



Wrightstown High School Course Guide 2023-2024

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Wrightstown High School Curriculum Course of Studies and Graduation Requirements

Credit Requirements:

Grades 9-11: Minimum load per year is 7 credits (at least 3.5 credits each semester)

Seniors: The minimum load is 3 credits per semester for a total of 6 credits

Credit Allowances: Semester courses = 0.5 credit, year courses = 1 credit

WHS 2024 Graduation Requirements

In order to graduate, a student must earn at least 25.5 credits, distributed to the graduation requirements listed below. **It is the responsibility of the student to ensure they are meeting graduation requirements.**

	Credits
<p>ENGLISH (One credit of English is required every school year)</p> <ul style="list-style-type: none"> 1 credit of English 9 1 credit of English 10 0.5 credit of Public Speaking, taken in grade 11 or 12 1.5 credits of elective English 	4
MATHEMATICS	3
<p>SCIENCE</p> <p><u>Class of 2024-2025:</u> 1 credit of Physical Science 2 credits of elective science</p> <p><u>Class of 2026 and beyond:</u> Must consist of: Intro to Biology or Biology, Intro to Chemistry or Chemistry, Intro to Physics or Physics, and balance of elective science</p>	3
<p>SOCIAL STUDIES</p> <ul style="list-style-type: none"> 1.0 credit of US History I 1.0 credit of US History II 1.0 credit of elective Social Studies 	3
<p>PHYSICAL EDUCATION</p> <ul style="list-style-type: none"> 0.5 credit of PE 9 0.5 credit of PE 10 0.5 credit of elective Physical Education 	1.5
HEALTH	0.5
PERSONAL FINANCE (taken in grade 12)	0.5
ELECTIVE CREDITS	10
TOTAL CREDITS NEEDED TO GRADUATE	25.5

New Grad Requirements: Class of 2025 – 26 total credits, Class of 2026 – 26.5 total credits, Class of 2027 & beyond – 27 total credits

Grade Weighting

Weighted classes are designed to challenge students with curriculum equivalent to university or college level coursework. In addition, they provide students an opportunity to test for credit through the advanced placement program. The weighted grading scale adds .33 grade points to each grade on the regular scale. As an example: the weighted scale allows 4.33 grade points for an A as opposed to 4.00 grade points for a non-weighted course. Courses eligible for weighted grades include AP Art & Design, AP Computer Science Principles, AP Microeconomics, AP English Literature and Composition, AP Spanish IV, AP Calculus, AP Statistics, AP Chemistry, AP Physics, AP Biology, AP US History, AP Psychology, AP Environmental Science, and AP Music Theory.

Valedictorian and Salutatorian

Our district believes that all students should be recognized for their achievement. The student(s) with the highest class rank average(s), having earned a minimum of 25 credits at the end of seven semesters, and meeting all district policy and state statutory requirements will be honored as valedictorian(s). The student(s) who have the second highest class rank average(s), having earned a minimum of 25 credits at the end of seven semesters, and meeting all district policy and state statutory requirements will be honored as salutatorian(s).

Class rank averages will be rounded to the thousandths place to determine award winners. Multiple winners with identical class rank averages are possible. In cases of multiple winners, all will be recognized.

The designated student(s) must have attended WHS for at least four consecutive semesters immediately preceding the determination of the class valedictorian and salutatorian. The class rank average shall be determined by grades received in all classes taken through the first seven semesters of high school attendance. In the event of a special circumstance or exception, the building principal will be notified and provide a recommendation to the Board of Education.

Add/Drop Course Policy

Students may add or drop a course within the first two weeks of the course. Students who drop a course after the two-week period will receive an F on their transcript for the remainder of that semester, unless both teacher and student agree the course has been too difficult or too easy, justifying a change. Students should check with the counseling office for specific add/drop period dates. Add/drop forms are necessary for any changes. Forms may be obtained from the counseling office, and require signatures from the parent and the teacher. Students must continue to attend their original courses until this form has been completed and processed.

Academic Progress

The honor roll is published after each quarter of the academic year. The A honor roll includes those students who have earned a grade point average of 3.50 or higher for the quarter. The B honor roll includes students who have earned a grade point average of 3.00 to 3.49 for the quarter.

Class rank is based upon a student's cumulative grade point average (GPA) of all courses taken in high school, in comparison to others in their class. Class rank and GPA are calculated at the end of each semester and are available upon request of the student. They are included on the student's official high school transcript.

****It is the responsibility of the student to ensure they are meeting graduation requirements.****

Academic Letters

Students must achieve a total score of at least 78 to receive an Academic Letter. Grades for quarters 1, 2, and 3 are assigned points and then added together. Each A is worth four points, a B three points, a C two points and a D one point. Any weighted class adds an additional .33 to the grade point value.

Aptitude Tests

There are several aptitude tests available through the counseling office. Students are encouraged to take at least one of the tests (PSAT/NMSQT; ACT Aspire; ACT; SAT) to further understand themselves in terms of academic aptitude. Most colleges require the ACT or SAT for admission. Click [here](#) for ACT registration materials. Click [here](#) for SAT registration materials. The student pays fees, and the tests take place at nearby high schools and colleges several times each year. Career interest inventories are also available through the counseling office. WHS is a testing site for the December ACT exam. All juniors will be required to take the ACT Plus Writing in the spring of their Junior year, and this is coordinated and paid for by WHS.

College/University Requirements and Recommendations

College and Technical School requirements vary with specific schools. Students are encouraged to take advantage of college fairs, career fairs, the career resource center in the counseling office, [Xello](#), [UW Help](#), and personal visits with college and technical school reps to learn about the specific requirements for admissions.

<u>English</u>	<u>Mathematics</u>	<u>Natural Science</u>	<u>Social Studies</u>	<u>Foreign Language</u>
4 Years	3 Years	3 Years	3 Years	2 years in one language
Composition	Algebra I	Physical Science	1 year US History	*Not required at all universities*
Speech	Geometry	Biology	1 year US History II	
Research	Algebra II	Chemistry	1 year Elective SS	
		Physics		
		Agriculture - ES		

* **UW Madison requires two years of the same foreign language to apply for admission.** UW Milwaukee requires 2 semesters of a foreign language to graduate if a student did not take 2 years in high school. UW Madison PREFERS 4 years of a foreign language on a high school transcript, but it is not required.

Technical College Requirements

Seniors meeting Wrightstown graduation requirements will also meet technical school admission requirements.

Students planning to attend a technical school may need to take the Accuplacer test, depending upon program of choice and ACT scores or other tests. It can be taken here at school by contacting the Counseling Office.

Advanced Standing or AS

The label AS in front of course titles signifies courses that students can take at the high school level, and receive credit from Wisconsin Technical Colleges. These courses are **NOT** weighted. If completed with a B- or better, students are eligible to receive advanced standing credit after enrolling (delayed credit) at a Wisconsin Technical College in which then the course will be marked as completed at WHS on the technical college transcript.

AS Marine Biology/Aquaculture-ES
AS Plant and Soil Science-ES
AS Sustainable Ag: Issues/Practices & Poultry Science

****AS Animal Science Production-ES**
****AS Genetics and Animal Breeding-ES**
****AS Veterinary Science-ES**

**** All three courses must be successfully completed to receive advanced standing credit.**

AS Software Applications
AS Advanced Software Applications
AS Computerized Accounting II
AS Android App Programming Using JAVA
AS Visual Basic Programming
AS Business Law II

Dual Transcribed Credit

Students may take a course at WHS that earns high school credit and credit at a Wisconsin Technical College at the same time. These courses are **NOT** weighted. If completed with a C or better, the student will receive dual transcribed credit. In addition to receiving credit on their high school transcript, they will receive an official technical college transcribed grade from the Wisconsin Technical College. The student will need to request the Wisconsin Technical College transcript from them if needed.

Students in grades 11-12 may earn dual credit for:

Technical College Math
Vocational Math AB (formerly known as Math Trades I)
AS Sustainable Ag: Issues/Practices & Poultry Science
Architectural Design
CNC Manufacturing
Welding Processes & Metal Machining

Students in grades 10-12 may earn dual credit for:

Computer Graphics I
Electricity and Electronics
Principles of Engineering
Product Design
**Automation Systems for Buildings and Manufacturing - See below for a unique opportunity*

*In Northeast Wisconsin, the demand for skilled Energy Technicians continues to exceed the supply of qualified applicants for facility digitization and automation across multiple occupations. Sophomores or juniors students take "Automation Systems for Buildings and Manufacturing" earning four transcribed credits. As seniors, they can attend NWTC as part of the "Start College Now" program completing the final five credits to earn an "Energy Controls Career Pathway Certificate." With this certificate, students will have the credentials necessary to work as Building Controls Installers. The nine credits will also ladder into the 63-credit Energy Management Associate Degree at NWTC. Graduates of the associate degree program can work as Energy Auditors, Energy Management Consultants, Energy Program Coordinators, and Control System Specialists.

