



NEW RICHMOND HIGH SCHOOL

ACADEMIC AND CAREER
PLANNING GUIDE



2024-2025

650 Richmond Way • New Richmond, WI 54017 • (715) 243-7451 • www.newrichmond.k12.wi.us

WELCOME TO NRHS

Welcome to New Richmond High School! We look forward to assisting you in fulfilling your educational goals and preparing you for success after high school. New Richmond High School has a proud history of offering excellent academic and extracurricular programs. You can benefit from what NRHS has to offer by being actively involved in your classes, athletics, clubs, organizations and activities. Our staff is here to make your years in high school as successful and enjoyable, yet educationally challenging, as possible. We encourage and expect you to be honest, respect yourself and others, work hard and do your best every day, look out for and help each other, get involved and take pride in being part of the NRHS Tiger student body. Let's make it a great year!



Sincerely,

Mrs. Nikki Benson, Principal



**NEW RICHMOND
TIGERS**

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The School District of New Richmond is committed to a policy of nondiscrimination on the basis of sex, race, national origin, religion, creed, pregnancy, marital, or parental status, sexual orientation, gender identity, or physical, mental, emotional, learning disability or handicap. This policy shall prevail in all matters concerning staff, students, the public, educational programs and services and individuals with whom the Board does business.

GENERAL INFORMATION

4 **GRADES**
9-12
Enrollment: **1160** Grad Rate: **99%**
YR. PUBLIC HIGH SCHOOL

Course Offerings:

148

Courses to include required and elective courses, AP, Project Lead the Way (PLTW), and Dual Credit courses.

Students have the opportunity to also take advanced online courses not offered through NRHS through WVS (Wisconsin Virtual Academy), or through the Early College Credit Program (ECCP) as arranged with your School Counselor and Administration.

Advanced Course Summary

- 14 AP Courses
- 10 NTC Dual-Credit Courses
- 5 UWRP Dual-Credit Courses
- 5 PLTW Courses

Graduation Destinations

Average from classes of 2020-2022

- 4-Year College: 54%
- Technical/Community College: 26%
- Military: 5%
- Employment/Job Training: 15%

Graduation Requirements

REQUIRED CREDITS:

English	4
Math	3
Science	3
Social Studies	3
Phy Ed	1.5
Health	.5
TOTAL	15

ELECTIVE CREDITS

Courses of your Choice	8+
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Total Credits to Graduate:

23

Be sure to review the requirements for your post-secondary plans. Many colleges/programs require beyond the basic Requirements for Graduation.

New Richmond High School Mission Statement

The mission of New Richmond High School is to create a learning environment in which people develop and practice skills and attitudes relevant to life in an ever-changing world.

Schedule

NRHS operates on a 2 semester schedule with 4 quarters. Final grades are awarded at semester, and class changes may occur at this time as well.

We run a 8 period schedule with Tiger Time daily.

School Hours

7:35-2:57



GENERAL INFORMATION

Introduction

This handbook has been assembled to give New Richmond High School students and their parents the information necessary to develop a total high school program. Certain courses are required for everyone because they are believed to be desirable for successful living in a democratic country. Consider abilities, interests, and educational/vocational plans when choosing electives.

Academic Excellence, Honors, & Merit

The computation of grades for Excellence, Honors, and Merit are based on all credit classes.

- To qualify for Academic Excellence, one must earn a 4.0.
- To qualify for Academic Honors, an average of 3.7-3.999 must be maintained.
- To qualify for Academic Merit, an average of 3.0-3.699 must be maintained.

Class of Distinction

Class of Distinction is awarded to seniors who have earned a cumulative GPA of 3.5 or higher, calculated at the end of the first semester of senior year.

Valedictorian and Salutatorian

Student(s) that have maintained a 4.0 as calculated after their first semester of senior year is selected as the Valedictorian. If a student has not maintained 4.0, the Valedictorian is the student with the highest GPA of their senior class.

Student(s) with the next highest GPA are selected as the Salutatorian(s).

Schedule Change Policy

NRHS encourages students to select courses carefully based on their high school and post-secondary plans. We make every effort to honor student course requests at the time of registration. However, we cannot guarantee all course or change requests. Changes can be requested through the online **Change Request Form** which is provided prior to start of the semester, and must be completed by the deadline provided.

Changes after that point are only approved under special circumstances, and within the first week of the start of the semester. Counselors and Administration will consider the rationale for the change, and reserve the right to approve or deny requests.



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GENERAL INFORMATION

Introduction

This handbook has been assembled to give New Richmond High School students and their parents the information necessary to develop a complete high school program. Certain courses are required for everyone because they are a requirement by the Wisconsin Department of Public Instruction in order to graduate. When choosing electives, consider abilities, interests, and educational/vocational plans.

If you have any questions about your schedule or any course offering, contact your school counselor or the principal.

Nondiscrimination Policy (Policy 112)

The School District of New Richmond is committed to a policy of nondiscrimination on the basis of race, religion, sex or sexual orientation, age, national origin, handicap, ancestry, color or any other factor provided for by state and federal laws and regulations. This policy shall prevail in all matters concerning staff, students, the public, educational programs and services and individuals with whom the Board does business.

Complaint Procedures: If any person believes that the School District of New Richmond or any part of the school organization has failed to follow state and federal nondiscrimination laws or in some way discriminates on the basis of sex, race, national origin, ancestry, creed, religion, pregnancy, marital or parental status, sexual orientation or physical, mental, emotional, or learning disability or handicap, they may bring or send a complaint to the administration office at the following address:

District Administrator
701 East 11th Street
New Richmond, WI 54017

Telephone: 715-243-7411

Notice of district nondiscrimination policies shall be published in accordance with state and federal requirements. Copies of district nondiscrimination policies shall also be made available to students, parents/guardians, job applicants, and employees.

GRADUATION REQUIREMENTS

In order to graduate from New Richmond High School, a student must:

1. Be enrolled in a minimum of six credit-earning courses each semester.
2. Have accumulated a total of 23 credits, comprising required and elective courses.
3. Demonstrate reading competency.¹
4. Successfully complete the following required credits/courses:
 - A minimum of 4 credits of English
 - A minimum of 3 credits of Math²
 - A minimum of 3 credits of Science⁴
 - A minimum of 3 credits of Social Studies³
 - A minimum of 1½ credits of Physical Ed⁴
 - A minimum of ½ credit of Health

¹ Students at New Richmond High School must demonstrate a reading competency which corresponds with their ability level. Tests will be administered during the 8th grade year to determine students who lack reading skills. Identified students will be placed in a required reading enhancement course. The student may be exempted from this requirement by demonstrating reading competency as determined by the school.

² Must include equivalent content of Algebra and Geometry

³ Grade 9:

- 1 credit Modern World History or AP World History: Modern

Grade 10:

- 1 credit US History or AP US History

Grade 11-12:

- ½ credit Civics
- ½ credit Introduction to Economics or AP Economics

⁴ Grade 9:

- 1 credit Principles of Science

Grade 10:

- 1 credit Biology

Grade 11-12:

- ½ credit Chemistry
- ½ credit Science Elective

⁵ Students who have a medical excuse from Physical Education must take credits in other areas to compensate for those not earned. Freshmen are required to take one semester of **General Physical Education** during their freshman year. Sophomores must take one of the following courses during their sophomore year: **Team Sports, Individual/Dual Activities, Weight Training I, or Modern Fitness**. The **Fit for Life** course must be taken either as a junior or senior.

Students must be in the school building and be accountable from 7:35 a.m. to 2:57 p.m. The only exceptions are cooperative education, a requirement for a class, work release, ECCP, or an individual education plan set up by school personnel and parents. This is state law.

Choice of Electives

PLEASE NOTE: A one-credit course is a year-long course; ½ credit course is one semester.

Many suggestions on elective choice for preparation for post-high school training, education, and jobs will have exceptions. Suggestions must be thought of as a general guide. Often the suggestions are minimum requirements and not really the desired preparation. Sometimes students with special talents and/or experiences are given special consideration.

SCHEDULE CHANGE POLICY

NRHS encourages students to select courses carefully based on their high school and post-secondary plans. We make every effort to honor student course requests at the time of registration. However, we cannot guarantee all course requests. Changes to schedules can be requested through the online **Change Request Form**, which must be submitted by the deadline set each semester. Changes after that point are only approved under special circumstances - Counselors & Administration will consider the rationale for the change, if it will fit the student schedule, and reserve the right to approve or deny requests. Some changes may require parent/guardian approval. Changes made within the 1st week of the semester will not affect your transcript. Changes made within the 2nd week of the semester, if approved, will be noted with a “W” on a transcript, standing for “Withdrawal”. Following that time frame, any dropped courses, will result in an “F” on the transcript, with the exception of changes made due to teacher recommendation or extenuating circumstances.

FOR THE FOUR-YEAR COLLEGE-BOUND STUDENT

Minimum Requirements for University of Wisconsin System (four-year universities)

For seniors entering college in the fall, the following courses are generally required for college admissions:

English	4
Social Science	3
Mathematics	3 (4 STRONGLY encouraged)
(Through Algebra 2 or higher)	
Natural Science	3
(Principles of Science, Biology, Chemistry)	

- Remaining credits can be additional courses in core subject areas, foreign language, fine arts, computer science, and/or other academic areas.
- Each institution may specify additional requirements for admission at their college/university.
- Standardized Test Scores: Colleges may require submission of an ACT or SAT score for admission. The State of Wisconsin requires all Juniors to take the ACT, which is administered at school for no cost, with college reportable scores. Students can also take/retake the ACT or SAT on their own through a certified testing location (visit ACT.org or Collegeboard.org to register)

NOTE: If planning on attending a 4-year College after high school, some may have specific requirements, such as two years of a foreign language, or in the case of Minnesota State Colleges, many require one year of fine arts. Fine Arts at NRHS include all Music and Art courses, as well as Video Production. Be sure to be checking the requirements for the post-secondary schools where you plan on applying.

PRIVATE COLLEGES

Private colleges tend to have similar admissions requirements to state colleges. However, they may specify more requirements in core subject or elective areas. Rank in class is usually considered, along with the choice of electives which were taken in high school.

NOTE: College entrance requirements will vary in state and private schools. “Highly selective”, “traditional”, “liberal”, and “open” describe admission policies.

Generally, ACT and/or SAT scores will be considered if class rank is not adequate. Foreign language may be required for some colleges.

TECHNICAL COLLEGES

Wisconsin Vocational Schools and Technical Institutes—Trades and Industry Division

Technical Institutes operated in connection with state vocational schools have increased entrance requirements for courses granting the two-year Associate of Applied Science Degree and the Associate of Arts Degree. High school graduation is required and most courses require technical mathematics (algebra and geometry). Some require college-type entrance examinations. Others, which lead to certificates from one-year vocational courses, have lower entrance requirements.

Nursing Programs—Associate Degree (two year) or Bachelor of Science Degree (four year)

The Wisconsin Department of Nurses recommends the following courses for those entering registered nurse training: four years of English, Algebra, Geometry, three years of Social Studies, and a full year of Chemistry. Completion of a Certified Nursing Assistant course is also highly recommended and required by some technical colleges. Additional science classes, such as AP Biology, Anatomy, Medical Terminology, and Physics are highly recommended.

ARMED SERVICES

High school graduation is generally required. For specialty areas, different high school courses are recommended. As an example, for electronics, a strong background in mathematics, physics, and electrical shop work would be desirable. Business education would be desirable for office jobs such as typists, payroll clerks, etc. For many of the mechanical or trade related fields, mathematics, sciences, and technology courses would be valuable.

All junior students are offered the opportunity to take the ASVAB (Armed Services Vocational Aptitude Battery). Students considering the military **must** complete the ASVAB before admission.

