

# HURLEY SCHOOL DISTRICT

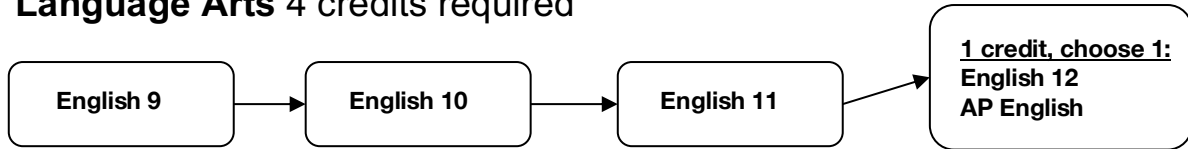


**2022 - 2023**

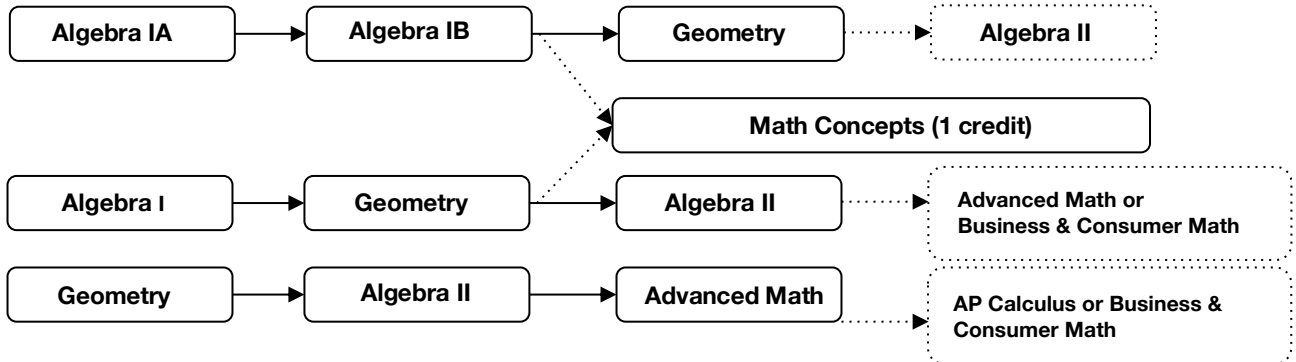
## **High School Course Description Handbook**

# Required High School Credits - 24

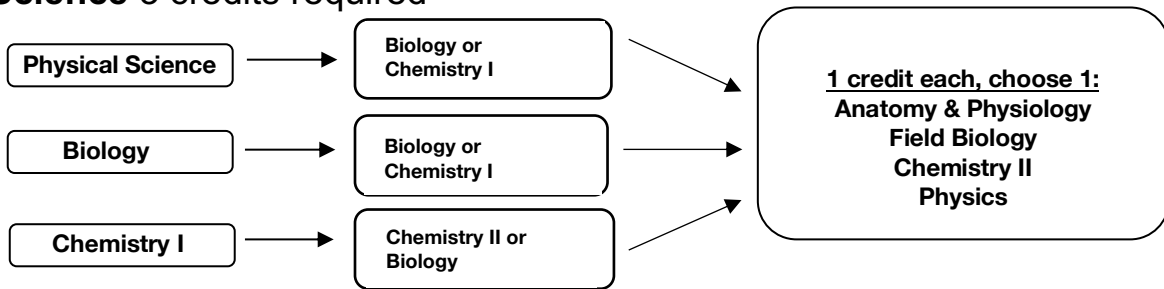
## Language Arts 4 credits required



## Mathematics 3 credits required



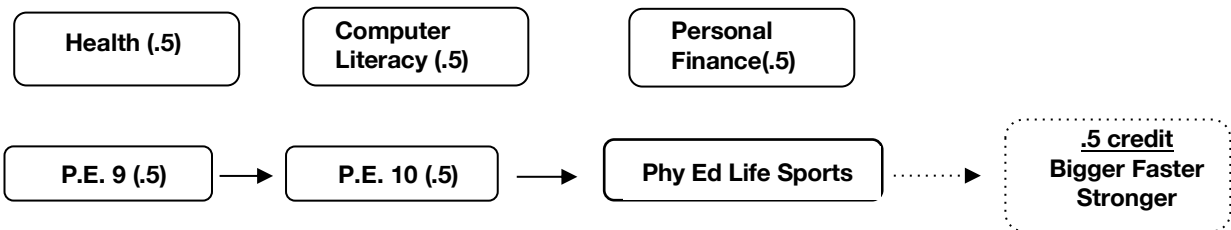
## Science 3 credits required



## Social Studies 3 credits required



## Additional Requirements 3 credits



## Elective Requirements a minimum of 8 credits

(from our course offerings, NWECS offerings, Start College Now or ECCP)

\* CIVICS TEST as of 16-17

## ELECTIVE HIGH SCHOOL CLASSES – 1 CREDIT EACH

### **MUSIC**

Senior High Band  
High School Choir

### **ARTS**

Foundations in Visual Arts  
Studio In Photography & Media/Graphic Design  
Ceramics & Sculpture  
Advanced Studio In Photography & Media Arts  
Portfolio Studio Art

### **INDUSTRIAL EDUCATION – WOODS**

Woods 1  
Woods 2  
Northwoods Manufacturing

### **COMPUTER TECHNOLOGY**

Mac Media Independent Study  
Technology Team

### **SPANISH**

Spanish 1

### **INDUSTRIAL EDUCATION - METALS**

Metals 1  
Metals 2  
Welding 1  
Welding 2  
Power Mechanics  
Northwoods Manufacturing

### **Other Options for Credits:**

Another Core Class Option  
*(Physical Science, Biology II, Chemistry I, Chemistry II, Physics, Algebra II, Advanced Math, AP Calculus, American Society, AP US History)*  
Distance Learning Classes (ITV Lab)  
Early College Credit Program  
Teacher Assistant  
School To Work – Work Experience  
Psychology  
Advanced S.T.E.M.  
Peer Mentoring