AGRICULTURE, LIFE SCIENCE and NATURAL RESOURCES

Related Career Clusters:



Veterinary Science Pathway

Pathway Courses	Work Based Learning / YA in:
AS Veterinary Science-ES	Small Animal/Vet Tech

Natural Resource Management Pathway

Pathway Courses	Work Based Learning / YA in:
Zoology & Wildlife-ES AS Marine Biology/Aquaculture-ES AP Environmental Science	Arborist Environmental Systems: Basic and Adv. Water Resources

Courses Offered Every Year

Food Science Industry-ES
AS Veterinary Science-ES
AS Sustainable Ag: Issues/Practices & Poultry Science
AP Environmental Science
Leadership Dynamics **NEW!**

Courses Offered 2023-2024, 2025-2026

AS Marine Biology/Aquaculture-ES
Zoology & Wildlife-ES

Courses Offered 2024-2025, 2026-2027

AS Animal Science Production-ES
AS Genetics & Animal Breeding-ES
AS Plant and Soil Science-ES

ES Courses = Ag courses designated as –ES can be used to fulfill elective science credit requirements for high school graduation.

WI DPI and the UW System have designated this class as a science equivalent course. Most UW System campuses will count completion of this course as a third credit of science as long as the student has taken some combination of biology/chemistry/physical science for the other two credits.

AS Courses = Students can take the course at WHS and have the opportunity to receive credit from Wisconsin Technical Colleges.

Food Science Industry-ES/SCED: 18305 Food Product Processing - Grades 9-12 .5 credit; semester course
Interested in learning the science behind your food? This course addresses the processing of raw agricultural products into finished goods ready for the consumer. Students will practice food processing and preservation techniques, develop new food products, and investigate all sectors of the food science industry while working in a hands-on laboratory setting. The concepts of food science research, classification, quality control and value added production will be explored.

AS Veterinary Science-ES/SCED: 18105 Veterinary Science - Grades 9-12 .5 credit; semester course
This class will explore units in veterinary sciences with emphasis on equine and small domesticated pets. Much of the material can be applied to human medicine, and is recommended for students who are interested in the medical field, and desire a hands-on/practical approach towards the investigation of mammalian body systems. Students will develop skills in disease prevention and diagnostics, performing physical exams, and carrying out medical procedures. Students will have an opportunity to apply practices used by veterinarians and animal scientists with dogs, cats, rabbits, horses and other companion animals. *Students who attend a WI Technical College have the opportunity to receive Tech Credit for this course when combined with AS Animal Science-ES and AS Genetics & Animal Breeding-ES.*

AS Sustainable Ag: Issues/Practices & Poultry Science- SCED: 18307 Agriculture and Society - Grades 11-12

.5 credit; semester course

Prerequisite: Instructor's consent and membership in FFA

This capstone class will explore a wide diversity of strategies and approaches necessary to create a sustainable food system. Students will compare organic agriculture and conventional agriculture, investigate organic soils and land access issues, debate current issues in GMO seed use, explore plant management practices and issues, outline issues related to hunger, social justice, worker rights, farm prices, climate change, compare organic animal stewardship to conventional management, and review National Organic Program (NOP) certification. The study of poultry science is incorporated in this course. Topics include biology, health, feeding, eggs, housing options for backyards or commercial enterprises, processing plans and budgets. *Students who attend a WI Technical College have the opportunity to receive Tech Credit for this course.*

AP Environmental Science - Grades 11-12

1 credit; year course

Prerequisite: Biology, Marine Biology and/or Zoology and/or Plant and Soil Science-ES recommended

This course will provide students with the scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world, to identify and analyze environmental problems both natural and human-made, to evaluate the relative risks associated with these problems, and to examine alternative solutions for resolving or preventing them. Environmental science is interdisciplinary; it embraces a wide variety of topics from different areas of study. This course does count as a science graduation credit.

Leadership Dynamics - Grades 10-12

.5 credit; semester course

NEW!!!!

This course will focus on developing the essential qualities all students need to possess, in order to become productive members of society and help create future successes in all aspects of life. Students will be taken on a fascinating journey through history, language and science by studying leadership philosophies employed by pragmatic individuals within these fields. Participation and group discussions are the foundation of this course. It will require personal intellectual curiosity and commitment to be successful in the coursework. Topics will include communication, ethics, group dynamics, leadership roles and thinking processes.

AS Animal Science Production-ES/SCED: 18101 Animal Production/Science - Grades 10-12

.5 credit; semester course;

THIS COURSE WILL RUN EVERY OTHER YEAR. IT WILL BE OFFERED DURING 2024-2025

Prerequisite: Intro to Biology or Biology or Instructor's consent

This course will examine animal agriculture on a scientific basis. Students will explore the animal systems of dairy, beef, poultry, hog, and sheep industries. Animal nutrition, genetics, evaluation, health care and management are explored for each species. *Students who attend a WI Technical College have the opportunity to receive Tech Credit for this course when combined with AS Vet Science-ES and AS Genetics & Animal Breeding-ES.*

AS Genetics and Animal Breeding-ES/SCED: 18308 Agricultural Biotechnology - Grades 10-12

.5 credit; semester course; **THIS COURSE RUNS EVERY OTHER YEAR. IT WILL BE OFFERED DURING 2024-2025**

Prerequisite: Intro to Biology or Biology

In this course students will focus on large animal sciences with an emphasis on new and exciting biotechnology utilized in this field of agriculture. Students will investigate and perform labs in DNA analysis, genetics and genetic engineering, artificial insemination, cloning, obstetrics, reproductive physiology, embryo transfer and stem cell research. *Students who attend a WI Technical College have the opportunity to receive Tech Credit for this course when combined with AS Animal Science-ES and AS Vet Science-ES.*

AS Plant and Soil Science-ES/SCED: 18051 Plant Production/Science - Grades 10-12

.5 credit; semester course; **THIS COURSE RUNS EVERY OTHER YEAR. IT WILL BE OFFERED DURING 2024-2025**

Prerequisite: Intro to Biology or Biology or Instructor's consent

This course will provide students with the fundamentals of plant and soil science. Investigations and labs will take place in the geodesic greenhouse. Students will look at plant nutrition and care, propagation, genetics, tissue culture, crop science, research design and soil basics. *Students who attend a WI Technical College have the opportunity to receive Tech Credit for this course.*

AS Marine Biology/Aquaculture-ES/SCED: 18306 Aquaculture - Grades 9-12 .5 credit; semester course

THIS COURSE WILL RUN EVERY OTHER YEAR. IT WILL BE OFFERED DURING 2023-2024

Prerequisite: Intro to Biology or Biology or Instructor’s consent

This course will give a scientific introduction to the study of marine and freshwater organisms and their environments. Areas of exploration include properties of lakes and oceans, marine fish and mammals, coral reef communities, freshwater fish, aquatic organism structure, and adaptations. The scientific principles utilized in the aquaculture industry will also be studied. *Students who attend a WI Technical College have the opportunity to receive Tech Credit for this course.*

Zoology and Wildlife-ES/SCED: 18501 Wildlife Management - Grades 9-12 .5 credit; semester course

THIS COURSE WILL RUN EVERY OTHER YEAR. IT WILL BE OFFERED DURING 2023-2024

This course will survey the animal kingdom and the diversity of animals on this planet. Students will study animal classification, structure and function. A variety of individual groups and species are intensively explored. Contemporary issues such as endangered species, wildlife management and habitat degradation are explored.

ART COURSES

Related Career Clusters:



Arts, AV Technology and Communication Pathway

Pathway Courses		Work Based Learning / YA in:
Art I Computer Graphics I	Computer Graphics II Web Design and Maintenance	Graphic Design Web Design

Visual Arts IB Pathway

Pathway Courses		Work Based Learning / YA in:
Art I Drawing and Painting I Drawing II Painting II	Sculpture I Sculpture II Studio Art Advanced Placement Art and Design	

Art I (Intro to Art) - Grades 9-12 1 credit, year course

This course is NOT just for the student who loves to draw, it is for anyone who likes to create and experience art and get messy in the process! Students will develop skills with a variety of art media and processes, while learning how to use the artistic thinking process to create original art in response to a leading question or prompt. Art media includes ink, charcoal, graphite, watercolor, acrylic, clay, paper maché, collage, sculpture and printmaking.

Drawing and Painting I - Grades 9-12 1 credit, year course

Prerequisite: Art I -or- Middle School Art Teacher recommendation

This course focuses on two-dimensional art forms with drawing and painting media. Students will enhance their use of media techniques through mini skill builder activities, practice developing works using the artistic thinking process, participate in critiques, and create unique works of art in response to a theme.

Sculpture I - Grades 9-12 .5 credit, semester course

This course is for students who show interest in 3D art. Students will create sculptures using materials such as cardboard, paper, paper mâché, glass, fiber, wood, wire, stone, and found objects. This course also involves exploration of concepts and techniques of construction, assemblage, and media manipulations.

Drawing II -Grades 10-12 .5 credit, semester course

Prerequisite: Drawing and Painting I

This course will offer students choice in what type of drawings they wish to create. Students will learn and practice the artistic process from planning original, individual drawings to the final critique of the pieces. Studio habits of mind will be emphasized throughout this process, as well as developing an individual style.

Painting II - Grades 10-12 .5 credit, semester course

Prerequisite: Drawing and Painting I

This course will offer students choice in what type of paintings they wish to create. Students will learn and practice the artistic process from planning original, individual paintings to the final critique of the pieces. Studio habits of mind will be emphasized throughout this process, as well as developing an individual style.