TECHNOLOGY-RELATED CAREERS

Students interested in pursuing careers in technology related fields such as Engineering, Architecture, Design, Graphics, Electronics, Machine Tooling, Mechanics, Welding, Construction, and Computers, should strongly consider enrolling in courses offered by the Technology Education Department. Knowledge of the relationships between materials, technical processes, math, and the sciences is necessary for successful entry into post-secondary schools and the workforce. Here is a sample four-year Technology Education plan for a student interested in mechanical engineering.

Freshman Year

- Manufacturing and Design
- Introduction to Communications
- Introduction to Engineering and Design

Sophomore Year

- Machine Tool I and II
- Principles of Engineering

Junior Year

- Machine Tool III
- Digital Electronics

Senior Year

- Small Engines
- Welding and Fabrication
- Northwood Technical College Articulation Machine Tool

For additional information, please contact the Technical Education Department and/or the School Counseling Office.

ADDITIONAL EDUCATION OPTIONS

Early College Credit Program/Start College Now

Wisconsin's Early College Credit Program allows public high school students grades 9-12 who meet certain requirements to take post-secondary courses. To qualify, students must have exhausted all curriculum options in a specific area of study offered at the high school or the requested course is not comparable to a course already offered at NRHS. If approved, the cost to the student can be covered 75%-100% depending on the course. Courses must be through a UW institution, a Wisconsin technical college, one of the state's participating private nonprofit institutions of higher education, or tribally-controlled colleges. Approved courses may count as dual-credit, going toward both high school credit and college credit. Students are limited to 18 total credits through ECCP/SCN throughout high school. Students must apply for each semester they wish to participate in the program, and meet all application deadlines. **The deadline to apply for upcoming Fall semester courses is March 1st and for upcoming Spring semester courses is October 1st. You can also apply for a summer term, with a deadline of February 1st.** Students interested can apply by visiting the NRHS School Counseling website, clicking on "Early College Credit Program/Start College Now" where you can access all applications. Visit Mrs. Bartlett in the Counseling Office for more information.

Part-Time Open Enrollment

This program allows students to take up to two (2) courses with a non-resident school district. Applications must first be signed by the non-resident school district and then is submitted to the resident school district at least six (6) weeks prior to course start date. Students must apply with the Part-time Open Enrollment Application that can be found on the Wisconsin DPI website or can be picked up in the counseling office.

Articulation Agreements

New Richmond High School has established articulation agreements with Northwood Technical College, which gives students the opportunity to earn transcribed/dual and/or advanced standing technical college credit in a comparable high school course upon admission into Northwood Technical College. Articulation agreements have been made for certain courses or course combinations in English, math, science, social studies, business education, technical education, and computer science. Students interested in earning technical college credit while taking high school courses should contact their school counselor or a teacher in these departments for further information.



Advanced Placement (AP)

Advanced Placement courses are college courses offered in the high school setting. These courses require rigorous workloads and maturity on the part of the student. At the end of the course, college credit may be earned by passing a national test given in May. The **approximate** cost of each Advanced Placement test is \$100.00. The definition of passing is different for each college or university. To determine the score necessary, students should contact their college of interest.

The expectation for AP classes is that 1½ hours of homework a night per class is common. This is college level reading, writing, thinking, and problem solving. Students must take this into consideration when planning their schedule. The AP faculty recommends that freshman and sophomores take no more than one AP class and juniors no more than two AP classes. Motivated and focused seniors may take up to three AP classes. This recommendation assumes that the student has met the criteria required for each individual AP class. Students should take into account the rigor of their “non-AP” classes as well when they are selecting their class schedule.

Students are encouraged to watch videos about the AP classes and conference with AP teachers or counselors about specifics related to the class

Dual Academic Credit Program (DACP)

DACP courses are college-level courses developed in partnership with the University of Wisconsin-River Falls for a reduced rate. Students may elect to earn both college credits and required high school credits simultaneously. Upon successful completion of a course, students will earn credits that count towards both high school and transferable college credits for most university requirements. Current courses offered as DACP courses are: UWRF Chemistry, UWRF Psychology, UWRF Statistics, UWRF Calculus I & II.



Northwood Technical College Welding Academy

This is a wonderful opportunity for students interested in pursuing a career in the field of welding, or a related field, to complete 10 Northwood Technical College credits while attending NRHS. Students then can continue onto NTC following graduation to complete their Welding degree. The Welding Academy includes three credits of Gas Metal Arc Welding, three credits of Shielding Metal Arc Welding, two credits Welding Math, and two credits of Welding Blueprint Reading. Please see Mr. LeQue for an application!



Youth Apprenticeship Program

The Youth Apprenticeship program is for juniors and seniors to prepare for a career while still in high school. One and two-year programs combine academic education, occupational instruction, and work-based learning with an employer. Students take required courses at the high school and report to a work site as scheduled. While working, students have the opportunity to get paid and earn high school credit. Students will also receive a Youth Apprenticeship Certificate from the State of Wisconsin that can be used for advanced standing in some post-secondary education programs. Career areas include: auto collision, auto technician, biotechnology, architecture, engineering, mechanical design, finance, graphic arts, health services, lodging and tourism, information technology, insurance, manufacturing production, agriculture, and welding. Students interested should contact Mrs. Huber for more information and an application for entry to the program.

Employability Skills

A junior and senior level work release program based on developing employability skills. Students must meet school graduation requirements to participate. See Mrs. Huber for information and an application form.



COURSE DESCRIPTIONS

AGRISCIENCE

Advanced Animal Science

Year-Long Elective: 682, 683 2 credits

Grade Level: 11-12

Prerequisites: Passing grade in Large Animal Science

Note: This is a year-long course which meets two class periods a day. Students cannot sign up for only one semester.

Do you have a passion for animal science? Do you want to be actively involved in the SOAR Educational Center aka the School Farm? In this course, you will be paired with animals you will raise for food, specifically school lunch. You will network with local farmers, as well as other people in various agricultural careers that make this a 104.8 billion dollar industry. You will be involved in the daily management practices of a real working farm, practicing skills and knowledge you gain along the way. Your experiences from classes taken before this capstone course will be very beneficial as you dig deeper into the science of animals that provide us with food. FFA involvement will be discussed as there are many awards and opportunities for this kind of curricular experience. There will also be some weekend, vacation, and summer duties because farming is year round, even on days off of school.

Plants, Animals, Pizza and More

Semester Elective 1st Sem - 684 .5 credit

2nd Sem - 685 .5 credit

Grade Level: 9-12

Prerequisites: None

In this semester course students will study the scope and makeup of agriculture and agribusiness. Since there are over 300 careers in agriculture, with only one of those being a farmer, we will spend a considerable amount of time exploring career opportunities. Students will spend time in the greenhouse learning more about plants. Both wild and domesticated animals will be studied with field trips to local farms and businesses, which students will help to arrange. Students will study how food is produced, harvested, processed, distributed, and retailed. There will be food labs where students learn how different foods are made. The FFA will also be discussed with an emphasis in leadership and citizenship.

Advanced Fish and Wildlife

Semester Elective 1st Sem - 694 .5 credit

2nd Sem - 695 .5 credit

Grade Level: 10-12

Prerequisite: Wildlife Management

If you enjoyed Wildlife Management, this course is for you! Using the new Aquaculture Laboratory, students will have the opportunity to stretch their knowledge of fish to commercially raise them in our new facility. Water testing, scientific principles of ecosystems, and a global look at the fishing industry will be studied. While a large part of our time will be spent on fish and the fishing industry, we'll also spend time enhancing our learning in the wildlife realm. Students will participate in a mammal taxidermy project, while also constructing lures and fishing poles. We'll look at water-fowl and their role in the environment. We will study ethics, procedures, and career areas within the fish and wildlife realm. Students will work in the Aquaculture Lab, which houses three 800 gallon fish tanks, doing a variety of hands-on labs. Students will have opportunities to participate in FFA activities that deal with the environment, fish and wildlife. Student- and teacher-organized field trips will be a part of class as well.

Small Animal Science ES

****Science elective credit****

Semester Elective	1st Sem - 688	.5 credit
	2nd Sem - 689	.5 credit

Grade Level: 9-12

Prerequisites: None

Any student planning a career in veterinary science or who has an interest in small animals should consider this course. Anatomy, physiology, breeding, nutrition, and management of dogs, cats, rabbits, hamsters, guinea pigs, reptiles, amphibians and fish will be covered. Animal behavior, training, grooming, and showing will be discussed and demonstrated. Approved veterinary practices will be studied. Students will have the opportunity to bring their pets into the classroom. Students will also get to bring animals into the Animal Learning Center, where we'll perform hands-on learning activities. FFA involvement will be discussed as we focus on the organization's ability to reward students for their interest and experience in the small animal industry. Students may also help to organize field trips to foster additional learning.

Large Animal Science ES

****Science elective credit****

Semester Elective	1 st Sem – 696	.5 credit
	2 nd Sem – 699	.5 credit

Grade Level: 10-12

Prerequisites: None

This course is designed to give students basic knowledge in the selection, anatomy, physiology, nutrition, and management of poultry, sheep, swine, goats beef and dairy cattle. Animal evaluation and a unit on meat selection will give the students an understanding of how to produce and consume quality meat. Several field trips, which students will help to organize, will be taken to farms to study animals. We will also go to the SOAR Center weekly, where students will be in charge of various animals, while performing management practices during lab time. Animal diseases, approved veterinary practices, breeding programs, and other strategic procedures will be discussed. Students will also get to bring animals into the Animal Learning Center, where we'll perform hands-on learning activities. Any student who has an interest in animals should consider this course. The FFA will be discussed with a focus on leadership and citizenship.

Wildlife Management

Semester Elective 1st Sem - 687 .5 credit

Grade Level: 9-12

Prerequisites: None

If you enjoy the outdoors and its critters, this is the class for you! Wildlife is a very important part of our natural world. This course explores the history of wildlife, their populations, habitats, diseases, and protection. We will study anatomy, physiology, nutrition and feeding. Units will also include hunting, fishing, and trapping. Ethics, regulations and citizen responsibilities will be discussed. Guest speakers, labs and field trips, which students will help to organize, will be utilized to make important connections with material taught in the classroom. Each student will have the opportunity to perform panfish taxidermy. Students will work in the Aquaculture Lab, which houses three 800 gallon fish tanks, doing a variety of hands-on labs. There will be time spent focusing on the FFA and the ways in which students can turn their interest in wildlife into a valuable experience.

Agricultural Business and Marketing

Semester Elective 2nd Sem - 690 .5 credit

Suggested Grade Level: 10-12

Prerequisites: None

The materials in this course will be presented in such a way that it can apply to all forms of business; however, agriculture will be the focus. Students will study different types of business organizations and what it takes to properly establish a business. Farm organizations, cooperatives, laws and advancing technology will be addressed. We will take a look at where we started in agriculture and how far we have come! The marketing of agriculture products will be extensively studied as they move from producer to consumer. Careers will be a major focus as there are many opportunities in agriculture within the realm of business and marketing. Students will help to organize field trips to local businesses. FFA involvement will also be addressed as a unit in this course.

This course can also be completed as an Independent Study with pre-approval from the instructor.

