

# Student Handbook of Course Offerings

**Hayward High School**

**2022-2023**



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## COUNSELING DEPARTMENT

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Dear Students and Parents:

You are now making some important choices that will affect your future options. Please plan your high school schedule so that you meet the graduation requirements and also meet the future requirements for the college or career that you may wish to enter.

The Wisconsin Department of Instruction requires all students to have an Academic and Career Plan (ACP). Xello has been used to help students build their ACP, starting in 6<sup>th</sup> grade. This program also helps students explore their interests, abilities, careers, colleges, etc. and serves as a guide when choosing future courses and creating class schedules.

It is important to select courses that will prepare you for your future. Double check to see if the courses you selected are in keeping with your ability. When in doubt, choose the courses most challenging to you. The courses you select represent educational decisions you have made. These decisions should be based on your long-range educational and career goals.

Careful planning at this time will help prevent future disappointment. Course selection should be a personal choice based on your own interests and goals. Counselors will make every effort to help students plan their programs, but the final choice is up to you.

The time for planning is now. Do not plan to make changes in the fall. Administration bases staffing decisions and equipment orders on the number of students enrolled in each course, so we are very hesitant to make changes unless it is absolutely necessary. Therefore, you should consider your course decisions as final and unchangeable.

We encourage you to talk over your plans with your parents, counselors, and teachers. Your choice of subjects should be well thought out and appropriate to your own needs and future goals.

We wish you much success in planning for your next year in High School.

Mr. Morgan and Mrs. Eckes

## INTRODUCTION

When creating your preliminary schedule you must make sure you have met or have scheduled courses to meet all the graduation requirements.

To be considered for a Hayward High School diploma, the student must first acquire the minimum credits as outlined below.

### **Graduation Requirements**

***A minimum of 28 credits are required to graduate with a Hayward High School Diploma.*** These credits must include:

- a. 4 credits in English – including English 9, English 10, American Literature, Communications and ½ senior elective credit
- b. 3 credits in Social Science- World History & American Democracy, US History to 1890, US History 1890+
- c. 3 credits in Mathematics – must take at least one credit of math each year through junior year. (Pre-Algebra will count as an elective)
- d. 3 credits in Science- including 1 credit of Physics First/Science 9 & 1 credit Biology
- e. 1-1/2 credits in Physical Education – must be earned over 3 separate years
- f. ½ credit of Health Education is required in 9th Grade
- g. ½ credit of Financial Literacy is required in 11th or 12<sup>th</sup> Grade

### **Other Graduation Requirements**

- 1. Students with disabilities that properly complete the programs specified in their IEP and have completed the recommendations in the IEP by the Committee, may participate in graduation activities and may be awarded a diploma.
- 2. Students must have a minimum of 20.0 credits when entering the fall term of their senior year, or have a plan established to assure graduation by the end of fourth term.
- 3. Every student will enroll in at least 8 credits each year.
- 4. Assigned periods will be determined by the master schedule.
- 5. Schedules are considered final.
- 6. Credit will be awarded only at the term or semester in which the course is taken and completed. If the student fails a required course, the course must be repeated. If the student fails or receives a D in any course, the student may choose to retake the exact same course and replace the failing grade with the new grade.
- 7. Counselors will make every effort to help the students check their credits, but it is the student's responsibility to know his/her status each year and to ask the counselors for assistance to make up deficiencies. Students will receive a copy of their transcript prior to scheduling for review. Students are encouraged to attend their individual counselor/parent conferences to review requirements and discuss any credit deficiencies.
- 8. **Civics Test Requirement:** In order to receive a high school diploma a student must take, during the high school grades, a civics test comprising 100 questions that may be asked of an individual during the process of applying for U.S. citizenship by the United States Citizenship and Immigration Services. The student must correctly answer at least 65 of those questions. Students are allowed to retake a test an unlimited number of times in order to achieve a passing score. Students with disabilities who have an individualized education plan (IEP) must complete the test, but cannot be required to pass the test in order to graduate. **A limited-English proficient student must be permitted to take the civics test in the student's language of choice.**
- 9. Students will need to meet the required components of the Academic and Career Plan Portfolio..

### **EARLY GRADUATION**

Students who are interested in graduating early, in addition to completing all graduation requirements, must have a minimum ACT score of 18 and/or 95% attendance through the first semester of senior year. Students must also complete the early graduation packet available in the counseling department.

### **REVIEW OF TRANSFER STUDENT'S RECORDS**

Each transfer student's record will be reviewed by the enrolling counselor or principal to determine if the student's program has been consistent with graduation requirements of the School District of Hayward, and the State of Wisconsin. Transfer student's records will be reviewed and credit will be awarded appropriately in accordance to course alignment. If the student's previous program is not consistent with our requirements as identified, he/she will be expected to have met the requirements of his/her previous school up to the time of transfer and our requirements while enrolled here. If the student has not been meeting his/her previous school's requirements because of failing grades or not enrolling in required courses, he/she will be expected to complete the courses required by the School District of Hayward or the State of Wisconsin.

### **SPECIAL PROVISIONS**

1. Pupils with Individual Education Plans (IEP) may be provided with alternate education programs for high school graduation. Such alternate education programs must be aligned with the IEP of the pupil. Successful completion of the alternate education program will result in the issuance of a diploma.
2. Wisconsin Statute 115 or PL 94-142 is followed. Students may also earn credit via such alternate routes as: homebound instruction, course work at a Technical College, course work done in conjunction with local colleges or universities, community educational experiences, correspondence courses or independent study, and participation in Youth Conservation Camps, and Upward Bound, (TRIO).

Credits earned through technical colleges, correspondence courses, alternative education, independent study, and/or work experience/work for credit programs are acceptable only when arranged through the principal's office and guidance counselor's office. These credits may be calculated into the Honors System upon request from administration.

3. Students meeting requirements in 3.5 years may apply for early completion of high school as per HCSD Policy. Students who intend to graduate early need to pick up check-out information from the office and have the counselor review transcripts to make sure all requirements have been met. **All paperwork and appropriate signatures must be turned in to the counseling department by December 1st of their senior year.**
4. Graduation requirements for transfer students from out-of-state, private schools, or a home-based private educational program as defined under S.118.10 (1r) and for pupils with individual education plans, needs, or requirements as provided in PI 18.04 will be reviewed by your counselor and principal on an individual basis.

### **ADMISSION REQUIREMENTS FOR 4 YEAR COLLEGES/UNIVERSITIES, TECHNICAL/COMMUNITY COLLEGES:**

Graduation from high school does not automatically qualify you for admission at a university. Universities may require more credits in certain subjects than you need to earn a Wisconsin high school diploma. Most of the universities also specify the courses and/or the course content that will be acceptable for admission. Consult your school counselor or contact the university or college admissions office for up-to-date information.

### **GRADING PROCEDURES AT HAYWARD HIGH SCHOOL**

Grades are a communication between teacher, student, and parent that indicates what the student has learned or where his or her performance is in relation to the expected course outcomes. All students should be given a course syllabus, and a copy of the course outcomes or expectations. Guidelines for grading in the class should be covered in the course syllabus. In the instance of a test or a quiz the teacher will provide an assessment similar to the original, but not necessarily the same assessment. *At no time will the make up/re-do/incomplete period extend beyond ten school days after the end of the term.* Parents and students may access current grades at any time via "Parent" portal on the school website, using "Skyward Family Access.

**GRADING SCALE**

Hayward High School will be using a standard grading scale. Teachers will be allowed professional judgment to round up percentages.

Grade Mark	High Value	Low Value
A	100	93.0
A-	92.99	90.0
B+	89.99	87.0
B	86.99	83.0
B-	82.99	80.0
C+	79.99	77.0
C	76.99	73.0
C-	72.99	70.0
D+	69.99	67.0
D	66.99	63.0
D-	62.99	60.0
F	59.99	0

**GRADE POINT AVERAGE SCALE**

Listed below is Hayward High Schools grade point average scale. Each letter grade is changed to the numerical equivalent that generates the grade point average.

Grade Mark	Numerical Equivalency
A	4.0
A-	3.67
B+	3.33
B	3.0
B-	2.67
C+	2.33
C	2.0
C-	1.67
D+	1.33
D	1.0
D-	.67

For one-half credit courses divide the grade points by 2.

**GRADE REPLACEMENT GUIDELINES**

D's and F's earned on a student's transcript will be eliminated if the student re-takes the exact same course (with the identical course number). The new passing grade will replace the old grade and be averaged into the grade point average. Administrative approval is necessary to repeat courses.

**HIGH SCHOOL CLASS RANK**

Hayward High School no longer uses a class rank system. Class ranking is replaced by the Hayward Honors Recognition System.

**HAYWARD RECOGNITION HONORS SYSTEM**

The Honors system is a point-based system in which students are recognized for their rigorous coursework. In addition, it encourages students to take more challenging classes. Honor points, earned by a student successfully completing a designated course, are used as a multiplier to determine a student's final distinction at graduation. Unweighted GPAs will still be provided to students, but class rank will no longer be recognized on student transcripts.

### **HOW TO CALCULATE HONORS SCORE**

Add up the total number of honor points earned through honor courses. Multiply your honor points by your GPA to determine your honor distinction.

- A minimum 3.0 GPA (cumulative) at the end of 1st semester of Senior year must be maintained to earn Honor distinction. Any GPA below 3.0 is not eligible. Rounding does not apply.
- Students must successfully complete an honors course to earn points.
- 2nd semester Senior courses may be included.

If a student's GPA or Honors distinction changes during the 8th semester, the honors distinction will be reported on the student's final transcript.

### **SENIOR HONOR STUDENT RECOGNITION**

Students will be honored with distinctions by color coded sashes and cords at graduation based on their honor level. Using the formula of GPA multiplied by honors points determine graduation recognition.

55+ Score / Gold Sashes = Highest Honors

45 - 54.99 Score / Gold Cords = High Honors

20-44.99 Score / Silver Cords = Honors

### **ACADEMIC EXCELLENCE SCHOLARSHIP (AES) & TIE-BREAKING PROCEDURE**

Hayward High School believes excellence in education should be determined by such factors as the rigor of course work and nationally recognized test scores. The Academic Excellence Scholarship will be awarded to the student with the highest cumulative GPA through 7 semesters.

If a tie exists the procedures are as follows:

- A. Highest ACT composite score. *(The final eligible ACT score would be the December score of the students' senior year).*

If a tie still exists:

- B. The second tiebreaker will be the highest subscore on the ACT Test.  
C. If still tied, the second, third, & fourth subscores will be used.  
D. In the event there is still a tie, a coin flip will determine the scholar.

### **CREDITS**

No credit will be given for courses unless the courses are successfully completed.

### **HONOR ROLL**

To qualify for the B Honor Roll you must obtain a grade point average of 3.00 - 3.49. To qualify for the "A" Honor Roll you must earn a grade point average of 3.50 or better.

### **SPECIAL EDUCATION**

Hayward Community School district provides a full range of special education programs and related services for any child aged 3-21 whose parent/guardian resides in the Hayward district. Students are not required to attend Hayward schools in order to use these services. The instructional programs include disabilities such as emotional disturbance, learning disability, intellectual disability, autism, visual impairment, auditory impairment, orthopedic impairment, traumatic brain injury, early childhood developmental delays, and speech/language disability. The related services may include, but are not limited to, screening, evaluation, instruction, transportation, and other related services as defined by law. In order to access these programs and services; contact your child's school counselor or the district director of EEN services at 715-638-9002.

### **DISTANCE LEARNING**

In addition to regular classroom instruction, Hayward High School students may earn credit through a variety of distance education methods in which a majority of instruction occurs while the teacher and learner are separate. Distance education or distance learning include correspondence study by mail, Internet based curriculum, interactive teleconferencing, computer assisted instruction, or use of other instructional technologies. Courses offered by agencies and institutions authorized and approved by the Hayward School District will be accepted for credit toward Hayward School District graduation requirements.

**Please check with our guidance department to see if this option is available as Distance Learning availability is based on multiple factors outside of the HCSD.**

### **EARLY COLLEGE CREDIT & START COLLEGE NOW PROGRAMS**

The statute allows Wisconsin public and private high school students to take one or more courses at an institution of higher education for high school and/or college credit. Under this section, “institutions of higher education” means an institution within the University of Wisconsin System, a tribally controlled college, or a private, nonprofit institution of higher education located in the state. While technical colleges are not eligible institutions under the ECC program, pupils that have completed 10<sup>th</sup> grade will continue to have the option to take courses at technical colleges through Start College Now program, statute, 38.12(14). *Application date deadlines: Fall Semester Courses- March 1, 2021 & Spring Semester Courses- October 1, 2021.*

### **ADVANCED COURSE & SCHEDULE CHANGES**

Hayward high school offers a variety of courses, many leading to an advanced level. While a suggested sequence of courses is laid out for students in this handbook, we acknowledge exceptions to this sequence. On occasion, a gifted student may wish to try a more advanced course, a remedial student may need to change courses to better meet his/her needs, a creative student may need to be challenged, etc. When any of these situations occur, parent involvement is encouraged to best meet the individual student needs. Parents wishing to have the schedule of their student changed, altered or modified should contact the high school guidance counselor assigned to their child



## **ART** **COURSE DESCRIPTIONS**

Art Fundamentals	1 term
Painting I	1 term
Painting II	1 term
Art History I	1 term
Art History II	1 term
Wildlife Art	1 term
Ceramics I	1 term
Ceramics II	1 term
<b>Advanced Ceramics</b>	2 terms
Sculpture	1 term
Yarn Bag Weaving (formerly Fiber Arts)	1 term
Jewelry/Metal Work I	1 term
Jewelry/Metal Work II	1 term
Intro to Media Production	1 term
Video Production	1 term
Digital Photography	1 term
Graphics & Print Technology	1 term
Cooperative Art	1 term
<b>Advanced Art</b>	2 terms
<b>AP Studio Art I</b>	2 terms
<b>AP Studio Art 2-D Design</b>	2 terms
<b>AP Studio Art 3-D Design</b>	2 terms
<b>AP Studio Art Drawing</b>	2 terms

***BOLD*** Denotes Honor Class

### **001 Art Fundamentals**- ½ credit

#### **One term-Grade Level- 9-12**

This class is a beginning class designed to accommodate all levels of student ability using a variety of art materials. Various projects can include, but are not limited to: drawing, jewelry, ceramics, mixed media, fiber art/textiles, printmaking, painting, and computer based learning. Students will have a chance to explore a wide range of art processes, so they can choose what area they would like to further their education in the arts. Art Fundamentals is a quick paced class everyone should take as an introduction to the arts, and to begin the creative process.