Sculpture II - Grades 9-12 .5 credit, semester course

Prerequisite: Sculpture I and Ceramics I or Glass I

This course will offer students choice in what type of sculpture they wish to create. Students will learn and practice the artistic process from planning original, individual sculptures to the final critique of the pieces. Studio habits of mind will again be emphasized throughout this process, as well as developing an individual style.

Ceramics I - Grades 9-12 .5 credit, semester course

NEW!!!!

Prerequisite: Sculpture I

This course is for students who show an interest in Ceramics. We will review basic hand building techniques such as coil, slab, and pinching. We will also learn different surface treatments for clay and learn how to throw on the pottery wheel. Students will create both functional pieces and sculptural pieces in this course. Studio habits of mind will be emphasized throughout this process.

Glass I - Grades 9-12 .5 credit, semester course

NEW!!!!

Prerequisite: Sculpture I

This course is for students who show an interest in glass art. We will learn basic cold glass techniques such as stained glass and mosaics, warm glass techniques such as fusing and casting, and hot glass techniques like torchwork. Studio habits of mind will be emphasized throughout this process.

Computer Graphics I - Grades 10-12 1 credit, year course

Students in grades 10-12 who take this course may receive one college credit from WI Technical Colleges.

This is a full year introductory class to using the computer as an art media, while learning to use the design thinking process. Emphasis is on the development of basic skills using tools in Adobe Illustrator & Photoshop.

Computer Graphics II - Grades 11-12 1 credit, year course

Prerequisite: Computer Graphics I

This course will focus on advanced methods of graphic design, including logo development, print media and package design. Emphasis is on design thinking using Adobe Illustrator, Photoshop, and an introduction to print layouts using Adobe InDesign.

Studio Art - Grades 11-12 .5 credit, semester course

Prerequisite: At least one level II art course or art teacher recommendation.

This course will offer students choice in media and techniques. Students engage in idea development, media exploration, and critiques throughout the creative process. Studio Habits of Mind will be emphasized throughout this process, as well as developing an individual style.

Advanced Placement Art & Design - Grades 11-12

1 credit, year course



Prerequisite: Two art courses, or an art teacher recommendation.

This course will focus on building a portfolio for submission to the College Board within one of three exam programs: Drawing, 2D Design or 3D Design. Throughout the course, new concepts and skill builders will be introduced, expanding on previously learned principles and skills. Students are expected to work above and beyond the high school classroom. The first part of the exam requires students to assemble a body of artwork and process documentation that demonstrates sustained investigation through practice, experimentation and revision. The second part of the exam requires students to submit five high quality selected works that demonstrate synthesis of materials, processes and ideas. Students who submit and pass the AP portfolio review at the conclusion of the course may be eligible for college credit.

BUSINESS EDUCATION

Related Career Clusters:



Arts, A/V Technology and Communications

Pathway Courses		Work Based Learning / YA in:
Art I Computer Graphics I	Computer Graphics II Web Design and Maintenance	Graphic Design Web Design

Business Management Pathway

Pathway Courses		Work Based Learning / YA in:
Entrepreneurship Business Law Public Speaking	World Cultures AS Business Law II Advanced Placement Statistics	Marketing Management

Finance Pathway

Pathway Courses		Work Based Learning / YA in:
Computerized Accounting I AS Computerized Accounting II Advanced Placement Microeconomics	Personal Finance Advanced Placement Statistics	Accounting Banking Insurance

Information Technology/Computer Science Pathway

Pathway Courses		Work Based Learning / YA in:
AS Software Applications AS Advanced Software Applications Advanced Placement Computer Science Principles AS Android App Programming Using JAVA	AS Visual Basic Programming	IT Broadband Technician IT Essentials IT Network & Security IT Software and Application Development

Marketing and Sales Pathway

Pathway Courses	Work Based Learning / YA in:
Sports and Entertainment Marketing Introduction to Psychology World Cultures Advanced Placement Microeconomics	Marketing Communications Marketing Management Marketing Research/Competitive Intelligence Merchandising Professional Sales

Course Offered 2024-2025, 2026-2027

AS Android App Programming Using JAVA

Course Offered 2023-2024, 2025-2026

AS Visual Basic Programming

AS Courses = Students can take the course at WHS and have the opportunity to receive credit from Wisconsin Technical Colleges.

AS Software Applications - Grades 9-12 1 credit; year course

Students who attend a WI Technical College may receive Tech Credit for this course.

A 2022 survey of Wrightstown graduates in secondary school found that 78% use Microsoft Office products at their secondary school vs. only 21% Google apps. Of those in the workforce, 72% use Microsoft Office vs. only 18.5% Google apps. Students will go-in-depth and master the features and capabilities of Microsoft Word and PowerPoint with the opportunity to achieve Microsoft Office Specialist (MOS) certification in Word and PowerPoint. Students will also learn the essentials of Excel. Students will learn how to give a presentation by exploring and presenting on their future career choice after high school. Student's keying speed will also be reinforced and graded.

AS Advanced Software Applications - Grades 10-12 .5 credit; semester course

Prerequisites: Software Applications

Students who attend a WI Technical College may receive Tech Credit for this course.

Students will master the features and capabilities of Microsoft Excel, a computerized spreadsheet program, and students will also learn the essentials of Microsoft Access, a computerized database program. A 2022 survey of Wrightstown graduates in secondary school found that 78% use Microsoft Office products at their secondary school vs. only 21% Google apps. Of those in the workforce, 72% use Microsoft Office vs. only 18.5% Google apps. Many comments from the survey suggested that Wrightstown graduates should be more versed in the advanced features of Excel, especially for students entering Business, Science, and Technology fields. Students will have the opportunity to achieve Microsoft Office Specialist (MOS) certification in Excel.

Employability Skills - Grades 10-12 .5 credit; semester course

Prerequisites: Software Applications

This course is designed to prepare a student for on-the-job training. During the semester, the student will learn about career opportunities, employee attitudes and successful relations with coworkers. The student will develop a career portfolio, refine communication skills, and develop a basic understanding of personal finance and economics. Career speakers will be invited to address individual class interests.

Computerized Accounting I - Grades 10-12 1 credit; year course

Prerequisites: Software Applications

National statistics have shown that the Accounting career field currently resides in the top 10 of the most demanded professions. If business related fields interest you, this is a must take course for all future business professionals. This course serves as an introduction to the use and preparation of financial records for a business. Students will learn to use debits and credits, how to record business transactions, and prepare financial statements. Students will be taught using easy to follow PowerPoint presentations and all projects are completed using online-computerized working papers. This course is a prerequisite for Business Occupations – Accounting Emphasis.

AS Computerized Accounting II - Grades 11-12 1 credit; year course

Prerequisites: Computerized Accounting I and Software Applications

Students who attend a WI Technical College may receive Tech Credit for this course.

This is the second year accounting course. Students go into much more detail with business transactions and dealing with depreciation, stocks and bonds, partnerships, and various other real world business situations. They also learn how to account for a manufacturing business. It covers individual accounting careers and skills needed to attain these careers. Like Computerized Accounting I, students will be taught using easy to follow PowerPoint presentations, and all projects are completed using online working papers.

AS Android App Programming Using JAVA - Grades 11-12 1 credit; year course

THIS COURSE WILL RUN EVERY OTHER YEAR. IT WILL BE OFFERED DURING 2024-2025

Prerequisite: Software Applications and Algebra; AP Computer Science Principles is recommended

Students who attend a WI Technical College may receive Tech Credit for this course.

This course provides the beginning programmer with a strong foundation necessary to build mobile applications for Android devices using the Java programming language. This course introduces key programming concepts, including variables, decision-making, lists and arrays, and gives the confidence and technical skills to create fully functional Android apps.

AS Visual Basic Programming – Grades 11-12 1 credit, year course

THIS COURSE WILL RUN EVERY OTHER YEAR. IT WILL BE OFFERED DURING 2023-2024

Prerequisites: Software Applications and Algebra I; AP Computer Science Principles is recommended

Students who attend a WI Technical College may receive Tech Credit for this course.

Students will be introduced and taken in-depth into programming using the Visual Basic.NET platform, which is widely used in the computer industry. Students will develop real-world graphical user interfaces/windows based programs and web pages. Students will also learn how to program apps for Windows phones and tablets. For students interested in pursuing a computer career, this is a must take course.

Business Law I - Grades 11-12 .5 credit; semester course

Prerequisites: Software Applications

This course stresses the understanding of law as applied to everyday activities in contracts, property, wills, etc.

Understanding the individual's legal rights and responsibilities through the study of torts and crimes will make the students aware of the legal implications of their acts. Business Law alerts the students to situations that require legal advice.

AS Business Law II - Grades 11-12 .5 credit; semester course

Prerequisite: Business Law

Students who attend a WI Technical College may receive Tech Credit for this course.

The course content will build on the concepts introduced in the Business Law I course, and narrow its focus to business related issues.

Entrepreneurship - Grades 10-12 1 credit; year course

Prerequisite: Software Applications

Students will use business knowledge and preparation to develop an understanding of business operations and the ability and skills necessary to become entrepreneurs. Specific course content will include areas on marketing, financing, and managing the small business, legal requirements, and career opportunities in entrepreneurship.

Health Career Exploration - Grades 9-12 .5 credit; semester course

This course is designed to educate students about the nature and scope of healthcare fields, including educational and physical requirements, as well as personal characteristics beneficial for particular healthcare careers. Students will be introduced to ethical, legal, safety, insurance, and customer service aspects of the healthcare field. Students will also investigate healthcare career securing strategies and tools.