## **Scheduling**

All students will be scheduled into courses needed to meet graduation requirements, academic support courses, if appropriate, and elective courses. When selecting courses for the next year, core courses, the district required courses, and academic support classes, if appropriate, are scheduled into the student schedule first. As the students approach their graduation date, courses required for graduation will have the highest priority for scheduling. All students will have an opportunity to request elective courses into which they would like to be scheduled. Every effort is made to meet these requests. The final determination of which courses will be scheduled is based upon all students' interests. The district will set the guidelines for making this determination based upon student interest and staffing. This may mean that students may not get their first choice elective class. All students are expected to have a full schedule (6.5-7 credits) and are expected to complete a full-year course in sequence within the school year. Once students have been informed of their schedules, there will be an opportunity to request a schedule change before the 2022-2023 school year.

Students are also allowed to make schedule changes through the first week of school. Under rare and extenuating circumstances, a schedule may be changed within the first week of the second semester. (Earning a lower grade than expected or the effect of a grade on the student's GPA is not considered an extenuating circumstance.) Students will be assigned a grade each semester for any course in which they are scheduled. Final grades are assigned at the end of a semester and will appear on the transcript.

## **Advance Placement (AP)**

Advance Placement courses are college-level courses offered at the high school. These courses are approved by the College Board. Students who participate in the AP program gain college-level skills and have the opportunity to earn college credit based upon their score on the student paid AP Exam given in the spring. (The amount of credit and the score needed vary by college.) AP courses are taught by trained high school teachers who follow course guidelines developed and published by the College Board. AP courses are available to all students who have successfully completed the prerequisite for the course. Students taking AP courses should be motivated and open to being challenged. It is an opportunity to prepare for college while still in a high school setting.

## **Online Courses**

Online courses offered through our online provider, Odysseyware, are accepted for credit toward graduation and may be used to meet requirements in the same subject area as the course. Online courses are comparable to traditionally taught classes in rigor and expectations. Students who elect to take an online course should be self-motivated, self-directed, and able to learn effectively in a self-paced environment. Online courses are subject to the same rules as other courses regarding retaking the course, attendance, grading, GPA calculation, and appearing on the transcript.

# HIGH SCHOOL COURSES

## ART

**Course Title:** FOUNDATIONS IN VISUAL ARTS (#3036)

**Grade Level:** 9-12

**Course Credit:** 1 Credit

*Course Description:* This introductory studio course is designed to provide a foundation in the visual arts. Students will learn the elements and principles of design as a basis for composition as well as explore a variety of artists, art processes and materials. Topics may include drawing, painting, printmaking, graphic design, ceramics, 2D & 3D design, color theory, the critical process and keeping a sketchbook journal.

**Course Title:** CERAMICS & SCULPTURE (#3038)

**Grade Level:** 9-12

**Course Credit:** 1 Credit

*Course Description:* In this course students will learn the fundamental methods of forming clay into a three-dimensional art form. The basic techniques for hand building (pinch pot, slab construction and coil construction) will be demonstrated as well as the fundamentals of wheel throwing. The class will focus on craftsmanship, creativity and application of the elements and principles of design.

**Course Title:** STUDIO IN PHOTOGRAPHY & MEDIA ARTS (#3040)

**Grade Level:** 9-12

**Course Credit:** 0.5 Credit (First Semester)

*Course Description:* In this course, students will learn how to use several camera types: 35mm film, basic point and shoot, and digital SLR as well as the basics of Adobe Photoshop. Topics include basic darkroom techniques, composition and design, lighting, photo criticism, visual culture, workflow, photo management, image editing and history of photography.

**Course Title:** GRAPHIC DESIGN I (#3039)

**Grade Level:** 9-12

**Course Credit:** 0.5 Credit (Second Semester)

*Course Description:* In this course, students will utilize the design process to learn the power of image and word in communicating ideas information. A range of design techniques will be explored using various art materials and software programs such as Adobe Illustrator and InDesign. Students will also analyze and critique artworks as well as learn the origins of graphic design history. Topics may include the fields of advertising, typography, logo design, poster design, packaging design and illustration.

**Course Title:** ADVANCED FOUNDATIONS IN VISUAL ARTS (#3037)

**Grade Level:** 10-12

**Course Credit:** 1 Credit

**Prerequisite:** Foundations in Visual Arts

*Course Description:* This upper level course is designed for students who wish to further develop their skills and techniques introduced in the previous Foundations class. Topics will be explored more in depth in this course and again may include drawing, painting, printmaking, graphic design, ceramics, 2D & 3D design, color theory, the critical process and keeping a sketchbook journal.

**Course Title:**            **ADVANCED STUDIO IN PHOTOGRAPHY & MEDIA ARTS (#3041)**  
**Grade Level:**            10-12  
**Course Credit:**         1 Credit  
**Prerequisite:**           Studio in Photography & Media Arts

*Course Description:* This course is designed to meet the needs of students who wish to learn advanced techniques in photography. Students will build upon skills learned in the introductory photography course. Topics may include product photography (lighting techniques), documentary photography (photojournalism), how to build strong compositions, advanced operations of a DSLR (digital single lens reflex) camera, and advanced Photoshop techniques. Students are encouraged to develop their own personal vision and style.

**Course Title:**            **PORTFOLIO STUDIO ART (#3042)**  
**Grade Level:**            11-12  
**Course Credit:**         1 Credit

*Course Description:* This studio course is offered to highly motivated Juniors and Seniors who have taken art classes both Freshman and Sophomore years. Advanced students will focus on portfolio development as they continue to advance their skills in producing high quality works of art. Emphasis is placed on building a mastery in technique, composition/design, research, experimentation and creative problem solving. Students will have the opportunity to focus on a chosen subject or medium and are expected to work at an ‘advanced and independent’ level.

