







Minnewaska Area High School 2024-2025 Course Registration Catalog





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General Information

Registration Guidelines

When registering for classes, high school students should communicate with their parents, teachers, advisors, and our guidance counselor to carefully plan their academic programming. A student's programming should be based on their interests and future plans. Students should fill out their first choice selections and all Alternate Course selections when registering. Students also need to meet the prerequisites for all courses they are enrolled in.

- Prerequisites are met
- All first-choice and alternate courses are selected

Add/Drop Classes

Students will have the first week of school to consider any schedule changes, where they would need signatures of approval from staff and parents.

Schedule Changes will be made for the following reasons:

- Academic misplacement: a student is placed in the wrong level of class or is placed in a class without meeting the prerequisite.
- Missing an academic class: a student missing a core class
- Missing a graduation requirement: a student is missing a course necessary for graduation in the upcoming school.

Withdrawal from Class

After the first week of classes, class schedule changes will be made only in special cases with administration approval. Students who withdraw from a PSEO course or Concurrent Enrollment course after the first week of Minnewaska classes begin will receive an F on their high school transcript.

Credit Requirement For Graduation (must complete all for graduation eligibility)

ENGLISH/LANGUAGE ARTS	_	4 Credits
• English 9	1 credit	1 Oroano
English 10 or Advanced English	1 credit	
English 11 (choose one of the following)	1 credit	
• English 11	rorcait	
 AP Language and Composition 		
 College Composition 		
English 12 (choose one of the following)	1 credit	
• English 12	rorean	
AP Literature		
College Literature		
Public Speaking		
SOCIAL STUDIES		3.5 Credits
United States History	1 credit	J.J Credits
World History or Advanced Placement World History	1 credit	
	.5 credit	
Sociology Economics	.5 credit	
American Government	.5 credit	
MATHEMATICS	.5 Credit	3 Credits
		3 Credits
Option A: Alcohro 1.5	1 and dit	
Algebra 1.5	1 credit	
Geometry Algebra II	1 credit	
Algebra II Ontion B:	1 credit	
Option B: Advanced Cooperators 0	4	
Advanced Geometry 9	1 credit	
Advanced Algebra II	1 credit	
College Algebra, Statistics, Trigonometry	1 credit	2 0 = = = = = =
SCIENCE	4 114	3 Credits
Environmental Science Piala managemental Science	1 credit	
Biology	1 credit	
Chemistry or Physics (choose one)	1 credit	
o Chemistry		
Chemistry Concepts		
o Physics		
College Chemistry		4.0 111
HEALTH & PHYSICAL EDUCATION		1 Credit
Health 9	.5 credit	
Physical Education	.5 credit	
ARTS		1 Credit
Music/Arts-Visual or Performing Arts	1 credit	
ELECTIVES		9.5 Credits
TOTAL CREDITS		25 Credits

Grade Point System

Letter grades are issued at the end of each quarter. These grades are translated into numerical values and averaged at the end of each semester in grades 9-12. AP Courses and Concurrent Enrollment courses taught by MAHS faculty are to be weighted at an additional .333. MAHS students are only allowed to take four (4) college-level courses in any given semester.

A = 4.00 A- = 3.667 B+ = 3.33 B = 3.00 B- = 2.667 C+ = 2.33 C = 2.00 C- = 1.667 D+ = 1.33 D = 1.00 D- = 0.667 F = 0.00

Cumulative GPA/Class Rank

All final semester grades from 9th to 12th grade are averaged to form a cumulative GPA. Minnewaska Area High School no longer has class ranks however we have GPA recognition.

GPA Recognition/Honors (seniors)

Honors: students with a cumulative GPA of 3.5-3.94 (Cum Laude) High Honors: students with a 3.95 GPA or above (Summa Cum Laude)

Participation in Commencement

The commencement ceremony honors students who have earned a diploma through credits. Therefore, students who have not completed graduation requirements may not participate in commencement exercises. Students must meet all Minnesota Graduation requirements by the Friday before commencement to participate in commencement exercises.

Incompletes

A student with special circumstances, such as an extended illness or absences with the approval of the administration and the teacher will be provided with an "Incomplete" (I) if all work missed during the time of the extended absence is not completed by the end of the grading period. Pre Excused absences do not warrant an incomplete. Two (2) weeks after the end of the grading period, any remaining "Incompletes" will automatically change to an F on the student's report card. Completing the incomplete requirements is the sole responsibility of the student.