### **003 Art History I**- ½ credit

#### **One term- Grade Level- 9-12**

This course will explore art and culture from Prehistoric through the Middle Ages. Students will learn about major art creations, architecture, artists, and movements with a global influence. Instruction will be mostly visual and audial, with discussion, debate, and investigation of various art topics.

### **017 Art History II**- ½ credit

#### **One term- Grade Level- 9-12**

This course will explore art and culture from the Middle Ages through the Modern Age. Students will learn about major art creations, architecture, artists, and movements with a global influence. Instruction will be mostly visual and audial, with discussion, debate, and investigation of various art topics.

**Prerequisite:** Art History I

### **007 Painting I**- ½ credit

#### **One term-Grade Level 9-12 (recommended 11 & 12)**

This class will focus on the creation of 2-dimensional work using mixed materials to make them. Techniques taught would include: mixed media oil painting, mixed media acrylic painting, mixed media wax encaustics, and mixed media works on paper. Lessons will sometimes be very loose and abstract in nature, and other times be more controlled and disciplined, bringing in a variety of learning styles to this class.

**Prerequisite:** Art Fundamentals

**023 Wildlife Art- ½ credit****One term-Grade Level 9-12**

This course will focus on drawing, painting, sculpting, animals and the landscape. All observational drawing and painting will use wildlife as the subject. We will go outside as much as possible and draw/paint in an outdoor setting. If this is not possible then we will do observational drawing from plants and animals in the classroom. There will be a focus on drawing/creating from life with some photo reference.

**Prerequisite:** Art Fundamentals

**010 Ceramics I- ½ credit****One term-Grade Level 9-12**

Ceramics is a class designed to focus on clay creations. Students will be able to create several different types of clay sculptures and pottery utilizing the wheel and basic hand building techniques such as: coiling, slab, and pinch. A focus of this class is teaching students how to express their ideas into three dimensions, using contemporary influences, and often a mixed media. Different clay finishes will be taught including: glaze, stain, paint, powder, and raku. An outdoor fire trip will be offered in fall and spring allowing students to experience in the raku or pit fire process.

**Prerequisite:** Art Fundamentals

**011 Ceramics II- ½ credit****One term-Grade Level 9-12**

Ceramics II will be taught similar to Ceramics I but a higher level of success will be evident. Students will develop more challenging projects which are bigger, better constructed, and/or with better attention to detail. Students will also learn to develop wheel projects with better technical skill, while learning to ‘throw from a hump’ and create a series of wheel pieces including more challenging forms such as goblets, boxes with lids, and large sectional pieces.

**Prerequisite:** Art Fundamentals, Ceramics I

**013 Advanced Ceramics- 1 credit****Two terms -Grade Level 10-12**

This course is an **honors** class designed so students can narrow what direction they would like to continue in ceramics, whether it be wheelwork or hand building, or a combination. Students will be pushed to create work that is closer to a beginning college class where students will be expected to create a body of work that is contemporary in thought and design. It is highly encouraged that students use this class in preparation for an AP Studio class.

**Prerequisite:** Art Fundamentals, Ceramics I, Ceramics II

**004 Sculpture- ½ credit****One term-Grade Level 9-12**

This course is a quick, fast paced class designed to focus on art created in three dimensional. Materials used will range considerably allowing the student to explore different methods of creating sculpture besides basic clay techniques. Projects might include plaster sculpture and castings, glass slumping, creating projects from nature and earth art, fabric and paper manipulation, wire and metal sculpting, or found object assemblage using everyday items around the house.

**Prerequisite:** Art Fundamentals

**009 Yarn Bag Weaving- ½ credit****One term- Grade Level 9-12**

*Formally called Fiber Arts-* This course is specific to learning Anishinaabe yarn bag weaving, and all the techniques needed to create a bag. Specific techniques include; pattern making, learning the round braid, flat weave, split weave, twinning, finger weaving, loom weaving, leather working, and simple sewing. Cultural history and craft is taught in this class with a modern approach.

**Prerequisite:** Art Fundamentals

**005 Jewelry/Metalwork I- ½ credit****One term-Grade Level 9-12**

This class will focus on jewelry making techniques, but include metal sculpture. Different jewelry techniques taught will include metal fabrication, soldering, glass fusing, glass beading, different casting techniques, learning how to create jewelry cording, enameling, and metal manipulation.

**Prerequisite:** Art Fundamentals

**006 Jewelry/Metalwork II- ½ credit**

One term- Grade Level 9-12 (recommended for grades 11 & 12)

This class will require students to demonstrate a high level of technical skill in the art of metalsmithing. Students will be able to create a body of work at a higher quality, utilizing more advanced techniques in creating jewelry. Students will also be able to explore more creative and unique solutions to body art and jewelry.

**Prerequisite:** Art Fundamentals, Jewelry/Metalwork I

**014 Painting II- ½ credit**

One term- Grade Level 10-12

This class is suggested for any student who loves painting or wishes to focus on art after high school. Painting II will allow for advancement in painting technique and the development of student ideas. This course will help to develop a student's style and allow more time to create refined work.

**Prerequisite:** Painting I

**021 Cooperative Art-½ credit**

One term- Grade Level 11-12

This class is designed for a team teaching opportunity between upper level art students and students of special needs. This class focuses on lesson planning and studio preparation amongst high school students. Students will be expected to teach individually and team teach lessons working with special needs students, with the potential to teach outside the high school, and work with students at the Primary, Intermediate and Middle School levels.

**Prerequisite:** Art Fundamentals, 2 terms beyond Art Fundamentals

**252 Intro To Media Production- ½ credit**

One term- Grade Level 9-12

Intro to Media Production is a beginning level course for students that are interested in digital media creation. Students will learn how to plan and create high quality audio, video and digital graphics projects. Students will also gain valuable experience creating and converting files for use in their projects. Students will collaborate on their projects with their classmates via our wiki/blog server. *This class should be taken prior to Video Production & and Graphic Designs.*

**247 Video Production- 1/2 credit**

One term- Grade Level 10-12

The Video Production and Motion Graphics course is for students who are interested in learning how to create various types of video projects. Students will use professional video editing software, audio & video production, 3D animation and digital graphics. Students will gain knowledge of a variety of software to create animated text and graphics. As students gain proficiency in the above software they will also be given the opportunity to create advanced video projects. Media arts programs will also be researched to look at post-high school opportunities and careers.

**253 Digital Photography- 1/2 credit**

One term- Grade Level 9-12

The emphasis of this course is on the student's understanding of the basic concepts of digital photography and digital imagery. The hands-on curriculum is designed to provide students with the basics of taking photographs with a digital camera, an introduction to image correction software, and opportunities to create digital prints and creative projects using digital media.

**254 Graphics & Print Technology- ½ credit**

One term- Grade Level 10-12

This course introduces students to a wide variety of digital communication methods. Students create digital images by using computer software such as Adobe Photoshop, Illustrator, and other computer programs. This class aligns with software used in the IDEA lab's 3D printers, laser engravers and computer aided cutting tools. Some of today's more dynamic fields- advertising, publishing, interactive- are based on this fundamental concept of graphic design.

**002 Advanced Art- 1 credit****Two terms-Grade Level 10-12**

This is an **honors** class that will focus on teaching students to excel in a range of mediums. Similar to Art Fundamentals, a variety of projects will be taught, but a higher level of success will be evident. Students will also be given more freedom in this class allowing the student to choose what direction their project will be created. New projects will be introduced in this class which time did not allow in other classes, such as: advanced painting techniques, various printmaking assignments, introduction to life drawing, and the study of human anatomy, with a focus on 2-dimensional work being created.

**Prerequisite:** Art Fundamentals, 1 term beyond Art Fundamentals

**102 AP Studio Art I - 1 credit****Two terms -Grade Level 11-12**

This **honors** course is a beginning class designed to prepare a student for the creation of an AP portfolio. This can be taken for college credit and is run at a very advanced pace. Students are expected to create high quality work at a fast pace working in and out of class to complete work. It is taught with the rigor similar to a college course and aligns with the national standards for college readiness and is approved through the College Board. ***Students will create work to use towards their portfolio for the second semester where students will pick their concentration and focus on the portfolio completion.***

**Prerequisite:** Advanced Art and/or 2 terms in a 3-D class (ceramics, jewelry, or sculpture)

**008 AP Studio Art 2-D Design- 1 credit****Two terms- Grade Level 11-12**

This **honors** course will focus on the completion of a 2-D Design portfolio for optional college credit. The emphasis will be on the elements and principles of design. This can range from drawing, painting, digital art, photography, printmaking, mixed media, fiber and metal design. Students will complete 15 high quality works of art for portfolio submission. This course is taught at a very high rigor where work will need to be done outside of class to complete for credit.

**Prerequisite:** AP Studio Art I

**100 AP Studio Art 3-D Design - 1 credit****Two terms- Grade Level 11-12**

This **honors** course will focus on the completion of a 3-D Design portfolio for optional college credit. The emphasis will be on the elements and principles of design in 3-D form. This can range from clay, paper, wood, mixed media work, fiber art, clothing, jewelry, digital 3-D art, etc. Students will complete 10 high quality works of art for portfolio submission. This course is taught at a very high rigor where work will need to be done outside of class to complete for credit.

**Prerequisite:** AP Studio Art I

**101 AP Studio Art Drawing - 1 credit****Two terms- Grade Level 11-12**

This **honors** course will focus on the completion of a drawing portfolio for optional college credit. The emphasis will be on drawing style and methods. A student focused on fine art is more suited to this portfolio. Media can include drawing, painting, digital art, printmaking, mixed media, or fiber art. Students will complete 15 high quality works of art for portfolio submission. This course is taught at a very high rigor where work will need to be done outside of class to complete for credit.

**Prerequisite:** AP Studio Art I

## **BUSINESS AND INFORMATION TECHNOLOGY**

### **COURSE DESCRIPTIONS**

<b>Accounting I**</b>	2 terms
<b>Accounting II*</b>	2 terms
Yearbook*	2 terms
<b>Business Law*</b>	1 term
Social Media and Print Marketing*	2 terms
Entrepreneurship*	2 terms
Financial Literacy and Economics**	1 term
Introduction to Business & Hospitality	1 term
Introduction to Computer Game Design	1 term
Computer Game Design II	1 term
MS Office I**	2 terms
MS Office II**	2 terms
Sports and Entertainment Marketing	1 term
Web Design and Computer Animation	1 term
<b>Principles of Finance ITV***</b>	1 term

***BOLD*** Denotes Honor Class

\*\*\*Must be enrolled in Financial Services Academy

\*\*Denotes Northwood Tech Transcribed Credit and Financial Service Customer Representative Academy

\*Denotes Northwood Tech Transcribed Credit. Students who successfully complete these courses earning 80% or higher will receive a transcript directly from Northwood Tech noting their completion of the course, grade, and credits earned. These credits may be used toward a program of study at any Northwood Tech campus and as electives at many UW schools.

**020 Accounting I** - 1 credit, \*4 Northwood Tech credits (*Financial Accounting 1A 10101176, Financial Accounting 1B 10101177*)  
**Two terms – Grade Level - 11-12 (10<sup>th</sup> grade with permission of instructor)**

This course is an introduction to Accounting. The first term covers the curriculum of Financial Accounting 1A (Northwood Tech) and focuses on the accounting equation and cycle. The second term covers the curriculum of Financial Accounting 1B (Northwood Tech) and covers special journals, merchandising, cash control, receivables, and payroll. This course provides an excellent head start for students going into an accounting or business-related program at a university or a technical college.

**Northwood Tech Transcribed Credit:** Students who earn 80% or higher will receive 4 transcribed credits from Northwood Tech.

**022 Accounting II--QuickBooks** – 1 credit \*2 Northwood Tech credits (*QuickBooks Accounting Beginning 10101174*)  
**Two terms – Grade Level - 11-12**

Students will learn the QuickBooks accounting software by performing tasks that involve the general ledger, accounts payable, accounts receivable, inventory, payroll, and financial statements. Students will be responsible for finding and correcting errors in the QuickBooks program. **Prerequisite:** Accounting I with a grade of B or better.

**Northwood Tech Transcribed Credit:** Students who earn 80% or higher will receive 2 transcribed credits from Northwood Tech.