Sports and Entertainment Marketing - Grades 10-12 .5 credit; semester course

This course is designed to provide students with an understanding of marketing concepts, foundations, and functions as they relate to career opportunities in the growing area of sports and entertainment. Instruction will focus on public relations and publicity, event planning and marketing, sponsorship, venue design, concessions, risk management, product planning, licensing, ticket sales, and distribution.

Personal Finance – Required for Grade 12 .5 credit; semester course

Learn the basics of living on your own. Practice skills necessary for understanding yourself, the world of work, family, community and money. In family living, students learn to work interdependently (with others). The class brings a sense of excitement about the new responsibilities of life after high school, and the basic life skills needed to survive. Life-like simulations include balancing a checkbook, financial planning and budgeting, auto and insurance buying, renting an apartment, single and married life, career planning and setting goals.

Web Page Design & Maintenance - Grades 10-12 .5 credit; semester course

Prerequisite: Software Applications

Students will learn a web page design software program called Dreamweaver. Students will learn skills and techniques that they can immediately apply in the real world related to web site development and maintenance. This course uses a step-by-step and screen-by-screen proven approach to learning features and capabilities, therefore, students of all computer literacy levels will stay on track while learning the Dreamweaver software package. For students interested in pursuing a computer career and active using the internet, this is a must take course.

Advanced Placement Computer Science Principles - Grades 10-12 1 credit; year course

Prerequisites: Software Applications and Algebra I

Equivalent to a first-semester introductory college computing course. Students will develop computational thinking skills vital for success across all disciplines, such as using computational tools to analyze and study data and working with large data sets to analyze, visualize, and draw conclusions from trends. The course engages students in the creative aspects of the field by allowing them to develop computational artifacts based on their interests. Students will also develop effective communication and collaboration skills by working individually and collaboratively to solve problems, and will discuss and write about the impacts these solutions could have on their community, society, and the world. Students who take and pass the AP examination at the conclusion of the school year may be eligible for college credit. It is recommended that students take this course prior to taking AS Android Programming and/or AS Visual Basic Programming. Students that would like to take both Android Programming & Visual Basic Programming should really take AP Computer Science Principles as a sophomore.



Advanced Placement Microeconomics - Grades 11-12 1 credit; year course

Prerequisite: Algebra I

AP Economics is a semester college level economics course that will focus on the branch of Microeconomics, which is the study of economic principles concerning individual decision makers (consumers and producers) within an economy. The main areas of concentration will include basic economic concepts, supply and demand, the nature and functions of product markets; nature and functions of factor markets; and efficiency, equity, and the role of government in a market economy. This course also enters into the math components of economics. This course is also a requirement for many college majors. Students who take and pass the AP examination at the conclusion of the school year may be eligible for college credit.



LANGUAGE ARTS

Related Career Clusters:



One credit of English is required every year

English 9- Required for grade 9 1 credit; year course

Study concentrates on improving individual skills in reading, composition, grammar, and speaking and listening using Common Core and College and Career Readiness Standards as guides. Units may include: history of the English language and language origins/root parts, choice novels, nonfiction reading, research writing using MLA documentation, and classic literature, including *The Odyssey*, and *Romeo and Juliet*.

English 10 - Grade 10, required for grade 10 1 credit; year course

Prerequisite: English 9

This is a rigorous class designed to prepare students for placement in junior and senior English courses. The curriculum is aligned with Wisconsin English-Language Arts standards in order to improve functional grammar, punctuation, reading comprehension, and formal writing. Covering both nonfiction and fiction texts, students will read *To Kill a Mockingbird*, *Night*, *Of Mice and Men*, *Taming of the Shrew*, various short stories, poems, and articles. Grammar, vocabulary, and essay writing are covered throughout the year in preparation for ACT Aspire, ACT, and SAT exams.

Public Speaking – Grades 11-12 (required for junior or senior year) .5 credit; semester course

Public Speaking will be a course designed to focus specifically on skills students will need to actively and effectively orally communicate. Students will not only learn the basics of speech presentation, but they will also focus on the development and organization of writing a speech. Specific lessons on note-taking, outlining, formal writing, body movement, presence, and voice quality (diction, articulation, volume, rate, etc.) will be taught.

American Literature I – Grades 11-12 .5 credit; semester course

Prerequisite: English 9 and 10

American Literature I is a survey course designed to expose students to the great literary masterpieces of early American literature. Units include Native American Traditions, Exploration, and Exploitation; Puritanism and the Revolutionary War Era; Romanticism and Transcendentalism; and Gothic Literature. Each unit is crafted with a focus on reading short works and excerpts for accuracy and meaning, along with an emphasis on knowledge and application of literary terms and vocabulary. A variety of creative writing and presentation assessments are used to gauge understanding of concepts.

American Literature II - Grades 11-12 .5 credit; semester course

Prerequisite: English 9 and 10

Chronologically, American Literature II continues where American Literature I ends, exposing students to the great literary masterpieces from 1850 to the mid twentieth century. Units include The Vanishing Frontier, Women's Voices, The American Dream, The Harlem Renaissance, and Modernism. Like American Literature I, each unit is crafted with a focus on reading short works and excerpts for accuracy and meaning, along with an emphasis on knowledge and application of literary terms and vocabulary. A variety of creative writing and presentation assessments are used to gauge understanding of concepts.

Contemporary Novel I - Grades 11-12 .5 credit; semester course

This course is recommended for students who are interested in extensive reading and in-depth analysis and interpretation of contemporary literary works. Students will build off their previous literature and composition skills as they read, reflect and interpret the course material. Much of the course focuses on symbolism, metaphors, theme, and

characterization. Some of the novels taught in class include *Looking for Alaska*, *Water for Elephants*, *All-American Boys*, *And the Mountains Echoed*, *The DaVinci Code*, *The Glass Castle*, and more!

Contemporary Novel II - Grades 11-12 .5 credit; semester course

This course is a continuation of Contemporary Novel I and is for students who have a genuine interest in reading and analyzing literature. Students will learn elements of fiction to strengthen their understanding of literature in terms of their comprehension and interpretation of the text. Students will develop well-formed paragraphs and papers implementing analysis and creative writing. Grammar usage will be incorporated as an element of writing. Novels read rotate based on class size and interest.

Creative Writing – Grades 11-12 .5 credit; semester course

Students will develop critical analysis skills and their writing craft as they study poetry, fiction, and the major poets and authors who have contributed to those genres. Emphasis will center on the study, interpretation, and application of figurative language and literary devices used in poetry and fiction, as well as understanding and appreciating the literary and artistic merits of the work. The students' knowledge will translate into writing their own poems and fiction (including daily writing prompts, novel writing, and a children's book).

Expository Writing – Grades 11-12 .5 credit; semester course

Prerequisite: English 9 and 10 (Required for those taking AP English)

This course places emphasis on skills that are needed to prepare students for writing at the collegiate level. Students will read and write essays of various styles, including narrative, process, critical analysis, reflective, evaluation, and persuasive. Specific work will be done on thesis development, vocabulary/word choice, usage, punctuation, and overall essay organization.

Media Literacy– Grades 11-12 .5 credit; semester course

Students will refine their critical thinking skills as they learn to access, understand, analyze, and evaluate all forms of media. The course will examine the evolution of media (and why that's important), civic engagement, digital footprints, digital communication, bias in media, social media, dangers of online environments, etc. Requirements will include: nonfiction reading, analysis through digital composition, in-class participation in discussions, note-taking, etc. **Student access to online media and social media will be helpful, but not required.

Advanced Speech & Interpretation – Grades 11-12 .5 credit; semester course (Fall semester only)

Prerequisites: Minimum grade of B in Public Speaking

Public speaking skills are essential for academic, business, and community life. This course is designed for students who are generally comfortable with the basics of public speaking and wish to further their skills at an accelerated rate. Students should expect to develop speeches to present outside of the classroom setting. Opportunities include the American Legion Oratorical Contest, the Optimist Oratorical Contest, and co-curricular speeches for forensics, FBLA, and/or FFA.

Advanced Placement English Language and Composition –Grade 12 only 1 credit; year course

Prerequisite: Expository Writing

This course cultivates the reading, writing, and analysis skills that students need for successful college reading & writing. Students will use the tools of rhetorical analysis to interpret and assess a variety of non-fiction writing including: news and academic articles, memoirs, and creative or argumentative essays. Students will also learn to evaluate visual texts and impactful historic speeches. Reading and writing assignments that focus on critical interpretation of texts, including expository, analytical, research, and argumentative essays, are an integral part of this course. This is great preparation for higher education because this is a required general education course at most technical and 4-year colleges. Students who take and pass the AP examination at the conclusion of the course may be eligible for college credit. It will also help students excel on college English entrance exams.



FOREIGN LANGUAGE

Spanish I - Grades 9-12 1 credit; year course

The primary goal of Spanish I is to introduce the student to proper pronunciation, spelling, and basic grammar usage of the Spanish language. It is intended that this course provides a strong base upon which to build proficiency in future years. The basic fundamental skills of reading, writing, speaking, and listening are stressed, along with cultural and geographical sections designed to expose the student to Hispanic cultures.

