard, garden, or forest. Students will be expected to work independently on a daily basis, keeping accurate records of their experiences.

## **SMALL ENGINE MAINTENANCE** (1 Trimester) (Advanced Standing Credit - Northwood Technical College)

Students will learn the basic concepts of small engines in this class. Students will first learn about engines, tools, processes and functions of basic small engines. Students will then work at disassembling and assembling a provided engine. Upon completion, students will be allowed to bring in engines of their own to be worked on. These engines will be tuned up and brought back to peak operating performance. Students will learn and demonstrate simple maintenance procedures that will be useful to any owner of small engines.

## **WILDLIFE MANAGEMENT** (1 Trimester)

REQUIRED PREREQUISITE - Conservation of Natural Resources OR Instructor Approval

This class will provide the student with an overview of the common species of fish and wildlife common to Rusk County and Wisconsin. Students will learn identification techniques, habitat requirements and management techniques. Hunting and fishing will be topics discussed along with conservation, preservation and wildlife ethics.

# ART

- Art I
- Art II
- Art III
- Art IV

- Design Photography
- Introduction to Drawing
- Sculpture I
- Sculpture II
- Yearbook

## **ART I (2 Trimesters)**

Art I explores the basic elements of design (line, shape, form, color, texture, value, space), principles of design (balance, movement, rhythm, contrast, emphasis, pattern, unity), and how they interrelate. The course covers a wide spectrum of art medium experimentation. Students will be creating “fine art” projects and some “crafts” as well. Art disciplines covered include: ceramics, acrylic and watercolor painting, printing techniques, metals, fibers, sculpture, with a main emphasis on basic drawing and design skills. Art History is explored as it relates to the student’s projects.

## **ART II (Intermediate Art) (2 Trimesters)**

REQUIRED PREREQUISITE - Art I A and Art I B

Art II is offered for those students interested in continuing their study of art. Art disciplines covered include: ceramics, painting, printmaking, metals, fibers, photography, digital art, and sculpture. Basic drawing is explored at a “stepped-up” level. Projects and techniques that were not included in Art I will be introduced. Art History and Careers in Art will also be explored.

## **ART III (Advanced Art) (2 Trimesters)**

REQUIRED PREREQUISITE - Art II A and Art II B

Art III involves utilizing all that was learned in earlier art classes to create new, more advanced works of art. References to “Art History” (famous art and artists, styles, techniques, mediums, etc.) will help student’s awareness of possibilities which will open up to them in the creative process. A balanced amount of independent study will provide the students with opportunities to pursue specialized art mediums unique to their interests. Art mediums of interest include: Ceramics, pottery, sculpture, glass art, art metals, fiber arts, acrylic and watercolor painting, mixed media, photography, drawing and printmaking.

## **ART IV (Advanced Art) (2 Trimesters)**

REQUIRED PREREQUISITE - Art III A and Art III B

Art IV reviews the basic art fundamentals learned in Art I, Art II and Art III. It offers the student advanced concepts, principles and styles/techniques of a wide variety of mediums including ceramics, sculpture, glass, jewelry, fiber arts, drawing, painting, and printmaking. To better their skills in their chosen specific mediums/styles, students will be given more freedoms than in Art III to create through individualized projects. Students will also learn skills in organizing and setting up art exhibits, framing, photographing art for portfolios and preparing a portfolio. Art History is explored as it relates to student projects.

## **DESIGN PHOTOGRAPHY (1 Trimester) (Dual Credit with Chippewa Valley Technical College)**

The goal of this photography course is to show and help students understand the importance of photography to design. Design Photography will introduce perspective, lighting, composition, features of all cameras, digital editing basics, and other aspects of commercial photography.

## **INTRODUCTION TO DRAWING I (1 Trimester) (Dual Credit with Chippewa Valley Technical College)**

REQUIRED PREREQUISITE: Two trimesters of classes in Art I and/or Art II

Drawing is a critical method for creative endeavors in art, language, communications, engineering, and design. In this [college level] introductory course, students will practice various forms of drawing in order to develop skills in traditional and digital media. A range of drawing systems will be investigated as both a foundational skill set and as a practical strategy in later professional activities.

## **SCULPTURE I (1 Trimester) - NEXT OFFERED DURING THE 2023-2024 School Year**

REQUIRED PREREQUISITE - Art I OR Instructor Approval

This class is offered to students who have decided that ceramics, sculpture, and other 3-D forms of art are areas that they want to concentrate on and develop further skills. Types of sculpture explored during this course may include ceramics, glass, metal, carving, paper mache, found-object sculptures, and mold-making for sculpture casting. Class critiques that look at student work as well as other artist’s work will develop evaluation skills necessary for more independent art-making.

## **SCULPTURE II (1 Trimester) - NEXT OFFERED DURING THE 2023-2024 School Year**

REQUIRED PREREQUISITE - Sculpture I

This class is offered to students who have decided that ceramics, sculpture, and other 3-D forms of art are areas that they want to concentrate on and develop further skills. Types of sculpture explored during this course may include ceramics, glass, metal, carving, paper mache, found-object sculptures, and mold-making for sculpture casting. Class critiques that look at student work as well as other artist’s work will develop evaluation skills necessary for more independent art-making.

## **YEARBOOK (3 Trimesters)**

The class is a year-long class that is open to only **10<sup>th</sup>, 11<sup>th</sup> and 12<sup>th</sup>**. During the course of the year, students are required to sell advertisements, take pictures, write headlines, construct the pages and sell the yearbook. This work is heavily technological in that the yearbook is compiled utilizing a specific program from Jostens. Each student will be responsible for managing pages assigned to them. Also, there will be several students who are assigned as editors.