Food Science ES

Science elective credit

Semester Elective 1st Sem - 692 .5 credit

Grade Level: 10-12

Prerequisites: None

How do you make 25 tasty flavors of Snapple? What makes the perfect bubble gum? Can we create a low-carb cookie that tastes like the real thing? These are just a few of the challenges Food Scientists face in the ever-important quest to find tasty, fun, and healthful ways to feed the world. Explore science through the exciting world of food! This exciting course covers food topics from production to the consumer. Using scientific research, we will evaluate how food is handled and processed every step of the way to your table. Topics such as how foods are processed, current food controversies and food laws and regulations will be discussed, as well as a brief introduction to the different areas of study and career opportunities within the food science industry. This class will contain many labs to help students understand the inner workings of food. Food Science is a course designed to introduce the learner to the relationship between food, additives, processing, and your health. We will use the classroom as our laboratory with field trips to local establishments. FFA experiences will also be discussed and encouraged. *Limited to 24 students per section.*

Greenhouse Management ES

****Science elective credit****

Semester Elective 1st Sem - 679 .5 credit

Grade Level: 11-12

Prerequisites: None

Whether or not you have a green thumb, this course is for you! If you are interested in exploring plants and all they represent, plus working in the greenhouse, you should take this class. We will take a look at floral design, container gardens, corsages, boutonnieres, wreath and bow making, interiorscaping and greenhouse management. We will plant a wide variety of plants while learning about how they grow, what they need, and how they can be used. Plant propagation, Integrated Pest Management, pesticides and insects will also be discussed. Guest speakers will be invited to share their expertise, and student/teacher organized field trips may also be taken. An introduction to the FFA will also take place.

Conservation of Natural Resources

Semester Elective 2nd Sem - 697 .5 credit

Grade Level: 9-12

Prerequisites: None

This course content includes the study of the natural environment encompassing soil, land, water, forest, fish, wildlife, outdoor recreation, energy, metal, and mineral management. Recycling and conservation of these resources are also studied at length. Current events related to nature and our planet will be discussed throughout the semester. Field trips to local establishments, some organized by students, will increase our understanding. Guest speakers from the area will be invited to share their insight with students. Students will work in the Aquaculture Lab, which houses three 800 gallon fish tanks, doing a variety of hands-on labs. The FFA will be discussed with an emphasis on leadership and citizenship.

Leadership and You!

Semester Elective 2nd Sem - 691 .5 credit

Grade Level: 10-12

Prerequisites: None

Whether you consider yourself a leader or a follower, this course is for you! With an ever-increasing need for leaders within our school, community, state and nation, we need you to be competent citizens who can make things happen! This class will teach you how to tweak your leadership skills to be the best you can be. It will help you become more of a leader by studying team building, group dynamics, personal leadership development and communication. We will explore different leadership styles and career possibilities. Guest speakers and field trips, some organized by students, will be a major focus of our learning throughout the semester. The FFA and its leadership opportunities will be discussed.

Horse Care and Management

Semester Elective 2nd Sem - 686 .5 credit

Grade Level: 10-12

Prerequisites: None

Do you have an interest in horses? This course is designed for those students who would like to learn about the selection, breeds, nutrition, reproduction, training, and showmanship of horses in both Western and English equitation. Horse health, disease prevention, and management will be covered. Student-organized field trips and hands-on training will be utilized to provide practical experience with horses. Horse tack and equipment will be studied, along with horse facilities. The FFA and its opportunities will be discussed throughout the semester.

Landscaping

Semester Elective 2nd Sem - 678 .5 credit

Grade Level: 11-12

Prerequisites: None

This course is intended to provide an overview of the rapidly growing “greens industry”. The course will provide an understanding of the development, installation, and maintenance of a home and commercial landscape. A unit on floriculture will complement the use of landscapes, gardening, fruit production, turf, shrubs, and trees. A residential home and a commercial building landscape may be planned and landscaped by the class. Anyone interested in a landscape career or in developing a landscape at home should consider this course. We will use the community as our classroom to study what is taking place in the landscaping industry. Additional field trips, some organized by students, may be taken throughout the semester to complement instruction. An introduction to the FFA and its opportunities will also be discussed throughout the semester.

Environmental Science

Semester Elective 2nd Sem - 708 .5 credit

Grade Level: 11-12

Prerequisites: None

The staggering population growth has affected the planet on which we live in many ways. In order to ensure a good quality of life long into the 21st century, students need to be informed of environmental concerns and actions. The course will cover basic ecology, population dynamics, natural resource use and preservation, pollution, and environmental societal effects. The course should be taken by students interested in the environment and improving all forms of life. Students considering careers in any of the sciences should enroll in this upper level class. Field trips, guest speakers, and hands-on lab activities will be utilized to provide realistic critical thinking with regard to the environment. Students will assist with the planning of field trips. An introduction to the FFA will exist, with a focus on citizenship and stewardship. *This course can also be completed as an Independent Study with pre-approval from the instructor.*

Agricultural Equipment

Semester Elective 2nd Sem - 693 .5 credit

Grade Level: 11-12

Prerequisites: None

In this course, instruction is given in the selection, usage, and maintenance of mechanically power driven equipment used in agriculture. The costs of owning and operating agricultural equipment and methods of calculating the performance standards for various implements are also studied. The kinds of equipment include, but are not limited to: tillage implements, calibrated machines, harvesting machines, forage machinery, and special farm processing machinery. Instruction will also include global agricultural equipment. Students will travel to Northwood Technical College and Frontier Ag & Turf to gain information. Students may also assist in planning more field trips to see equipment in action. Safety will be a major focus. An introduction to the FFA and its opportunities will also be discussed.

ART

Art I

Semester Elective 1st Sem - 720 .5 credit
 2nd Sem - 721 .5 credit

Grade Level: 9-12
Prerequisites: None

This introductory class helps students strengthen a variety of art skills from drawing to sculpture to painting. For every unit, students learn about a period of art and then create a project that corresponds with the art of the time period. No art experience or art skills needed to take this class; you will learn them here.

Art II

Semester Elective 1st Sem - 732 .5 credit
 2nd Sem - 733 .5 credit

Grade Level: 9-12
Prerequisite: Art I

In Art II, students apply skills learned in Art I and take it to the next level by applying strong composition and design skills. A variety of two-dimensional and three-dimensional art will be created. Art examples from a variety of cultures are used to support concepts.

Ceramics

Semester Elective 1st Sem - 744 .5 credit
Grade Level: 10-12
Prerequisites: None

Are you interested in a course where you work with nothing but clay for the whole semester? Ceramics students create vessels (hand-built and wheel-thrown) first quarter, and create sculptures and other non-vessel forms second quarter. Throughout the course, students will practice planning, designing, forming, glazing, and safety skills. Students will also learn about the kiln firing process and ceramic pieces created by a variety of cultures. No prior experience is necessary.

Sculptures, Textiles and Crafts

Semester Elective 2nd Sem - 755 .5 credit
Grade Level: 10-12
Prerequisites: None

Students will explore a series of 3-D arts and crafts, including fibers, stone, wood, paper, and other materials (even junk!) at the discretion of the instructor. Students will design and create several works of art, using proper techniques, processes, and terminology. Evaluation will be based on demonstrated understanding of the unique properties of each medium. No prior experience is necessary.

Drawing

Semester Elective 1st Sem - 742 .5 credit
Grade Level: 10-12
Prerequisites: Art I, Art II

Do you love drawing and want to take your skills to the next level? In this class you develop your observational and creative drawing skills in a variety of media. Your outstanding finished art will help build a portfolio.

Studio Art *offered every other year*****

Semester Elective
Grade Level: 10-12
Prerequisites: Art I, Art II

Are you wanting a class where you can visually express your ideas and produce work for a portfolio? In this class you will create symbolic, expressive work where you choose your media and style! Working off of a theme or concept, you will creatively solve a visual problem. Students will sculpt, draw, paint, print, design, and craft to showcase their concept.

Graphic Art and Design

Semester Elective 1st Sem - 756 .5 credit
Grade Level: 10-12
Prerequisites: Art I, Art II

Did you know that graphic design is all around you? From the graphics on your favorite cereal box, to the logos on your shoes to the apps on your phone...just to name a very few! In this exciting course you will learn to develop and showcase your ability to creatively solve problems and create visually appealing designs that convey a message. Both traditional and digital art (using Adobe Photoshop and Illustrator) will be created in this class.

Contemporary Art

Semester Elective 2nd Sem - 726 .5 credit
Grade Level: 10-12
Prerequisites: Art I, Art II

Do you like newer art forms? Unique materials? Thinking outside the box? Contemporary art is for you. We will take a look at what artists are doing today to help generate ideas for your own artwork. Creativity, problem solving, and self expression are what's important in this class. We will create sculptures, drawings, paintings, prints, and many other media forms.

Painting

Semester Elective 2nd Sem - 743 .5 credit
Grade Level: 10-12
Prerequisites: Art I, Art II, Drawing

Painting class springs off from where Drawing class ends. You will learn basic painting techniques by starting first with black and white, then exploring basic color schemes, and finally creating more complicated palettes of their own. Oils, acrylics, watercolor, and multimedia will all be explored. Using your observation skills from Drawing, your new color theory knowledge, and painting techniques, you will create several original works of art on canvas, masonite, paper, and possibly even objects or walls.

BUSINESS EDUCATION

Personal Finance

Transcribed credit available through Northwood Technical College.

Semester Elective	1st Sem - 629	.5 credit
	2nd Sem - 630	.5 credit

Grade Level: 11-12

Prerequisite: None



Consumer based class intended to help students with managing and investing money. Topics include: personal budgeting, checkbooks, investing, credit, insurance, home loans, car loans, renting, and retirement planning. This is a life skills course intended to help you when you are living on your own.

Intro to Business

Transcribed credit available through Northwood Technical College.

Semester Elective	1 st Sem - 640	.5 credit
	2 nd Sem - 641	.5 credit

Grade Level: 11-12

Prerequisite: None (Max students: 15)



This is an introductory course designed to develop an understanding of the activities, functions, and principles of business enterprises. The course helps to gain insight into the responsibilities and challenges of operating a business. Emphasis is on the interaction of the various functions required to operate businesses of all sizes. Specifically, the areas of business trends, ownership models, leadership, human resources, marketing, information management, and finance will be explored. Students interested in starting their own business would benefit greatly from this class as well.

Marketing Principles

Transcribed credit available through Northwood Technical College.

Semester Elective	1 st Sem - 608	.5 credit
	2 nd Sem - 609	.5 credit

Grade Level: 11-12

Prerequisite: None (Max students: 15)

This course focuses on the marketing process as it relates to the operation of a business enterprise as well as in the Sports and Entertainment industries. The intent is to provide students with an understanding of how the marketing function fits within the overall structure of the organization. Special attention is given to the role and significance of evaluating customer needs, pricing, distribution, and promotion of products and services.



COMPUTER SCIENCE

AP Computer Science

Year-Long Elective 394, 395 1 credit

Grade Level: 11-12

Prerequisites: Advanced Computer Applications and Introduction to Programming

Please see the AP course description on page 10.

This course is a rigorous programming course that will allow students a chance to program in the widely-used language of Java. The course is designed to introduce all the language structures used in Introduction to Programming using the Java language. The focus of the first semester is to learn the language and its structures. Next, we will focus on object-oriented programming, data structures, data files, and recursion. The second semester will also focus on a practice test to prepare students for the AP test.

AP Computer Science Principles

Year-Long Elective 614, 615 1 credit

Suggested Grade Level: 10-12

Prerequisite: Computer Applications OR Intro to Programming

Have you ever thought of a job in the computer field? This class will introduce you to many options in the careers of computers and technology. Class is designed for students who have taken computer apps and are interested in learning more about module programming, programming apps for mobile devices, learning about cyber security, visualization of data, use of internet programming and tools and simulations. We will use a variety of software packages to design all of these items and there will be a short electronics unit.

Computer Applications

Semester Elective 1st Sem - 610 .5 credit

2nd Sem - 611 .5 credit

Grade Level: 9-12

Prerequisites: None

Computer Applications will cover a broad range of topics related to computer software, hardware, desktop publishing, and design. The first part of the course will focus on learning how to effectively utilize programs like Microsoft Word, Excel, PowerPoint, Microsoft Publisher and Access. Students will be using these programs to create real world documents. Additional topics may include file management, the history and future of computer technology, scanners, digital cameras, online learning, and web page design.