**041 Yearbook** - 1 credit, \*Northwood Tech 2 Credits (*Adobe Photoshop 10103156*)  
**Two terms - Grade Level - 10-12**

**\*Note: Students who have had this class can take it again independently during any block of the day for credit with instructor approval.**

Students will use Adobe Photoshop, InDesign, and Illustrator software programs for completion of page layouts. Students will take digital photos, and gather information to make the yearbook an accurate record of the school year. Students in this class will be successful if they are outgoing, have good attendance, work ethic, can drive (for ad sales) and are able to work independently while being reliable and responsible.

**Prerequisite:** Desktop Publishing or Digital Photography with a grade of B or higher, English grades of B or

higher.

**Northwood Tech Transcribed Credit:** Students who earn 80% or higher will receive 2 transcribed credits from Northwood Tech.

**026 Business Law** - ½ credit \*Northwood Tech 3 Credits (*Business Law 10105125*)

**One term – Grade Level - 10-12**

Business Law is a course which deals with the practical aspects of law as it applies to everyday life. The class explores general legal principles. Such topics as civil rights, due process, the law and the minor, consumer law, crimes and torts, and the legal system are studied. After a broad understanding of the legal system has been achieved, the rest of the term deals with the business topics of contracts. Discussion will center on the business topics of debtors and creditors, bailment, employment insurance, agency and real property. Throughout the class, speakers, skits, field trips and mock trials are used to illustrate the various legal principles. The class will also take a field trip to a courthouse to witness a real trial. Students who are interested in a legal career should definitely take this class.

**Northwood Tech Transcribed Credit:** Students who earn 80% or higher will receive 3 transcribed credits from Northwood Tech.

**036 Social Media and Print Marketing** – 1/2 credit \*2 Northwood Tech Credits (*Desktop Publishing 10106127*)

**One term -Grade Level 9-12**

This course is designed to provide an opportunity for students to combine text and graphics using a computer and software to create attractive publications and social media posts. Using Adobe Photoshop, InDesign and Illustrator software, students will produce logos, newsletters, letterheads, business cards, movie posters, magazine covers, invitations, and various digital imaging projects as well as web content. Digital and print marketing can be used in personal, academic, career, and business settings to produce publications quickly and professionally whether for the online environment or in print. Students will learn to create and deploy a social media campaign while learning the history and development of social media platforms. This class is also a great way to get involved with and learn how to create the WANAKI, the school newspaper.

**Northwood Tech Transcribed Credit:** Students who earn 80% or higher will receive 2 transcribed credits from Northwood Tech.

**080 Financial Literacy and Economics** – ½ credit (required course for all students) \*3 Northwood Tech Credits (*Personal Finance 10114125*)

**One term - Grade level 11-12**

This course offers a practical approach to managing personal finances. Students will learn financial skills vital to living on their own. Units include wise use of resources, goal setting and decision-making, comparison shopping, using a checking account and wise use of credit. Students will become familiar with both their rights and responsibilities as consumers, and develop skills to help themselves resolve consumer problems such as buying vs. renting and purchasing insurance.

**Northwood Tech Transcribed Credit:** Students who pass this course with a grade of 80% or better may receive 3 Northwood Tech credits.

**037 Entrepreneurship** - 1 credit \*3 Northwood Tech Credits (*Introduction to Business 10105100*)

**Two terms- Grade Level 10-12**

Students may take this class for a total of 2 semesters. Those enrolling for the second semester will be involved in manager training. Everyone has the ability to start his or her own business; however, maintaining a successful business is more difficult. This class will examine the different aspects of running a business and hopefully help you to become a successful entrepreneur. Students will be involved in engaging business activities. The focus will be on school projects such as selling school apparel, operating the school store and marketing for different organizations. Entrepreneurship students will also work with local businesses by offering a variety of business services. Working on these projects with local businesses will give students the skills they need to be successful in the business world.

**Northwood Tech Transcribed Credit:** Students who earn 80% or higher will receive 3 Northwood Tech credits. (if they complete the Northwood Tech material)

**029 Introduction to Business & Hospitality**– ½ credit**One term – Grade Level - 9-12**

This course is designed to help students understand the role of business in a free enterprise economic system. It provides principles, concepts, and understandings for the preparation of individuals as effective citizens, employees/employers, and consumers participating in the American free enterprise economy.

**025 Introduction to Computer Game Design** – ½ credit**One term – Grade Level – 9-12**

This course provides students with a complete understanding of the technological and creative aspects of computer video game design in an easy-to-follow format. Students learn video game theory and apply game applications through design. Students learn about gaming, computerized gaming, and the evolution of gaming. Students then learn about artistic aspects of perspective, design, and animation. The technical aspects of collision theory and programming logic are discussed, followed by explanations of the hardware of video games. Students will design and create their own computer game as a culminating project.

**046 Computer Game Design II**– ½ credit**One term- Grade Level- 9-12**

This is a continuation of Introduction to Game Design. Students will continue to learn game theory and apply game applications through design. Students will design games using the HTML5 platform, as well as other applications. Students will work with teachers in various content areas to create an educational computer game as a culminating final project.

**Prerequisite:** Introduction to Computer Game Design Grade of B or better.

**016 Microsoft Office I** 1 credit, \*Northwood Tech 4 Credits (*MS Excel A 10103151, MS Excel B 10103152, MS Word A 10103146, MS PowerPoint 10103106*)**Two terms-Grade Level- 10-12**

Students will learn word processing using MS Word including creating, editing, saving, formatting, printing and other basic features, MS Excel creating, editing, saving, formatting, printing, performing calculations and enhancing worksheets through charts, using advanced formulas, object linking and embedding, multiple worksheets, 3-D references, macros and database basics, and MS PowerPoint to make presentations in different formats.

**Northwood Tech Transcribed Credit:** Students who earn 80% or higher will receive 4 Northwood Tech credits.

**012 Microsoft Office II** 1 credit, \*Northwood Tech 2 Credits (*MS Word B 10103147, MS Access 10103148*)**Two terms- Grade Level 10-12**

Students will continue MS Word learning advanced tables, mail merge, sort, graphics, workgroup collaboration, macros, styles, and advanced formatting. They will also learn MS Access basics as well as complete a comprehensive MS Office Simulation.

**Northwood Tech Transcribed Credit:** Students who earn 80% or higher will receive 2 Northwood Tech credits.

**040 Sports and Entertainment Marketing** – ½ credit**One term – Grade Level – 10-12**

Sports, entertainment and recreation play an important part in our lives as well as the lives of companies. This class will examine how marketing is used in these three areas. Explore the intriguing world of sports and entertainment from the perspective of marketing. This class will take you on a step-by-step journey through the world of marketing. You will learn about the key functions of marketing and how those functions are applied to sports and entertainment.

**024 Web Design and Computer Animation** – ½ credit,**One term-Grade Level - 9-12**

Using Adobe Dreamweaver, Illustrator, Animate, and HTML5, students will create a digital design portfolio, which includes a web-site of personal accomplishments, movies, banners, digital photo albums, animated .gif images, and much more. Students will then put these skills to work as they design an ecommerce website for a business.

**855 Principles of Finance- ITV- 1 credit****Two terms- Grade Level 12**

Students must be enrolled in the Financial Services Academy to register for this course. The Principles of Finance course concentrates its study on the financial management of business. Students analyze profitability, cash flow, long-term investment decisions, long-term financing decisions, short-term capital management, mergers, acquisitions, and business failure. Northwood Tech Course #10114107- 3 credits

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**TECHNICAL DIPLOMA**

Students have the opportunity to earn a technical diploma through Wisconsin Indianhead Technical College by taking classes offered at Hayward High School. Students should plan their schedules to accommodate the course sequence for the program they are interested in. Students who successfully complete the program will be awarded with this Northwood Tech Technical Diploma on graduation day.

**Financial Services Customer Representative**

Technical Diploma

14 Credits (Northwood Tech)

Career Cluster: Finance

<https://www.Northwood>

[Tech.edu/academic-programs/degree-programs-and-certificates/financial-services-customer-representative/curriculum](https://www.NorthwoodTech.edu/academic-programs/degree-programs-and-certificates/financial-services-customer-representative/curriculum)

**Required HHS Courses:**

016 MS Office I (Northwood Tech MS Word A, MS Excel A, MS Excel B and MS PowerPoint)

020 Accounting I (Northwood Tech Financial Accounting 1)

080 Financial Literacy & Economics (Northwood Tech Personal Finance)

\*Northwood Tech Principles of Finance-ITV (students should request Study Hall- 1st period, Semester II for this class)

**Program Overview**

Financial Services Customer Representative graduates will be able to create reports and analyze financial data.

Topics studied will include credit cards, student loans, budgeting, saving, debt avoidance, debt reduction, negotiating deals, taxes, retirement, investing, buying a car, buying a house, planning or big purchases and insurance. Upon completion of the requirements of the program, you will have an understanding of where the money goes and strategies for building financial security and wealth.

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## WORK EXPERIENCE OPPORTUNITIES & REQUIREMENTS

**STUDENTS ARE ALLOWED A MAXIMUM OF TWO CREDITS FOR WORK EXPERIENCE.**

**038 Work Experience-** *A minimum of 60 hours of work experience must be completed to earn ½ credit*

**One Term - Grade Level -12 ONLY**

The Work Experience Program is designed for regular education students that want to gain experience working in a job that is directly tied to a class that the student is enrolled in. The academic and occupational skills that the student will be learning need to be at the same skill level as the course that the student is enrolled in.

Examples of quality Work Experience Programs are:

- Tourism when enrolled in Business Ed or Marketing class
- Local newspaper when enrolled in an English class
- Restaurant when enrolled in a foods class
- Construction when enrolled in a Wood Tech or Construction I or II class

**Requirements for course:** Students must have:

1. An overall GPA of 2.5
2. Good attendance – no more than 3 absences in the previous quarter (excluding school related absences and/or an absence beyond student control)
3. Their own transportation, including proof of car insurance
4. Work experience hours must be completed within the scheduled calendar school days & hours

-students cannot work under the supervision of family members

-the requirements of attendance, GPA, and transportation stated above also apply to this work experience

**556 HERO/Educator Assistant** ½ credit earned for 60 hours of experience.

**One Term- Grade Level- 11-12**

This course allows students to gain skills and work related experience by tutoring other students or assisting an instructor or other school personnel in a career/professional field setting. Students will gain knowledge of different career fields such as teaching, secretarial, coaching or other school personnel positions. Placement will be based on school personnel need.

**ENGLISH DEPARTMENT**  
**COURSE DESCRIPTIONS**

English 9 or <b>Honors English 9</b>	2 terms
English 10 or <b>Honors English 10</b>	2 terms
American Literature or <b>Honors American Literature</b>	2 terms
<b>Advanced Placement English Literature and Composition I</b>	2 terms
<b>Advanced Placement English Literature and Composition II</b>	2 terms
Communications	1 term
Science Fiction/Fantasy*	1 term
Myths & Legends*	1 term
College Prep Composition *	1 term
Creative Writing*	1 term
Introduction to the Theatre	1 term

***BOLD*** Denotes Honor Class

\* One of these courses must be taken if not enrolled in AP English Literature & Composition

**042 English 9** - 1 credit- Required course

Two terms- Grade Level 9

Our curriculum provides instruction in reading strategies, writing, grammar, vocabulary, literary elements and forms, speaking and listening, and critical thinking. Students read short stories, nonfiction (essays, articles, workplace writing, biographies/autobiographies), poetry (narrative, dramatic, sonnet, lyric), drama (*The Tragedy of Romeo and Juliet*), and a novel. Selections include a blend of classic and contemporary literature. Language skills will be developed through the writing process. Students will write six to eight major papers (including a research paper) during this 18-week course.

**043 Honors English 9** - 1 credit

Two terms- Grade Level 9

See description for English 9. Students enrolled in Honors English 9 will be required to complete extended vocabulary, writing, reading (analytical and interpretive), and speaking activities. Students should be highly motivated; they are expected to be active participants on a regular basis. A detailed handout is provided to eighth graders at registration. Students are expected to have earned Advanced or Proficient scores (Reading and Writing/Language Arts) on the Wisconsin Forward eighth grade exam.

**044 English 10** - 1 credit - Required course

Two terms- Grade Level 10

This one-credit, required course has varied units of study including literature (fiction and nonfiction), study/test-taking skills, poetry, vocabulary studies, grammar, and writing mechanics. Required composition assignments include expository, persuasive, and creative writing. Each student will present two book reports.

**Prerequisite:** Successful completion of English 9

**045 Honors English 10** - 1 credit

Two terms- Grade Level 10

This one-credit course is a more challenging, "higher powered" version of the English 10 class. The areas of study will be similar to the English 10, but with the expectation that discussions and assignments will reflect more advanced levels of thinking. Students should expect rigorous reading schedules; in-depth writing assignments involve analysis and evaluation. Required readings include nonfiction books as well as other college-bound readings such as *Julius Caesar*, *Fahrenheit 451*, *Animal Farm*, and others. Students are expected to have earned Exceeding or Ready scores (Reading, English, and Writing) on the ASPIRE 9 exam.

**Prerequisite:** Successful completion of English 9

**048 Introduction to the Theatre** - ½ elective credit

**One term- Grade Level 10-12**

Theatre combines the literary arts of storytelling and poetry with the world of live performance. As a form of ritual as well as entertainment, theatre has served to unite communities and challenge social norms, to vitalize and disturb its audiences. In order to understand this rich art form more fully, we will study and discuss a sampling of plays that exemplify different kinds of dramatic structure. We will also develop an understanding of the commonality of themes, characters, and storylines that run from the Greeks through modern day television.