# ART



## BUSINESS EDUCATION

- Employability Skills
- Personal Finance
- Youth Apprenticeship
- Accounting I
- Accounting II
- Marketing I
- Online Content Creation
- Game Design & Development
- Website Design
- Business Law
- Future Business Leaders of America
- Introduction to Business
- Microsoft Office
- Sports and Entertainment Marketing

**EMPLOYABILITY SKILLS** (1 Trimester) Through this course students are able to explore career options, develop career goals, demonstrate job seeking skills, and identify entrepreneurial skills needed to balance work and family. This class not only helps students prepare for life after high school, but the skills and topics covered within this class can be helpful to students who are currently employed. Students will learn to create resumes, fill out job applications, prepare for an interview and learn how to apply soft and transferable skills to the workplace. This course is a prerequisite for Work Release and Youth Apprenticeship, in which a student can receive credits for working outside of school. Students who take this course may also be eligible to receive an Employability Skills Certificate issued by the Department of Public Instruction.

**PERSONAL FINANCE** (1 Trimester) (Advanced Standing - Northwood Technical College) REQUIRED for graduation. Financial Literacy is essential when navigating the complicated world of personal finance. In this course, students will be exposed to topics such as taxes, checking, savings, types and managing credit, investing, insurance, budgeting, and more. This is a must take class for all students as they approach the "real-world" after high school. Students who take this course may also be eligible to receive a Financial Literacy Certificate issued by Wlse Financial Literacy.

### YOUTH APPRENTICESHIP

Youth Apprenticeship (YA) is a school-based and work-based learning opportunity designed to equip students with the technical and essential skills needed to thrive in a 21st century workplace. Students will develop skills in employability and occupational skills while taking courses at Bruce High School or in the technical college system and working in their field of choice. Opportunities for YA placements currently are offered in the pathways of: Agriculture, Food and Natural Resources; Architecture and Construction; Art, A/V Technology and Communications; Finance; Health Science; Hospitality, Lodging and Tourism; Information Technology; Manufacturing; Marketing; Science, Technology, Engineering and Math; and Transportation, Distribution and Logistics. Level One Apprenticeships require the student to work a minimum of 450 hours within a year in addition to 1 high school credit of related coursework. Level Two Apprenticeships require the student to work a minimum of 900 hours within that two-year period in addition to 2 high school credits of related coursework. There are prerequisites for all students wishing to apply for apprenticeship programs. These prerequisites vary depending on the type of apprenticeship.

### ROTATIONAL YEAR BASIS:

**ACCOUNTING I** (2 Trimesters) (Advanced Standing - Northwood Technical College) Accounting provides an understanding of the basic elements and concepts of double-entry accounting systems. Activities include the accounting equation, the accounting cycle, entering transactions in journals, posting to ledgers, the end-of-period statements and reports, payroll systems, banking activities, taxes, uncollectible accounts, depreciation, inventories, and notes and interest. Automated accounting principles are integrated into many of the activities such as payroll, preparation of balance sheets, income statements, and journal entries. Students will have several hours of hands-on computer time doing various automated accounting projects including a business simulation.

**ACCOUNTING II** (2 Trimesters) REQUIRED PREREQUISITE - Accounting I with a grade of B or above. Activities include departmentalized accounting, general accounting, adjustments, corporate accounting, cost accounting, and managerial accounting. This course provides learning needed for entry-level employment or the basis for further accounting study at technical school or college. This is an independent study course.

**MARKETING I** (1 Trimester) This introductory course is a fun, relatable course that will help students understand why we buy the things we do. Through this course students will learn the fundamentals of marketing through creative group projects and hands-on learning experiences. Students are introduced to the 5 P's of marketing: product, place, price, promotion, and people. This class will dive a little deeper into concepts such as marketing research, selling, promotional strategies, advertising and branding. This class is beneficial for all students, no matter what educational or career path they are interested in.

**ONLINE CONTENT CREATION** (1 Trimester) Interested in creating content for TikTok, YouTube, Instagram, and other social media platforms? In this course students will use a variety of online tools to create printable and postable marketing content to engage your audience. Plan to explore topics such as graphic design, publication design, video and audio production, digital communication, website design, and other communications methods. This would be an outstanding class to take if students are interested in taking Marketing I or pursuing a business related education or career. This course is project-based and will offer a variety of digital media experiences.

**GAME DESIGN & DEVELOPMENT** (1 Trimester) Enjoy destroying corner campers on Call of Duty, dominating the ladder in Clash Royale, or exploring the caves and cliffs of Minecraft? Ever wonder what goes into creating these interactive environments? Join us and embark on an adventure to create your own remarkable game. This introductory course to game design and development engages students in project-based learning. Students will learn various skills that go into building games and then create unique games that test and enhance different coding skills. After the guided games, students will create their very own unique game.

## BUSINESS EDUCATION

# BUSINESS EDUCATION

Students will learn the components of how gaming is used in the “real-world” and what goes into designing good games, what separates good games from bad games, and the gaming and engineering design cycle.

**WEBSITE DESIGN** (1 Trimester) This course consists of learning beginning web development skills using HTML and other web page software. A review of computer terminology and continuing updates on the latest advancements in computer technology is also emphasized. Students will create a variety of web pages while participating in simulations and many project-based experiences. This class will also explore careers related to the information technology career cluster.

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**BUSINESS LAW** (1 Trimester) This course is designed to acquaint students with the basic legal principles relevant to each individual in his or her triple role of citizen, consumer, and employee. Content includes the origin of law, the court systems, criminal and civil law, rights and duties, basic elements of contracts, consumer protection, insurance, bailments, negotiable instruments, employer-employee relations, and legal affairs affecting property such as ownership, transfer, landlords and tenants, wills and estates, and community property. The law is interpreted through a variety of case studies. Business law is not a pre-law course.

**FUTURE BUSINESS LEADERS OF AMERICA** (1 Trimester) This course is your first step to developing leadership skills that will help you thrive in the workplace, educational settings, and while working with others. Students will develop strategies and techniques to help them lead by example, understand their impact on others, manage their time, increase their productivity, reduce stress, work with difficult people, better their attitude, resolve conflicts appropriately, etc. Students in this class will be members of our FBLA student organization, develop promotional materials, and host events to increase membership and participation. Therefore, active participation in FBLA will be a requirement for a student’s grade. In addition, students in this class will get an opportunity to compete at the FBLA Regional Leadership Conference in an event of their choice.