Advanced Computer Applications

Semester Elective 1st Sem - 619 .5 credit

2nd Sem - 620 .5 credit

Grade Level: 9-12

Prerequisite: Computer Applications

Advanced Computer Applications offers students an opportunity to develop skills necessary for personal success and career success. In addition to improving keyboarding skill, students will become efficient users of word processing, spreadsheet, database, and presentation graphics software. Techniques for searching the internet will also be explored.

PC Networking

Semester Elective 2nd Sem - 623 .5 credit
Grade Level: 11-12
Prerequisite: Advanced Computer Applications

PC Networking is a class that will teach you the basics of building a computer from its components. We will install multiple operating systems. Then we will troubleshoot computer hardware and software problems. Next, we will design and create a peer-to-peer network and a server client network. Lastly, we will design and create different types of secured wireless networks.

Programming Mobile Apps

Semester Elective 2nd Sem - 627 .5 credit
Grade Level: 11-12
Prerequisites: Introduction to Programming

In this class students will have the opportunity to learn how to program applications for mobile devices. Students will learn how to program using object C and cocoa touch in order to develop apps. Students will test these programs and make changes to make them functional. Finally, students will create a project that will be an actual app idea of their own.

Game Design and Development

Semester Elective 2nd Sem – 603 .5 credit
Suggested Grade Level: 9-12
Prerequisites: Introduction to Programming

This course will introduce students to the basic skills necessary for game design. They will study the various games in the industry and analyze their approach in terms design, development and deployment. The student will explore the processes and art of making game elements like story, sound, user interfaces, programming and levels. This analysis will include an orientation to the gaming market and innovative techniques. Finally, the student will merge all these elements into a functional prototype showing their understanding of the game design process.

ENGLISH

English 9

Year-Long Required Course 0112, 0113 1 credit
Grade Level: 9

This class is an introduction to high school English through review of basic skills including reading, listening, and writing. Students will read short stories, drama, and novels in order to improve their ability to read for pleasure, knowledge, and scholastic success. Through discussion and composition, students will analyze kinds and levels of conflict, describe characterization, and identify points of view. Definition, comparison, and contrast paragraphs will be stressed first semester; the multi-paragraph essay will be stressed second semester. This course will also include units involving library research, creative writing, and mechanics of written English.

Enriched English 9

Year-Long Course - Taken in place of English 9 0116, 0117 1 credit
Grade Level: 9

This course is for freshman students who demonstrate a commitment to learning through self-directed motivation and desire. This class will challenge each student's ability to read, think and write. The reading selections will be more sophisticated and complex, class activities will emphasize deeper interpretations, assessments will be more self-directed, and discussions will focus on the craft of literature and writing. Students will be expected to accomplish much of the reading and writing outside of class; however, these activities will not be at the pace or amount of an AP class. The class will prepare students to enter Enriched English 10 the following year. This pathway will better prepare students to meet the rigor of AP classes should they decide to enroll in these classes as juniors and seniors.

English 10

Year-Long Required Course 0130, 0131 1 credit
Grade Level: 10
Prerequisite: English 9

This course is designed to prepare students for the rigor and content of the junior level English courses. In addition to reinforcing the basic language, reading, and writing skills learned in English 9, students will broaden their analytical and writing skills as they explore the thematic and stylistic development of literature. Novels, short stories, poetry, nonfiction texts, and plays will be studied as a way to expand writing and thinking skills. This course will also include a comprehensive study and application of the rules which apply to grammar and usage. This class is intended to be more challenging than previous English courses; however, accommodations in pacing and grading are made throughout the year in order to encourage students to grow their skills.

Enriched English 10

Year Long Course - Taken in place of English 10 0132, 0133 1 credit

Grade Level: 10

Prerequisite: English 9

Enriched English 10 is for sophomores interested in challenging their reading, thinking, and writing skills. In addition to many activities and assessments that are similar to regular English 10, Enriched students will also read several novels and write a variety of papers designed to hone their language arts skills and deepen their understanding of the human experience. This class is not an Advanced Placement class; however, students must work independently and maintain consistent attendance and participation in order to achieve success. A teacher recommendation is recommended, but not required.

English 11

Year-Long Required Course 152, 153 1 credit

Grade Level: 11

Prerequisite: English 10

The purpose of this course is to integrate the skills of language, literature, and composition. In order to develop specific writing skills, students will be able to experiment with many types of writing, including reflective, creative, academic, and personal. At the same time, students will analyze the language and react to content of modern and classical pieces of literature in the form of drama, novels, poetry, and short stories, which all deal with individual and/or societal issues. Additionally, students will study and apply the research process and create a documented paper focusing on a technical college, vocational school, and/or four-year college/university of their choice. Lastly, this course focuses on preparing students for the ACT. Through ACT preparation testing and ACT prompt writing, students will be better prepared for the reading and language sections on the ACT test.

Advanced Placement (AP) English Language and Composition

Year-Long Course - Taken in place of English 11 184, 185 1 credit

Grade Level: 11-12

Prerequisites: None

Please see AP course description on page 10

This is a rigorous course which provides students with extensive writing opportunities. Much attention is given to developing a personal writing style through essay writing. In addition, an intense examination of grammar, punctuation, sentence structure and vocabulary will be used to further develop writing skills. This course is designed to be the equivalent of a college course in composition, and students should expect a workload appropriate to that level of class. Summer reading will also be required. **Students must pass first semester to continue second semester.**

Advanced Placement (AP) English Literature and Composition

Year-Long Course - Option for Senior English 180, 181 1 credit

Grade Level: 12

Prerequisites: Students need to have successfully completed AP English Language and Composition as a junior.

Please see AP course description on page 10.

This is a rigorous course which provides students with extensive reading and writing opportunities. Students will read multiple pieces of literature ranging from the Middle English of Chaucer to contemporary works. Drama, fiction, and poetry will be covered. In addition, students will write literary analyses and a research paper. This course is designed to be the equivalent of a college course in literature, and students should expect a workload appropriate to that level of class. Summer reading will also be required. **Students must pass first semester to continue in second semester.**

English 12 - College Prep

Year-Long Course - Option for Senior English 182, 183 1 credit

Grade Level: 12

Prerequisite: English 11

This class is recommended for those who are planning to attend a 4-year college. It may also be appropriate for students planning to attend a community college with plans of transferring to a 4-year university setting. The course introduces challenges that gradually increase to a college level of difficulty. Although some time is devoted to polishing skills, the primary focus of the course is to use skills to explore and analyze the connection between texts and life. Students will read literature, scholarly novels, and college-bound texts as a part of the course. Students will write numerous smaller writing pieces, compose a variety of essays, and complete multiple research papers including a larger senior paper. Study strategies such as annotating and organizing will also be incorporated into the course. **Students are required to take both semesters of this course.**

English 12 - Applied Communications

Semester Course - Option for Senior English 1st Sem - 176 .5 credit

(Year-long course suggested with Advanced Communications)

Grade Level: 12

Prerequisites: English 11

This basic communication course focuses on effective listening, speaking, reading, researching, and writing in life and at work. There is a focus on the communication process itself as well. Students demonstrate their skills both individually and in groups. Students also produce such employment documents as a cover letter and a resume.

English 12 – Advanced Communication Skills

Semester Course 2nd Sem - 177 .5 credit

(Year-long course: Prerequisite is Applied Communications)

Grade Level: 12

Prerequisites: English 11 and Applied Communications

This course fully explores effective listening, speaking, reading, and writing in the workplace. Students take notes, deliver presentations, work in groups, and write program-related documents. Students work to write proposals, analyze texts, research, provide solid customer service, and communicate in a variety of situations.

English 12—Creative Writing

Semester or Year-Long Course - Senior English Option	1 st Sem - 170	.5 credit
	2 nd Sem - 171	.5 credit

Suggested Grade Level: 12

Prerequisites: Passing grades in other English course work or recommendation from English Department member.

Creative Writing is an elective English class that encourages students to cultivate and practice habits and attitudes of successful lifelong writers and readers. Because the most important aspect of the course is for students to recognize and build on their strengths as writers, readers and thinkers and strive to improve all aspects of communication, students work with the teacher to assess, reflect, and set goals based on their individual needs and skills. Projects and assignments are designed based on the interests, strengths and weaknesses of the class, using the Arts PROPEL as a model. This model requires students to analyze and study exemplary pieces of work, produce their own work, analyze the quality of their work, revise, and eventually, publish. Students will learn to effectively conference about writing and use each other as resources. They will be exposed to a variety of creative brainstorming and drafting techniques, and be expected to take major pieces to completion each semester.

Yearbook

Semester Elective	1 st Sem - 198	.5 credit
	2 nd Sem - 199	.5 credit

Grade Level: 9-12

Yearbook is a hands-on elective class that provides students with the unique opportunity to create their yearbook. Using computer technology, digital camera equipment and the online yearbook site, students will create a book that will be aesthetically pleasing, historically accurate and journalistically correct. Students will learn the elements of design, photography basics, InDesign, and Photoshop. They will also learn how to write strong headlines, captions, and copy.

Intro to Video Productions

Semester Elective	704 – 1 st Sem	.5 credit
	705 – 2 nd Sem	.5 credit

Grade Level: 10-12

Prerequisite: Entrance application and instructor approval (See Mr. Staudt for an application)

****Applications must be returned to Mr. Staudt by 3:00 pm on Friday, March 8th, 2024****

Note: This is a semester-long course offered both semesters. Once you have completed a semester of Intro to VP you may take Adv. Filmmaking and/or Broadcast Journalism. This course only needs to be completed once.

Students will stretch their imagination by writing scripts, developing storyboards, filming, and acting in a variety of video projects. Projects will include public service announcements, commercials, interviews, music video, animations, and more. Students will learn various technical skills while producing and directing analog and digital video segments. Students will be instructed in the following areas: camera functions, digital editing, script writing, audio recording, and lighting techniques. The course will culminate with the production of a short film or documentary. Class size is limited, so students must complete an entrance application to be qualified for enrollment.

VP 2: Advanced Filmmaking (level 2)

Semester Elective 712 – 1st Sem .5 credit
 713 – 2nd Sem .5 credit

Grade Level: 10-12

Prerequisite: Minimum of B average in VP, instructor approval and entrance application. (See Mr. Staudt for an application)

****Applications must be returned to Mr. Staudt by 3:00 pm on Friday, March 8th, 2024****

Note: This is a semester-long course offered both semesters. *This course may be taken multiple times.*

This class will immerse students in lessons that develop their scriptwriting, cinematography, producing, editing and visual storytelling skills through a variety of film genres. Students study & produce documentaries, short films, movie trailers, sports highlight videos, music videos. Students will also explore career opportunities in video production and filmmaking.

Broadcast Journalism (level 2)

Semester Elective 1st Sem. - 702 .5 credit
 2nd Sem - 703 .5 credit

Grade Level: 10-12

Prerequisite: Instructor approval, recommended minimum of B average in VP, and entrance application. (See Mr. Staudt for an application)

****Applications must be returned to Mr. Staudt by 3:00 pm on Friday, March 8th, 2024****

Note: This is a semester-long course offered both semesters. This course may be taken multiple times.

This class will cover broadcast news writing, videography, editing and visual storytelling. Students will learn the basics of reporting, videography, and broadcast journalism. They will produce a variety of reports to expand their understanding of the various formats, styles and types of reports used in the media. Students will also work on news judgment, sourcing stories, interviewing subjects and writing and editing their stories for broadcast and the web. There will be an emphasis on performing journalism on television, and radio and online media. Upon completion of this class, students should be comfortable performing on-mic and on-camera.