## COMPUTER TECHNOLOGY

**Course Title:**            **COMPUTER LITERACY (#2013)**  
**Grade Level:**            10-12  
**Course Credit:**         0.5 Credit (Semester Course)

*Course Description:* This one-semester course is designed to develop student understanding and skills in computer literacy. Topics of study will include major computer components and “computer” terminology, network & internet components and function; responsible internet usage including safety, social networking/online reputation and digital citizenship; word processing, spreadsheets, desktop publishing & digital media. This is a required class recommended for sophomores, juniors or seniors. Prior keyboarding experience is encouraged.

**Course Title:**            **MAC MEDIA (#2712)**  
**Grade Level:**            9-12  
**Course Credit:**         1 Credit  
**Prerequisite:**           Computers 7

*Course Description:* Mac Media introduces students to digital creation tools on their Macs such as Pages, Keynote, iMovie, and GarageBand, through the creation of digital media

projects. Students will be able to leverage features in each of these apps, as well as some of the tools available online to produce various forms of presentations. Students will be able to apply the best software tool for the style of digital communication they would like to produce, as well as evaluate third-party apps available online that might not be available on the Mac.

**Course Title:** TECHNOLOGY TEAM (#2991)

**Grade Level:** 9-12

**Course Credit:** 1 Credit

*Course Description:* The Student Technology Team is open to students in grades 9-12 and is a year-long course/mentorship. Students will get hands-on experience both with technology-related diagnosis and problem solving, as well as customer service and teamwork. In addition to solving technology-related problems for students and teachers, students will assist the technology director with maintenance of the technology in our school (software updates, maintenance of equipment, creation and maintenance of media and instructional websites, social media and other content). Students will learn how to use and maintain the software and systems that we use in our district and apply them to the needs of students and staff. Students will also be required to complete at least one project related to technology in our school or community, as approved by the technology director.

## ENGLISH

**Course Title:** ENGLISH 9 (#2025)

**Course Credit:** 1 Credit

*Course Description:* This course will focus on short stories, the elements of the novel, and drama. Speeches will be given in conjunction with literary projects. A research paper and a novel will be completed. Among major literary works that will be read are *The Odyssey*, *Romeo and Juliet*, *Night*, and *Animal Farm*. Students will complete an independent novel and participate in small group novel reading.

**Course Title:** ENGLISH 10 (#2026)

**Course Credit:** 1 Credit

*Course Description:* This course will experience a multitude of literature, including short stories, drama, poetry, novels, nonfiction, and informational texts. Students will continue to deepen their understanding of literature, critical thinking skills, and will spend a significant amount of time making correlations between literature and the real world. Additionally, this course will focus on writing skills, including writing formal and informal essays. The final objective of the course is for the student to better understand the writing process and showcase their evidence through their writing. Major literary works include *Catcher in the Rye*, *Into the Wild*, *Hamlet*, and *Fahrenheit 451*.

**Course Title:** ENGLISH 11 (#2027)

**Course Credit:** 1 Credit

*Course Description:* This course focuses on the study of literature and writing. Selections focus on writers and major themes that constitute the culture of the American people. The final objective of the course is for the student to better understand the writing process and showcase their evidence. In addition to reading textbook selections, students read *The Great*

*Gatsby*, *12 Angry Men*, an independent reading book and small group novel once per semester. Students will also engage in extensive essay writing among other styles: research paper, speeches, poetry, narratives, timed essays, and presentations. Students must complete weekly vocabulary and grammar.

**Course Title:** ENGLISH 12 (#2028)

Course Credit: 1 Credit

*Course Description:* This course focuses on a multitude of literature including short stories, sonnets, poems, plays, novels, and informational texts. Students will develop skills in reading and responding to literature, how to think critically and dissect literature effectively, how to communicate clearly in the appropriate format, and most importantly, students will analyze how culture influences literature. Students will also focus on writing skills, including formal, informal essays and a major research paper. Major literary works include *The Things They Carried*, *Adventures of Huckleberry Finn*, and *Macbeth*.

**Course Title:** ADVANCED PLACEMENT ENGLISH LITERATURE (#2228)

Grade Level: 12

Course Credit: 1 Credit

Prerequisite: B in English 11 or Instructor's Approval

*Course Description:* This course will align with the College Board and the requirements the board sets for AP Literature and Composition. It is a preparation for the College Board English literature exam in May. Depending on the ranking the student achieves, it can equate to three – six college credits in English for which the students only pays the test fee, not tuition. Students will be able to deeply understand literature through close reading and analysis. They will learn how authors use language and rhetoric to create a meaningful reading experience. They will be examining a work's structure, style, and theme as well as elements of figurative language, imagery, symbolism, and tone. They will be reading a number of genres from British and American authors throughout the summer and school year spanning many years and they will be writing in them as well.

## FOREIGN LANGUAGE

**Course Title:** SPANISH I (#2034)

Grade Level: 9-12

Course Credit: 1 Credit

*Course Description:* Students will learn the basics of the Spanish language. Concentration will be on grammatical structure using the present tense, vocabulary, basic conversation and the history and culture of the Spanish-speaking world. All aspects of written and conversational Spanish will be introduced.



## INDUSTRIAL EDUCATION – WOODS

Course enrollment includes the cost for (1) pair of safety glasses which are required for any activity in the lab area. Replacements for lost or damaged safety glasses will be the responsibility of the student.

### **Portfolios**

Students will build a portfolio that will contain a competency checklist, pictures of projects, resume, cover letter and credentials. Competencies are based on industry standards that will allow students to show the skills and abilities attained throughout their high school career and will be useful in future employment.

**Course Title:** WOODS I (#2812)

**Grade Level:** 9-12

**Course Credit:** 1 Credit

### *Course Description:*

**1st Semester:** Students will be introduced to career paths in the wood industry, understand wood industry, understand wood as a material, identify wood species, explore raw material sources used in manufacturing wood products, learn how to safely use machines to create wood products, read and understand working drawings, know basic processes to build wood products, and build basic wood products using simple joinery methods. Students will use their understanding of wood shop tools equipment and processes to transform raw wood into a quality, finished product. This course is also where students will begin assembling their manufacturing portfolios that will travel with them throughout their high school career demonstrating student's competencies in the technical trades.