**Prerequisite:** Successful completion of English 9 and English 10

**054 Communications/ Speech**- ½ credit - Required course

**One term- Grade Level 12**

This required course is designed to aid the student's ability to communicate orally. The student will give speeches such as the informative, demonstrative, biographical, narrative, and persuasive. Emphasis will also be given to library research, note taking, organizing speeches effectively, and using multimedia for presentation purposes. This course will require completion of oral and written assignments. A formal job interview and job-seeking unit comes at the end of this course.

**Prerequisite:** Successful completion of English 9 and English 10 and American Literature

**052 American Literature**– 1 credit - Required course

**Two terms- Grade Level 11**

This course covers selected American literary works from the colonial era to the present. Reading assignments include nonfiction and fiction: journals, speeches, letters, poems, essays, short stories, plays, and novels. Students will respond critically, both in writing and discussion, to the material presented. This required class encourages students to expand their understanding and appreciation of their country's literary heritage. Main readings may include *The Yearling*, *Of Mice and Men*, and various high interest novels by American authors.

**Prerequisite:** Successful completion of English 9 and English 10

**053 Honors American Literature** –1 credit

**Two term- Grade Level 11**

Students will combine American literature study and advanced composition skills. The literature portion surveys and focuses on the development of different types of writing from the Puritan era to the present day. Activities include reading and analyzing poetry, short stories, plays, novels, and essays; group projects; writing interpretive papers; and smaller critical and creative writing assignments. Skills such as note taking, research, essay composition, and textual analysis will be emphasized. Readings may include *The Scarlet Letter*, *The Great Gatsby* and other various readings from the AP reading list. Students are expected to have earned Exceeding or Ready scores (Reading, English, and Writing) on the ASPIRE 10 exam.

**Prerequisites:** Successful completion of English 9 and English 10

**064 Advanced Placement English Literature and Composition I\***- 1 credit

**Two terms - Grade Level 12**

This course is designed for the serious student who has completed Honors American Literature. The College Board has approved the course syllabus; as a result, HHS is authorized to use the “AP” distinction for this course on students’ transcripts. Students will read works (British Literature) from several genres and periods –from the sixteenth to the twenty-first century – but, more importantly, they will get to know a few works well. Students are encouraged to read actively, deliberately and thoroughly, taking time to understand a work's complexity, to absorb its richness of meaning, and to analyze how that meaning is embodied in literary form. Writing instruction (critical analysis of literature) includes attention to developing and organizing ideas in clear, coherent, and persuasive language; a study of the elements of style; and attention to precision and correctness as necessary.

Students are expected to have earned Proficient or Advanced benchmark scores (English, Reading, and Writing) on the ACT exam.

Students are encouraged to take the National Advanced Placement English Literature and Composition Exam. Upon completion of Semester I, student will have encountered all the skills and concepts necessary to write a successful AP exam. (May 2021) **Prerequisites:** Successful completion of English 9, English 10, and American Literature

**066 Advanced Placement English Literature and Composition II – 1 credit****Two terms - Grade Level 12**

*“Because the AP English course depends on the development of interpretative skills as you learn to write and read with increasing complexity and sophistication, the AP English Literature course is intended to be a full-year course” (The College Board).*

Based on the skills obtained during Semester I, this course will continue with careful reading and critical analysis of American, British, and world literature. On a daily basis, this course asks students to read critically, think clearly, and write concisely. By the end of the course, students have cultivated a rich understanding of literary works and acquired a set of analytical skills they will use throughout their lives.

Students will frequently practice interpreting and writing about literature. Skills include writing about the structure of a poem or a story, the themes of a drama, and the style of an essay. Students will identify various literary devices to explain how those devices help to create meaning in a particular text (answering the prompt).

**Prerequisite:** Successful Completion of Advanced Placement English Literature and Composition I

**059 Science Fiction/Fantasy- ½ credit****One Term- Grade Level 12**

Time travel. Alien invasions. Alternate universes. Dystopian futures. From the early formation of the genre to more contemporary works, the science fiction genre mirrors events throughout our history, with both optimistic outcomes and horrifying predictions. In this quarter-long course, students will critically read a series of science fiction texts, including novels, short stories, and graphic fiction. Possible areas of interest include the environment, energy conservation, war, and social issues. The course has a substantial writing component, calling upon the students' creative, critical, and research skills.

**Prerequisites:** Successful completion of English 9, English 10, and American Literature.

**055 Myths and Legends- ½ credit****One Term- Grade Level 12**

Angry deities. Fantastic creatures. Mighty heroes. Mythology and folklore have been used since the first humans started gathering around fire as a way to make sense of the world around us. This quarter-long course focuses on the many myths and legends woven into various cultures around the world. Starting with an overview of Greek mythology, students will journey to strange and dangerous new lands, face powerful monsters side-by-side with demigods, and follow heroes as they charge into battle. Ultimately, students will explore and examine the universal themes of myths and folklore, and how they've come to shape the literature and society of today.

**Prerequisites:** Successful completion of English 9, English 10, and American Literature.

**057 College Prep Composition- ½ credit****One Term- Grade Level 12**

This quarter-long course develops students' abilities to write, read, and discuss paragraphs and short essays about significant subjects. Students will compose no less than five papers in a variety of modes, including at least one research paper that uses information from outside sources. During the quarter, writers will expand their knowledge of grammar and conventions, stylistic range, and ability to discuss complex issues in written form.

**Prerequisites:** Successful completion of English 9, English 10, and American Literature.

**056 Creative Writing- ½ credit****One Term- Grade Level 12**

This quarter-long course focuses on the exciting art of expressive composition. Students will write a variety of pieces, focusing on varied aspects of creative writing including fictional narratives, non-fictional pieces, choose-your-own-adventure stories, poetry, short stories, songs, satire, and more! You will learn a variety of writing styles while retaining the creative freedom to invent lively characters, craft descriptive settings, and make them into your own masterpieces.

**Prerequisites:** Successful completion of English 9, English 10, and American Literature.

## FAMILY AND CONSUMER SCIENCE COURSE DESCRIPTIONS

Housing and Interior Design	1 term
Apparel, Textile & Design	1 term
Nutrition and Wellness	1 term
Culinary Foods	1 term
Cultural Foods	1 term
Parenting	1 term
Infant & Toddler Development*	1 term
<b>Foundations of Early Childhood Education*</b>	1 term
Human Perspectives	1 term

***BOLD*** Denotes Honor Class

\*Denotes Northwood Tech Transcribed Credit. Students who successfully complete these courses may receive a transcript directly from Northwood Tech noting their completion of the course, grade and credit earned. These credits may be used toward a program of study at any Northwood Tech campus and possibly as electives at UW schools.

### **096 Apparel, Textile and Design** – ½ credit

One term - Grade Level – 9-12

This introductory course covers basic sewing and needlecraft skills, the psychology of clothing, and the elements of principles of design. Students will have the opportunity to design and complete individual sewing and needlework projects. ***Fees-Students will be responsible for purchasing materials for individual projects.***

### **098 Housing & Interior Design** – ½ credit

One term - Grade Level – 9-12

This course allows students to explore the physical, social and psychological aspects of housing selection and design. After studying the elements, principles, and goals of design, students will have the opportunity to apply skills in a variety of projects, including a complete floor plan and an interior design presentation. Guest speakers from local businesses in the housing industry will share their expertise when available. Skills learned will be valuable for students as they make housing and design choices in their own lives, as well as for those interested in a career in interior design or architecture.

### **084 Nutrition and Wellness** – ½ credit

One term - Grade Level - 9- 12

This introductory course covers information on basic nutritional needs, my plate, safety and sanitation guidelines, plus cooking terminology and food principles. Nutrition and Wellness would be helpful to the student interested in a career in the fast growing food industry, students going into a health related field, or those interested in food related topics for their own personal reasons. Students will have numerous opportunities to apply classroom learning.

### **086 Culinary Foods** – ½ credit

One term - Grade Level - 9-12

This second level course is designed to give students the opportunity to apply food preparation skills and knowledge of nutrition and safety to more complex lab experiences. Units include the principles of poultry, meat and seafood preparation, the use of herbs and spices, and the preparation of soup and soup stocks. Students will transfer those skills to a career-oriented project as they explore the field of food styling. Working cooperatively in groups, students will create a food product and use technology to showcase the product in a magazine-like layout. The course culminates with a unit in which students apply knowledge of the principles of meal planning including nutrition, the efficient use of resources, and the fundamentals of food preparation.

**Prerequisite:** Nutrition and Wellness

**088 Cultural Foods – ½ credit****One term - Grade Level - 10-12**

This course allows students to explore the cultural influences on food. Social Studies and English are integrated in a research project about a specific region of the United States. After researching the geography, economy, and cultural background of a region, students will then educate classmates about that region, and the food and food customs associated with that region. Students will also complete research as they become knowledgeable about the culture and food customs of foreign countries, again sharing information with classmates. Students will work cooperatively to plan and present all information to the class, as well as prepare foods from the regions and countries. Students will also explore holiday food traditions and create holiday desserts. They will do the same as they choose and “sell” the perfect food, developing communication and persuasive speaking skills as they explore the influence of society on individual food choices.

**Prerequisite:** Nutrition and Wellness

**092 Parenting – ½ credit****One term - Grade Level - 9-12**

This course offers students the opportunity to explore the prenatal development of a child from conception through birth. Topics include parenting skills and readiness, qualities of effective parents, and approaches to parenting. Family planning, decision-making, and contraception are all part of a unit on parenthood as a choice. Pregnancy and prenatal development, labor and delivery, and birth defects are also studied. Students will care for infant simulators to get firsthand experience at parenting an infant. Students develop skills and knowledge that will be valuable to them as future parents as well as future workers in the areas of Early Childhood Education and Child Care.

**082 Foundations of Early Childhood Education- ½ credit/3 credits Northwood Tech (Offered 2020-21 school year)****One term- Grade Level- 11-12**

Students taking this course will explore the profession of early childhood educators: reviewing the history of early childhood education, learning about different types of ECE programs, and exploring the responsibilities of early childhood educators. Students will get hands-on experience planning developmentally appropriate activities for children from birth to age 8 and have the opportunity to observe professionals in the school district and the community.

*Students who complete the course with a grade of 80% or better will earn 3 credits from Northwood Tech. These credits will apply directly to the Early Childhood Education program at any technical college in the WI system offering that program. The credits can also be applied towards elective credits for students enrolling in other programs in the WI technical college system, as well as four-year colleges in the UW system.*

**093 Infant & Toddler Development- ½ credit/3 credits Northwood Tech (Offered 2021-22 school year)****One term- Grade Level- 11-12**

Students taking this course will study infant and toddler development, examining conditions before and after birth that impact early development. They will explore the role of heredity, the environment, and brain development in early learning. Students will get experience planning appropriate activities for infants & toddlers, and may have the opportunity to observe infants & toddlers in a local daycare.

*Students who complete the course with a grade of 80% or better will earn 3 credits from Northwood Tech. These credits will apply directly to the Early Childhood Education program at any technical college in the WI system offering that program. The credits can also be applied towards elective credits for students enrolling in other programs in the WI technical college system, as well as four-year colleges in the UW system.*

**094 Human Perspectives- ½ credit****One term- Grade Level- 10-12**

This course offers students the opportunity to explore social issues and the impact of those on their lives and the lives of their families. After some self-exploration, students will examine adult relationships, effective communication, and conflict resolution. They will explore relationships, family, and social influences on one's life path. Skills learned can be applied to students' personal lives, as well as to their work lives.

## **HEALTH**

### **COURSE DESCRIPTIONS**

#### **208 Health Education** - ½ credit

##### **One term – Grade Level 9**

Health education is a required course for 9<sup>th</sup> grade students. The course components include individual research, group assignments, projects and presentations. This course includes units in the following:

- 1) Mental Health
- 2) Alcohol and Illicit Drugs
- 3) CPR/AED Training (certification is not given)
- 4) Human Growth & Development

#### **209 Advanced Health** - ½ credit

##### **One term - Grade Level - 10-12**

This is an elective course. It includes units in the following topics: Health related careers, Exercise and Nutrition, First Aid / CPR (in-class certification), Infectious / Non-infectious Diseases, Health Care Services and Insurance, Alternative Health Care options, other student generated health related topics. This course includes many opportunities for community service and research.

**Prerequisite:** The student must have earned a grade of “C” or better in the required 9th grade Health Education class or consent of the teacher.

#### **081 Health Occupations** – ½ credit

##### **One term - Grade Level – 10-12**

This course provides an opportunity for students to investigate careers in the healthcare industry. In addition to career exploration, units will cover legal and ethical responsibilities, cultural diversity, basic medical terminology, general anatomy and physiology, human growth and development, and geriatric care. Learn about issues specific to healthcare careers, visit local health care facilities and hear directly from people working in a variety of health care fields.

## **WORLD LANGUAGES** **COURSE DESCRIPTIONS**

Ojibwe I	2 terms
Ojibwe II	2 terms
Ojibwe Culture	1 term
Ojibwe Crafts	1 term
Spanish I	2 terms
Spanish II	2 terms
<b>Spanish III</b>	2 terms
<b>Spanish IV</b>	2 terms
<b>Spanish V</b>	2 terms

***BOLD*** Denotes Honor Class

The Hayward School system offers five years of Spanish. Spanish I - V is offered in high school. The upper levels of IV or V may be offered through alternative settings (Distance Learning, Virtual classes or Independent Study, etc.) In the first three years, oral drill work is stressed--particularly in class participation. In addition to oral work, great emphasis is placed on learning vocabulary and grammar in memorized and written form. Language courses are highly academic. Students can expect daily homework assignments, biweekly quizzes, weekly tests and at least one project. Although we try to make the study of language an enjoyable experience, at the same time, it does require a great deal of work and repetition. If students are interested in language study to meet potential college requirements, three years should be considered, depending on the college.