Spanish II - Grades 10-12 1 credit; year course

Prerequisite: Spanish I

Spanish II begins with a thorough review of Spanish I. New material is introduced to further increase the students' ability level in Spanish. The four elements of language learning (speaking, listening, reading and writing) are again stressed throughout the year as this new material is integrated with the students' prior knowledge. Cultural and geographical sections continue, along with a historical presentation on Spain.

Spanish III - Grades 11-12 1 credit; year course

Prerequisite: Spanish I and II

After a review of Spanish I and II, the third year of Spanish completes the study of Spanish grammar. All elements of the language will have been presented by year's end, enabling the student to capably communicate in Spanish. Written and oral work are stressed somewhat more in Spanish III. Cultural elements continue.

Advanced Placement Spanish Language and Culture - Grade 12 1 credit; year course

Prerequisite: Spanish I, II, III

This course is intended to cover the equivalent of a third-year college course in advanced Spanish composition and conversation. Spanish is the predominant language spoken in class with the intent of encouraging students to use Spanish in their daily lives, both in and out of the classroom. In addition to classroom conversations with peers and the teacher, students will be exposed to a wide range of speaking, reading, writing, and listening opportunities. Culture will be integrated throughout all of these opportunities. Some of these expectations include reading and interpreting short stories and books, writing short essays on various topics, and presenting speeches to the class. Students who take and pass the AP examination at the conclusion of the course may be eligible for college credit. In addition, students will receive social, cultural, academic, and workplace benefits that will help students throughout their lives.



MATHEMATICS

Related Career Clusters:



Finance Pathway

Pathway Courses	Work Based Learning / YA in:
Computerized Accounting I AS Computerized Accounting II Advanced Placement Microeconomics	Personal Finance Advanced Placement Statistics Accounting Banking Insurance

Engineering/STEM Pathway

Pathway Courses	Work Based Learning / YA in:
Intermediate Algebra Algebra II Geometry Vocational Math AB	Technical College Math Pre-Calculus Math Trades II Advanced Placement Calculus (AB)
	Bioscience Lab Foundations Civil Engineering Engineering Drafting Mechanical/Electrical Engineering Architecture Planning and Drafting

Intermediate Algebra – Grades 9-12 1 credit; year course

This course is designed to reinforce the fundamentals of algebra. Students are placed into Intermediate Algebra by their eighth grade teachers. Upon completion of this course, students will move to Algebra I course.

Algebra I - Grades 9-12 1 credit; year course

Algebra is the study of numbers and their relationship to each other. Topics covered will include relationships between quantities and reasoning with equations, linear and exponential relationships, descriptive statistics, expressions and equations, and quadratic functions and modeling. The skills learned will be the tools for success in other courses in mathematics, science, business, finance, engineering, computers, and many more. A must course for students considering college or technical college.

Algebra II - Grades 9-12 1 credit; year course

Prerequisite: Algebra I

In Algebra II you are prepared to use advanced algebraic concepts and skills in mathematics and other related disciplines. The course begins with a thorough review of Algebra I before moving on to the more advanced topics. The course will give you skills to open the doors to a variety of related disciplines and careers such as in engineering, physics, psychology, aeronautics, architecture, mechanics, business, computer science, electronics, instrumentation, and many more. **Graphing calculator required.**

Geometry - Grades 9-12 1 credit; year course

Prerequisite: Algebra I

Geometry includes two and three-dimensional geometry. We will be covering concepts of congruence, proofs, transformations, constructions, similarity, and trigonometry. We will be integrating algebra to geometry concepts. Applications of probability are also included.

Vocational Math AB - Grades 11-12 .5 credit; semester course

Prerequisite: Geometry

Students will have the opportunity to earn Tech Credit for this course through Wisconsin Technical Colleges.

Provides the opportunity for the learner to develop the knowledge, skills, process, and understanding of whole numbers, fractions, decimals, measurement, trigonometry, integers, algebraic equations, word problems, and practical plane geometry. (Vocational Math AB is formerly known as Math Trades I)

Math Trades II - Grades 11-12 .5 credit; semester course

Prerequisite: Vocational Math AB (formerly known as Math Trades I)

Provides the opportunity for the learner to develop the knowledge, skills, process, and understanding of solving equations, ratio, proportion, percent, practical plane geometry, solid figures, trigonometry, and statistics.

Technical College Math - Grades 11-12 1 credit; year course

Prerequisite: Algebra I

Students will have the opportunity to earn Tech Credit for this course through Wisconsin Technical Colleges.

Topics include solving linear equations, graphing, percents, proportions, measurement systems, computational geometry, and right triangle trigonometry. Emphasis will be on the application of skills to technical problems.

Pre-Calculus - Grades 11-12 1 credit; year course

Prerequisite: Algebra I, Algebra II, Geometry and consent of instructor

Consists of an in depth study of trigonometry and circular functions during the first semester, a quarter of matrix based algebra and a quarter of introductory calculus topics. Designed to prepare a student for a college credit calculus course, but is helpful no matter what level of math you go into at the college or technical college level.

Advanced Placement Statistics – Grades 11-12 1 credit; year course

Prerequisite: Algebra II and consent of Instructor

AP Statistics will introduce students to the major concepts and tools for collecting, analyzing and drawing conclusions from data. The students are exposed to four broad conceptual themes including exploring data, sampling and experimentation, anticipating patterns, and statistical inference. Upon entering this course, students need to have an understanding of graphical and algebraic concepts through the second year of Algebra, including linear, quadratic, exponential, and logarithmic functions. In contrast to many math classes, this course will require reading the text. This AP Statistics course is taught as an activity-based course in which students actively construct their own understanding of the concepts and techniques of statistics. AP Statistics relies heavily on students' active engagement in doing statistics with appropriate technological tools throughout the course and on the AP Exam. Students who take and pass the AP examination at the conclusion of the course may be eligible for college credit.



Advanced Placement Calculus (AB) - Grade 12 1 credit; year course

Prerequisite: Algebra I, Algebra II, Geometry & Pre-Calculus and consent of instructor

AP Calculus is the mathematics of motion and change. Calculus and its extensions will allow you to solve a large number of problems in a wide range of fields helping to bring an understanding about the universe and the world around us. Used by economists, oceanographers, biologists, medical researchers, space scientists, psychologists, physicists, engineers, sports equipment manufacturers, stock market analysts, and a large number of others. This is an excellent course for a college or technical college student pursuing a career in a technical related field. Students who take and pass the AP examination at the conclusion of the course may be eligible for college credit.



MUSIC

Related Career Clusters:



High School Band - Grades 9-12 1 credit; year course

Prerequisite: Previous experience on wind or percussion instruments, or prior director approval. Members must be able to read music at an intermediate to advanced level. Students new to the district and past band students who have had to drop due to schedule conflicts and are interested in joining the WHS Band, must contact the director as soon as possible. High School Band is a wind and percussion ensemble that uses wind band literature to teach musical and instrumental techniques. The course teaches the elements of music as they apply to performing with musical instruments, breathing, and interpretation of music. This class meets daily as an ensemble and in individual lessons during study halls or before and after school. Participation in band also entitles students to join the Northeastern Conference Honor Band, and to participate in Solo & Ensemble.

High School Concert Choir - Grades 9-12 1 credit; year course

Concert Choir is a mixed vocal ensemble. The repertoire includes a variety of styles of music from classical to contemporary songs. The curriculum includes a focus on proper techniques for singing, correct breath support, rhythm and notation, and interpretation of music. Students meet daily for group rehearsal and in small group or private voice lessons to work on technique and literature. Participation in choir also entitles students to join the Northeastern Conference Honor Choir, and to participate in Solo & Ensemble.

Music Theory - Grades 10-12

1 credit; year course

Consent of Instructor required.

This course explores the theory behind why music sounds the way it does, and how the elements of music interact to create pleasant experiences. Curriculum includes rhythm, notation, ear training, chord structure, composition, music history, and analysis. Students will use workbooks, computer programs, and projects to improve proficiency with hearing and writing specific sonorities. Specifics of pacing and content may vary depending on the level of students who sign up.

Guitar – Grades 9-12

.5 credit; semester course

This semester course will offer a two-pronged approach to the guitar, according to the needs of the students who sign up. It will teach beginners the basics of guitar tuning, note reading, strumming, and chords. It will also cater to experienced guitar players and/or those who took Guitar at the 8th grade level, offering advanced techniques like finger picking according to the student's ability level. The course will be structured on the use of method books and regular playing checks; practice time will be incorporated into the class. Please inform instructor if you have your own guitar for class.

Songwriting – Grades 9-12

.5 credit; semester course

This semester course will teach the process of songwriting based on today's music. Topics to be discussed include form, lyric writing, common chord progressions, and analysis of pop and rock music. The course is designed for the non-musician and open to anyone who wants to try their hand at writing their own music. We will begin with some basic guitar and piano in order to inform our use of chords.

Music Exploration – Grades 10-12

.5 credit; semester course

This student-driven course is designed to allow students to explore an aspect of music that interests and excites them. Students choose a passion project in the field of music (e.g. learning an instrument, composing a song, using music software like GarageBand, or researching something from music history), design their own course outline and dedicate their class time to that project. Twice a week, the class will meet all together to learn about various parts of the musical world, from instruments to music production to song analysis, as well as to share their projects. The rest of the class's time will be spent independently on student projects, with regular check-ins from the teacher.