**2nd Semester:** Students will continue to learn about equipment/facility safety, math and measuring, design concepts, business enterprise, prototyping and manufacturing. Students will have the opportunity to create a business to design, market and manufacture a product. They will learn work ethic, teamwork, business practices and manufacturing skills while operating the programs Northwoods Manufacturing.

Students will be studying the following during each semester:

#### **1st Semester**

- Safety
- Understanding Wood as a Material
- Math/Measuring
- Tools/Equip
- Wood ID
- Processing Wood
- Project Planning
- Individual Wood Project

#### **2nd Semester**

- Developing Plans of Procedure & Cut Lists
- Manufacturing Processes & Mass Production
- Individual Projects

Students will be able to (based on state standards):

- Identify a variety of wood species and wood defects.

- Perform mathematical tasks such as: adding, subtracting, multiplying and dividing fractions; calculate board feet; and basic project estimating.
- Understand the importance of basic wood joints.
- Safely operate and maintain tools and equipment.
- Recognize potential employment in the wood industry.
- Work cooperatively to achieve success in operating a small business.

**Course Title: WOODS II (#2813)**

Grade Level: 10-12

Course Credit: 1 Credit

Prerequisite: Woods I

*Course Description:*

**1st Semester:** Students will have the opportunity to expand their basic knowledge of wood as a material, basic wood-working processes and wood-working skills to an intermediate level of difficulty and quality. Projects include coffee and end tables, bookcases and other small furniture products. Gaining an understanding of furniture styles will allow students to incorporate a variety of design influences on their individual furniture project designs. CNC technology will be explored with the opportunity to utilize our Shopbot CNC router to further improve projects.

**2nd Semester:** Students will explore case construction (face frame, frameless cabinets) allowing them to design and build larger scale cabinets such as kitchen cabinets, entertainment centers, gun cabinets, etc. Intermediate skills will include laminating, bending wood, hardware components and case construction. The addition of advanced competencies for students will provide the opportunity to continue building on their portfolios.

Students will be studying the following during each semester:

**1st Semester**

- Shop safety
- Sketching/Plan of procedure
- Cabinet styles and design
- Math/Measuring/Conversions
- Hardware/Mechanical Fasteners
- Material layout-sheet goods and solid wood
- Joinery/Doors/Drawers

**2nd Semester**

- Cabinet Construction
- Industrial Production Cabinetmaking

Students will be able to (based on state standards):

- Demonstrate safe and efficient use and maintenance of hand and machine tools.
- Explain the importance incorporating ergonomics into cabinet/furniture design.
- Develop and follow a plan of procedure.
- Develop an estimate and procure the materials necessary to build a cabinet or piece of furniture.
- Design and build a complete cabinet or piece of furniture.

**Course Title:**           **ADVANCED WOODS (#2814)**  
**Grade Level:**           11-12  
**Course Credit:**         1 Credit  
**Prerequisite:**         Woods I & II and Instructor Approval (Instructor approval will be based on final grade of B or better in previous course, work ethic, self-motivation, prior overall performance.)

*Course Description:*   Advanced Woods is a course designed to allow students to explore a variety of technologies within the wood industry, from understanding basic principles of technologies to demonstrating the use of technologies. Areas of technology that students will explore include but are not limited to the following: Wood Technology, Construction, Manufacturing, Design and Engineering. Students will be required to maintain a portfolio during the class to monitor progress made during the course of the year. In this portfolio, students will log time spent on various tasks such as research, listening to lecture and demonstrations, lab application and presentations. The portfolio will be beneficial to the student, so they may present to employers and higher education institutions the skills and knowledge they possess. The goal of this type of program is to encourage students to engage in practical study in areas of interest to them. This offering promotes self-discipline, self-awareness, and self-motivation as they pursue **student** driven learning activities to enhance their portfolios.

**Course Title:**           **NORTHWOODS MANUFACTURING – WOODS (2815)**  
**Grade Level:**           10-12  
**Course Credit:**         1 Credit  
**Prerequisite:**         Woods I & II and Instructor Approval (Instructor approval will be based on interview and complete portfolio.)

*Course Description:*   In Northwoods Manufacturing students will use all skills learned in previous classes to build/create real world manufactured wood products. Students are responsible for quoting jobs, ordering materials, manufacturing parts, quality control, shipping, receiving materials, inventory, invoicing, customer service, accounting, marketing, maintaining work hours and other responsibilities associated with the operation of a manufacturing business.

## INDUSTRIAL EDUCATION – METALS

**Course Title:**           **METALS I (#2818)**  
**Grade Level:**           9-12  
**Course Credit:**         1 Credit

*Course Description:*   A beginner level class giving the students experience in basic machining. Lathe and milling machine operations will be studied throughout the class, projects include can crushers, bearing bunches and other small machining projects. Some computer machine tool basics will also be covered during parts of the class. In this class students will be required to start a portfolio keeping track of their progress in all technology education classes. Inside the binder the students will track competencies they have accomplished in preparation for Metals II and Northwoods Manufacturing.

**Course Title: WELDING I (#3589)**

Grade Level: 9-12

Course Credit: 1 Credit

*Course Description:* During this course an introduction of SMAW and GMAW will be covered as well as plasma cutting. Students will be required to complete a series of labs for each welding process. Also covered is basic welding nomenclature and different welding positions. Each student will be required to start a portfolio to track their progress and growth as well as complete a competency checklist.

**Course Title: METALS II (#2819)**

Grade Level: 10-12

Course Credit: 1 Credit

*Course Description:* A continuation of Metals I, Metals II gives the student more experience in machining and metrology. Lathe and milling machine operations will be studied throughout the class. Basic CNC machining and the use of Mastercam software will be covered as well. Portfolios are required for this class, with most level 1 machining competencies completed.