### **204 Ojibwe I** - 1 credit

Two terms - Grade Level 9-12

This course is designed to help students understand, appreciate, and respect the richness of American Indian culture and language. It involves basic study of the Ojibwe language using the double vowel system and oral communication. A history unit on Wisconsin tribes will be studied and the Cherokee nation will also be studied.

### **205 Ojibwe II** - 1 credit

Two terms - Grade Level 9-12

Ojibwa II will allow the student to communicate on a higher level of effectiveness. It will include Ojibwa translation, listening, spelling, speaking, and written practice. Cultural knowledge skills will be reinforced through weekly lesson goals, learning (animate and inanimate) endings to vowel usage. Study units on Federal Indian law and treaty issues; contemporary native issues; and a study of the history of the Ojibwe people. A ten page research paper is required.

**Prerequisite:** Ojibwe I with at least a C

### **206 Ojibwe Culture** - 1/2 credit

One term - Grade Level 9-12

This course will immerse the students in activities that will teach them about traditional Ojibwe subsistence activities; such as ricing, sugar bushing and other native foods. Students will learn through storytelling and experiencing first hand Ojibwe culture traditions.

### **207 Ojibwe Crafts** - 1/2 credit

One term - Grade Level 9-12

This course is focused on learning Ojibwe traditional art forms and crafts. Students will gain a deeper understanding of Ojibwe traditions, language, and culture centers around the history and story-telling of the Ojibwemowin crafts and art forms.

### **190 Spanish I** - 1 credit

Two terms – Grade Level 9-12

Spanish I involves a fully articulated system of language learning designed to teach the basic concepts of the Spanish language. Emphasis is on ensuring a rapid acquisition of the listening, speaking, reading and writing skills necessary for meaningful communication in both spoken and written Spanish. The class presents the student with a



highly structured, logical sequence of opportunities to learn, to practice and use Spanish in a stimulating and enjoyable atmosphere. We allow both the students and teacher to participate to a maximum degree and to adapt the content and format to the needs of a varied classroom. Students are expected to maintain an organized notebook of vocabulary, grammar and verbs that will be used in future Spanish courses.

**192 Spanish II** - 1 credit

**Two terms - Grade Level 9-12**

Spanish II provides a complete second level course enabling the student to communicate thought, needs, wants and reactions in another language. Students are presented with a highly structured, logical sequence of opportunities to learn, practice and use Spanish. Listening-speaking skills are reinforced through structure drills, dialogues and reading narratives, which also communicate everyday life and culture to the students. Spanish II students are expected to use Spanish in the classroom through the use of common expressions. The students will hear basic instructions in Spanish and will be expected to recognize them. Spanish II students are also required to do a research project.

**Prerequisite:** Spanish I

**194 Spanish III** - 1 credit (Honors)

**Two terms - Grade Level 10-12**

Spanish III is a sequel to Spanish II with specific goals of presenting the language in an interesting and stimulating context. Varied exercises provide both drill and personalized manipulation of the language with a logical learning sequence and smooth progression from the spoken to the written language. The class is designed to encourage self-expression with emphasis on an understanding of Spanish. The students will be expected to use common expressions in Spanish in the classroom as well as using the language in basic social conversations. The major project of Spanish III is a multiple chapter autobiography. Students are expected to maintain a daily journal.

**Prerequisite:** Spanish I & II

**196 Spanish IV** - 1 credit (Honors)

**Two terms - Grade Level 11-12**

Spanish IV will continue the study of grammar. The class will be geared to the use of the Spanish language in terms of reading, writing and speaking. Throughout the year, the students will be required to keep a daily journal. Students will be required to read, understand and write about legends and short stories. They will be required to give speeches in the language. The final projects will include an extensive video project that students will develop collaboratively. Students will be encouraged to speak, read and think in Spanish. Stress will be on conversation through skits and “talk” sessions. This course is designed to prepare students for work on the university level in that the assignments given require in-depth thought and are often long-term.

**Prerequisite:** Spanish I, II, & III

**197 Spanish V** - 1 credit (Honors)

**Two Terms - Grade Level 11-12**

Spanish V is an advanced course that teaches students how to effectively use the target language. Projects will involve learning experiences that will provide a total immersion in the language. More advanced grammar will be explored and past grammar will be reviewed as needed. Students must be cooperative and independent workers.

**Prerequisite:** Successful completion of Spanish I-IV

## **MATHEMATICS**

### **COURSE DESCRIPTIONS**

Pre-Algebra	2 terms
Algebra IA	2 terms
Algebra IB	2 terms
Technical Math	2 terms
Math Concepts	2 terms
Algebra IIA	2 terms
Algebra IIB	2 terms
Geometry	2 terms
<b>Pre-Calculus I / Pre-Calculus II</b>	4 terms
College Prep Statistics	2 terms
<b>AP Statistics I / AP Statistics II</b>	4 terms
<b>AP Calculus I / AP Calculus II</b>	4 terms

***BOLD** Denotes Honor Class*

#### **110 Pre-Algebra-** 1 elective credit

##### **Two terms-Grade Level 9-12**

This course is designed to provide the necessary background material to prepare students for Algebra. Topics include: number properties, number theory, integers, fractions, solving equations, ratios, proportions and percent, rational numbers, graphing equations, statistics and probability.

#### **112 Algebra I A-** 1 credit

##### **Two terms – Grade Level 9-12**

This course contains the standard topics of Algebra I. These topics include solving and analyzing linear equations and inequalities, graphing relations and functions, slope of a line and systems of equations and inequalities. Students use integers, fractions, decimals, and exponents in expressions, equations and inequalities.

**Prerequisite:** Must pass Pre-Algebra or a comparable course

#### **114 Algebra IB-** 1 credit

##### **Two terms- Grade Level 9-12**

This course is a continuation of Algebra I. These topics include solving and analyzing linear equations and inequalities, graphing relations and functions, slope of a line and systems of equations and inequalities. Students use integers, fractions, decimals, exponents, radicals and quadratic expressions. Other topics include trigonometry, the Pythagorean theorem, statistics, probability, and exponential, quadratic and rational functions and equations.

**Prerequisite:** Must pass Algebra IA or a comparable course

#### **116 Technical Math-**1 credit

##### **Two terms-Grade Level 10-12**

This course begins with a short review of basic arithmetic skills and continues with the application of these skills. Problem solving involving fractional and decimal dimensions is emphasized. The course also includes introductory algebra with emphasis on utilization of formulas including work with signed numbers. First-degree equation solution is also emphasized. (This is a dual credit course with Northwood Tech which fulfills requirements for Northwood Tech Courses MATH 355, and also MATH 373). This course is needed to be eligible for the “Construction Technical Diploma”.

**Prerequisite:** Algebra IA and Algebra IB

**108 Math Concepts- 1 credit****Two terms-Grade Level 10-12**

This is a course which is designed to strengthen math skills in algebra, geometry and statistics. Topics include linear equations and inequalities, exponential functions, quadratic functions, samples of data and their graphs, points, lines, angles, parallel lines, triangles, polygons, proportion and similar triangles, Pythagorean theorem, trigonometry, statistical simulations, probability and counting principles, distributions and confidence intervals.

**Prerequisite:** Successful completion of Algebra I A and I B

**118-120 Algebra IIA & Algebra IIB 1 credit each****Two terms each-Grade Level 9-12**

A rigorous preparation for advanced mathematics. Topics include: review of essentials, linear functions and relations, systems of linear equations or inequalities, graphs in space; polynomial and rational expressions, radicals and irrational numbers, polynomial functions, quadratic relations and systems, exponents and logarithms. Other topics include permutations, combinations and probability, trigonometric and circular functions, trigonometric identities, and inverses.

**Prerequisite:** 8<sup>th</sup> Grade Algebra I (B or better) or Algebra I A and Algebra I B (C or better) or consent of the instructor.

**Students are recommended to have a TI-84 graphing calculator.**

**122 Geometry-1 credit****Two terms-Grade Level 9-12**

A course designed to provide the necessary background for the student going on to Pre-Calculus as well as provide for those students using this as their terminal course. Topics include: points, lines, planes, and angles, deductive reasoning, parallel lines and planes, congruent triangles, quadrilaterals, inequalities in geometry, similar polygons, right triangles, circles, construction, area of plane figures, areas and volumes of solids, coordinate geometry, and transformations.

**Prerequisite:** Algebra I A and I B with a grade of C or better, or Algebra II with a grade of C or better, or consent of the instructor

**124-126 Pre Calculus I / II 2 credits****Four terms-Grade Level 11-12 Honors**

The Pre-Calculus course is designed to prepare students for Calculus or College Algebra. This course develops each topic through the use of algebraic, graphic and numeric problems to enhance student mastery. The topics covered include Functions: (Linear, Polynomial, Power, Rational, Exponential, Logarithmic and Trigonometric); Analytic Trigonometry; Vectors; Matrices; Conic Sections; Probability and Statistics; Discrete Math and Limits. A graphing calculator is required as a technological approach is emphasized.

**Prerequisite:** Algebra 1A and Algebra 1B, Geometry, Algebra IIA and IIB (with a grade of C or better in these classes) or consent of the instructor

**Students must have a TI-84 graphing calculator.**

**127 College Prep Statistics- 1 credit****Two terms- Grade Level 11-12**

College Prep Statistics is an introductory statistics course to prepare students for college-level Elementary Statistics. The course covers the following topics: Analyzing Data, Producing Data, and the Foundations of Inference. There will be a survey project which incorporates the topics covered in the course.

**Prerequisite:** Students must have passed Algebra IA, IB, 2A, 2B and Geometry.

**Students must have a TI-84 graphing calculator.**

**129-131 AP Statistics I/II -2 credits****Four terms-Grade Level 12 (AP/Honors)**

AP Statistics is a course offered for students interested in college level statistics. The course covers the following topics: Foundations of Inference using Binomial and Geometric Distributions, Inference using Significance Testing, Confidence Intervals and Chi-Square Procedures. There will be a survey project which incorporates the topics covered in the course. We will work through necessary case studies as used on the AP Exam. The course will include practice exams in preparation for the AP exam. A placement test and reduced tuition will be required to earn UW-Superior credit for Math 130: Elementary Statistics

**Prerequisite:** Algebra II/Geometry with a grade of C or better in these or consent of the instructor.

**Students must have a TI-84 graphing calculator**

All students are encouraged to take the AP Test.

**128-130 AP Calculus I / II-2 credit****Four terms-Grade Level 12 (AP / Honors)**

Calculus is the terminal course offered for the college bound students. The course covers the following topics: Functions; Limits; Derivatives; Application of Derivatives, Integration; Application of Integrals; Solving Differential Equations and Integration involving Partial Fractions and Substitutions and series. Students could take the AB or BC AP Calculus examination after completing these courses. A placement test and reduced tuition will be required to earn UW-Superior credit for Math 240: Calculus and Analytic Geometry I and March 241: Calculus and Analytic Geometry II.

**Prerequisite:** Pre-Calculus with a grade of C or better or consent of the instructor

**Students must have a TI-84 Plus graphing calculator.**

All students are encouraged to take the AP Test.

## **MUSIC**

### **COURSE DESCRIPTIONS**

<b>Jazz Ensemble</b>	2 terms 1 credit
Band	2 terms 1 credit
Mixed or Treble Choir*	2 terms 1 credit
<b>Chamber Choir</b>	2 terms 1 credit
Music Appreciation I	1 term ½ credit
Music Appreciation II	1 term ½ credit
Intro to Music Theory	1 term ½ credit
Intermediate Music Theory	1 term ½ credit

***BOLD*** Denotes Honor Class

\*All incoming freshman girls must be in Treble Choir if they want to be in the Choir. They may join Mixed Choir and Treble Choir at the same time but if they choose to be in one Choir, they must be in Treble Choir at least for their freshman year. Sophomore year and up, they may choose to do either one.

#### **141 Jazz Ensemble-** 1 credit

##### **Two terms - Grade Level 10-12**

The Jazz Ensemble is performance geared through individual practice, sectionals and group rehearsals scheduled during and outside of the school day. Music prepared and performed include swing, be-bop, blues, ballad, jazz rock and other jazz styles. Members of the Jazz Ensemble are required to attend all scheduled music events. Musical training includes: music theory (written and oral), jazz theory (scales, chords, changes), jazz improvisation and listening. Values stressed in the Jazz Ensemble are self-discipline, responsibility, leadership and teamwork.

**Prerequisite:** Current enrollment in Concert Band.

#### **143 Concert Band-** 1 credit

##### **Two terms - Grade Level 9-12**

The High School Band is structured mainly as a performing ensemble through concerts, pep band and marching band performances. Values stressed are; self-discipline, responsibility, teamwork and professionalism. Emphasis is placed on mastering the basic elements of music and gaining the tools necessary to appreciate, as well as make quality music during and beyond high school. Grades are determined through performance, participation and lessons. Students have opportunities to advance individually on their instrument through solo/ensemble and other performances that may arise within or outside the community.