Behind Broadway – Grades 9-12

.5 credit; semester course

This course will delve into the world of musical theatre, both on and off stage. Students will learn what goes into a musical production, from casting to choreography to costumes to set and lighting design. The course will also highlight key moments and people in musical theatre history and their effects on the genre, including Tin Pan Alley, Cole Porter, Rodgers and Hammerstein, up to and including modern shows like Hamilton and Dear Evan Hansen.

PHYSICAL EDUCATION / HEALTH

Related Career Clusters:



Health- Required for grade 9 .5 credit; semester course

The course focuses on educating students on their total health. They will analyze how the decisions they make will impact their health now and in the future. Students will gain knowledge and skills that will help them take charge of their health for a lifetime. Topics covered include nutrition, fitness, mental & emotional health, tobacco, alcohol, illegal drugs, human growth and development, diseases, first aid and CPR, and environmental health.

Physical Education 9- Required for grade 9 .5 credit; semester course

This course is designed to introduce students to activities and concepts that will keep them fit and healthy. Each week students will participate in activities that will address all five components of physical fitness. These include sports-based activities, weight training, and days devoted to lifetime fitness activities. Students will also be educated and quizzed on fitness terms and concepts, and will complete assignments that will prepare them for future PE classes. Expenses include: students supply their own gym shirts, shorts, tennis shoes, socks, and combination lock. Locks are also available for purchase from the PE department. Students will be required to purchase a heart rate monitor band.

Physical Education 10- Required for grade 10 .5 credit; semester course

This course is designed to review and build on the fitness concepts learned in Physical Education 9. Each week students will participate in activities that will address all five components of physical fitness: sports-based activities, weight training, and days devoted to lifetime fitness activities. During the course of the semester, students will be guided through the process of creating a personal fitness plan, and then have 2 weeks to implement their plan. Students are required to have a heart rate monitor band, and can use the one from the previous year.

Lifetime Fitness - Grades 11-12, grade 10 with PE teacher approval .5 credit; semester course

This class involves exploring the different areas of lifetime fitness. The goal will be to learn the basics of a variety of aerobic and anaerobic activities, while learning key components of what it takes to be fit for life. The class will engage in activities such as walking, aerobics, step aerobics, exercise band and ball workouts, Pilates, dance, kickboxing, weight training, and yoga. The class will also feature a few class periods in the student kitchen preparing healthy foods and learning about the nutritional value of each item. Students are required to have a heart rate monitor band that can be used year to year.

Personal Conditioning Co-Ed – Grades 11-12, grade 10 with PE teacher approval .5 credit; semester course

This is a physical education class for students interested in achieving their highest level of health-related fitness. Class activity emphasizes improving health-related fitness through resistance and cardiovascular training, while incorporating speed and agility activities. The students will implement a personal fitness program, and will be monitored weekly to assure they achieve their expected results. Achievement will be based on personal fitness goals that are designed by the instructor and student together. Students are required to have a heart rate monitor band that can be used year to year.

Personal Conditioning for Girls – Grades 11-12, grade 10 with PE teacher approval .5 credit; semester course **NEW!!**
Same course description as above.

Physical Education 11 & 12- Grades 11-12 .5 credit; semester course

This course is designed to build on the fitness concepts learned in the previous two classes. Each week students will participate in activities that will address all 5 components of physical fitness. These include sports-based activities, weight training, and days devoted to lifetime fitness activities. Students will create their own weight training program that will be used on a weekly basis. They will also complete assignments that will prepare them to lead a healthy and fit lifestyle after high school. Students are required to have a heart rate monitor band that can be used year to year.

SCIENCE

Related Career Clusters:



Health Science Pathway

Pathway Courses		Work Based Learning / YA in:
Health Biology Health Career Exploration Chemistry	Human Anatomy and Physiology Advanced Placement Chemistry Advanced Placement Biology Certified Nursing Assistant	Medical Office Nursing Assistant Resident Aid

Engineering/STEM Pathway

Pathway Courses		Work Based Learning / YA in:
Intermediate Algebra Algebra II Geometry Vocational Math AB Technical College Math Pre-Calculus	Chemistry AP Physics I Advanced Placement Calculus (AB) Advanced Placement Chemistry Math Trades II	Bioscience Lab Foundations Civil Engineering Engineering Drafting Mechanical/Electrical Engineering Architecture Planning and Drafting

Class of 2024 and 2025:

1 credit of Physical Science and 2 credits of elective Science

Refer to course selection sheets

Class of 2026 and beyond:

Grades 9 & 10 must take a full credit of science per school year. Intro to Biology or Biology, Intro to Chemistry or Chemistry, Intro to Physics or Conceptual Physics, and balance of elective science – **Refer to the information below**

1.5 credits from required courses

REQUIRED Science Courses	Credits		Area	Prerequisites
Introduction to Biology OR Biology	0.5		Biology	None
	1.0		Biology	None
Introduction to Chemistry OR Chemistry	0.5		Chemistry	None
	1.0		Chemistry	Algebra
Introduction to Physics OR Conceptual Physics	0.5		Physics	None
	1.0		Physics	None

1.5 credits from elective courses

ELECTIVE Science Courses	Credits	Area	Prerequisites
Human Anatomy and Physiology	1.0	Biology	Biology
AP Biology	1.0	Biology	Biology and Chemistry
*AS Genetics and Animal Breeding-ES	0.5	Biology	Introduction to Biology or Biology
*AS Marine Biology Aquaculture-ES	0.5	Biology	Introduction to Biology or Biology
*AS Veterinary Science-ES	0.5	Biology	None
*AS Animal Science Production-ES	0.5	Biology	Introduction to Biology or Biology
*AP Environmental Science	1.0	Biology	Biology
*AS Plant and Soil Science-ES	0.5	Biology	Introduction to Biology or Biology
*Zoology and Wildlife-ES	0.5	Biology	Introduction to Biology or Biology
AP Chemistry	1.0	Chemistry	Algebra 1 and Chemistry
*Food Science Industry-ES	0.5	Chemistry	None
Astronomy	0.5	Physics	Introduction to Physics or Conceptual Physics
AP Physics	1.0	Physics	Intro to Physics or Conceptual Physics and Algebra II

* Course Descriptions can be found under Agriculture, Life Science, and Environmental Science Department

Introduction to Biology - Grades 9-10 0.5 credit; semester course

The study of life covers many subjects within it, and in this course, we will cover the basic concepts of biology that are shared by all living things. What constitutes a living thing, what controls these organisms both internally and externally, and how this idea of life translates to various levels of biological organization.

Students do not need to take this course before taking Biology, but one or the other is required for graduation.

Introduction to Chemistry - Grades 9-10 0.5 credit; semester course

The basic rules and principles that govern the subatomic world will be covered in this course by taking a big picture approach to this material. The composition of matter and how it interacts with the rest of the world will be at the heart of this material. Students do not need to take this course taking Chemistry, but they do need to take one or the other.

Students that have taken Physical Science are not allowed to take this course.

Introduction to Physics - Grades 9-10 0.5 credit; semester course

This course is an introduction to the study of mechanics, thermal energy, waves, and electromagnetism.

Students will learn through inquiry, projects, and the scientific method. This course will lay the foundation to more advanced problem solving methods in Physics. Students do not need to take this course before taking Conceptual Physics, but they do need to take one or the other. Students that have taken Physical Science are not allowed to take this course.

Biology - Grades 9-12 1 credit; year course

This is a full year course with the purpose to cultivate in students the scientific attitude of thought, and to acquaint them with general biological principles. The aim of the course is to give the student a general idea of the processes that go on in plants, animals, and man, and to correlate these processes. It is hoped that the student will gain knowledge of how all living things are connected by various factors in nature and in cellular structure.

Human Anatomy and Physiology – Grades 11-12 1 credit; year course

Prerequisite: Biology

This class is the study of the structure and function of the human body. All of the systems of the body will be studied in depth and detailed dissections and laboratories will be completed. Special emphasis will be placed on the function of the human body in sickness and health. This class is a college prep class without the final testing of an advanced placement class.

Chemistry - Grades 10-12 1 credit; year course

Prerequisite: Algebra I

This is the fundamental science of the nature of matter and the changes it undergoes. The laws of chemistry are the controlling laws of life and health. The purpose of this course is to acquaint students with the nature of things that surround them, and the fundamental laws that govern the changes of matter in everyday living. An effort is made to make the course both technical and practical.

Advanced Placement Chemistry - Grades 11-12 1 credit; year course

Prerequisite: Algebra I and Chemistry

AP Chemistry is a college level course designed to be the equivalent of an introductory level college chemistry course. It will present the basic facts and theories of modern (organic) chemistry. It will deal with the nature, structure, and composition of common organic compounds used in everyday living. The course will also review general chemistry and introduce biochemistry. Students who take and pass the AP examination at the conclusion of the course may be eligible for college credit.



Astronomy - Grades 10-12 0.5 credit; semester course

Prerequisite: Introduction to Physics or Conceptual Physics

Astronomy is the study of the observable universe outside of the Earth's atmosphere. Students will learn about planets, stars, galaxies, and cosmology through a series of labs and night time observations. This is meant to be an introduction to space science with a strong component of the class being observations at night.

Conceptual Physics - Grades 10-12 1 credit; year course

This course will focus on the conceptual nature of physics. Content will include mechanics, electrostatics, electricity, waves and sound. Projects will include the egg drop contest, catapult contest, and others.