**INTRODUCTION TO BUSINESS** (1 Trimester) (Dual Credit - Northwood Technical College) This fast paced course is designed to help students develop an understanding of the role of business in a free enterprise economic system. Students will be introduced to the U.S. economic environment, business and government in a global economy, technology in business, and various aspects of consumer issues. This class will also cover areas involved with entrepreneurship. These areas will include: types of ownership, business plans, marketing your business, managing, and protecting your business.

**MICROSOFT OFFICE** (2 Trimesters)

Microsoft Office is the preferred software in business and industry when it comes to document creation and formatting, data analysis, and presentation tools. This software course will introduce students to Microsoft Word, PowerPoint, Excel, OneNote, and OneDrive. Students will explore software features and create a variety of business related documents. Students who take this course may also be eligible to receive a Microsoft Office Specialist certification issued by Microsoft.

**SPORTS AND ENTERTAINMENT MARKETING** (1 Trimester) This course will help students develop a thorough understanding of the marketing concepts and theories by applying them to sports and entertainment events. The areas this course will cover include basic marketing, target markets and segmentation, sponsorship, event marketing, promotions, sponsorship proposals, and implementation of sports marketing plans. This course will also cover promotion plans, sports marketing plans, and event evaluation and management techniques.

# ENGLISH

- Advanced Literature
- Creative Composition
- English 9
- English 10
- English 11
- English Conventions
- Introduction to Theater and Drama
- Novels
- Senior College Prep
- Speech Communications

## **ADVANCED LITERATURE** (1 Trimester)

OPEN TO JUNIORS AND SENIORS

Students will read, analyze, and discuss works by Shakespeare, Thoreau, Whitman, Emerson, Poe, Capote, Sedaris, Perry, and others. Activities can include analysis and performance of poetry, application of English conventions, writing and editing creative works for publication, and digital and social media production.

## **CREATIVE COMPOSITION** (1 Trimester)

OPEN TO GRADES 10, 11, & 12

This is an elective writing course. Students will write personal narrative stories, informal essays and poetry. Students will observe the world around them and develop their individual writing styles. Students must be willing to share their ideas and writing with the group for study and critique.

## **ENGLISH 9** (2 Trimesters)

Students will read, annotate, and analyze short stories, novels, drama and informational texts. Students will focus on the elements of writing with specific emphasis on English conventions. They will also participate in a narrative unit implementing effective techniques. A speech unit will cover the elements of effective communication. Journaling, figurative language, and vocabulary occur daily.

## **ENGLISH 10** (2 Trimesters)

Students will analyze the author's craft and structure in a variety of written works, including fiction and non-fiction. Specific attention is given to proper use of English convention rules. Journaling, figurative language, and vocabulary occur daily.

## **ENGLISH 11** (2 Trimesters)

The main focus of the class is on American Literature. Authors and their works are selected based on their positive contributions to the literary world. If the work of literature provokes high level thinking and discussion, it makes its way to my curriculum. Everything read in the English III classroom will be discussed incorporating some form of Socratic Methodology. Quizzes and tests are weighted and will be administered after each section of reading has been discussed. The process of writing is incorporated into every phase of the class.

## **ENGLISH CONVENTIONS WORKSHOP** (1 Trimester)

REQUIRED CONCURRENT ENROLLMENT IN AN ENGLISH OR HISTORY CLASS

Writing-based coursework focuses on Standard English Conventions. Conventions include sentence structure, grammar, capitalization, punctuation, organization, public speaking, and related concepts.

## **INTRODUCTION TO THEATER & DRAMA** (1 Trimester)

OPEN TO GRADES 9-12

The purpose of Introduction to Theater and Drama is to increase students' understanding, appreciation, and critical perceptions of the theatrical event. Readings and seminars will focus on the elements of theatrical practice; artists and innovators of theatre throughout history; and on the theater's development as an art form and a social phenomenon. Participation in class forum discussions and sharing of critiques and short reports will offer avenues to explore students' individual theatrical interests.

## **NOVELS** (1 Trimester)

OPEN TO JUNIORS AND SENIORS

This is a class that focuses on American works and British works of significance and replaces English 12. This class is reading and writing intensive and is meant for students who desire to answer the questions of author intent, author style, and to answer the relevance of literature to our contemporary world. Socratic seminar, primarily in small groups, is essential to success in the classroom.

## **SENIOR COLLEGE PREP** (1 Trimesters)

RECOMMENDED to College Bound Seniors that maintained a strong "B" in Junior English

This course is a survey of the literature of Great Britain. Also included will be an intensive use of grammar, composition, and rhetoric. Students are expected to submit written work each week. Both semesters have a strong focus on writing. At the conclusion of the 2-Trimester course, students will be prepared for college writing. Additional reading assignments and cultural projects will be expected.

## **SPEECH COMMUNICATIONS** (1 Trimester)

OPEN TO FRESHMAN AND SOPHOMORES

During the course of this trimester long class, students will explore and learn all the elements that build a complete communications model. Verbal techniques, along with all the nonverbal techniques will be learned and put to use for speech delivery. Students are expected to deliver several speeches during the trimester. The benefits to the student are to become better speakers and to make them comfortable and confident in front of an audience.

# ENGLISH

# FAMILY AND CONSUMER SCIENCE EDUCATION

- Basic Foods
- Advanced Foods
- Career Foods
- Food Science
- Child Development
- Early Childhood Education
- Clothing Construction
- Advanced Clothing Construction
- Housing & Interior Design
- Human Relations

## **BASIC FOODS** (1 Trimester)

This class will provide you with basic food knowledge and preparation. You will learn a variety of cooking techniques through preparing a variety of different foods.

## **ADVANCED FOODS** (1 Trimester)

REQUIRED PREREQUISITE - Basic Foods

This class will allow you to build on the skills you learned in Basic Foods by learning more advanced techniques and skills in food preparation.

## **CAREER FOODS** (1 Trimester)

REQUIRED PREREQUISITE - Basic Foods

Do you like to cook? Do you think you may want to be in a career involving food? In this class, you will explore the different careers related to food by learning about each career and doing some of the tasks involved.