**Prerequisite:** Prior experience or audition with band director

#### **147 Mixed Choir-** 1 credit

#### **145 Treble Choir-** 1 credit

##### **Two terms - Grade Level 9-12**

The choirs are designed to give students basic and advanced skills in musicianship. Private or small group lessons, once a week, are **mandatory** for all choir students. Students will study and sing a variety of musical forms from different cultures and time periods. Students will be required to sing alone and in groups. Opportunities to compete in District Solo and Ensemble and audition will be provided. Grades will be based on the following criteria: demonstrated improvement of performance skills, mastery of vocal techniques, proficiency in performing assigned parts, participation in daily rehearsals, special rehearsals and public performances, and the level of cooperation in all aspects of group activities including the handling of equipment/uniforms. **Attendance is mandatory for all performances.** Consistently missing performances will be a reason for dismissal from the choral program for one semester, and will be considered on an individual basis.

Students committed to being a choir member will:

- Perform at a high level of excellence.
- Perform with poise and confidence before audiences in a variety of settings.
- Gain a deeper understanding of the value of music as a means of relating to and communicating

- with people of all ages and backgrounds.
- Develop a professional attitude about performing.

### **121 Chamber Choir-** 1 credit

#### **Two terms – Grade Level 10-12**

The Hayward High School Chamber Choir is a 10-12<sup>th</sup> grade only ensemble that is audition-only. Students must be in either Treble Choir or Mixed Choir in order to participate. In addition to every expectation of the Mixed or Treble Choirs, students in this group will perform challenging musical literature from various musical eras and styles, written for small vocal ensembles including jazz, gospel, pop and contemporary. The Chamber Choir will perform in all school performances, and in extra-curricular activities throughout the community.

Chamber Choir members are expected to work toward mastery of the following concepts; the ability to:

- Sing on pitch to provide vocal accompaniment for soloists.
- Sing alone or with others their Soprano/Alto/Tenor/Bass (SATB) arrangement part.
- Sight-read an eight-measure piece of music alone or in 2, 3 or 4 parts.
- Sing Class-A repertoire for Solo & Ensemble Competition

**Prerequisites:** Auditions are held annually for this choir and one year of Mixed/Treble Choir is a preferred prerequisite.

### **139 Music Appreciation I-** ½ credit

#### **One Term-Grade Level 9-12**

This non-performance course explores the elements and history of music and composers from the medieval period until the beginning of the 20th Century. It encourages students to view music as an ingredient of the students' own life, and of human life in all cultures. It uses history as a resource for understanding how music has fulfilled basic human purposes in other ages and present times. Content is divided between the history of music and a study of musical elements through musical literature. Through this course, students develop listening skills, master the fundamental elements of music, and survey major periods and styles in Western music, and music in selected non-Western cultures. There is no prerequisite required to enroll in this course.

### **138 Music Appreciation II-** ½ credit

#### **One Term- Grade Level 9-12**

This non-performance course explores music of the 20th and 21st Centuries and examines musical trends and how they are influenced by society. The music that will be covered in this course will range from jazz and classic rock, all the way up to modern orchestra and electronic compositions. Students will also explore how music functions as social entertainment, specifically looking at concert/program music, chronicling through the decades of the last one hundred years. Students will explore music's function in regards to shaping identity and focus on topics such as nationalism and American grown genres and their influence around the world.

**Prerequisite:** Music Appreciation I

### **134 Intro to Music Theory-** ½ credit

#### **One Term- Grade Level 10-12**

This term course will introduce and review the components of basic music theory and ear training. Designed to enhance music skills and basic music fundamentals, the course will set a framework for further study. Students will learn the basics of music notation, rhythm pitches, reading the grand staff, meter, ear training, form and more. Students should have a minimum of one year in either high school band or choir before taking this course.

### **136 Intermediate Music Theory-** ½ credit

#### **One Term- Grade Level 10-12**

This term course continues on the foundations built in Intro to Music Theory, with intervals, chords, inversions, figures, bass, modes, harmonizing melodies, non-chord tone, and more.

**Prerequisite:** Intro to Music Theory

## **PHYSICAL EDUCATION COURSE DESCRIPTIONS**

### **Physical Education Requirements:**

All students enrolled in Physical Education courses are REQUIRED to wear school appropriate athletic clothing to class. Athletic clothing including: tennis shoes, (non-marking) black athletic shorts, and a t-shirt. (in its original form)

### **Required courses:**

Physical Education 9 (½ credit)

One additional credit in Physical Education must be selected from the list below to meet the graduation requirements.

### **Elective Courses:**

General Physical Education  
Team Sports I & II  
Fit for Life I & II  
Club Fit

Weight Training & Conditioning I & II  
High Performance Physical Education  
Fusion Physical Education

### **NOTIFICATION OF FITNESS GRAM ASSESSMENT OF PHYSICAL EDUCATION STUDENTS:**

*All physical education students will be assessed using the Fitness Gram testing module as a formal assessment of physical activity. Fitness Gram assesses the five components of fitness: cardiovascular endurance, muscular endurance, muscular strength, flexibility and body composition.*

### **211 Physical Education 9 - ½ credit**

One term – Grade Level 9

**This class is required for 9<sup>th</sup> grade students. Students must take and pass Physical Education 9, prior to enrolling in a 10-12 grade level Physical Education course.**

This course is designed to familiarize students with a variety of team and individual sports and continue skills and fitness development.

### **212 General Physical Education 10-12- ½ credit**

One term- Grade Level 10-12

This class will help you learn lifetime skills that will benefit a healthy lifestyle. The use of drills and lead up game situations will assist you when participating in golf, tennis, indoor/outdoor fitness, yard games (bocce ball, horseshoes, ladder golf), pickleball, weightlifting, snowshoeing, archery, tennis, and badminton.

### **213 & 220 Team Sports I & II - ½ credit**

One term-Grade Level 10-12

This class is designed to instruct the student in understanding basketball, volleyball, team handball, floor hockey, soccer, lacrosse, flag football and softball history and rules. A more in-depth approach will be used including strategy and introduction to officiating.

### **216 & 219 Weight Training & Conditioning I & II - ½ credit**

One term- Grade Level 10-12

General weight training will give each student the opportunity to learn correct training techniques and methods, build strength, improve their fitness level and conditioning. The P1 + 4m weight program will be introduced and followed.

**Prerequisite:** PE 9 or General PE

**218 High Performance Physical Education** – ½ credit

**One term- Grade Level 11-12**

This class is designed for students involved in interscholastic sports to develop strength, flexibility, agility, conditioning and self-esteem through the principles of PLT4m, plyometrics and goal setting. Extensive and intense work will be designed to increase performance and prevent injuries.

**Prerequisite:** Weight Training & Conditioning

**224 Fit for Life I** – ½ credit

**One term-Grade Level 10-12**

This elective class is geared for an individual to work in a non-competitive environment to develop personal fitness goals and habits. Emphasis will be placed on the use of exercise, weights, and aerobics to reach and maintain healthy levels of fitness in the areas of flexibility, strength, agility, and cardiovascular endurance. The successful student is self-motivated and focused on daily improvement based on their individual skill level. Recreational activities will be included for social development.

**225 Fit for Life II** – ½ credit

**One term-Grade Level 10-12**

This elective class is an elective for the student desiring to continue developing and maintaining personal fitness levels and goals.

**Prerequisite:** Fit for Life I

**217 Club Fit-** ½ credit

**One term- Grade Level 10-12**

This course will incorporate aerobics, core conditioning, interval training, strength training, yoga, pilates, rollerblading, dancing, cross country skiing, walking, jogging and snow shoeing .

**Prerequisite:** PE 9 or General PE

**215 Fusion Physical Education-** ½ credit

**One term- Grade Level 10-12**

Fusion PE is a course that will strengthen students' hearts, lungs, muscles, endurance, and bones. Exercises and activities will improve coordination, agility, flexibility, and balance. Students will learn the benefits of various exercises that include yoga, dance, pilates, strength training, and other low-impact activities that build muscle strength, flexibility, and improve students' general mental wellbeing and self-confidence.



## **SCIENCE**

### **COURSE DESCRIPTIONS**

Science 9	2 terms
<b>Honors Science 9</b>	2 terms
Biology	2 terms
<b>Honors Biology</b>	2 terms
Environmental Engineering	2 terms
Environmental Science	2 terms
Chemistry	2 terms
<b>Honors Chemistry</b>	2 terms
Physics	2 terms
<b>Advanced Placement Chemistry I &amp; II</b>	4 terms
<b>Anatomy &amp; Physiology**</b>	2 terms
Medical Terminology**	2 terms
Earth Science	2 terms
Small Animal Science	1 term
Large Animal Science	1 term

***BOLD*** Denotes Honor Class

\*\*Denotes Northwood Tech Transcribed Credit. Students who successfully complete these courses may receive a transcript directly from Northwood Tech noting their completion of the course, grade, and credits earned. These credits may be used toward a program of study at any Northwood Tech campus and as electives at many UW schools.

#### **148 Science 9-** 1 credit (required for all 9<sup>th</sup> grade students)

##### **Two terms- Grade Level 9-10**

This course will serve as the foundation for all science courses at the high school level by introducing students to a rigorous, investigative way of thinking about the physical world. The course will give students a solid understanding of the observed interactions between matter and energy and the classical theories used to explain those behaviors. Students will be making investigations and analyzing the results to learn how to model phenomena that occur in the natural world while developing and learning about key theories in physics.

#### **149 Honors Science 9-** 1 credit

##### **Two terms- Grade Level 9-10**

This course will serve as the foundation for all science courses at the high school level by introducing students to a rigorous, investigative way of thinking about the physical world. The course will give students a solid understanding of the observed interactions between matter and energy and the classical theories used to explain those behaviors. Students will be making investigations and analyzing the results to learn how to model phenomena that occur in the natural world while developing and learning about key theories in physics. The main differences between Science 9 and Honors Science 9 are that the Honors class will (1) move at a faster pace and (2) will develop more sophisticated models and (3) will explore a larger number of key physics theories. Students who are anticipating taking the second physics course in 11<sup>th</sup> or 12<sup>th</sup> grade are encouraged to take Honors Science 9.

**Prerequisite:** Recommendation of previous science teacher.

#### **150 Biology -** 1 credit (required course for all students and transfers)

##### **Two terms-Grade Level 10-12**

Biology is the study of all living things and how they are related. This course is designed to provide students with a deeper understanding of the following content areas: the living organism, classification of organisms, the chemistry of living things, cell structure and function, heredity and application of genetics, and plant and animal phyla, including their anatomy/physiology and interactions within the environment. Students will be expected to participate in cooperative learning projects, complete individualized learning projects, and also learn in a traditional lecture/discussion format. In addition, students will participate in a variety of laboratory situations, such as exploring the evidence of a chemical reaction to the dissection of preserved animal specimens. Students are expected to have good study habits, meet deadlines, and have good problem solving skills.

**Prerequisite:** Successful completion of Science 9

**154 Honors Biology** – 1 credit**Two terms-Grade Level 10-12**

This course is designed for the student who is prepared to learn biology content at a more rigorous and challenging pace than those who take the Biology course. A student enrolled in this course is expected to complete daily homework assignments, be an active participant in daily classroom discussions, contribute ideas and knowledge in cooperative groups, be willing to examine and challenge prior understandings of content knowledge, and come prepared to learn something new every day. Topics to be covered in this course include an in-depth examination of the history and methods of molecular and cellular biology. This will include the study of the scientific method, chemical basis of life, molecules of life, a tour of the cell, cellular basis of inheritance, patterns of inheritance, DNA and the language of life, and human genetics and applications. Other topics that may be covered are classification of organisms, plant and animal phyla, including the anatomy and physiology of these organisms. Please contact the current course instructor for more detail on course expectations and to answer any questions that you may have regarding the rigor of the course.

**Prerequisite:** Successful completion of Science 9 and/or concurrent enrollment in Algebra 2 is suggested.

**152 Environmental Science** - 1 credit**Two terms-Grade Level 10-12**

In this course students will explore a number of topics that will help to develop an understanding of the complex environmental problems facing society today. Students will study the structure of ecosystems, with emphasis on our local ecosystems as a model, and biomes of the world. In all units, there is an emphasis on the impacts that humans have on ecosystems, with discussion of choices available to informed citizens to solve environmental problems. Additional topics to be studied include: endangered species, energy resources, human population, climate change, animals and plants of Wisconsin.

**Prerequisite:** Successful completion of Science 9 and Biology.

**156 Chemistry** – 1 credit**Two terms-Grade Level 10-12**

This course addresses the key concepts found in traditional chemistry courses but with an approach and sequence that is different from a traditional course. In this course, your teacher will be using an instructional philosophy known as Modeling Instruction, which places a strong emphasis on four scientific practices identified as essential for understanding the nature of science: (1) developing and using models, (2) analyzing and interpreting data, (3) constructing explanations, and (4) engaging in argument from evidence. Because of this approach to chemistry, we will use a more coherent model development strategy than in a traditional course, which usually starts with the most complex models early in the course and then later covers topics like the behavior of gases that could be explained using simpler models. The main difference between General Chemistry and Honors Chemistry is the Honors will move at a faster pace and develop a more advanced model of matter by the end of the course.

**Prerequisite:** Successful completion of Science 9. Successful completion of Biology and Algebra 2 or concurrent enrollment is recommended.

**Requirements:** Scientific calculator

**157 Honors Chemistry** – 1 credit**Two terms—Grade Level 10-12**

This course addresses the key concepts found in traditional chemistry courses but with an approach and sequence that is different from a traditional course. In this course, your teacher will be using an instructional philosophy known as Modeling Instruction, which places a strong emphasis on four scientific practices identified as essential for understanding the nature of science: (1) developing and using models, (2) analyzing and interpreting data, (3) constructing explanations, and (4) engaging in argument from evidence. Because of this approach to chemistry, we will use a more coherent model development strategy than in a traditional course, which usually starts with the most complex models early in the course and then later covers topics like the behavior of gases that could be explained using simpler models. The main difference between General Chemistry and Honors Chemistry is the Honors will move at a faster pace and develop a more advanced model of matter by the end of the course.