AP Physics 1 - Grades 11-12 1 credit; year course

Prerequisite: Intro to Physics or Conceptual Physics and Algebra II

Students will explore principles of Newtonian mechanics (including rotational motion), work, energy, and power, mechanical waves and sound. The course is based on teaching core scientific principles, problem solving, experimental design, and mathematical processes to provide a broad way of thinking about the physical world.



Advanced Placement Biology - Grades 11-12 1 credit; year course

Prerequisites: Biology, Chemistry and consent of Instructor

This course is designed to be the equivalent of a college introductory biology course usually taken by biology majors during their first year. AP Biology is designed to be taken by students after the successful completion of biology and chemistry. The course will cover biochemistry, cells, energy transformation, molecular genetics, heredity, evolution, plants, animals, and ecology. Students who take and pass the AP examination at the conclusion of the course may be eligible for college credit.



Certified Nursing Assistant – Grades 11-12 .75 credit; semester course

Elective credit only; does not count as Science graduation credit.

Class is limited to 10 students and preference will be given to seniors.

Students will have the opportunity to earn NWTC credit for this course by earning a grade of B or better.

The Nursing Assistant program prepares students for employment as nursing assistants. The program also prepares students with some of the skills needed for the first semester of the Nursing program. During the 120-hour course,

Introduction to Psychology – Grades 11–12 .5 credit; semester course

This course is not required to take AP Psychology.

This course introduces students to psychology in two ways. First, the course provides students with a foundation in the basic theories and principles of psychology. Second, it guides students towards a greater understanding of their own capacity for growth. Students who plan to take additional courses in psychology will thus have a solid base on which to build. All students, however, will be able to benefit from the insights provided by a field that touches almost every aspect of their daily lives.

World Cultures – Grades 11–12 .5 credit; semester course

This course will examine the world we live in. The course content will include the five basic geographic themes and their focuses including: 1) Describing location as the position of people and places on the Earth's surface, 2) Understanding that places are both identified and distinguished from one another by physical and human characteristics, 3) Relating relationships within places and noting the coexistence of human societies and natural environments, 4) Describing movement as the interaction that occurs between and among places, people, information, ideas and objects, 5) Understanding that a region is a part of the earth that is marked by features that distinguish it from neighboring areas.

Wisconsin History – Grades 11-12 .5 credit; semester course

This course provides students with a background in our state's history. From being a vital link in the French fur trade to farming and tourism, this class will focus on many of our state's important events, places, people, and facts. Topics will include but are not limited to early history through statehood, Wisconsin's role in some of our nation's prominent historical events (Civil War, WWI, WWII, Vietnam, etc.) and time periods (Civil Rights, etc.), Wisconsin Native American tribes, Wisconsin's economy, and so much more! This class will be a project-based learning environment, which means there will be no tests, and minimal homework, but the assessment will be in the form of further research in the given unit. This will connect the class to things that might interest each student about their state, which ultimately makes the class more beneficial!

World Leaders – Grades 11-12 .5 credit; semester course

This class will enable students to become more aware of the remarkable contributions (both good and bad) that individuals have made throughout history. The list will include past and present world leaders. Individuals to be studied could include Mohandas Gandhi, Thomas Jefferson, Mother Teresa, Bill Gates, Attila the Hun, Julius Caesar, Johann Guttenberg, Dr. Jonas Salk, and so on. The course is geared toward student research projects, and student guided activities.

Advanced Placement U.S. History - Grades 11-12 1 credit; year course

Prerequisite: must have earned a B average in both History I and History II

The objective of this course is to increase the student's understanding of United States history from discovery to the present. The course is divided into two semesters: Discovery through the Gilded Age, and The Road to Empire to the Present. The areas of concentration include historical, political and economic history coupled with an intense study of cultural and intellectual institutions and their development. This course is taught at the college level. Solid reading and writing skills, along with a willingness to devote considerable time to homework and study are necessary to succeed. Students who take and pass the AP exam at the conclusion of the course may be eligible for college credit.



Advanced Placement Psychology – Grade 11-12; min 3.5 GPA & instructor consent 1 credit; year course

The purpose of this course is to introduce students to the scientific study of the behavior and mental processes of human beings. It will provide the student with a learning experience equivalent to that obtained in most college introductory psychology courses. Students are exposed to the psychological facts, principles and phenomena associated with each of the major subfields within psychology. Topics of study include research methods and history of psychology, brain and behavior, sensation and perception, states of consciousness, memory and learning, cognition, motivation and emotion, personality, and Abnormal, Developmental and Social Psychology. Students who take and pass the AP exam at course conclusion may be eligible for college credit.



TECHNOLOGY EDUCATION

Related Career Clusters:



Architecture and Construction Pathway

Pathway Courses		Work Based Learning / YA in:
Geometry Introduction to Technology Vocational Math AB Technical College Math Pre-Calculus AP Physics I Electricity and Electronics	Wood Technology and Processes Home Maintenance Construction Architectural Design Math Trades II Advanced Placement Calculus (AB) Advanced Placement Chemistry	Architectural Drafting and Planning Carpentry Fundamentals Heavy Equipment Operator and Operating Engineer Masonry/Concrete Fundamentals Mechanical/HVAC Fundamentals Plumbing/Sprinkler Fitting Fundamentals

Arts, AV Technology and Communication Pathway

Pathway Courses		Work Based Learning / YA in:
Intro to Art Computer Graphics I	Computer Graphics II Web Design and Maintenance	Graphic Design Web Design

Manufacturing Pathway

Pathway Courses		Work Based Learning / YA in:
Introduction to Technology Intermediate Algebra Algebra II Geometry Vocational Math AB Technical College Math	Electricity and Electronics Welding Processes & Metal Machining Robotics & Automation Math Trades II Advanced Welding Processes & Metal Machining	Assembly and Packaging Electromechanical/Mechatronics Industrial Equipment Machining Manufacturing Manufacturing Processes Production Operations Welding

Engineering/STEM Pathway

Pathway Courses		Work Based Learning / YA in:
Introduction to Technology Intermediate Algebra Algebra II Geometry Vocational Math AB Technical College Math Pre-Calculus Chemistry	AP Physics I Electricity and Electronics Product Design Robotics & Automation Math Trades II Advanced Placement Calculus (AB) Advanced Placement Chemistry Principles of Engineering	Bioscience Lab Foundations Civil Engineering Engineering Drafting Mechanical/Electrical Engineering Architecture Planning and Drafting

Students may take a tech ed course at WHS that earns high school credit and credit at a WI Technical College at the same time. Please read course descriptions carefully and refer to page 4 regarding dual transcribed credit.

Students in grades 10-12 may earn dual credit for:

Electricity and Electronics (1 credit)

Principles of Engineering (1 credit)

Product Design

Automation Systems for Buildings and Manufacturing (5 credits, certificate and eligible for Start College Now)

Students in grades 11-12 may earn dual credit for:

Architectural Design (1 credit)

CNC Manufacturing (4 credits and a certificate)

Welding Processes & Metal Machining (1 credit)

Introduction to Technology - Grades 9-12 .5 credit; semester course

This course is required for all other hands-on shop oriented courses.

In this project-based course, you will explore tools, materials and processes that are used to create the technological world you live in. Hands-on projects will introduce you to architectural design, 3D modeling, digital fabrication, engineering design, electronics, woodworking, sheet metal, CNC milling and more.

Woodworking – Grades 10-12 .5 credit; semester course

Prerequisite: Introduction to Technology

This course is designed for students with an interest in furniture and cabinet work. Students will learn to safely use all of the woodworking tools and machines so they can make projects out of wood. Required projects include a wood mallet, an end table with drawer, a lamp and upper cabinet. Students will have an opportunity to design and make a small independent project at the end of the semester. Teamwork, safe work habits and employability skills are incorporated throughout the course.

Electricity and Electronics - Grades 10-12 .5 credit; semester course

Prerequisite: None

Students in grades 10-12 who take this course may receive one college credit from WI Technical Colleges.

It is remarkable how the simple building blocks of electronics can be pieced together to construct complex systems. You will explore how we design, fabricate and program electronics through the use of hands-on projects and real world applications. Projects built to reinforce theory may include a battery, speaker, DC motor, single string electric guitar, simple games and small robots. No prior experience is necessary to take this course.

Principles of Engineering - Grades 10-12 1 credit; year course

Prerequisites: Geometry

Students in grades 10-12 who take this course may receive one college credit from WI Technical Colleges.

This advanced survey course will introduce students to major concepts that they may encounter in a post-secondary engineering field of study. Throughout this project-based learning course, students will utilize engineering and scientific concepts to develop solutions for engineering design problems. Aspects that will be addressed include engineering careers, design process, 3d modeling and simulation, digital fabrication, design of mechanisms, material properties, statics, fluid power and electronic control systems. Students will utilize professional design tools including 3D printing, laser cutting, CNC milling and software including Fusion 360, MATLAB and Simulink. Projects will include designing and building a calculated model bridge, aerodynamic wind turbine blades, two-speed transmission and self-balancing motorcycle robot.