**Course Title: WELDING II (#3598)**

Grade Level: 10-12

Course Credit: 1 Credit

*Course Description:* During this course a continuation of SMAW and GMAW labs will be covered as well as CNC plasma cutting. Oxyacetylene welding, flux core welding, and GTAW will also be introduced and practiced. Just like in Welding I labs will be introduced and completed by the students on a weekly basis for each welding process being covered. Students will continue to use their portfolio and competency checklist to track their progress through the class.

**Course Title: POWER MECHANICS (#2703)**

Grade Level: 10-12

Course Credit: 1 Credit

Prerequisite: Metals I

*Course Description:* This course includes small engine repair on such portable power equipment as lawn and garden machinery, chain saws, outboard and inboard engines, and motorcycles. A brief introduction to oxy-acetylene cutting and mig welding is covered. Further emphasis is placed on automotive repairs and modification. Projects may include automotive repair and modification, snowmobile repair and modification, custom buggy design and build, other small engine repair and modification, etc.

**Course Title: NORTHWOODS MANUFACTURING – METALS (2821)**

Grade Level: 11-12

Course Credit: 1 Credit

*Course Description:* In Northwoods Manufacturing students will use all skills learned in previous classes to build/create real world machined/welded parts or products and sell them for profit. This class is as close to a real business as possible. Students are responsible for quoting jobs ordering materials, manufacturing parts, quality control, shipping and receiving

materials, inventory, invoicing, customer service, accounting, marketing, maintaining work hours and many other responsibilities.

## MATHEMATICS

**Course Title:** ALGEBRA 1A (#2741)

**Grade Level:** 9-12

**Course Credit:** 1 Credit

*Course Description:* Algebra 1A is the prerequisite to Algebra 1B and counts as one (1) mathematics credit towards a high school diploma from the Hurley School District. Algebra 1A covers the first half of a typical Algebra 1 course. The goal is that students will be able to master algebraic concepts throughout the class. Course content will include properties of the real number system; writing and translating algebraic, verbal, and written expressions; writing, solving, and graphing algebraic equations and inequalities; writing, solving, and graphing systems of equations; properties of exponents and scientific notation; properties of functions; probability, statistics, and data analysis.

**Course Title:** ALGEBRA 1B (2774)

**Grade Level:** 10-12

**Course Credit:** 1 Credit

**Prerequisite:** Algebra 1A

*Course Description:* Algebra 1B is a prerequisite to Geometry and counts as one (1) mathematics credit towards a high school diploma from the Hurley School District. Algebra 1B is the second of two courses which covers the same material as a typical Algebra 1 course, but at a much slower pace. The goal is that students will be able to master algebraic concepts throughout the class. Course content will include a review of properties of the real number system; writing and translating algebraic, verbal, and written expressions; writing, solving, and graphing algebraic equations and inequalities. Course content will then focus on writing, solving, and graphing systems of equations and inequalities; properties of exponents and scientific notation; properties of linear and nonlinear (including exponential, quadratic, radical, and rational) functions; add, subtract, multiply, divide, factor, and solve polynomials; probability, statistics, and data analysis.

**Course Title:** ALGEBRA I (#2067)

**Grade Level:** 9-12

**Course Credit:** 1 Credit

*Course Description:* A study of mathematical concepts relating to the structure of the real numbers. The emphasis is on problem solving skills. This course is designed for a student wishing to develop a mathematical background.

**Course Title:** GEOMETRY (#2069)

**Grade Level:** 9-12

**Course Credit:** 1 Credit

**Prerequisite:** Algebra 8, Algebra 1, or Algebra 1A & Algebra 1B

*Course Description:* Geometry counts as one (1) mathematics credit towards a high school diploma from the Hurley School District. Algebra 1A/1B or Algebra 1 are prerequisites to

Geometry and should be completed before being enrolled in this course. The goal is that students will be able to master geometric concepts throughout the class and solve problems by applying algebra. Course content will include defining basic and complex geometric figures; using logic and reasoning skills to create proofs; properties of parallel and perpendicular lines; similarity and congruence properties of polygons; solving problems using right triangles and trigonometry; properties of circles; calculating perimeter/circumference and areas of 2-D figures; calculating surface area and volume of 3-D figures; coordinate geometry; properties of transformations; probability, statistics, and data analysis.

**Course Title:** MATH CONCEPTS (#2066)  
**Grade Level:** 10-12  
**Course Credit:** 1 Credit  
**Prerequisite:** General Math or Algebra I

*Course Description:* Math Concepts counts as one (1) mathematics credit towards a high school diploma from the Hurley School District. The goal is that students will be able to master mathematical concepts throughout the class and apply problem solving skills to any real-world context. Course content will include basic arithmetic using decimals, fractions, and integers; calculations using percent, ratios, and proportions; developing logic and reasoning skills; measurements; geometric calculations of perimeter, area, and volume; calculations with polynomials; statistics and probability; data analysis and representations.

**Course Title:** ALGEBRA II (#2068)  
**Grade Level:** 10-12  
**Course Credit:** 1 Credit  
**Prerequisite:** Grade of C or higher in Algebra 1 or Algebra 1B; Geometry is recommended

*Course Description:* This course is advised for students preparing for college or going into math-related fields. Algebra II is a continuation of Algebra I and deals with mathematics used as a base for engineering and advanced mathematics.

**Course Title:** BUSINESS & CONSUMER MATH (#3658)  
**Grade Level:** 11-12  
**Course Credit:** 1 Credit

*Course Description:* This course serves to give real life applications of math, so that you are able to use it in a career field. The main goal is to answer the question, “why will I ever need to know this”. The course will be broken down into different units focusing on different applications with assignments focusing on the career field the student is interested in. We will be focusing on using graphs, charts and tables, using Excel, probability and statistics, trigonometric functions, and logarithms. It is recommended that students have taken Algebra II in order to take this class.