**Requirement:** Scientific calculator

**Prerequisites:** Science 9 (Honors Biology, Algebra 2, Geometry or concurrent enrollment recommended), recommendation of previous science teacher.

**162 Physics** - 1 credit**Two terms - Grade Level 11-12**

Physics is a physical science that deals with forces, motion, energy and their interactions. Physics is a critical course for anyone who is planning to enter a career that involves science, such as engineering/technology, medicine/health sciences and all the pure sciences. However, the problem-solving and critical-thinking skills acquired in physics are beneficial to anyone, regardless of the career path they choose. The following topics are explored by means of laboratory activities, discussions and problem-solving exercises: projectile motion, momentum, energy analysis, simple harmonic motion, waves, sound, light, and electrical circuits.

**Requirements:** Scientific calculator

**Prerequisites:** Successful completion of Science 9, Biology and Geometry.

**160-161 Advanced Placement Chemistry I & II** - 2 credits**Four terms – Grade Level 11 & 12**

Advanced Placement Chemistry is a course designed for those students who are planning to attend college. Most major and minor fields of study at the college level require some chemistry. This course can either replace some of those requirements or make them easier to attain at the college level. This course will cover the topics of quantitative experimental chemistry, current models of atomic structure and bonding, equilibrium kinetics, acid/base chemistry, redox reactions, nuclear chemistry and organic chemistry. At the end of the 4 terms, students will have the option of writing the Advanced Placement Examination for college credit. A student may earn from 3 to 8 college credits by passing the exam with a score of 3 or better (out of 5). The Advanced Placement Examination is accepted for credit at many colleges and universities. There is an administrative cost associated with the examination, which must be borne by the student. If a student wishes only to receive high school credit, he or she may elect not to take the examination.

**Requirement:** Scientific calculator

**Prerequisite:** Successful completion of Algebra II, Geometry, and Biology. Concurrent enrollment in Calculus and Physics is suggested.

**164 Anatomy & Physiology** - 1 credit/2 credits Northwood Tech**Two terms-Grade Level 11-12**

This is a college-preparatory science class for students interested in preparing themselves for future college science classes or careers in the medical industry. Students pursue a rigorous course of study of the structures and functions of many of the systems of the human body by comparing the anatomy of a human to that of a cat. Students will be required to complete research papers on varied medical topics.

**Requirements:** \$40.00 lab fee

**Prerequisites:** Successful completion of Science 9, Biology and Chemistry. Medical Terminology recommended.

**151 Earth Science**- 1 credit**Two terms - Grade Levels 10-12**

Earth Science is a broad subject that includes all of the fields of study related to our world. An Earth Scientist works to understand the Earth's structure, systems, history, and its place in the solar system. Some of the topics that will be explored in this course include: mapping the Earth's surface, rocks and minerals, plate tectonics, earthquakes, volcanoes, surface and underground freshwater systems, ocean currents and climate, the atmosphere, weather factors, weather patterns, climate change, gravity and motion, phases, eclipses, tides, the sun, the moon, and more.

**Prerequisite:** Successful completion of Science 9 and Biology

**167 Small Animal Science** - ½ credit**One term - Grade level 10-12**

This course will emphasize the care and management of small animals and veterinary procedures involved with common domestic species. Students will learn about pet and companion animal care, basic breeds, animal ethics, small animal body systems, and nutrition. In this class, students will gain knowledge through class instruction and labs, as well as hands-on experience with live animals. Ultimately this course should give pet owners a working knowledge of how to care for their pet beyond the basics.

**Prerequisite:** Successful completion of Science 9 and Biology

**159 Large Animal Science** - ½ credit

**One term - Grade level 10-12**

This course will cover the care and management of common large animal species including cattle, horses, swine, sheep, and others. Students will learn popular breeds and be expected to identify them. Students will also learn about animal ethics, basic veterinary practices, diseases, nutrition, anatomy and physiology of the different species. The course will be carried out through classroom instruction, and lab activities, with the possibility of guest speakers. Hands-on experience with live animals is also possible.

**Prerequisite:** Successful completion of Science 9 and Biology

**165 Environmental Engineering-** 1 credit

**Two Terms- Grade Level 10-12**

Humans are part of the world's ecosystems. How people operate day-to-day influences the wellbeing of many aspects of those systems, including the humans themselves. Environmental engineers find more efficient ways for people to progress in the world with a mindset of ecological balance in mind, allowing for continued future use of resources and health of ecosystems (sustainability). This course will present students with challenges to solve. Each unit will have a specific problem that will need to be solved by a group of students through the application of science and math skills. Students will test and develop their designs in an effort to solve the problem most effectively and efficiently. Possible problems involve energy use and efficiency, water and air quality, and landscape management to include resource consumption and waste management.

**Prerequisite:** Successful completion of Science 9. This course can be concurrently enrolled with Biology.

**171 Medical Terminology-** 1 credit/ 3 credits Northwood Tech

**Two Terms- Grade Levels 10-12**

This science course focuses on the component parts of medical terms: prefixes, suffixes, and word roots. You will practice the formation, analysis and reconstruction of terms. We will emphasize spelling, definition and pronunciation. You will be introduced to operative, diagnostic, therapeutic, and symptomatic terminology of all body systems, as well as systemic and surgical terminology.

**Prerequisite:** Successful completion of Science 9 and Biology

## **SOCIAL STUDIES** **COURSE DESCRIPTIONS**

### **Required Courses:**

Civics	1 term
World History 9	1 term
U.S. History until World War I	2 terms
U.S. History World War I+ or	2 terms
<b>AP US History I &amp; II</b>	2 terms each
Intro to Geography and Culture	1 term
Psychology	1 term
Sociology and the World	1 term
U.S. and World Affairs	1 term
History of the Lake Superior Chippewa	1 term
<b>Modern U.S. History: The Development of 20<sup>th</sup> Century America</b>	1 term
<b>Advanced Psychology</b>	1 term
<b>Honors Civics</b>	1 term

***BOLD** Denotes Honor Class*

**168 General Civics** – ½ credit (required course for 9<sup>th</sup> grade students)

One term – Grade Levels 9

This course will give students the opportunity to learn about American state, local and national governments. Emphasis will be on participatory citizenship, citizen rights and duties, constitutional law, the federal system and Wisconsin state, local government, and tribal government.

**169 Honor Civics** – ½ credit (will satisfy required course for 9<sup>th</sup> grade students)

One term – Grade Levels 9

This course will give students the opportunity to learn about American state, local and national governments. Emphasis will be on participatory citizenship, citizen rights and duties, constitutional law, the federal system and Wisconsin state, local government, and tribal government. The main difference between General Civics and Honors Civics is the honors class will move at a faster pace and take a more in depth look at each until. Students in Honors Civics will also be expected to write at an advanced level, which will demonstrate the ability to move into advanced classes in the future. Students should be highly motivated and are expected to be active participants on a regular basis.

**Prerequisite:** Students considering this course should have a recommendation from the 8th grade teaching team.

**170 World History 9** – ½ credit (required course for 9<sup>th</sup> grade students)

One term – Grade Level 9

World History 9 is a modern world history course. Students will start with a study of twentieth and twenty-first century world history. In part, this is a continuation of the World History course started in the 8th grade. The causes, events and consequences of World Wars I and II will be stressed. In the final part of the class, the emphasis will be on the world since World War II.

**172 U.S. History until World War I** - 1 credit

Two terms – Grade Level 10-12

This course attempts to acquaint students with the general historical development of the United States from the time of the earliest "Americans" (Native Americans), to approximately World War I. Highlights covered will be: early exploration, settlement and colonization, the movement toward independence, a study of the U.S. Constitution and its development, the age of Jacksonian Democracy, Westward expansion, the Civil War, Reconstruction, and the Age of Industrialization of the late 1800's and the dawn of the 20th Century.

**174 U.S. History World War I+ - 1 credit**

**Two terms – Grade Level 11-12**

The course is a continuation of the US History until World War I course. It begins with the history of the early 1900's when the U.S. starts to emerge as a world power and goes up to the present day. Along the way the course examines and interprets the economic, political, diplomatic, military and social developments, which have shaped the U.S. in the first part of the 20th century. Topics covered are the Progressive Era, WW I, The Roaring Twenties, up to the Great Depression of 1929, New Deal, WWII, Cold War, Vietnam Era, and current events. The course provides a fresh perspective on our past and a comprehensive prologue to our future. US History World War I+ takes a topical and chronological approach to the history of this country.

**Prerequisite:** Civics, World History, U.S. History until World War I

**185 Introduction to Geography and Culture ½ credit**

**One term – Grade Level 9-12**

This course will explore the physical, cultural, and political aspects of the world we live in today. Relationships between cultures in relation to physical settings will be compared and analyzed. Appropriate current events dealing with the areas being studied will also be discussed.

**180 Psychology – ½ credit**

**One term – Grade Level 10-12**

Psychology is the scientific study of human and animal behavior that focuses on individual actions. This course includes the study of some of the most famous psychologists and their methods. Other topics include the brain and behavior, the subconscious and dreams, conditioning and learning, personality, and abnormal psychology. Current issues in psychology will also be studied.

**181 History of the Lake Superior Chippewa- ½ credit**

**One term- Grade Level 10-12**

This course is designed to provide an understanding of the historical, cultural, political, social, and economic impact of American Indian Nations in the state of Wisconsin and the United States. This course will not only explore the history and experiences of the Lake Superior Chippewa, but also will examine and discuss contemporary issues connected to all American Indian peoples of Wisconsin with respect to their histories and cultures. This will use ethno-history to interpret the historical records.

**182 Sociology and the World – ½ credit**

**One term – Grade Level 10-12**

Sociology is the scientific study of social structure, (human social behavior), that focuses on group behaviors. Students will study a number of issues such as culture, stratification and social class structure, societies, religion, deviance, and current issues.

**183 Advanced Placement U. S. History I - 1 credit**

**Two terms – Grade Level 10-12**

Advanced Placement U. S. History is a survey course of American History from the age of exploration and discovery to Reconstruction that prepares students for the AP Exam given each May. Advanced Placement U.S. History is a two-part course. (Advanced Placement U.S. History I and II) It is a student's first opportunity to experience Advanced Placement studies and is designed to teach students how to be successful in Advanced Placement course work. Students who successfully complete the AP Exam may be eligible for college credit. (This may be from 3 to 8 college credits.) Students should check with the university or college they wish to attend for the exact credit awarded. The areas of concentration include historical, political, economic, and social history. Students must have strong reading and writing skills, good analytical skills, along with good time management skills. Emphasis is placed on critical and evaluative thinking skills, essay writing, analyzing and interpreting original documents, and knowledge of history. All students are expected to take the AP Test.

*This course meets the requirement for U.S. History to WW I.*

**Prerequisite:** Honors English 9 with B or better. Honor Civics, World History

**184 Advanced Placement U. S. History II - 1 credit**

**Two terms – Grade Level 10-12 – Advanced Placement Credit**

Advanced Placement U.S. History II is a continuation of Advanced Placement United States History I that prepares students for the AP Exam given each May. Students who successfully complete the AP Exam may be eligible for college credit. (This may be from 3 to 8 college credits.) Students must check with the university or college they wish to attend for the exact credit awarded. The areas of concentration include historical, political, economic, and social history. Students must have strong reading and writing skills, good analytical skills, along with good time management skills. Emphasis is placed on critical and evaluative thinking skills, essay writing, analyzing and interpreting original documents, and knowledge of history. **Students are expected to take the AP Exam.**

*This course meets the requirement for U.S. History WW I+.*

**187 Modern U.S. History and World Affairs – ½ credit**

**One term – Grade Level 10-12**

Modern U.S. History and World Affairs is an honors class designed to look at the United States and its relationship with the rest of the world by discussing and analyzing the events that lead to the events of the day. The goal of the course is to create student interest in a broad range of current issues while encouraging students to apply their knowledge and understanding of U.S. History to an analysis of world problems. Students will study current events through the use of news magazines, television news, and the internet and U.S. History through current articles and text materials.

**188 The Development of 20<sup>th</sup> Century America- ½ credit**

**One term- Grade Level 11-12**

The Development of 20<sup>th</sup> Century America explores key themes in the development of America. While exploring the influences that define American culture...good and bad...this course examines the development and challenges of American democracy over time, particularly with regards to individual rights and civil rights for an ever-diversifying American population. The course promotes the development of students' skills (both written and non-written) in historical research and analysis, especially focusing on historiographical engagement and the analysis of primary sources.

**189 Advanced Psychology- ½ credit**

**One term- Grade Level 11-12**

Advanced Psychology is an extension of the prerequisite course 180 Psychology. Advanced Psychology is an honors course and will provide students an opportunity to build and broaden their Psychological background. Students will increase their understanding through current, relevant, and specific psychological topics/units across the branches of Psychology. Advanced Psychology will review prerequisite knowledge and expand upon Psychological topics, new and old, including: Abnormal Psychology, Child Psychology, Sports Psychology, Cross Cultural Psychology, Positive Psychology, Minority Psychology, the Psychology of Gender, Forensic Psychology, and even Paranormal Psychology. Oh...and even some Freud! Additional units may be added depending upon student interest and class discussion.