## **FOOD SCIENCE** (Science Equivalent) (1 Trimester)

REQUIRED PREREQUISITE - Earned "C" or higher in Biology I

This class will help you to see food in a whole new way. In this class, you will explore the science of food, basic food chemistry and organic food chemistry. This course can count for .5 credits of science.

## **CHILD DEVELOPMENT** (1 Trimester)

REQUIRED PREREQUISITE - Health

Take a journey through a child's life from conception to kindergarten. Learn about what it takes to care for a child and apply the knowledge through various activities.

## **EARLY CHILDHOOD EDUCATION** (1 Trimester)

REQUIRED PREREQUISITE - Child Development

Are you interested in pursuing a career working with children? Have you set your career goals towards the fields of child care, elementary education, human services, medical fields or parenting? This is the class for you! Interact with children in an Exploratory School Project. Learn about understanding the developmental stages of children, guiding children, designing classrooms and play spaces, teaching classroom activities, preparing meals/snacks, using SIDS prevention techniques, developing an understanding towards diversity, planning lessons to meet the needs of special students, and gaining skills towards professional development.

## **CLOTHING CONSTRUCTION** (1 Trimester)

Here's a chance to be creative! Learn sewing skills to construct your own personalized sewing projects. Students will select and construct a minimum of two projects. Students will need to provide personal supplies and materials.

## **ADVANCED CLOTHING CONSTRUCTION** (1 Trimester)

REQUIRED PREREQUISITE - Clothing Construction

Build on your sewing skills! Create more advanced sewing projects and even create your own pattern and clothing item. Students will need to provide personal supplies and materials.

## **HOUSING AND INTERIOR DESIGN** (1 Trimester)

What are simple things that you can do to make a room feel new? You will learn the answer to this question in this class. You will also learn about different housing styles, curb appeal, the elements and principles of housing design, and what to look for when buying or renting a home.

## **HUMAN RELATIONS** (1 Trimester)

REQUIRED PREREQUISITE - Health

What is the answer to understanding relationships? Address this question by learning how to develop satisfying relations with others built on trust, respect, and cooperation. Gain knowledge on how to get along with others in both personal and professional settings and develop skills for living.

# FAMILY AND CONSUMER SCIENCE EDUCATION

# MATHEMATICS

- Algebra I
- Algebra II
- Advanced Math
- Calculus
- Geometry
- Sports Math (elective)
- Technical Math

## **ALGEBRA I** (3 Trimesters)

Algebra I is the foundation of higher mathematics. The material provides context-rich problems to introduce students to concepts. Students use visual representations, manipulatives, and models to support learning. Study teams encourage math discourse and help students articulate and develop their ideas, listen to how others see problems and shape their own development and mastery and over time. Students have several opportunities to learn a skill and receive support. It is critical that the student is actively participating and doing all problems.

## **ALGEBRA II** (2 Trimesters)

**REQUIRED PREREQUISITE** - Earned "C" in Geometry and Algebra (Instructor approval is required to "double up" in math.)

In this course students will continue their study of systems, quadratics, powers and roots. Algebra II also gives the student an introduction to matrices, logarithms, trigonometric functions and complex numbers.

## **ADVANCED MATH** (2 Trimesters)

**REQUIRED PREREQUISITE** - Earned "B" in Algebra II

Advanced Math is a college preparatory course that gives a thorough background into algebraic, geometric, exponential, logarithms, circular and trigonometric functions.

## **CALCULUS** (3 Trimesters) (Distance Learning - Northcentral Technical College)

**REQUIRED PREREQUISITE** – Earned "B" in Advanced Math

The course develops calculus in an intuitive, conceptual manner. Laboratory experiments and hands-on activities are integrated throughout the curriculum as key concepts for learning and conceptual understanding. Students are expected to work collaboratively in study teams; explain; justify and present ideas; and demonstrate persistence when asked to develop difficult concepts for themselves. This calculus course will incorporate technology on a daily basis as a tool for learning. All chapters have labs and other major investigations which will rely on student's proficiency with the graphing calculator. The course has three major activities during which the students use a CBL or CBR to collect data and analyze rates of change. Key problems also rely on the regression feature of the calculator.

## **GEOMETRY** (2 Trimesters)

This course builds an understanding of geometric figures and their properties. Geometry covers angle relationships, parallel lines and planes, congruent triangles, trigonometry, similar polygons, circles, coordinate geometry and constructions. There are many applications where geometry is useful, and we will discover how it is used daily.

## **SPORTS MATH** (1 Trimester)

Dig deeper into the analytics of sports. Work with algebra, probabilities, geometry and trigonometry to analyze the numbers in sports. Make predictions and find probabilities of events happening while analyzing the data in sports. Use Geometry to determine the perfect pass, shot or homerun. Open up to the numbers behind the sports.

## **TECHNICAL MATH** (2 Trimesters)

**OPEN TO JUNIORS AND SENIORS** who have successfully passed Algebra I and Geometry.

This is a course designed for students interested in a technical career OR to improve their skills before taking Algebra 2. Topics covered in this course include the basics of arithmetic, algebra, geometry, trigonometry, and statistics. Students will also work on skills needed to be accepted into technical college, military, or entering the workforce.

# MATHEMATICS

# MUSIC

## **INSTRUMENTAL MUSIC** (3 Trimesters)

This course is designed to develop music literacy, performance, and listening skills of the student through ensemble performance of varied band repertoire. There will be an emphasis on the fundamentals of instrumental technique as students work toward developing a beautiful and characteristic sound. Students are encouraged to develop their individual technique and musicianship through various exercises, studies and music theory. However, the main focus will be learning, reading, and performing both traditional and contemporary literature.

The high school band will perform a minimum of two evening concerts per year and will be responsible for performing pep songs at selected home athletic events. Band members will be required to “march” in several parades in the Spring, Summer and Fall. Students will also have opportunities to participate in individual activities such as a solo and ensemble contest, Lakeland Conference honors band and tri-state honors band.