**Course Title:** ADVANCED MATH (#2070)  
**Grade Level:** 11-12  
**Course Credit:** 1 Credit  
**Prerequisite:** Geometry, Algebra II

*Course Description:* This course is designed to provide a sound basis for calculus through the study of polynomial exponential, logarithmic, and trigonometric functions, matrices, and analytical geometry. Technological explorations are incorporated into each subject.

**Course Title:**            **ADVANCED PLACEMENT CALCULUS (#2298)**  
**Grade Level:**            12  
**Course Credit:**         1 Credit  
**Prerequisite:**            Advanced Math

*Course Description:* Calculus defines and applies the derivative and integral functions. Derivatives are used to find rates of change, and integrals are used to find the net accumulation of change. Both of these functions are based on the concept of a limit, which is also defined in this course. Technology is incorporated daily into this class, and a graphing calculator is required. A strong background in Algebra and Geometry is recommended. Due to the cross-curricular content, it is helpful to take Physics at the same time. The curriculum follows the curriculum outlined by the College Board, and any student may take the AP test for Calculus AP upon course completion.

## MUSIC EDUCATION

**Course Title:**            **SENIOR HIGH BAND (#2085)**  
**Grade Level:**            9-12  
**Course Credit:**         1 Credit

*Course Description:* Senior High Band is designed to increase music skills learned in Elementary and Junior High Bands and to prepare you for performing at the college level, if you so choose. Though participation in the feeder bands is not mandatory, an efficient working knowledge of your instrument is required. The Senior High Band performs at many activities throughout the year, such as: concerts, the District Music Festival, athletic games, pep sessions, and parades. Students are required to participate in all performances throughout the year. Music studied and performed varies from traditional to contemporary band literature. All members have the opportunity to participate in the W.S.M.A. Solo Ensemble Festival.

**Course Title:**            **HIGH SCHOOL CHORUS (#2086)**  
**Grade Level:**            9-12  
**Course Credit:**         1 Credit

*Course Description:* No audition is needed for this class. A variety of music will be sung from the different genres, including standard choral music, spirituals, folk and pop. Concerts include: The Winter concert in December, Large group festival in February/March, Spring concert in May and Graduation on the Saturday of Memorial Day weekend. Attendance/participation at concerts and graduation counts as part of your grade in this performance class. Solo and Ensemble competition is in March and is optional yet encouraged. This class meets five days a week. Private lessons are available weekly.

## SCIENCE

**Course Title: PHYSICAL SCIENCE (#2090)**

Grade Level: 9-12

Course Credit: 1 Credit

*Course Description:* Physical Science is a survey course in which we study the applications of physical laws and chemical processes to matter and energy. Fundamental scientific principles are introduced through readings, discussions, lectures, and laboratory work. The metric system is studied until it can be used effectively by the student. Units covered include force and work, laws of motion, atoms and compounds, solids, liquids and gases, chemical elements and solutions and finally, nuclear energy.

**Course Title: BIOLOGY (#2091)**

Grade Level: 9-12

Course Credit: 1 Credit

*Course Description:* This course introduces the principles and concepts of biology. Emphasis is on the laws of thermodynamics which are an important unifying principle of biology. The First Law of Thermodynamics, also known as the law of conservation of energy, states that energy can neither be created nor destroyed. It may change from one form to another, but the energy in a closed system remains constant. The Second Law of Thermodynamics states that when energy is transferred, there will be less energy available at the end of the transfer process than at the beginning. In addition to the laws of thermodynamics, basic biological chemistry, cell structure and function, homeostasis, metabolism, genetics, evolution, classification and ecological concepts will be covered during the study of biology. Laboratory exercises reinforce lecture topics and include microscope techniques.

**Course Title: ANATOMY & PHYSIOLOGY (#2092)**

Grade Level: 10-12

Course Credit: 1 Credit

Prerequisite: Biology

*Course Description:* **Human Anatomy and Physiology (Biology II)** is an advanced science course. Students taking this course should be progressing towards a degree in the health sciences, biological sciences, or a nursing field. The course is a strenuous survey of human anatomy that parallels anatomical characteristics of other animals. The course focuses on anatomical terminology, anatomical identification, and physiological processes of human body systems. Topics include body organization; homeostasis; cytology; histology; and the integumentary, skeletal, muscular, digestive, nervous systems, and other body systems during the dissection of a fetal pig. Upon completion, students should be able to demonstrate an in-depth understanding of principles of anatomy and physiology and their interrelationships. Laboratory work includes dissection of preserved specimens, microscopic study, physiologic experiments, computer simulations, blood typing, stethoscope and blood pressure work, and multimedia presentations.

Students enrolled in this course should realize that this course requires an extensive amount of time, effort, reading, and memorization. Successful completion of this class requires dedication and commitment from the student. Students will be required to participate in a dissection of a heart, brain, eyeball and kidney.



Students will also be working with an online platform for assignments and exploration for a better visual of the human body.

### LEARNING OUTCOMES

Upon completion of this course, the student will demonstrate basic knowledge in the following:

1. Explain the concept of homeostasis, how it interrelates basic human body functions and life processes and demonstrate a knowledge of the organization of the human body.
2. Describe the major anatomical components of each human body system studied, describe briefly their anatomical locations and general structures, and explain their physiological functions at both the organ and cellular levels.
3. Apply the concepts learned in the lecture to understand and analyze laboratory activities and observations.

**Course Title:** CHEMISTRY I (#2095)  
**Grade Level:** 9-12  
**Course Credit:** 1 Credit

*Course Description:* Chemistry is the science of matter, primarily its chemical reactions, but also, its composition, structure, and properties. It is often called “the central science” because it connects physics with other natural sciences such as geology and biology. Chemistry I will focus on atoms, the “building blocks of matter” and their interactions with other atoms in chemical bonds. This class is part of the college preparatory curriculum and class time will be an ever changing and evolving mix of lecture, hands-on labs/activities, group discussions, reading/writing assignments, research activities, computer simulations, as well as student directed learning.