**Prerequisite:** Psychology

## TECHNOLOGY & ENGINEERING EDUCATION

### COURSE DESCRIPTIONS

Architecture & Design	2 terms
Auto Service Technology I & II	4 terms
<b>Construction Technology I &amp; II</b>	4 terms
Video Production	1 term
Digital Photography	1 term
Graphics & Print Technology	1 term
Machine Shop	1 term
Advanced Machine Tool Technology	2 terms
Mechanical Drafting & Design	2 terms
Metals Processes	1 term
Small Engine Technology	1 term
Vocational Welding	2 terms
Welding	1 term
Wood Processes	1 term
Wood Technology	2 terms
Applied Engineering	2 terms
Home and Auto Maintenance	1 term
Print Reading for Building Construction	1 term
Introduction to Engineering (IE)	1 term
Technology Skills	1 term
Hurricane Enterprises	2 terms

***BOLD*** Denotes Honor Class

**282 Architecture & Design** – 1 credit (Credits may be used towards a program of study at Northwood Tech. Please see the instructor for more information).

**Two terms - Grade Level 10-12**

Architecture has existed since the beginning of man. This course will briefly look at the history of architecture, the present and the future. Residential planning is then emphasized and students put ideas on paper using freehand sketches, drafting equipment and computers. Students will draw floor plans, elevations and structural details. The course is valuable for the future Architect, Engineer, Carpenter, Realtor, Architectural Drafter or Homeowner.

Computer Software: AutoCAD® Architecture 2010, Revit®

**284-Auto Service Technology I**

**285- Auto Service Technology II-** 2 credits

**Four terms - Grade Level 12**

In this course, the students learn to identify and service the various automotive parts and systems. They also learn how the various automotive systems work together. Students learn the basic service procedure needed to keep a vehicle and it's engine operating properly. Throughout the course, students are taught to use tools and equipment safely. High Tech Diagnostic Test Equipment is used to understand today's Computer Control Systems. A late model Oldsmobile, Chevy Cavalier, and Chevy Suburban are available for lab work. Eighty-five percent of the course is hands-on.

Highly motivated students may take this class and work exclusively on a High Mileage Vehicle project. A small team will work on this project which will require research and organization skills as well as the ability to work as a team member. Students with strong math, physics, English, and mechanical skills are all required.

**Prerequisite:** Small Engine Technology and instructor approval required



**248-Construction Technology I**

**249 Construction Technology II**- 2 credits (Credits may be used towards a program of study at Northwood Tech. Please see the instructor for more information).

**Four terms - Grade Level 11 & 12**

Want to learn skills that could help you make a living? Construction Technology is a course designed to allow a student an opportunity to explore and develop entry level job skills in the various careers associated with the building trades industry. Through field trips, lab activities, technical reports, etc., students will follow the process of residential construction from foundation to finishing. First term activities will be associated with the following careers; real estate, land/title, surveyor, excavation, architecture and design. Second term of the Construction Technology class is devoted to the development of skills in the building trades. Students will be involved in various lab and community service projects. *When taken with Print Reading for Building Construction and Technical Math, can apply towards Northwood Tech diploma- Construction Essentials.*

**Prerequisite:** Wood Processes suggested

**247 Video Production-** 1/2 credit**One term- Grade Level 10-12**

The Video Production and Motion Graphics course is for students who are interested in learning how to create various types of video projects. Students will use professional video editing software, audio & video production, 3D animation and digital graphics. Students will gain knowledge of a variety of software to create animated text and graphics. As students gain proficiency in the above software they will also be given the opportunity to create advanced video projects. Media arts programs will also be researched to look at post-high school opportunities and careers.

**253 Digital Photography-** 1/2 credit**One term- Grade Level 9-12**

The emphasis of this course is on the student's understanding of the basic concepts of digital photography and digital imagery. The hands-on curriculum is designed to provide students with the basics of taking photographs with a digital camera, an introduction to image correction software, and opportunities to create digital prints and creative projects using digital media.

**254 Graphics & Print Technology-** ½ credit**One term- Grade Level 10-12**

This course introduces students to a wide variety of digital communication methods. Students create digital images by using computer software such as Adobe Photoshop, Illustrator, and other computer programs. This class aligns with software used in the IDEA lab's 3D printers, laser engravers and computer aided cutting tools. Some of today's more dynamic fields- advertising, publishing, interactive- are based on this fundamental concept of graphic design.

**258 Machine Shop** – ½ credit (Credits may be used towards a program of study at Northwood Tech. Please see the instructor for more information).

**One term - Grade Level 10\*-12**

This Machine Shop course is an introductory course designed to open the field of machine tools to the student. Major emphasis is placed on the identification and use of precision measuring and layout tools, followed by a detailed study of the engine lathe. A required project involves the student in basic lathe cutting operations. In the later stages of the course students are introduced to more advanced machinery such as the vertical and horizontal mills.

**Prerequisite:** Metals & Communications helpful and instructor's approval for 10<sup>th</sup> grade students

**259 Advanced Machine Tool Technology** - 1/2 credit (Credits may be used towards a program of study at Northwood Tech. Please see the instructor for more information).

**One term - Grade Level 11-12**

This is an advanced machine shop course designed to prepare the student for employment in the machining field at an entry-level position. This offering is an extension of the Machine Shop course and studies a variety of machines (mills, surface grinders, etc) , their accessories and cutting applications. A number of hands-on machining exercises apply academic knowledge to student operation. Further studies include abrasives and grinding, gears and gear

cutting, indexing, precision layout and setup, EDM operations and CNC (computer numerical control). Field trips, too!

***Note:** Annually, nationwide there is a shortage of skilled people in the machining industry*

**Prerequisite:** Machine Shop

**260 Mechanical Drafting & Design** – 1 credit, (Credits may be used towards a program of study at Northwood Tech. Please see the instructor for more information).

**Two terms - Grade Level 9-12**

Technology has revolutionized the field of mechanical drafting and design. Thanks to modern computer-aided design (CAD) programs, our only limit to what we can create is our imagination. This class will create both two dimensional, and three dimensional drawings using these CAD programs. We cover the proper techniques needed to create lines and shapes, and how they should be presented using industry standards. Assignments in this class will progress from creating simple two dimensional shapes, to creating an accurate three dimensional object based on an actual prototype. **Note:** This is a great course for future engineers and designers of all genders.

Computer Software: AutoCAD® Mechanical 2010, Inventor®

**262 Metal Processes** – ½ credit, (Credits may be used towards a program of study at Northwood Tech. Please see the instructor for more information).

**One term - Grade Level 9-12**

This class is intended to give all students basic knowledge and skills in the use of hand tools, some machines, safety, and methods of making projects out of metal. This course is a prerequisite for welding, machine shop and power mechanics. The main content areas include sheet metal layout and fabrication, drills and drilling, taps and dies, drill sharpening, soldering, riveting, forging, foundry and heat treating.

**Prerequisite:** Technology Skills

**268 Small Engine Technology** – ½ credit

**One term - Grade Level 10-12**

The world is full of small engines and this course provides students with basic information on small engine construction, how the systems operate, lubrication requirements, preventive maintenance practices, servicing techniques and rebuilding procedures. This course deals with detailed technical information on one and two-cylinder, two and four cycle gasoline engines. Math and science are used in the course. Students bring in their own engine to repair. A lot of hands-on lab work is done with an emphasis on understanding the theory of the engines systems. The principles of diesel, steam, turbines and rotary engines along with new developments are also covered. Since 1988 this class has produced 5 state champions in VICA skills competition.

**Prerequisite:** Metal Processes Recommended but not required.

**272 Vocational Welding** - 1 credit

**Two terms - Grade Level 10-12**

This course is an in-depth study of the welding industry, welding processes, techniques and equipment. You will become a skilled welder with M.I.G., T.I.G. and Stick arc welding. Plan, fabricate and complete a major welded project. Plans and a complete report on the project are required. You also have a chance to compete in a national arc-welding contest and win cash--Over 65 students in the past 35 years have won such awards.

**Prerequisite:** Welding I

**274 Welding** – ½ credit

**One term - Grade Level 10\*-12**

Welding I is an introduction to the welding field. Major emphasis is placed on two traditional welding forms, oxy-acetylene (gas) welding and electric shielded arc (stick) welding. This course has no required project, however, it is a lead into the vocational welding course where more advanced welding techniques are explored and a welding project is required. This class is an excellent choice for anyone interested in welding or related fields.

**Prerequisite:** Metal Processes or Instructor Approval    \*Instructor's approval

**276 Wood Processes** – ½ credit, (Credits may be used towards a program of study at Northwood Tech. Please see the instructor for more information).

**One term - Grade Level 9-12**

Wood Processes is a course designed to introduce the students to the basic concepts and technologies used by industry in the production of "wood based" products. The focal point of this class is to learn the safe use of woodworking equipment and become familiar with the basics of the trade through the planning, designing and construction of a project. Students are further encouraged to explore the woodworking and construction industries through individual or group instruction.

**Prerequisite:** Technology Skills

**278 Wood Technology** - 1 credit, (Credits may be used towards a program of study at Northwood Tech. Please see the instructor for more information).

**Two terms - Grade Level 10-12**

Wood Technology is a course designed to allow the students an opportunity to develop entry level job skills in the woodworking industry. Course content is based upon the design and construction of one or more "wood based" products. Emphasis is placed on using methods of production that are commonly found in industry today. Course goals and objectives are designed to test the student's problem solving and creative abilities.

**Prerequisite:** Wood Processes

**264 Applied Engineering** – 1 credit

**Two terms – Grade Level 10-12**

Applied Engineering is a course that will let students continue to practice the basic concepts of engineering and will allow them to explore a variety of engineering disciplines. This course will provide students with the necessary foundation for success in future STEM courses and careers. Students will learn how to work with a variety of measuring tools, to compile and document data and processes, to work with and collaborate within project teams, to investigate with purpose, to enhance research and products through inquiry, testing, and observation, to draw scaled Orthographic Projections, to properly dimension Multi-view Drawings, properly sketch Isometric Views of various objects, to develop engineering communication skills, which include computer graphics, modeling, and presentations. Students will also learn how to utilize the engineering design cycle, from beginning to end (The Design Process). Upon completing this course, students will understand the various fields of engineering and will be able to make informed career decisions.

**Prerequisite:** Introduction to Engineering (IE)

**286 Introduction to Engineering** – 1/2 credit

**One term- Grade Level 9-12**

Introduction to Engineering (IE) is a beginner level course that is appropriate for all students who are interested in design, engineering and STEM classes. The main focus of IE is to expose students to the design process, research and analysis, teamwork, communication methods, human and global impacts, engineering standards, and documentation. IE gives students the opportunity to develop skills and understanding of course concepts through activity, projects, and problem based learning (APPB Learning). This also allows students to solve problems and develop strategies to enable and direct their own learning, which is an important goal of education. Lastly, students will get an introduction into mechanical design, documentation, and product simulation through various 3D software modeling programs. This course is a prerequisite for Applied Engineering (AE)

**265 Home and Auto Maintenance**- ½ credit

**One term- Grade Level 10-12**

Home and Automotive Maintenance is a beginning level course for students that are interested in the basics of light repair and maintenance of their home/apartment and car. Students will learn how to perform basic car maintenance including; oil changes, battery maintenance, filter replacements, tire changes, bulb replacement to list a few. On the home side, basics in plumbing and electrical repair will be included with other aspects of basic home repair.

**300 Print Reading for Building Construction-** ½ credit**One term- Grade 10-12**

This course provides instruction in reading and interpreting shop drawings, residential drawings, and commercial building plans. Emphasis is placed on the building terminology and learning conventional techniques of communicating building methods from the designer to the builder. Students learn to visualize the structure and to interpret elevations, plan views, details, and sections from drawings. They also learn to read and interpret building specifications. *When taken with Construction and Technical Math, can apply towards Northwood Tech diploma-Construction Essentials.*

**250 Technology Skills-** ½ credit**One term- Grade 9-12**

Students will learn basic knowledge of the manufacturing and construction industry, career options, and essential skills for these areas. Emphasis is placed on safety, measuring practices, basic drafting and construction skills, and industry terminology. Students will have opportunities to manufacture basic projects that build skills necessary for more advanced shop classes. Course content will build students' knowledge necessary for participation in the co-curricular student organization, SkillsUSA and Construction Essentials Academy.

**246 Hurricane Enterprises-** 1 credit**One term- Grade 10-12**

Hurricane Enterprises will be a semester-long class where students will have the opportunity to design, manufacture, and market a product of their choosing. This class will be partnered with the Business Department (Entrepreneurship Class) and Technology Education Department (Hurricane Enterprises). Students will learn the principles necessary to begin and operate a small business. In addition, students will understand the capital required, the return on investment desired, and the potential for profit.

**Prerequisite:** Technology Skills

**TECHNICAL DIPLOMA**

Students have the opportunity to earn a technical diploma through Wisconsin Indianhead Technical College by taking classes offered at Hayward High School. Students should plan their schedules to accommodate the course sequence for the program they are interested in.

**Construction Essentials Academy**

Technical Diploma

9 Credits (Northwood Tech)

Career Cluster: Construction

<https://www.Northwood Tech.edu/academic-programs/degree-programs-and-certificates/construction-essentials>

**Required HHS Courses:**

116 Technical Math

248 Construction Tech 1

249 Construction Tech 2

300 Print Reading for Building and Construction

**Program Overview**

You will find entry-level job success with an opportunity to build your knowledge, skills and professionalism to further your career. Students will learn the basic fundamentals of construction framing and drafting along with print reading and math concepts related to construction. Safety principles and the use of hand and power tools will be covered.