Advanced Culinary: Gourmet to Go

****only offered every other year** Will Run 2024-2025 School Year**

Semester Elective 2nd Sem - 656 .5 Credit

Grade Level: 10-12

Prerequisite: Intro To Culinary Arts

Course Fee: \$10

In this advanced course, you will refine your culinary skills, as well as, learn cost control and management skills through the semester long Gourmet to Go project. At the conclusion of the course, you will be eligible for the ServSafe® Sanitation Management Certification from the National Restaurant Association. College articulation to 30+ institutions is available if you choose to complete the ProStart program. Other certifications and scholarship opportunities will also be available. Learning will take place through hands-on activities, guest speakers, field trips, volunteer work, and more! *Limited to 24 students per section.*

Advanced Culinary: Baking and Pastry

****only offered every other year** Will Run 2025-2026 School Year**

Semester Elective 2nd Sem - 642 .5 Credit

Grade Level: 10-12

Prerequisite: Intro. To Culinary Arts

Course Fee: \$10

Do you like to bake and be creative in the kitchen? Do you love cupcake wars? Does the idea of being a pastry chef intrigue you? Baking and pastries is the course for you. In this advanced culinary course you will develop your baking and pastry skills. Through many lab experiences, guest speakers, field trips, demonstrations and more we will discover baking topics such as pies, croissants, chocolate and sugar work, cake decorating, soufflés and many more! College articulation to 30+ institutions is available if you choose to complete the ProStart program. Come join the fun! *Limited to 24 students per section.*

Culture and Cuisine

Semester Elective 2nd Sem - 650 .5 credit

Grade Level: 10-12

Prerequisite: Foods I or Intro to Culinary

Course fee: \$10

Are you an adventurous eater? Do you dream of traveling the globe and sampling foreign cuisines? This is the course for you! We'll discover some of the psychology behind why we eat what we do. How do we develop comfort foods? What are they? We'll explore the regions of the United States and their unique cuisines and then we'll travel abroad to investigate food and culture in several foreign countries. Be prepared for hands-on projects, field trips and many labs! Labs include cajun chicken pasta, crepes, baba ganoush, baklava and many many more! *Limited to 24 students per section.*

Foundations of Early Childhood Education

Earns 3 college credits through Northwood Technical College

Semester Elective 1st Sem - 652 .5 credit

Grade Level: 10-12

Prerequisite: None



Do you like kids? Have you ever considered being an Early Childhood Education teacher? If so, then this is the course for you. This college course will give you an opportunity, through hands-on experiences, group work, field trips, role plays, and projects to learn about the many facets of Early Childhood Education. Some topics include the history of ECE, learning strategies to support diversity, discovering creative learning spaces, investigating the responsibilities of an ECE teacher, and exploring learning activities for young children. Discover your passion while earning free college credit!

Infant and Toddler Development

Earns 3 college credits through Northwood Technical College

Semester Elective 2nd Sem - 647 .5 credit

Grade Level: 10-12

Prerequisite: None



Do you ever wonder why babies crawl before they walk? Or what makes them laugh or cry? Do you love taking care of young children? This is the course for you! In this course you will have the opportunity to discover how small children develop from conception to 3 years of age. You will get to see babies in action when you observe at local daycare centers and in class. In addition, heredity, environment, brain development and developmental theories will be topics of discovery. Join the fun, all while earning 3 FREE college credits!

Dimensions of Life

Semester Elective 1st Sem - 646 .5 credit

Grade Level: 10-12

Prerequisite: None

This course is about you and your life. It focuses on issues that teens face today and takes a look into the future. Through a variety of interactive methods such as discussion, journaling, role play, and hands-on projects, students will discover topics such as dating and sexuality, communication and healthy relationships, marriage, family, and parenting. Baby Think It Over and Empathy Belly are just two of the fun and educational activities in store for this course.

Clothing and Fashion

Semester Elective 1st Sem - 643 .5 credit

Grade Level: 9 -12

Prerequisite: None

Course Fee: \$10 for classroom supplies.

Additional project and supply fees may be required, depending on the project selected.

This course introduces students to the world of clothing and fashion and is filled with hands-on projects and many opportunities to be creative and inventive. We will begin with discussing how the fashion world has been influenced by famous designers and history. Elements & Principles of Design, types of fabric construction, and consumerism will be included in the course before reading a pattern, hand- and machine-sewing, and creating a sewn product.

Housing and Interior Design

Semester Elective 2nd Sem - 651 .5 credit

Grade Level: 9 -12

Prerequisite: None

If you have the desire to create comfortable, interesting, and inspiring environments that people will admire, live in, and work in, then this course is for you. Housing and Interior Design is a course that will give students a hands-on opportunity to explore the many career options available in the field of interior design and family housing. We will study communities, the construction process, color in design, lighting and accessories, as well as researching various career options and opportunities for further education.

Survivor

Semester Elective 2nd Sem - 644 .5 credit

Grade Level: 11-12

Prerequisite: None

Can you survive the game of life? Are you ready for the real world? Pop quiz - can you: sew on a button, change a tire, plan meals on a budget, avoid the freshman 15, manage stress, find an apartment, do your laundry, co-exist with roommates, manage your social life and get to work on time etc. This class is designed to teach you the art of adulting through a variety of interactive activities that will help you survive in the "real world!"

HEALTH

Health

Required Semester Course	1st Sem - 594	.5 credit
	2nd Sem - 595	.5 credit
	Summer Term	.5 credit

Grade Level: 9-12

Prerequisite: None

This course provides information on issues important to young adults. Topics include Mental Health, Growth and Development, Disease Prevention, Nutrition, Alcohol, Tobacco, and Other Drugs, and CPR. Knowing the facts will enable students to make the right choices on issues affecting their future.

Health Occupations

Credit and certification through Northwood Technical College

Semester Elective	1 st Sem – 600	.5 credit
	2 nd Sem – 601	.5 credit

Grade Level: 11-12

Prerequisite: None



This class explores the world of Health Occupations. You will dive into important areas related to health and working in the health field. Topics such as anatomy, disease prevention, characteristics of good employees, mental health, taking vital signs, legal responsibilities, etc. will be covered. Students will also have the opportunity to become certified in Basic Life Support CPR, which is a medical level CPR. This course will also include individual career research and guest speakers. This course also includes collaboration with Northwood Technical College. You will work towards getting certified as a Personal Care Worker. This will get you a credit and certification through Northwood Technical College. The PCW course is a precursor to CNA certification. So if you want to get your CNA, this is a great course to get you ready for that. Whether you know that you want to work in the health field or you just want to understand what occupations are out there, this is the course for you.

MATH

CC3 (Pre-Algebra)

Year-Long Course 330,331 1 credit

Suggested Grade Level: 9

Prerequisite: None

Recommended: D/F in 8th grade math or teacher approval

Core Connections, Course 3 is a course designed to prepare students for a rigorous college preparatory algebra course. It uses a problem-based approach with concrete models. This course helps students develop multiple strategies to solve problems and to recognize the connections between concepts. A scientific calculator is highly recommended for the course.

Technical Mathematics

Year-Long Course 340, 341 1 credit

Available to: Incoming freshmen with instructor's approval; Students who have passed Pre-Algebra

Prerequisites: None

Requirements: Scientific calculator

Technical Mathematics will provide the practical mathematics skills needed in a wide variety of trade and technical areas, including plumbing, automotive, electrical and construction trades, machine technology, welding, drafting, and many other occupations. It is especially intended for students who find math challenging. The course will assist students by providing a direct practical approach that emphasizes careful, complete explanations and actual on-the-job applications. It is intended to provide practical help with real math. A calculator is a necessary tool for workers in trade and technical areas. The course will integrate scientific calculators as needed with the understanding that students will also need to know the mathematical computations without a calculator.

CCA (Algebra 1)

Year-Long Course 320, 321 1 credit

Suggested Grade Level: 9

Recommended: C or better in 8th grade math

 Passing grade in CC3 (Pre-Algebra)

 D/F in Algebra 1 from previous year

Core Connections Algebra is the first course in a three-year sequence of college preparatory mathematics courses that starts with Algebra 1 and continues through Algebra 2. *Core Connections Algebra* aims to deepen and extend student understanding built in previous courses by focusing on developing fluency with solving linear equations and inequalities and systems; extending these skills to solving quadratic and exponential functions; exploring functions, including sequences, graphically, numerically, symbolically and verbally; and using regression techniques to analyze the fit of models to distributions of data. A scientific calculator is required for the course. A graphing calculator is optional for this course.

CCG (Geometry)

Year-Long Course 350, 351 1 credit

Suggested Grade Level: 10

Prerequisite: Algebra 1

Recommended: C or better in Algebra 1 or teacher approval

Core Connections Geometry is the second course in a three-year sequence of college preparatory mathematics courses that starts with Algebra 1 and continues through Algebra 2. *Core Connections Geometry* aims to formalize and extend the geometry that students have learned in previous courses. It does this by focusing on establishing triangle congruence criteria using rigid motions and formal constructions, building a formal understanding of similarity based on dilations and proportional reasoning, developing the concepts of formal proof, exploring the properties of two- and three-dimensional objects, working within the rectangular coordinate system to verify geometric relationships, proving basic theorems about circles, and using the language of set theory to compute and interpret probabilities for compound events. A scientific calculator is highly recommended for this course. A graphing calculator is recommended for this course.

CCI2 (Integrated 2)

Year-Long Course 352, 353 1 credit

Suggested Grade Level: 11, 12

Prerequisites: Passed Algebra 1, Geometry

Recommended for: Students not ready for Algebra 2 – Teacher Selected

Requirements: Scientific Calculator

Core Connections Integrated II aims to formalize and extend the algebra and geometry that students have learned in previous courses. Students who did poorly in algebra and geometry are prime candidates for this class. Students doing well in this class can potentially take Algebra 2 the next year. Topics include: Algebraic and Geometric Relationships, Justification and Similarity, Probability and Trig, Factoring and more Trig, Quadratic Functions, Right Triangles, Proof and Conditional Probability, Polygons and Circles, Modeling with Functions, Circles and More, Solids, and Counting Principles.

CCA2 (Algebra 2)

Year-Long Course 362, 363 1 credit

Suggested Grade Level: Consult with your teacher for a
recommendation

Prerequisite: Algebra 1 and Geometry

Recommended: Grade of C or better in Geometry and/or teacher approval

Core Connections Algebra 2 is the third course in a three-year sequence of rigorous college preparatory mathematics courses that starts with Algebra 1 and continues through Algebra 2. *Core Connections Algebra 2* aims to apply and extend what students have learned in previous courses by focusing on finding connections between multiple representations for function, transformations of different functions families, finding zeroes of polynomials and connecting them to graphs and equations of polynomials, modeling periodic phenomena with trigonometry, and understanding the role of randomness and the normal distribution in making statistical conclusions. A graphing calculator is required for this course.

Advanced CCA2 (Advanced Algebra 2)

Year-Long Course 360, 361 1 credit

Suggested Grade Level: Consult with your teacher for a recommendation

Prerequisite: Algebra 1 and Geometry

Recommended: Grade of B or better in Geometry, B+ or better in Algebra 1

Core Connections Algebra 2 is the third course in a three-year sequence of rigorous college preparatory mathematics courses that starts with Algebra 1 and continues through Algebra 2. *Core Connections Algebra 2* aims to apply and extend what students have learned in previous courses by focusing on finding connections between multiple representations for functions, transformations of different function families, finding zeroes of polynomials and connecting them to graphs and equations of polynomials, modeling periodic phenomena with trigonometry, and understanding the role of randomness and the normal distribution in making statistical conclusions. As well as an extensive study of functions, this course also strongly emphasizes comparing and contrasting the mathematical concepts and processes. This course emphasizes mathematical practices, and strong writing and verbal skills in the context of mathematics. A graphing calculator is required for this course.