**Course Title:** CHEMISTRY II (#2096)  
**Grade Level:** 10-12  
**Course Credit:** 1 Credit  
**Prerequisite:** Chemistry I with a minimum grade of B- or instructor approval

*Course Description:* The Chemistry II curriculum is a continuation of the Chemistry I course and is organized to further develop a student’s understanding of both matter and energy. Students will explore both concrete and abstract concepts. Topics will include a more detailed approach to the physical states of matter equilibrium, as well as an introduction to organic chemistry. The combination of both Chemistry I and Chemistry II courses closely mirrors the course description of a typical General/Inorganic Chemistry course found at the college/university level. This class is part of the college preparatory curriculum and is considered an upper-level course. Class time will be an evolving mix of lecture, undergraduate-level laboratory activities, group discussions, and computer simulations with an emphasis on student-directed learning.

**Course Title:** FIELD BIOLOGY (#2777)  
**Grade Level:** 11-12  
**Course Credit:** 1 Credit

*Course Description:* This course focuses on the biological concepts of aquatic ecology, forestry, soils/land use, and wildlife. This class will include hands on field researching of

American martens, loons, invasive species, and more. Many other activities, labs, and research projects will be included throughout the year.

One big focus will be hands-on activities. Students will be expected to age deer skulls, go snowshoeing, and go on canoe trips 2-3 times a year.

Another big project will be our taxidermy unit. There are Dermestid Beetles we are responsible for feeding and caring for. Students will also participate in European skull mounts, fish mounts, and other critters from Iron County.

**\*Students taking this class are required to attend Woods and Waters research outings once a month. Some months there may be additional outings that could include but, not limited to: trail building, visiting natural resource study locations, conferences, and/or sites of interest. Students unwilling to participate in field work activities or class outings will only qualify for a grade of C or less (EVEN IF ALL OTHER CLASSWORK IS TURNED IN OF 'A' QUALITY).**

**Course Title:           PHYSICS (#2097)**

Grade Level:           12

Course Credit:         1

Prerequisite:          Algebra 2

*Course Description:* Physics (Greek *physis*: “nature”) is the natural science that involves the study of matter and its motion through space and time. Concepts of energy and forces are studied in great detail. In general terms, physics is the study of nature and how the universe behaves. This full-year course is designed to introduce the principles of physics and provide appropriate laboratory experiences to supplement these principals. This class is part of the college preparatory curriculum and is considered an upper-level course. Students will also encounter elements of algebra, geometry, and trigonometry. Class time will be an ever-changing and evolving mix of lecture, hands-on labs/activities, group discussions, reading/writing assignments, research activities, computer simulations as well as student-directed/independent learning.

**Course Title:           ADVANCED S.T.E.M. (#3612)**

Grade Level:           11-12

Course Credit:         1 Credit

Prerequisite:          This class is available to only Juniors & Seniors who have successfully completed Chemistry 1 and are currently enrolled in either Chemistry 2 and/or Physics.

*Course Description:* Physical Science (Greek: *physis* “nature”) is the systematic study of the sciences concerned inanimate natural objects, including physics, chemistry, astronomy, and related subjects. This classroom/laboratory learning opportunity will allow highly-motivated students to supplement their current science classes (Chemistry, Physics, Biology) with added exploration of topics that include Inorganic/Organic Chemistry, Electricity, Solar Energy, Arduino Coding, and many others. Students will encounter the many elements of Science, Technology, Engineering, and Mathematics (S.T.E.M.) primarily through self-guided inquiry.

## SOCIAL STUDIES

**Course Title:** CONTEMPORARY WORLD HISTORY (#2100)

**Grade Level:** 9-12

**Course Credit:** 1 Credit

*Course Description:* The purpose of the course is to provide students with a new viewpoint of the world in which we live. This course focuses on the growth of Western civilization and the developing concepts that shaped the world dating to the Renaissance, Reformation, Scientific Revolution and the Enlightenment. From understanding those concepts an appreciation is developed to explore what is happening in our world today. It is these moments of time that are so vital to the foundation of Western Civilization. As our current events are dominated by events around the globe it is important to see where the foundation of these events occurs. Ours is a small and shrinking world.

**Course Title:** ANCIENT WORLD HISTORY (#2101)

**Grade Level:** 9-12

**Course Credit:** 1 Credit

*Course Description:* Ancient World History is a study of mankind from prehistoric times to the middle ages. It is the story of how civilizations developed, and nations became linked into a global community. You will study the diversity, complexity, and unifying themes of the human experience. History teaches us to understand people whose experiences are different from our own. It gives us a greater appreciation for the cultural diversity of the world's people and contributes to our understanding of the causes and effects of events in our own world.

**Course Title:** UNITED STATES HISTORY (#2102)

**Grade Level:** 9-12

**Course Credit:** 1 Credit

*Course Description:* This course is a general survey of the history of our country featuring the discovery, exploration, conquest and settlement of the new nation. Special emphasis is placed on the ideals upon which the country was founded. Great events will be used in conjunction with this course to aid the students in relating the experience of the past to the events of the present. This course is designed for all students as a means of indoctrinating them into the American way of life with the hope they will better appreciate and understand how to be better citizens in their country.

**Course Title:** AMERICAN SOCIETY (#2308)

**Grade Level:** 9-12

**Course Credit:** 1 Credit

*Course Description:* This course studies what it means to be part of our American Society. We will deal with full range common issues of the day and what they may mean to your future. We look at the past to understand the present. We study many features of the United States including education trends, history, legal systems, global economy and foreign relations.