## **VOCAL MUSIC** (3 Trimesters)

This course is designed to develop music literacy, performance and listening skills of the student through ensemble performance of varied choir repertoire. Students are encouraged to develop their singing voices, learn to sing in a choral ensemble, learn to read music, learn the basics of music history, genres and styles, develop self-discipline, concentration and cooperation. A great deal of class time is spent on vocal and musical techniques as well as performance standards and will be demonstrated in performances throughout the school year.

The high school choir will perform a minimum of two evening concerts per year and may be required to participate in other scheduled events throughout the year. Choir students will have opportunities to perform in individual activities such as a solo and ensemble contest, Lakeland Conference honors choir, tri-state honors choir and Dorian Festival Choir.

# PHYSICAL EDUCATION

- Fitness For Life
- Health
- Strength And Conditioning
- Team Sports
- Individual Sports
- Individual Fitness

Mission of the department:

To provide a program of instruction for the development of the whole individual through physical activities by emphasizing the relationship between the physical, intellectual, emotional, and social well-being of the individual. The curriculum will provide experiences that will develop positive attitudes toward wellness and contribute to lifetime participation in physical activities. All Physical Education classes will include various strength, cardiovascular and flexibility activities.

## **FITNESS FOR LIFE** (1 Trimester)

REQUIRED for 9<sup>th</sup> Grade Students

Students will learn about fitness and wellness. They will study the components of fitness, goal setting, guidelines for exercises and the principles of training. Also, they will learn about flexibility, cardiovascular and muscular fitness, nutrition, body composition, stress management and fitness testing. A variety of programs and activities will be used. This course is limited to 20 students.

## **HEALTH** (1 Trimester)

REQUIRED for 9<sup>th</sup> Grade Students

Topics for health include: health skills; mental and emotional health; family and social health; growth development; nutrition; personal and physical health; alcohol, tobacco and other drugs; communicable and other diseases; consumer and community health; environmental health; and injury prevention and personal safety.

## **STRENGTH AND CONDITIONING** (1 Trimester)

This class is designed to teach proper lifting techniques and training principles. The students will have an opportunity to use these techniques and principles during class. This class is ideal for students interested in becoming physically fit. This course is limited to 16 students.

## **TEAM SPORTS** (1 Trimester)

Team sports may include units in volleyball, basketball, kickball, soccer, ultimate football and Frisbee, softball, and four square games. This course is limited to 28 students.

## **INDIVIDUAL SPORTS** (1 Trimester)

Individual sports may include units in snowshoeing, cross country skiing, badminton, archery, recreational games, golf, ping pong, circuit training, pickle ball and nitro ball. This course is limited to 16 students.

## **INDIVIDUAL FITNESS** (1 Trimester)

Students will use or design a specific program to improve their overall fitness. Students will gain a better understanding of lifelong fitness and health to suit their abilities. Each student will set a goal and use their fitness program to meet that goal. Activities could include yoga, fitness walking/running, fitness videos, strength training, and PLT4M programs. This course is limited to 16 students.

# SCIENCES

- Anatomy And Physiology
- Biology
- Chemistry
- Chemistry II
- Ecology
- General Science
- Medical Terminology
- Physics
- Zoology

## **ANATOMY AND PHYSIOLOGY** (2 Trimesters)

REQUIRED PREREQUISITE of "C" or better in Chemistry OR Instructor Approval

This is a college prep course designed to prepare students with memorization of parts of the body and their functions, this is encouraged for those entering the medical field. Labs are used to reinforce topics covered.

Topics covered in A: cytology, integumentary system, skeletal system, muscular system and nervous system.

Topics covered in B: senses, blood, heart, pregnancy, growth, development and genetics. Labs are used to reinforce topics covered.

## **BIOLOGY** (2 Trimesters)

REQUIRED for 10<sup>th</sup> Grade Students

Biology is the study of living organisms and how they relate to one another. Topics covered in A: macromolecules, cytology, and genetics. Projects and labs are used to reinforce concepts covered.

Topics covered in B: genetic engineering, natural selection and how the Earth has changed over time and has evolved with the species that occupy it (past and current). Projects and labs are used to reinforce concepts covered.

## **CHEMISTRY**

REQUIRED PREREQUISITE of "C" or better in Biology and Algebra I (2 Trimesters)

This first trimester will focus on the periodic table, patterns in the periodic table, nomenclature, and gas pressure.

Laboratory exercises will be used a great deal to reinforce the concepts learned.

The second half of chemistry will continue to focus on the periodic table and its trends, light, stoichiometry, the ozone, and forensic science. Laboratory exercises will be used a great deal to reinforce the concepts learned.

## **CHEMISTRY II** (1 Trimester)

REQUIRED PREREQUISITE of "C" or better in Chemistry OR Instructor Approval

This class will be a continuation of Chemistry focusing on solutions, pH, equilibrium, acids and bases and nuclear chemistry.

## **ECOLOGY** (1 Trimester)

OPEN TO JUNIORS AND SENIORS

This class will study the interactions between living things and their surroundings and what effects the environment has on its occupants. This course can count for .5 credits of science toward graduation.

## **GENERAL SCIENCE - PRE CHEMISTRY / PRE PHYSICS** (2 Trimesters)

REQUIRED for 9<sup>th</sup> Grade Students

This class is divided into two main units: Pre-chemistry and Pre-physics. Both units will focus on how math is involved with both chemistry and physics. Laboratory exercises will be used to reinforce the concepts learned.

## **MEDICAL TERMINOLOGY** (1 Trimester) (Distance Learning - Northcentral Technical College)

This course focuses on the component parts of medical terms: prefixes, suffixes, and word roots. Students practice formation, analysis, and reconstruction of terms. Emphasis on spelling, definition, and pronunciation. Introduction to operative, diagnostic, therapeutic, and symptomatic terminology of all body systems, as well as systemic and surgical terminology.