****Automation Systems for Buildings and Manufacturing** - Grades 10-12 1 credit; year course

Prerequisite: None

Students in grades 10-12 who take this course may receive 5 college credits from WI Technical Colleges and earn an Engineering Helper Certificate. This course will begin to prepare students for employment as technicians who assemble, install, troubleshoot, repair and modify electromechanical systems. Students will apply basic automation logic and motor control systems in conjunction with designing, building and programming robots. Students will identify and understand how building mechanical systems including ventilation and air handling, heating, cooling, and lighting components are used to provide human comfort. The course focus is on Building Automation System (BAS) components, including system architecture and sequences of operation.

****Unique opportunity for Start College Now**

In Northeast Wisconsin, the demand for skilled Energy Technicians continues to exceed the supply of qualified applicants for facility digitization and automation across multiple occupations. Sophomores or juniors students take "Automation Systems for Buildings and Manufacturing" earning four transcribed credits. As seniors, they can attend NWTC as part of the "Start College Now" program completing the final five credits to earn an "Energy Controls Career Pathway Certificate." With this certificate, students will have the credentials necessary to work as Building Controls Installers. The nine credits will also ladder into the 63-credit Energy Management Associate Degree at NWTC. Graduates of the associate degree program can work as Energy Auditors, Energy Management Consultants, Energy Program Coordinators, and Control System Specialists.

Product Design - Grades 10-12 .5 credit; semester course

Prerequisite: None

Students in grades 10-12 who take this course may receive one college credit from WI Technical Colleges.

Every single day we find ourselves knowingly influenced by the products we use. Decisions about the form, function and manufacture of these objects had to be made when the objects were designed. Working in collaborative teams, you will explore the design of products using 3D modeling, 3D printing and CNC technologies. Your team will focus on the goal of producing products that consider consumer desirability, market viability and technical feasibility. In addition to hands-on activities and problem-based challenges, your final capstone project will present you with the opportunity to design an original product.

Welding Processes & Metal Machining - Grades 10-12 .5 credit; semester course

Prerequisite: Introduction to Technology

Students in grades 11-12 who take this course may receive three college credits from WI Technical Colleges.

This course will prepare students with knowledge of welding and basic metal fabrication. Students will learn how to MIG and stick weld a variety of materials and thicknesses in all positions. The emphasis is on repair and fabrication of projects made mainly of metal. Students will also learn how to bend and form sheet metal on the brake, shear, and slip roller. The other areas covered are plasma-cutting, layout, measurement, and calculating material cost. All students will have to design and build a welding and sheet metal project for the semester.

Advanced Welding Processes & Metal Machining - Grades 10-12 .5 credit; semester course

Prerequisites: Welding Processes & Metal Machining

This course will prepare students with knowledge in TIG welding and metal machining. Students will learn tool and machine skills on the machine lath such as set up, feeds and speeds for every type of metal to be turned, and the cutting tool needed to cut it. Students will also learn how to set up and operate the milling machines. Other areas covered are TIG welding for aluminum and stainless steel, taps, drills, and cutting threads.

Consumer Automotive - Grades 10-12 .5 credit; semester course

Prerequisite: Introduction to Technology

Consumer Automotive Maintenance is a course everyone should take. This class will show you how to perform general maintenance on modern day cars, trucks, and SUVs. Classroom and lab experiences include learning about the operation of the different systems found in modern day vehicles. Students will gain skills and knowledge regarding common problems associated with automotive maintenance. During this class students will be instructed on how to perform maintenance tasks on the following systems: lubrication, cooling, electrical, brakes, wheels and tires, ignition, suspension, and fuel systems. The learning activities will be followed by hands-on lab experiences that can be done

through projects as well as on the student's vehicle. Students will also learn how to purchase and/or lease a new and/or used vehicle and evaluate a vehicle's value. Additional information will be covered on vehicle insurance and financing. All of the skills covered should enable you to make intelligent choices when purchasing, repairing, or having your vehicle repaired by a service facility.

Small Engine Maintenance and Repair - Grades 10-12 .5 credit; semester course

Prerequisites: Consumer Automotive

This class will show you how to do general maintenance for small gas powered equipment. Classroom and lab experiences include learning about the different systems of gas engines. Students will gain skills and knowledge regarding common problems associated with lawn equipment, lawn tractors, snow throwers, personal watercraft and more. This course will aid students who wish to pursue a career in automotive technology, or just want to be knowledgeable about small gas powered equipment.

Home Maintenance - Grades 10-12 .5 credit; semester course

Prerequisite: Introduction to Technology

This class will show you how to do general maintenance for the home. Classroom and lab experiences include learning about the different systems of a home. Students will gain skills and knowledge regarding common problems associated with plumbing, electrical, heating and cooling, basements, walls, roofing, yard upkeep and more. This course will aid students who wish to pursue a career in construction technology or just want to be knowledgeable about home maintenance.

Architectural Design - Grades 10-12 0.5 credit; semester course

Students in grades 11-12 who take this course may receive one college credit from Wisconsin Technical Colleges.

One of the biggest decisions and purchases in your life will be home ownership. Here you will explore the basics of good design and construction practices as you develop numerous residential structures. You will learn to communicate designs through the creation of drawings. You will bring your ideas to life with the use of 3D computer modeling, detailed photo realistic renderings, 3D animated walkthroughs, and 3D printed models.

Construction - Grades 10-12 .5 credit; semester course

Prerequisite: Home Maintenance or Architectural Design

This course is designed for students with an interest in construction and the areas surrounding construction such as plumbing. Students will learn about the different construction systems and how they have to work together to build a structure. Students will also learn how to read residential blueprints and the various types of measuring techniques used in the construction industry.

CNC Manufacturing - Grades 10-12 (12 student limit) .5 credit; semester course

Students in grades 11-12 who take this course may receive four college credits from WI Technical Colleges and earn a CNC Helper Certificate.

Students will learn how to use a computer numerically controlled (CNC) router, lathe, and mill. Students will learn the CNC design processes including the use of G Code Controls, 3D Modeling, and CAM software. Students will learn how to edit CNC programs and set up machining fixtures and tooling for the proper operations of each machine. Students will apply CNC manufacturing techniques to mass-produce a simple product for sale. Teamwork, safe work habits and employability skills are incorporated throughout the course.

OTHER OPTIONS



Advanced Placement Testing

Advanced Placement Testing is available at WHS for Mathematics, English, Physics, Computer Science, Chemistry, Biology, Spanish, History, US Government, Art and several other areas. You do not have to be enrolled in an advanced placement class in order to take the test. Tests are administered in May of each school year. For additional information, please contact the Principal's office. Students are responsible for test fees.

Early College Credit/Start College Now

Courses offered through local universities and technical colleges are available to all juniors and seniors through the Early College Credit/Start College Now program. If your career interests require coursework unavailable at Wrightstown High School, and that course work can be used as high school credit, the district will pay course tuition and fees. Transportation to attend these courses is the student's responsibility.

Application Instructions for ECCP/ SCN:

- 1) Talk with your High School Counselor to see if it is a good fit, aligns with academics plan, and whether you meet the prerequisites.
- 2) Submit a completed application to your School Counselor by **May 1st** for the Fall Semester and by **October 1st** for the Spring Semester. Use your personal email address that you check often.
- 3) Follow all application or registration requirements of the College
- 4) Communicate with your High School Counselor on your registration

Application Criteria

- Students must be in 11th or 12th Grade
- Student must be on track for graduation, have good attendance, and good behavior
- Students must provide their own transportation
- Students who receive a failing grade or drop the course, while in session, the student and or guardian will be required to reimburse the school district for the cost of the course.

Unique opportunity for Start College Now:

Automation Systems for Buildings and Manufacturing

In Northeast Wisconsin, the demand for skilled Energy Technicians continues to exceed the supply of qualified applicants for facility digitization and automation across multiple occupations. Sophomores or juniors students take "Automation Systems for Buildings and Manufacturing" earning four transcribed credits. As seniors, they can attend NWTC as part of the "Start College Now" program completing the final five credits to earn an "Energy Controls Career Pathway Certificate." With this certificate, students will have the credentials necessary to work as Building Controls Installers. The nine credits will also ladder into the 63-credit Energy Management Associate Degree at NWTC. Graduates of the associate degree program can work as Energy Auditors, Energy Management Consultants, Energy Program Coordinators, and Control System Specialists.

Youth Apprenticeship

Grades 11-12, One or Two Year Programs, Credits vary from 1-4

This program through Northeast Wisconsin Youth Apprenticeship (NEWYA) allows students to explore a future career while earning money, high school credits, and post-secondary credits. Youth Apprenticeship Programs are offered in the areas of:



Agriculture, Food & Natural Resources

Careers involve working with plants, animals, and the environment.



Architecture & Construction

Careers involve designing and building homes, roads and other structures.



Arts, A/V Technology & Communications

Careers involve creative tasks, such as performing or writing.



Finance

Careers involve managing and working with money.



Health Sciences

Careers involve helping people and animals with the medical care they need to get or stay healthy.



Hospitality & Tourism

Careers involve providing people with food, lodging, and related services.



Information Technology

Careers involve working with computer hardware, software, or network systems.



Manufacturing

Careers involve making products, such as food, cars, and household goods.



Marketing

Careers involve promoting and selling products and services.



Science, Technology, Engineering, & Mathematics (STEM)

Careers involve solving problems through research and design.



Transportation, Distribution, & Logistics

Careers involve moving people and products from one place to another.

If you are interested in this program, please contact the Counseling Office and see your NEWYA School Based Coach.