**Course Title:** ADVANCED PLACEMENT UNITED STATES HISTORY (#2229)

**Grade Level:** 11-12

**Course Credit:** 1 Credit

*Course Description:* Advanced Placement United States History is a year class that fulfills the U.S. History requirement. It is geared for the serious student who intends to pursue post-secondary education and who wants to prepare fully for the college experience while still in high school. The class is open to juniors and seniors and an opportunity will be given and expected for students to participate in the College Board Advanced Placement United States History exam in early May. Depending upon how well the student scores on this exam they may be able to earn up to five credits of college credit.

**Course Title:** PSYCHOLOGY (#3045)  
**Grade Level:** 9-12  
**Course Credit:** 1 Credit

*Course Description:* This course is designed to lead to an understanding of human behavior. This course covers such topics as the history of psychology, brain psychology, human development, special topics will be covered using case studies and other articles. This course requires participation in discussions and almost daily reading assignments.

**Course Title:** PERSONAL FINANCE (#2604)  
**Grade Level:** 9-12  
**Course Credit:** ½ Credit (Semester Course)

*Course Description:* In this introductory finance course, students learn basic principles of economics and best practices of managing their own finances. Students learn core skills including budgets, developing long-term financial plans to meet their goals, and making responsible choices about income and expenses. They gain a deeper understanding of capitalism and other systems, so they can better understand their role in the economy of society. Students are inspired by experiences of finance professionals and stories of everyday people and the choices they make to manage their money.

## PHYSICAL EDUCATION

**Course Title:** PHYSICAL EDUCATION 9 (#2111)  
**Grade Level:** 9  
**Course Credit:** ½ Credit

*Course Description:* This course teaches the basic skills needed to play a variety of team and individual sports along with a program of physical conditioning throughout the year. In each grade level, more skill is developed along with learning the fundamentals of officiating.

**Course Title:** PHYSICAL EDUCATION 10 (#2115)  
**Grade Level:** 10  
**Course Credit:** ½ Credit

*Course Description:* This course teaches the basic skills needed to play a variety of team and individual sports along with a program of physical conditioning throughout the year. In each grade level, more skill is developed along with learning the fundamentals of officiating.

**Course Title: HEALTH (#2113)**

Grade Level: 9

Course Credit: ½ Credit

*Course Description:* This course is part of the physical education course for freshmen. There are units of study on mental health, personal hygiene, drugs, alcohol and tobacco abuse, anatomy, human growth and development, fitness, consumer health, first aid and environmental health.

**Course Title: PHYSICAL EDUCATION LIFE SPORTS (#2117)**

Grade Level: 11-12

Course Credit: ½ Credit

*Course Description:* The purpose of this course is to familiarize the students with activities they will be involved with during their lifetime. These activities include units in tennis, bowling (12<sup>th</sup> grade only), skiing, jogging, golf, archery, aerobics, weights, conditioning, badminton, and volleyball. The student will have a good background in various physical activities to better enjoy more leisure time in today's world. 12<sup>th</sup> grade physical education will emphasize conditioning activities at least 2 times per week.

**Course Title: BFS – WEIGHTLIFTING (#2302)**

Grade Level: 11-12

Course Credit: ½ Credit

*Course Description:* This class is open to juniors and seniors with seniors having top priority if the class becomes full. This is an all-year class offered on an every other day basis. The bigger, faster, stronger weightlifting system will be used unless the student has another personal weightlifting plan approved by the instructor.

## STUDY SKILLS

**Course Title: STUDY SKILLS**

Grade Level: 6-12

Course Credit: 1 Credit

*Course Description:* This course is designed to assist students learn, understand, and reinforce concepts and/or assignments presented in the general curriculum. Students have the opportunity to develop and strengthen good study habits and learning strategies through various instructional methods and strategies. This course can also assist with social, organizational, and job skills. This course can be added with instructor approval. Credit will be given for this class but no letter grade will be earned (pass or fail only).

## TEACHER ASSISTANT

**Course Title:** TEACHER ASSISTANT  
**Grade Level:** 9-12  
**Course Credit:** 1 Credit

*Course Description:* Students in grades 11 and 12 can spend one class period working with a staff member on assigned tasks and projects. During this time, students will learn time management, organization, and get a first-hand experience in the classroom or in the cafeteria. Placement will be determined on teacher/student needs.

## PEER MENTORING

**Course Title:** PEER MENTORING (#2249)  
**Grade Level:** 12  
**Course Credit:** ½ Credit per semester completed

*Course Description:* Peer mentors will meet one-on-one or in small groups with middle school or elementary students throughout the school week. The goal of the mentoring time is for high school mentors and their mentees to work together to identify strengths, interests, and goals. A variety of activities will be explored together under the supervision of a staff member.

## SCHOOL TO WORK

**Course Title:** SCHOOL TO WORK (#2053)  
**Grade Level:** 11-12  
**Course Credit:** ½ Credit per semester completed

*Course Description:* School to work is a supervised work experience program offered to students in grades 11 and 12. School supervised work experience helps you learn about the world of work and develop work skills that are needed for moving into adulthood. During this program you have the opportunity to work at a job either during the school day or after school and earn high school credit provided jobs fall into the Student Career Preparation Plan. To be eligible to participate in a school supervised work experience project the school, employer, parents, and student must enter into an agreement that will specify the rules and learning goals to be achieved. An application and approval are required as a prerequisite to enrollment in this program.

## DISTANCE LEARNING OFFERINGS

A list of courses varies from year to year. A list of potential courses will be available in the High School Guidance Office when released by NWECS. Any interested students may pick up this information. These courses are sometimes limited to seating and will only be offered at the times listed. Please meet with Guidance Counselor to arrange for a Distance Learning course.

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

The Youth Options statute (118.55) was renamed the Early College Credit Program, which 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, “institution 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. For questions about this information, please contact Mrs. Eder at 715-407-4777 ext. 280.

Start College Now (38.12(14)) allows WI public school pupils that have completed 10th grade to have the option to take courses at technical colleges through a separate statute Start College Now, 38.12(14). For questions about this information, please contact Mrs. Eder at 715-407-4777 ext. 280.