Pre-Calculus

Year-Long Course 382, 383 1 credit

Suggested Grade Level: 11, 12

Prerequisite: C or better in Algebra 2 and Geometry (or teacher approval)

Pre-Calculus is designed for the student who has above average interest and ability in mathematics. The goal is to prepare the student for college mathematics. The topics covered include an introduction to the plane analytic geometry, and an in depth study of functions with emphasis on curve sketching leading to an intuitive approach to the concept of derivatives. Other topics include the study of trigonometric relations and identities as derived from the unit circle, the graphics of six trigonometric functions and polar coordinates, and a high degree of emphasis on practical applications. This course is recommended if you plan to attend college. A graphing calculator is required for this class.

Calculus I - UWRF Math 165

Year-Long Course 384, 385 1 credit

Suggested Grade Level: 11, 12

Prerequisite: B or better in Pre-Calculus and teacher approval



Calculus I is a college-level course that is equivalent to 1st semester college Calculus. Students who are college-bound and planning on a mathematics-related career are encouraged to take this course. Calculus is a branch of mathematics that concerns itself with rate changes. The course will study extremes through various means of differentiation. The concept of integration will be studied for both definite and indefinite integral. Applications of calculus to realistic problems related to distance, particle motion, area, volume of revolution and volumes by cross sections will be studied. A graphing calculator is required for this course.

Dual Credit with UWRF (DACP): Students may elect to earn both college credits and required high school credits simultaneously, providing students with the opportunity to earn UWRF credit at the high school. Upon successful completion of the course, students will earn credits that count towards both high school and transferable college credits for most university requirements. In order to qualify for Dual Credit enrollment, students must meet one of the following criteria:

- earn a B or better in Precalculus
- earn a 26 or higher on the math portion of the ACT
- passing the WPT with a MAFOR of at least 100 (see instructor)

A fee is required to enroll in the UWRF dual credit Math 165 (Calculus I) course. Please contact the Calculus I teacher for more information on DACP with UWRF.

Calculus II - UWRF Math 167

Year-Long Course 388, 389 1 credit
Suggested Grade Level: 12
Prerequisite: B or better in AP Calculus I and
teacher approval



Calculus II is a college-level course that is equivalent to 2nd semester college Calculus. Students who are college-bound and planning on a mathematics-related career are encouraged to take this course. The course builds on material taught in Calculus I. Additional topics include Techniques of Integration, Series and Sequences, Vectors, Parametric and Polar defined curves. A graphing calculator is required for this course.

Dual Credit with UWRF (DACP): Students may elect to earn both college credits and required high school credits simultaneously, providing students with the opportunity to earn UWRF credit at the high school. Upon successful completion of the course, students will earn credits that count towards both high school and transferable college credits for most university requirements. In order to qualify for Dual Credit enrollment for this course, students must meet one of the following criteria:

- pass UWRF Math 165 (Calculus I) with a grade of C- or better
- pass the AP Calculus AB exam with a score of 3, 4, or 5

A fee is required to enroll in the UWRF dual credit Math 165 (Calculus I) course. Please contact the Calculus II teacher for more information on AP vs DACP with UWRF.

Advanced Placement (AP) Statistics/UWRF Math 225 - Statistics

Year-Long Course 386, 387 1 credit
Suggested Grade Level: 11-12
Prerequisite: B or better in Algebra 2
(Can be taken at the same time as Pre-Calculus or AP Calculus)



Two Options for College Credit: AP test or Dual Credit with UWRF (as offered with Calculus I & II)

Statistics is a college level course and will allow students the opportunity to learn the equivalent to a one-semester, introductory, non-calculus based, college course in statistics. An introductory statistics course, similar to the AP Stats course, is typically required for majors such as social sciences, health sciences, education, and business. AP Statistics will introduce students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. Students will be exposed to four broad conceptual themes: Exploring Data, Sampling and Experimentation, Anticipating Patterns, and Statistical Inference.

Dual Credit with UWRF (DACP): Students may elect to earn both college credits and required high school credits simultaneously, providing students with the opportunity to earn UWRF credit at the high school. Upon successful completion of the course, students will earn credits that count towards both high school and transferable college credits for most university requirements. In order to qualify for Dual Credit enrollment for this course, students must meet one of the following criteria:

- earn a B or better in all semesters of Algebra II
- earn an ACT score of 23 or higher on the math portion
- passing the WPT with a MAFOR of at least 70 (see instructor)

A fee is required to enroll in the UWRF dual credit Math 225 (Statistics) course. Please contact the Statistics teacher for more information on DACP with UWRF.

MUSIC

Band

The band program has a variety of activities and performance styles throughout the school year. The year begins rehearsing music and outdoor drill work to perform for home football halftime shows. Following the annual Indoor Marching Concert, students will learn and rehearse a wide array of concert band repertoire, including everything from concert marches to movie soundtracks. Students will also learn a wide array of pep band songs to perform for various home winter sports events. In addition, band students will be eligible to participate in Solo/Ensemble Contest, the Summer Marching Program, and for individual/group lessons as needed. Regardless of your skill level, we have a spot for you!

Concert Band 9 & 10 Grade

Year-Long Elective 821, 822 1 credit
Grade Level: 9-10
Prerequisite: Must own or rent a band instrument (except percussion)

Wind Ensemble 11 & 12 Grade

Year-Long Elective 830, 831 1 credit
Grade Level: 11-12
Prerequisite: Must own or rent a band instrument (except percussion)

Note: Participation for the entire year is required unless otherwise approved by the director.

Chorale

Year-Long Elective 884, 885 1 credit
Grade Level: 9-12
Prerequisite: Non-auditioned – see Mrs. Mealey for voice placement

Chorale (pronounced *Core-AL*) is an SATB vocal ensemble in which all freshmen singers are automatically placed into, but is a multi-grade level group that consists of students in 9th-12th grade. This ensemble is for anyone who loves music, wants to further develop their singing skills, have fun, work together, and perform in a choir. Students in Chorale will sing a wide range of musical styles which include: Top 40's, musical theater, pop, classical, rock, jazz, and more. Students typically perform three to four concerts per year.. All singers are eligible for Solo and Ensemble by joining choir. This is a year-long class, due to concert performances throughout the year - special exceptions need to be worked out with the instructor.

Concert Choir

Year-Long Elective 880, 881 1 credit
Grade Level: 10-12
Prerequisite: Audition with instructor required

Note: Participation for the entire year is required unless otherwise approved by the director.

Concert Choir is a mixed (SATB) ensemble for a select group of singers with the ability and interest to sing at a high level of performance. The selection of repertoire consists of Classical, Contemporary, and Jazz. Lessons are a required part of this ensemble (2-3, fifteen minute lessons per quarter). Lessons focus on the refinement of the classical singing technique. Concert Choir performs four concerts per year, plus offers

numerous additional performing opportunities including: Clearwater Choral Festival, SCVMEA Honors Choir, performing at Sam's Christmas Village, and/or singing the National Anthem at home football games. and tours every four years. All singers are eligible for Solo and Ensemble and although this is not required it is highly encouraged. Participation for the entire year is required, unless otherwise approved with the director.

Orchestra

Year-Long Elective 890, 891 1 credit

Grade Level: 9-12

Prerequisites: Experience in orchestra

Recommended: Own or rent an instrument

The orchestra performs a wide variety of music from classical to pop, Video game, pop and movie music.. While in the orchestra, students will have the option to audition for chamber orchestra and play more advanced music in addition to the music learned in class. Students in orchestra will be eligible for solo and ensemble festivals. Students will have access to lessons throughout the year.

Music Theory and Technology

Semester Elective 1st Sem - 893 .5 credit

Grade Level: 10-12

Prerequisites: Must also be currently enrolled in band, orchestra, or choir

Music Theory and Technology offers students an opportunity to explore advanced musical concepts through the use of music software, written exercises, and listening. Other topics of study will include music notation software, composition, recording and editing, and audio production.

Jazz Improvisation

Semester Elective 2nd Sem - 894 .5 credit

Grade Level: 9-12

Prerequisites: Must also be currently enrolled in band, orchestra, or choir, or have Mr. Mealey's approval

This class offers student musicians the opportunity to investigate their creative side through the study of chords, scales, and the work of past jazz masters. Students will learn to play and improvise over several styles, including the blues, swing, rock, funk, and bebop. No jazz experience necessary!

PHYSICAL EDUCATION

Physical education provides opportunities to achieve and maintain a health-enhancing level of physical fitness, as well as participation in team, individual, and lifetime sports. Instruction is provided for students to develop knowledge and skills for healthful and worthwhile lifetime leisure activities. These courses are taught in a co-educational setting. Appropriate attire is required for class (shorts, t-shirt, sweats, and tennis shoes).

Each student must successfully complete three semesters of physical education in order to graduate. Students who have a medical excuse from physical education must take credits in other areas to compensate for those not earned.

- Freshmen are required to take one semester of **General Physical Education**
- Sophomores must take one of the following courses during their sophomore year:
 - **Team Sports**
 - **Individual/Dual Activities**
 - **Weight Training I**
 - **Modern Fitness**
- The **Fit for Life** course must be taken either as a junior or senior. The remaining courses may be taken as non-physical education elective credits.
- **Students in a JV or Varsity sport in their junior or senior year may qualify to opt out of one .5 credit of PE.** This is not an automatic credit, and you must apply prior to the start of your sport's season and meet some other academic qualifications. You must do this prior to the spring semester of senior year. See your counselor for an application.

General Physical Education (Freshmen)

Required Semester Course	1st Sem - 549	.5 credit
	2nd Sem - 550	.5 credit

Suggested Grade Level: 9

The General Physical Education class is required of freshmen and is meant to be an overview of physical education activities. Included will be team activities, individual and dual activities, as well as physical fitness evaluations.

Team Sports

Semester Course	1st Sem - 551	.5 credit
	2nd Sem - 552	.5 credit

Grade Level: 10-12

****This course may not be repeated****

The Team Sports course is a physical education elective. As such, it will satisfy the student's need for a semester of sophomore physical education. Activities will be selected from: flag football, softball, field hockey, broomball, soccer, volleyball, team handball, indoor soccer, basketball, speedball, floor hockey, and recreational games.

levels, create a plan to address gaps in their fitness levels, and implement the plan of action they have created. Activities include, but are not limited to: aerobics, step aerobics, yoga, Tae Bo, and Pilates.

Fit for Life

Semester course

Required	1st Sem - 555	.5 credit
	2nd Sem - 556	.5 credit

Grade Level: 11-12

Fit for Life is required during the junior or senior year, although it's recommended that it be taken during junior year. The intent of this course is to prepare the student for maintenance of fitness throughout life. All elements of fitness will be addressed. Included, but not limited to, are the following areas: cardiovascular, muscular strength, muscular endurance, flexibility, and body composition. Activities that promote fitness and are well suited to participating in later in one's life will be included. Some coursework will take place in the classroom. Instructors will choose from: archery, aerobics, dance, volleyball, softball, tennis, golf, weight training, cross country skiing, and bowling.

SCIENCE

Principles of Science

Required Year-Long Course 420, 421 1 credit

Suggested Grade Level: 9

Prerequisite: None

This course investigates three areas of science to include Physics, Chemistry and Earth Science. Topics studied in the Physics unit are forces, motion, and energy. Chemistry units will include matter, atomic structure, and the periodic table. Earth Science units will cover space, Earth's atmosphere, and Earth's history. This is a required course for 9th grade.