## **PHYSICS** (2 Trimesters)

OPEN TO JUNIORS AND SENIORS earning a "C" or better in Algebra

Physics is a science that deals with mechanics and composition of our entire physical world. This course builds a background on forces, motion, kinetic theory, energy, conservation, Newton's Laws, thermodynamics, heat, fluids, astronomy, and many more. The lab work allows students to develop a deeper understanding of our environment, learn safe techniques, and how to apply the scientific approach to problem solving.

## **ZOOLOGY** (1 trimester)

OPEN TO JUNIORS AND SENIORS earning a "C" or better in Biology

Zoology introduces students to the diverse animal kingdom. The lab course identifies the morphology, taxonomy, anatomy, and physiology of the seven major classes of the phylum Chordata

# SCIENCES



# SOCIAL STUDIES

- U.S. History
- World History
- Social Problems
- Psychology
- Philosophy
- The Holocaust
- Social Problems - Research Focus
- Legal Studies
- U.S. History II

## **U.S. HISTORY** (2 Trimesters)

REQUIRED for 9<sup>th</sup> Grade Students

The course focuses on the events that laid the foundation for our Constitution and the American way of life. The curriculum is aligned with state standards with an emphasis on Common Core Discipline Literacy. Instead of filling out worksheets, students will learn to deep read numerous primary sources and formulate generalizations. Utilizing these generalizations, students will develop a concise understanding of who we are as Americans and how we got to this point. The assignments will be interesting and challenging with a great deal of latitude for students to develop the lessons themselves. Each day of learning will be different and students will find that they will like coming to history class.

## **WORLD HISTORY** (2 Trimesters)

REQUIRED for 10<sup>th</sup> Grade Students

World History is the story of mankind. In this class, students study the global connections that shape the world. This class not only focuses on events, but on concepts such as government, religion, culture, and perspective.

## **SOCIAL PROBLEMS - CIVICS / ECONOMICS** (2 Trimesters)

REQUIRED for 12<sup>th</sup> Grade Students

The goal of Social Problems is to show students the benefits of civic engagement and to provide them with the knowledge and tools to be civically minded citizens. The first trimester focuses on the government in the United States. We examine government interactions at federal, state, and local levels. Students learn how they can be involved in the process. During the second trimester students examine the laws of economics and how they explain the world around them.

ROTATIONAL YEAR BASIS:

### **PSYCHOLOGY** (1 Trimester)

This is an overview course for the social science of psychology. The goal of this class is to develop an understanding of the basic biology and anatomy of the human brain. Additionally, we will aim to understand why people act and behave the way they do. We will seek to answer such questions as what determines our personality? How do groups affect the way we act? What are mental illnesses and how do they impact people?

### **PHILOSOPHY** (1 Trimester)

Philosophy is the study of the meaning of life. Why are we here? What determines our futures? How do we know what we know? Do we know anything at all? In this class we will study famous philosophers and philosophical concepts through the lens of history and film. Please be prepared to openly discuss life's deepest questions when you sign up for this course.

### **THE HOLOCAUST** (1 Trimester)

This class will be in depth study of the world's most horrific and tragic events--the Holocaust. We will study the rise of the Nazis, the methods they used to strip Jewish people of their humanity, and how they carried out one of the world's worst crimes against humanity. We will also study how the world reacted to this event, and other events in World history that share similarities with the Holocaust. We can hopefully learn some valuable lessons, so that we are able to spot and stop any event like the Holocaust from ever happening again.

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### **SOCIAL ISSUES RESEARCH** (1 Trimester)

This is a mostly independently-driven research development course. You will learn the basics of research, writing, citation, and presentation while conducting your own research on a topic of your choosing. You will have the choice to dive into current event topics that matter to you in an effort to create a long-form research paper and a podcast. This class is for those who are curious, driven, and willing to do the work.

### **LEGAL STUDIES** (1 Trimester)

This course will cover the basics of each of the major types of law. These include Criminal Law, Constitutional Law, and Civil Law. In this class we will study courtroom procedure, case law, and current day questions facing the legal system. Students will research major court decisions, analyze evidence, and engage in a series of mock trials which include roles like lawyers, witnesses, and jury members. This is a course for those interested in law, the criminal justice system, or those who just like to debate.

### **US HISTORY II** (1 Trimester)

This class is a continuation of US History I. We will pick up American history after the end of WWII. We will study modern American History. The class seeks to investigate how America became the superpower it is today, how different groups acquired civil rights over time, which groups still struggle for civil rights, and how America has used its power to advance its interests in the world. Students will analyze primary sources weekly, develop their writing skills and engage in whole class discussions about events in American history and their lasting legacy.

# SOCIAL STUDIES

# SPANISH

- Spanish I
- Spanish II
- Spanish III
- Spanish IV

The main purpose of studying a foreign language is to learn the language and to be able to communicate orally in the language in real life situations. There is a need to study foreign languages. We must think of ourselves as citizens of the world and develop an understanding of people who speak other languages and have values different from ours. The class activities provide practice in all four basic language skills: listening, speaking, reading, and writing. The program also encourages cultural awareness--that is, the behavior, beliefs, and values of the people in Spanish speaking countries.

## **SPANISH I (2 Trimesters)**

Spanish I students should master Spanish pronunciation. Each text unit revolves around school, family, sports, shopping, and so forth. The material presented on each theme is practical and useful; you will be able to make use of the vocabulary and cultural information if you ever travel or live in a Spanish speaking country.

The primary objective in Spanish I, besides pronunciation, is to practice and improve number and gender in Spanish, as well as be able to use SER and ESTAR correctly. In addition to the basic program, students will use the internet to research Hispanic cultures and participate in an online mystery based in Spain: Mi Vida Loca; this will be done once a month all year. Students will read short stories in Revista Literal and create their own. Students will create reflection journals.

## **SPANISH II (2 Trimesters)**

Each level of Spanish prepares the student further. A review of previous work reinforces the student's knowledge of vocabulary and grammar. Students will be introduced to more complex grammar, other tenses of verbs and vocabulary that is more challenging. Students will create many projects throughout the course that not only reinforce grammar concepts, but are also centered on Hispanic cultural traditions and customs. One major project is the Spanish-speaking country showcase. Students will choose a Spanish-speaking country to study extensively, make a food that is popular from that country and then share their findings with staff and students during the annual showcase.