Biology

Required Year-Long Course 450, 451 1 credit

Grade Level: 10

Prerequisite: Principles of Science

This course is an introductory (sophomore level) course that covers the study of biology from the cellular approach. The three basic themes of unity, diversity, and continuity of life are accomplished through studying the plant and animal kingdoms.

Advanced Placement (AP) Biology

Year-Long Elective 490, 491 1 credit

Grade Level: 10-12

Prerequisite: Principles of Science, Biology (*Instructor approval required to take as a sophomore*)

Please see AP course description on page 10.

The Advanced Placement Biology course is designed to be the equivalent of a college introductory biology course usually taken by biology majors or as an elective during their first year. The AP Biology course is designed to be taken by students after the successful completion of a first course in high school biology and one in high school chemistry as well. It aims to provide students with the conceptual framework, factual knowledge, and analytical skills necessary to deal critically with the rapidly changing science of biology.

Chemistry I & II

Required 460 (Chemistry I) 0.5 credit

Elective 461 (Chemistry II) 0.5 credit (required for 4-year college)

Grade Level: 11-12

Prerequisite: Principles of Science, Biology

Chemistry I deals with all the substances that make up our environment and the changes in these substances. An attempt is made to present chemistry as it is today. Unifying principles are developed from the laboratory work which tends to ease the need for endless memorization that goes with many science courses. These principles grow from observations made by the student in an attempt to get the student actively engaged in science. At the end of the course, the student will not know all of chemistry, but will be adequately prepared to continue in chemistry because they will have covered such topics as: structure of the atom, periodic trends, and bonding. **Chemistry II** continues building on modern atomic theory. Quantifying chemical change through understanding chemical reactions forms the basis for the course. Other topics extend into acid and bases and molecular structures.

Physics

Year-Long Elective 470, 471 1 credit

Grade Level: 12

Prerequisite: Algebra 2, knowledge of Pre-Calculus, Principles of Science, Biology

Physics presents the scientific concepts of physics and some technological applications. Thus, any student who has had Algebra and Pre-Calculus may take the course and master it. The topics covered are: motion, force and conservation laws, vibration and waves, heat and energy, electricity and electromagnetic radiation, optics and light, and atoms and matter. By allowing the student to discover through lab work the unifying principles, a good understanding of physics and its position in our modern technology is accomplished.

Advanced Placement (AP) Physics

Year-Long Elective 500, 501 1 credit

Suggested Grade Level: 12

Prerequisite: Chemistry, Physics and/or AP Calculus I

Please see AP course description on page 10.

AP Physics is the equivalent of a second semester college course of physics. It deals with an intensive study of the behavior of matter with laboratory techniques, as well as the theory of physics. This course takes off from where the first semester of college physics would end. This course is usually taken by physics or engineering majors, or as an elective during their first year of college. Areas of study will include, but are not limited to, Newton's laws applications, Fluid Mechanics, Thermodynamics, Electricity and Magnetism, Optics (mirrors and lenses), and Atomic and Nuclear physics, as well as Quantum Theory.

Human Anatomy and Physiology

Course completion earns Advanced Standing Northwood Technical College credits.

Year-Long Elective 480, 481 1 credit

Grade Level: 11-12

Prerequisite: Biology and Chemistry, or currently enrolled in Chemistry

Human Anatomy is a college preparatory course especially designed for students entering nursing, medicine, physical education, physical therapy, etc., or for any student that plans to attend college. The course is a detailed study of human anatomy and physiology. The study of anatomy and physiology is done by the systems approach with much stress placed upon the biochemical cellular aspects. The student will be able to understand how the systems function together to make a collective organism. Most of the class time is spent in discussion of each system and independent study by students of models, charts, research articles, and associated laboratory activities, including multiple dissections.

Medical Terminology

Course completion earns Advanced Standing Northwood Technical College credits.

Semester Elective 1st Sem – 596 .5 credit

2nd Sem – 597 .5 credit

Grade Level: 10-12

Prerequisite: Biology



This course focuses on the component parts of medical terms: prefixes, suffixes and word roots. Students practice formation, analysis and reconstruction of terms. Emphasis will be on spelling, definition and pronunciation. Also, included is an introduction to operative, diagnostic, therapeutic and symptomatic terminology of all body systems, as well as systemic and surgical terminology. This course is recommended for students interested in or pursuing medical and healthcare careers including CNA, nursing, healthcare and physician/medicine.

Biotechnology/Forensic Science

Year-Long Elective 497, 498 1 credit

Grade Level: 11-12

Prerequisite: Principles of Science, Biology

This is a year-long applied science course designed to introduce students to the biotechnology revolution and forensic sciences (CSI). Students in the first semester of this hands-on course will complete laboratory activities in the following areas: DNA extraction, DNA finger printing, colony transformation, plant and animal tissue culturing, food science, and polymerase chain reactions. They will also discuss the ethical issues that go along with biotechnology.

In the second semester students will explore basic forensic science techniques and then concentrate on how biotechnology is used in forensic science to solve a basic crime scene. Laboratories this semester will include: protein profiling, bioinformatics, gene sequencing, along with many other basic forensic laboratory techniques.

Meteorology

Semester Elective 1st Sem – 482 .5 credit

Grade Level: 11-12

Prerequisite: Principles of Science, Biology

Meteorology is the study of Earth's atmosphere and the processes that cause weather. Topics will include weather systems and patterns, mapping, drawing and interpretation of meteorological symbols, forecasting, weather observations and weather data analysis, cloud identification, severe storms, tornadoes, and hurricanes.

UWRF Dual Credit Chemistry

Year-Long Elective 495, 496 1 credit

Grade Level: 11,12

Prerequisite: Principles of Science, Biology, and ACT score of 26 or greater. Grade 11 students need instructor approval.



Dual credit chemistry is a college-level course developed in partnership with the University of Wisconsin-River Falls. This course is designed to give students a first semester chemistry experience and could lead to transcribed credit through UWRF. The course is the first in the general chemistry sequence. Topics covered include chemical formulas and equations, chemical reactions and energy, gas laws, and atomic and molecular structure. A significant laboratory component is included in this course. Laboratory exercises are illustrative of chemical principles and/or designed to develop foundational laboratory skills and practices, including laboratory safety. In order to qualify for Dual Credit enrollment for this course, students must meet one of the following criteria:

- earn a B or better in Chemistry
- earn an ACT score of 23 or higher in the Science Portion
- by teacher recommendation

SOCIAL STUDIES

Modern World History and Geography

Year-Long Required Course 0210, 0211 1 credit

Grade Level: 9

Prerequisite: None

The purpose of Modern World History and Geography is to inspire curious, collaborative, globally minded learners through inquiry by exploring diverse lived experiences from the past and present to better understand our interconnected world.

Advanced Placement (AP) World History: Modern

Year-Long Course - Can be taken in place of Modern World History 238, 239 1 credit

Grade Level: 9-12

Prerequisite: None

Please see AP course description on page 10.

AP World History: Modern is a college-level course in which students will make inquiries about significant events, individuals, developments, and processes from 1200 CE to the present. Over the course of six themes, students will develop and practice using skills including analyzing primary and secondary sources; forming historical connections and arguments; and utilizing reasoning about comparison, causation, and continuity and change over time. Students who want to take this course should have strong reading and writing skills. Near the end of the school year, students have the opportunity to take the national AP World History: Modern exam. Scores from this exam will not impact the student's course grade, but if successful, they could receive college credit towards a future degree. This course is offered to all students, but can be taken in place of the NRHS 9th grade social studies required credit of Modern World History.

United States History

Year-Long Required Course 0220, 0221 1 credit

Grade Level: 10

Prerequisite: Modern World History

This United States History course will inspire curious, collaborative, civically engaged life-long learning through the inquiry of essential social studies content. By exploring diverse perspectives during key times in the history of our nation, we will connect the past to the present lives of our students. This course will develop student's content knowledge and critical thinking skills by investigating United States History from the beginning of the Technological Revolution (1870s) to the present.

Advanced Placement (AP) US History

Year-Long Course - Can be taken in place of United States History 260, 261 1 credit

Grade Level: 10-12

Prerequisite: Teacher approval

Please see AP course description on page 10.

This is a college level survey course in United States History that can be taken in addition to or in place of the required 10th grade course. It is recommended for students at the 11th and 12th grade level who have discussed it with a Social Studies staff member, a school counselor, and their parents, and who write and read well. Successful completion of the course and the AP exam may enable you to receive advanced standing in college and/or credit toward a degree. The course will be taught using a college text, historical documents, novels, and scholarly essays as regularly assigned readings.

Please see AP course description on page 10.

This is a college level survey course in Macroeconomics. The course will give students a thorough understanding of the principles of economics that apply to an economic system as a whole. This course places an emphasis on the study of national income and price-level determination. Students will analyze economic performance measurements to determine economic growth, unemployment, and inflation rates. Finally, students will evaluate stabilization policies and international economics. Successful completion of the course and the AP exam may enable a student to receive advance standing in college and/or credit toward a degree. A student who takes the AP exam upon completion of the course is responsible for the cost of the exam. **Successful completion of AP Macroeconomics can be substituted for Introduction to Economics as a required graduation requirement.**

Principles of Psychology I

Semester Elective 1st Sem - 253 .5 credit
Grade Level: 10-12
Prerequisite: None

Principles of Psychology I introduces students to the study of human behavior and mental processes. Students will learn about how Psychology began as an academic discipline, what careers a Psychologist may pursue, and how we apply the scientific method to the study human behavior. Students then study how mechanisms in the brain and body impact behavior, altered states of consciousness, and theories on learning.

Principles of Psychology II

Semester Elective 2nd Sem - 258 .5 credit
Grade Level: 10-12
Prerequisite: None

This course is a follow-up to Principles of Psychology I and will examine theories of memory, emotion, motivation, personality, stress, clinical psychology and treatment. This course presents a broad survey of basic concepts, issues, theories, classic experiments and new discoveries in the field of psychology and will include an emphasis on how concepts relate to the lives of students within the class.

DACP UWRF General Psychology

Year-Long Elective 255, 256 1 credit
Grade Level: 11-12



Recommended: Successful completion of prior Social Studies courses. Students must pass semester 1 to progress to semester 2.

DACP UWRF General Psychology is a college level psychology course developed in partnership with the University of Wisconsin River Falls. This course introduces students to the study of human behavior and mental processes. It emphasizes research methods, the biological basis of behavior, human cognition, human development, social behavior, and mental health. Students can earn 3 transcribed credits in General Psychology through UWRF and the Dual Academic Credit Program (DACP).

Sociology

Semester Elective 2nd Sem - 252 .5 credit
Grade Level: 11-12
Prerequisite: None

This class will introduce you to the scientific study of a powerful force that influences your behavior and experience: society. You will learn how different institutions such as family, friends, school, media, and culture

TECHNOLOGY EDUCATION

Building Construction

Year-Long Elective 676, 677 2 credits

Grade Level: 11-12

Prerequisites: Wood Techniques and entrance application (see Mr. Vogler for application)

****Applications must be returned to Mr. Vogler by 3:00 pm on Friday, March 8th, 2024****

Note: This is a year-long course which meets 6th and 7th hours only. Students cannot sign up for only one hour or only one semester.

This course provides an opportunity for students to gain firsthand experience of building construction by their involvement in the erection of a residential structure/ dwelling. This course will include reading and interpreting blueprints, estimating materials, understanding specifications and building codes, proper application of building materials, safe and proper tool usage, and residential framing methods.

Auto Mechanics

Year-Long Elective 680, 681 1 credit

Grade Level: 12

Prerequisites: Small Engines, Basic Auto, and entrance application (see Mr. Leisz for an application)

****Applications must be returned to Mr. Leisz by 3:00 pm on Friday, March 8th, 2024****

Note: This is a year-long course. Students cannot sign up for only one semester.