## **SPANISH III (2 Trimesters)**

REQUIRED PREREQUISITE of "C" Average in Spanish II

More emphasis is placed on reading and writing during the 3rd and 4th year of language study. Students should be able to express themselves freely and independently. New grammatical structures of an advanced level are studied. A great deal of independent reading gives the student further insight into many more aspects of the Hispanic culture. Students will also practice writing in Spanish with the use of a reflection journal.

## **SPANISH IV (2 Trimesters)**

REQUIRED PREREQUISITE of "B" Average in Spanish III

A wide variety of reading materials is used during level four. Writing at the fourth level is expanded greatly. The students will be able to express an opinion, write descriptions and give orders orally and in writing. Students will research Spain and the Bullfight as well as read and comment on current events around the Hispanic world. Students will read the novel Caminos Peligrosos based in the Yucatán Peninsula, Mexico.

# TECHNOLOGY EDUCATION

- AutoCADD Inventor
- CAD Basics
- Robotics
- General Metals I, II
- Machine & Tool
- Welding
- Manufacturing
- Print Reading - Machine AND Welding Trades
- Architecture
- Building Modeling
- Home Maintenance
- Woodworking Technology
- Home Wood Furnishing
- Cabinetmaking

Mission of the department:

- to develop in each student an active interest in industrial careers and in the methods and problems of industrial production.
- to develop in each student the ability to work and communicate with fellow workers through shop organization.
- to develop in each student desirable mental and physical attitudes.
- to develop in each student the appreciation of good design and workmanship and the abilities to select, care for, and use industrial products as wise consumers.
- to develop in each student an understanding of drawings, blueprints, and mastery of equipment in the industry.
- to develop in each student basic skill in the use and care of common tools and machinery.

## **AUTOCADD INVENTOR** (1 Trimester)

REQUIRED PREREQUISITE - INTRO TO AUTOCADD INVENTOR

In this course we will study the graphic language used by industry. Units of study will include some freehand drawing, but most of the class will be spent introducing Computer Aided Drafting and Design (CADD). Using a computer drawing program, we will emphasize drafting techniques, multi-view drawing and dimensioning as we study 2D mechanical design. Students will be exposed to advanced drafting skills. This course will emphasize 3D drawing, which has become an important part of the design process for any product in industries today. In this course we will explore 3D drawings for mechanical design. Students will re-engineer a hydraulic robot arm to create their own design, plans and working model using Inventor.

## **CAD BASICS** (1 Trimester) (Dual Credit - Northwood Technical College)

This course offers instruction on individual computer workstations in a computer lab. This computer-aided drafting (CAD) instruction uses SolidWorks software that is capable of creating 3D drawings. In this course you will spend a majority of the time creating 3D models and exploring the concepts of working in 3D space. Students will create, complete a fully dimensioned 3-View part prints ready to be transferred to paper.

## **ROBOTICS** (1 Trimester)

Robotics is for students who are interested in the design, engineering and programming of robots or another technical career held such as automated manufacturing. This course is designed to explore the past, current and future use of automation technology in industry and everyday use. The students will receive a comprehensive overview of robotic systems and the subsystems that comprise them. They will have the privilege to get "hands on" experience with programming and wiring. Also, in this course they will have the "hands-on" approach to introduce the basic concepts of robotics, focusing on the construction and programming of autonomous mobile robots.

## **GENERAL METALS I** (1 Trimester)

General Metals I units of study will include common metals and their properties, Arc Welding, Oxy-Acetylene Welding, Hand Tools, Bench Work, Layout Tools, Semi-Precision and Precision Measurement, the Lathe, the Power Hacksaw, and the Vertical Band Saw. Equal emphasis is placed upon practical manual skills and the book work aspects of metal working: theory and knowledge. A well-equipped metal working laboratory will provide students exposure to hands-on experience in welding, brazing, bench work, and machine tool metalworking.

## **GENERAL METALS II** (1 Trimester)

REQUIRED PREREQUISITE - General Metals I

This class will include a review of topics presented in Metals I plus Vernier measuring tools, threads and thread cutting, abrasives, the surface grinder, and the milling machine. Students whose future plans include employment as a skilled metal worker should strongly consider this course.

## **MACHINE AND TOOL** (1 Trimester) (Dual Credit - Northwood Technical College)

REQUIRED PREREQUISITE - General Metals 1

This class will include a review of topics presented in Metals I plus Vernier measuring tools, threads and thread cutting, abrasives, the surface grinder, and the milling machine. Students whose future plans include employment as a skilled metal worker should strongly consider this course.

## **WELDING** (1 Trimester)

REQUIRED PREREQUISITE - General Metals 1

Students interested in this course must have a " or consent of instructor. Arc, Oxy-Acetylene, Mig and Tig Welding skills will be tested on an advanced level. Equal emphasis is placed upon practical manual skills and of reading of welding plans along with aspects of metal working: theory and knowledge. These skills will be put to the test with planned projects.

## **MANUFACTURING** (1 Trimester)

Of all of the courses offered, this one is a little different than most; it combines the business aspect of a company along with the production aspect. This gives the students a firsthand experience as to how a company works and is run. During this course, the students will research and develop a product, build a company, produce the product and sell it to the community for profit. Each member of the company will receive money based on the company's success. If you're interested in business and/or building things, this is the class for you.

# TECHNOLOGY EDUCATION

# TECHNOLOGY EDUCATION

## **PRINT READING FOR MACHINE and WELDING TRADES** (Dual Credit - Northwood Technical College)

REQUIRED PREREQUISITE - Algebra

Machine Trades will cover the basic principles of print reading for machine trades. The emphasis is on interpreting standard lines and symbols in single- and multiple-view working drawings. Topics include print reading procedures, drawing changes, machining specifications, and the reading of prints in specialized areas including ANSI and ISO standards. Strongly recommend a basic understanding of mathematics concepts.

Welding Trades will cover the basic principles of print reading for welding trades. Topics include print reading procedures, drawing changes, welding specifications, and the reading of prints in specialized areas. Also verify structural shapes on bill of materials. Strongly recommend a basic understanding of mathematics concepts. We will be converting measurements and drawing welding joints with welding symbols.

## **ARCHITECTURE** (1 Trimester)

This course will study the basic layouts of a house, apartments, and commercial buildings. We will create basic floor plans with walls, doors and windows. Specialty objects such as column or ceiling grids, stairs and railings along with adding furniture, fixtures and equipment. The students will have an opportunity to design their own dream house. They will study the proper studding techniques of buildings including doors, windows, and openings. Proper studding of walls and spacing of floors, will be looked at. The understanding of different roof pitches and designs to how they are built. They will also look at different styles of buildings from houses, cabins, garages, and sheds.

## **BUILDING MODELING** (1 Trimester)

REQUIRED PREREQUISITE - ARCHITURE

The students will take what they have learned in previous courses and build a model of a building of their choosing to a scale. This model can be of a house, barn or shed but proper building practices will be used. They will make a full material list and price cost of a project. This model will start as a computer based drawing and will migrate to a hand drawing with multiple views.

## **HOME MAINTENANCE** (1 Trimester)

Students will have the opportunity to inquire, explore, examine, analyze, and evaluate concepts related to basic home maintenance. They will learn the basics of purchasing and renting a home and also the basic repairs needed in a house. This includes, but is not limited to, plumbing, electric, drywall repair, flooring and general interior and exterior fixes.

## **WOODWORKING TECHNOLOGY** (1 Trimester)

Students will learn the fundamentals of woodworking technology, safety techniques in woodworking and tool operation, understanding the particular tools and equipment used in woodworking and the principles by which such tools are most efficiently operated. The basic fundamentals of woodworking will be applied through student planned and built projects. Students will have the opportunity to build one assigned project. Careers in the woodworking industry will also be discussed. Students may need to purchase some materials for projects in this class.

## **HOME WOOD FURNISHING** (1 Trimester)

REQUIRED PREREQUISITE - Woodworking Technology OR Consent of Instructor

Students will learn the fundamentals of products to furnish a home, safety techniques in woodworking and tool operation. Understanding the particular tools and equipment used in woodworking will also be reinforced. The basic fundamentals of using hidden fasteners to make advanced woodworking projects will be applied through student planned and built projects. Students will have the opportunity to build assigned projects and if time allows, design their own project. Students may need to purchase some materials for projects in this class.

## **CABINETMAKING** (1 Trimester)

REQUIRED PREREQUISITE - Woodworking Technology OR Consent of Instructor

Students will learn the fundamentals of cabinetmaking technology, safety techniques in woodworking and tool operation. Understanding the particular tools and equipment used in woodworking will be reinforced. The basic fundamentals of cabinetmaking will be applied through student planned and built projects. Students will have the opportunity to build assigned projects and design their own project. Students may need to purchase some materials for projects in this class.

# FOUR YEAR HIGH SCHOOL COURSE PLAN

Name \_\_\_\_\_

GRADE 9 Year _____	GRADE 10 Year _____	GRADE 11 Year _____	GRADE 12 Year _____
<b>ENGLISH 1 credit</b> 9 A & B	<b>ENGLISH 1 credit</b> 10 A & B	<b>ENGLISH 1 credit</b> 11 A & B	<b>ENGLISH 1 credit</b> Any 2 Electives
<b>HISTORY 1 credit</b> U.S. History A & B	<b>HISTORY 1 credit</b> World History A & B		<b>HISTORY 1 credit</b> Social Problems A -Civics B -Economics
<b>MATH 1 credit</b> Algebra A, B, & C	<b>MATH 1 credit</b> Geometry A & B	<b>MATH 1 credit</b> Algebra II A & B <b>OR</b> Tech Math	
<b>SCIENCE 1 credit</b> Gen Science -Pre Physics Gen Science -Pre Chemistry	<b>SCIENCE 1 credit</b> Biology A & B	<b>SCIENCE 1 credit</b> Chemistry A & B <b>OR</b> Physics A & B <b>OR</b> Food Science <b>and</b> Ecology, Animal Science, or Zoology	
<b>PHYS ED .5 credit</b> Fitness for Life	<b>PHYS ED .5 credit</b> Any Phy Ed Elective	<b>PHYS ED .5 credit</b> Any Phy Ed Elective	
<b>HEALTH .5 credit</b>		<b>PERS. FINANCE .5 credit</b>	
<b>ELECTIVES 4 credits</b> <u>Choose at least 11 classes</u> from Agriculture, Art, Business, English, FCSE, Math, Music, Phys Ed, Sciences, Social Studies, Spanish, Technology  1. _____ 2. _____ 3. _____ 4. _____ 5. _____ 6. _____ 7. _____ 8. _____ 9. _____ 10. _____ 11. _____	<b>ELECTIVES 4 credits</b> <u>Choose at least 11 classes</u> from Agriculture, Art, Business, English, FCSE, Math, Music, Phys Ed, Sciences, Social Studies, Spanish, Technology  1. _____ 2. _____ 3. _____ 4. _____ 5. _____ 6. _____ 7. _____ 8. _____ 9. _____ 10. _____ 11. _____	<b>ELECTIVES 4 credits</b> <u>Choose at least 11 classes</u> from Agriculture, Art, Business, English, FCSE, Math, Music, Phys Ed, Sciences, Social Studies, Spanish, Technology  1. _____ 2. _____ 3. _____ 4. _____ 5. _____ 6. _____ 7. _____ 8. _____ 9. _____ 10. _____ 11. _____	<b>ELECTIVES 3.5 credits</b> <u>Choose at least 7 classes</u> from Agriculture, Art, Business, English, FCSE, Math, Music, Phys Ed, Sciences, Social Studies, Spanish, Technology  1. _____ 2. _____ 3. _____ 4. _____ 5. _____ 6. _____ 7. _____ 8. _____ 9. _____

Parent Signature

Parent Signature

Parent Signature

Parent Signature