Auto Mechanics is a technical education course related to auto service and designed for the student who desires to pursue a career in the automotive repair field. The course work will be designed to meet the needs of the student. The class will operate as a simulation of an auto service business. This course will stress actual hands-on work, and classroom activities will be held to a minimum. Special projects may be incorporated into this class as needs and opportunities arise. Dress accordingly—this is a shop class where students **will** get dirty.

Small Engines

Semester Elective 1st Sem - 672 .5 credit

2nd Sem - 673 .5 credit

Grade Level: 9-12

Prerequisite: None; students must provide a small four-stroke engine for this class.

This course is designed for those students who want to learn about small engine design, operation, and overhaul. Areas covered in this course are: introduction to power mechanics tool and equipment use, shop safety, principles of internal combustion, small engine theory, and overhaul. The instruction is divided into class and shop segments. Shop work is devoted to small engine overhaul procedures.

Machine Tool II

Articulated Technical College credit may be available for students completing the course.

Semester Elective 2nd Sem - 723 .5 credit

Grade Level: 10-12

Prerequisite: Manufacturing and Design,
 Machine Tool I

Course Fee: \$20



This course is designed for students with an interest in machine tool and welding operations. At the completion of this course students will be able to:

- Perform technical operations on mills and lathes such as tapering, threading, knurling, boring, squaring, and finishing projects to predetermined quality standards
- Explain quality management and develop measurable quality standards as applied to machining
- Use mathematical skills as they relate to product design, material layout, machine setup, and construction of products
- Use computer drawing and design platform software (MasterCam and CAD) to design student projects and construct drawings as related to the metal working industry. Designs will be machined out using CNC and manually operated machines.
- Use other related lab equipment and tools to perform and complete assigned lab activities and student projects
- Apply Machine Tool I and II skills and techniques to design and build a semester project.
- Read and write basic G-Code programs for the CNC mill

Welding and Fabrication

Articulated Technical College credit may be available for students completing the course.

Semester Elective 2nd Sem - 709 .5 credit

Grade Level: 10-12

Prerequisites: Manufacturing and Design

Course Fee: \$10 *Articulated Technical College credit may be available for students completing the course.*



This course is designed for students with an interest in welding and fabrication. At the completion of this course students will be able to:

- Understand and apply safety practices used in operating tools and equipment in the welding and fabrication industry
- Understand the major processes used to change raw materials into industrial goods and products
- Demonstrate welding skills in various welding practices, materials, and positions
- Understand and follow blueprints and symbols used in the industry
- Complete mathematical equations related to product design, cost, and construction of products
- Use CAD and MasterCam software to design products to be cut with the CNC plasma table
- Define common terminology and perform basic operations on sheet metal equipment

Advanced Welding, Machining, & Fabrication

Articulated Technical College credit may be available for students completing the course.

Semester Elective 2nd Sem - 724 .5 credit

Grade Level: 10-12

Prerequisites Manufacturing and Design; Welding and Fabrication OR Machine Tool I

Course Fee: \$10 Materials for student semester projects will be paid for by students as well.



This course is designed for students with an interest in welding and machine tool operations. This is designed for students interested in applying high-level skills in completing a project. At the completion of this course students will be able to:

- Perform technical operations including multiple welding operations, programming of CNC equipment, perform technical operations on manual mills and lathes such as tapering, threading, knurling, boring, squaring, chamfering, and finishing projects with exceptional quality
- Understand and apply safety practices used in operating tools and equipment in the welding and fabrication industry
- Evaluate and follow industry blueprint terminology in the construction of products
- Use mathematical skills as they relate to product design, material layout, machine setup, and construction of products

Introduction to Communications

Semester Elective 2nd Sem - 725 .5 credit

Grade Level: 9-12

Prerequisite: None

Course Fee: \$10

This course is designed for students with an interest in graphics for technology. This exciting course provides students with hands-on opportunities in a variety of technological areas, with a main focus on mechanical and architectural design. At the end of the course students will be able to:

- Apply safe work habits as used in the industry while working in the lab
- Use various computer software such as Corel Draw, AutoCad, Inventor, Revit, Adobe and Photoshop for creating designs and manipulating photos and images
- Apply industry standards and processes in screen printing process to transfer images to various media such as shirts, banners, and posters
- Use computer-operated laser engraver to transfer images onto various media such as plaques, glass, plastic, and more
- Calculate the cost of materials and time for completing production runs
- Design, plan, and cost out complete high-quality production runs of products in screen printing and engraving for various organizations
- Students will learn about drafting techniques, tools, and rules using CAD software.

Wood Techniques

Semester Elective 1st Sem - 700 .5 credit

Grade Level: 10-12

Prerequisite: Manufacturing & Design

Course Fee: \$20

This course is designed for those with an interest in wood working techniques. At the completion of this course students will be able to:

- Identify various wood products, tools, and supplies used in wood working
- Perform mathematical equations as they relate to materials layout, costing, and construction of products
- Identify and construct various wood working joints as used in wood working and cabinetry industry
- Apply wood working techniques as used in the industry to cut, form, and shape wood into a usable product
- Perform operations on wood working equipment meeting identified quality standards
- Use computer drawing and design software (MasterCam and CAD) to design projects and construct drawings as related to the wood working industry

Cabinet and Furniture Construction

Semester Elective 2nd Sem - 659 .5 credit

Grade Level: 10-12

Prerequisite: Manufacturing & Design, Wood Techniques

Course Fee: Dependent on Individual Product

This course is designed for students with an interest in learning more about how wood and composite materials are manufactured in industry. Emphasis will be placed on design, project planning, estimating materials, skill development in advanced machining operations, and computer numerical control machining/manufacturing. Each student will design and construct an individual product that may include cabinets, chest, or an entertainment center.

Northwood Technical College Welding Academy

Year Long Course

Required Grade Level: 12

Prerequisites: Prior vocational experience, must be in good standing at your high school, 2.0 GPA.



This course is designed for students with an interest in pursuing a career in welding. The Welding Academy includes three credits of Gas Metal Arc Welding, three credits of Shielding Metal Arc Welding, two credits Welding Math, and two credits of Welding Blueprint Reading. Please see Mr. LeQue an application.

TECHNOLOGY/PRE-ENGINEERING

Introduction to Engineering and Design (IED)

Year-Long Elective 710, 711 1 credit

Grade Level: 9-12

Prerequisite: None

Recommended: Algebra 1 or higher

Note: This is a year-long course. Students cannot sign up for only one semester.

This is an entry-level course for all students interested in pursuing a career in engineering or other design, manufacturing technology career. Students will use “state of the art” CAD modeling software to design multiple projects including a child’s puzzle cube, a desktop organizer, and a minimum of one independent project. In addition, students will use the 3D modeling software to create videos and animations of their design projects. All students will leave this course with a Student Portfolio of their work, which may be used for acceptance into colleges and/or future employment.

Principles of Engineering (POE)

**Science elective credit

Year-Long Elective 714, 715 1 credit

Grade Level: 10-12

Prerequisite: Geometry (B or higher)

Recommended: Knowledge of Trigonometric Functions, Introduction of Engineering Design (IED)

POE is a hands-on high school level survey course of engineering. The course exposes students to major concepts that they will encounter in a post-secondary engineering course of study. Students have an opportunity to investigate engineering and high tech careers. POE gives students the opportunity to develop skills and understanding of course concepts through activities, projects, and problem-based (APPB) learning. Used in combination with a team-based approach, APPB learning challenges students to continually hone their interpersonal skills, creative abilities, and problem solving skills based upon engineering concepts. Students will gain experience in MD Solids, Logger Pro, ROBOTC, and West Point Bridge Designer, as well as putting their knowledge of CAD to work. Students will build compound machines, solar-hydrogen fuel-cell vehicles, marble sorters, and much more! Part of the course is the presentation of projects in front of a panel, much like what will be done in the workplace. This class allows students to develop strategies to enable and direct their own learning, which is the ultimate goal of education.

Digital Electronics (DE)

Year-Long Elective 716, 717 1 credit

Grade Level: 10-12

Prerequisite: None

Recommended: IED, POE, and Algebra 2 or higher

Digital Electronics is an exciting course that encompasses the design and application of electrical and electronic circuits found in video games, watches, calculators, digital cameras, and thousands of other devices. Instruction includes the application of engineering, scientific, and electronic principles to solve logic-circuit design problems. Students will use computer simulation software to design, build and evaluate circuits, operate test equipment to collect and analyze data, breadboard numerous circuits, as well as program microcontrollers for autonomous robotic devices.

Computer Integrated Manufacturing (CIM)

Year-Long Elective 728, 729 1 credit

Grade Level: 10-12

Prerequisite: None

Recommended: IED, POE, DE and Algebra 2 or higher

Manufactured items are part of everyday life, yet most students have not been introduced to the high-tech, innovative nature of modern manufacturing. This course illuminates the opportunities related to understanding manufacturing. At the same time, it teaches students about manufacturing processes, product design, robotics, and automation. Students can earn a virtual manufacturing badge recognized by the National Manufacturing Badge system.

WORLD LANGUAGE

Spanish I

Year-Long Elective 950, 951 1 credit

Grade Level: 9-11

Prerequisite: Students must have an English reading score at or above grade level to take Spanish I in Grade 9.
Students who do not pass first semester are not allowed to continue taking Spanish I second semester.

Spanish I is designed to teach students the basic skills of speaking, listening, reading, and writing Spanish. Students will learn Spanish phrases used in daily situations as well as the basic grammar and vocabulary needed to communicate about themselves, their family, and school. The culture and customs of Spanish-speaking countries will be included.

Spanish II

Year-Long Elective 960, 961 1 credit

Grade Level: 9-12

Prerequisite: Spanish I
Students who do not pass first semester Spanish II are not allowed to continue taking Spanish II second semester.

Spanish II is a continuation of the study of the Spanish language. While listening comprehension, writing, and speaking skills are stressed and expanded, reading skills are used to enhance the appreciation and knowledge of Spanish-speaking countries. Students will expand their use of the present tense and add the preterite tense to talk and write about what they did in the past.

Spanish III

Year-Long Elective 970, 971 1 credit

Grade Level: 10-12

Prerequisite: Grade of C+ or better in Spanish II
Students who do not pass first semester
Spanish III are not allowed to continue taking Spanish III second semester.

Spanish III is a continuation of the study of the language and culture, with an emphasis on advanced grammar. In first semester we will quickly review all previously taught grammar and add the imperfect tense to talk about habitual actions in the past. Second semester will focus on the subjunctive mood.

Spanish IV

Year-Long Elective 980, 981 1 credit

Grade Level: 11-12

Prerequisite: Grade of C+ or better in Spanish III or instructor approval
Students who do not pass first semester
Spanish IV are not allowed to continue taking Spanish IV second semester.

Offered as a continuation of the study of Spanish, advanced writing skills and sentence structure will be emphasized with the addition of the future, conditional and perfect tenses. The curriculum will include expanded reading opportunities while working with troublesome grammatical problems. Past subjunctive will be taught after reviewing the uses of the subjunctive mood. Students will improve listening and speaking skills through conversations and presentations.

Spanish V

Year-Long Elective 990, 995 1 credit

Grade Level: 12

Prerequisite: Grade of C+ or better in Spanish IV or instructor approval
 Students who do not pass first semester
 Spanish V are not allowed to continue taking Spanish V second semester.

This class will offer an opportunity for advanced study for students who are serious about language learning. Students will review all previously studied grammar and use the grammar as a medium to learn about art, history, geography, and politics of Spanish speaking countries. Students will create projects to improve their reading, writing, speaking, and comprehension skills. Spanish V will review complex grammatical concepts in order to prepare students for taking college placement tests and examples of placement tests will be used for practice.