College Credit Opportunities at Minnewaska Area High School

Students who take concurrent enrollment (college) courses should contact the university of their interest to determine transfer credit requirements. For any credit, college course, or transfer questions students are encouraged to meet with the guidance counselor.

English (earn 12 credits)		Science (earn 23 credits)	
Public Speaking	3 credits	Intro to Biology 1	4 credits
Intro to Literature	3 credits	Intro to Biology 2	4 credits
Composition 1	3 credits	Human Anatomy & Physiology I	4 credits
Composition 2	3 credits	Human Anatomy & Physiology II	4 credits
		College Chemistry	4 credits
		CNA	3 credits

Mathematics (earn 20 credits)

Pre-Calculus 4 credits Calculus 1 4 credits College Algebra 4 credits Intro to Statistics 4 credits Principles of Trigonometry 4 credits

Additional Offerings General Psychology 3 credits Intermediate Spanish I 4 credits

Intermediate Spanish II 4 credits

Advanced Placement Courses (a student would need to pass the AP exam with a score of 3 or greater to earn college credit)

AP World History

AP Language and Composition

AP Literature

AP courses are recommended for students planning on attending a two or four year school, but are not enrolled in College courses, as these classes are considered college prep classes and do not have a requisite GPA.



Course Offerings Summary		Drones I	9,10,11,12
*New Courses for 24-25 highlighted		Drones II Exploration in Technology I	10,11,12 9,10,11,12
(Y) is for year long courses		Exploration in Technology II	9,10,11,12
		Farm to Table (Local Foods)	9,10,11,12
English/Language Arts		Home & Car Maintenance	10,11,12
English 9	9	Intro to Agriculture	9,10,11,12
English 10	10	Laker Construction I	11,12
Advanced English 10	10	Laker Construction II Laker Manufacturing	11,12 10,11,12
English 11	11	Landscape Design	9,10,11,12
AP Language and Composition	11	Plant Science	9,10,11,12
Composition I Composition II	11 11	Robotics	9,10,11,12
AP Literature and Composition	12	Shop 101(non-traditional)	9,10,11,12
Intro to Literature	12	Welding I	10,11,12
English 12	12	Welding II	11,12
Public Speaking	11,12	Wildlife & Natural Resources	9,10,11,12
Journalism	10,11,12	Woods I Woods II	10,11,12 10,11,12
Intro to Drama and Theatre Arts	9,10,11,12	College Algebra	11,12
		Trigonometry	11,12
Mathematics		Pre-Calculus	12
Algebra 1.5	9	Calculus	12
Advanced Geometry	9	Intro to Statistics	11,12
Geometry	10 10		
Advanced Algebra II Algebra II	11,12	BCE Pathway	
Foundations of Math	12	Music - Performance Arts	
College Algebra	11,12	Varsity Band	9,10,11,12
Principles of Trigonometry	11,12	Concert Band	10,11,12
Pre-Calculus	12	Varsity Choir	9,10
Calculus I	12	Concert Choir Other BCE Courses	10,11,12
Intro to Statistics	11,12	Accounting I	10,11,12
		Accounting II	10,11,12
Science		Career Exploration & Planning	9,10,11,12
Environmental Science	9	Ceramics I	10,11,12
Biology	10	Ceramics II	10,11,12
Chemistry Chemistry Concepts	11,12 11,12	Computer Essentials I Computer Essentials II	9,10,11,12 9,10,11,12
Physics	11,12	CO-OP	11,12
College Chemistry	11,12	Digital Media & Yearbook	11,12
Intro to Biology I	11,12	Drawing	9,10,11,12
Intro to Biology II	11,12	Entrepreneurship	10,11,12
Certified Nurses Assistant (CNA)	11,12	Foods I	9,10,11,12
Anatomy/Physiology	11,12	Foods II	11,12
Anatomy/Physiology I Anatomy/Physiology II	11,12 11,12	Global Foods Graphic Design	10,11,12 9,10,11,12
Anatomy/i mysiology ii	11,12	Independent Living	10,11,12
Social Studies		Interior Design & Housing	9,10,11,12
US History	9	Intermediate Spanish I (CLC) (Y)	11,12
World History	10	Intermediate Spanish II (CLC) (Y)	12
AP World History	10	Intro to Art	9,10
Economics	11,12	Intro to Business	10,11,12 9,10,11,12
Sociology	11,12	Intro to Drama and Theatre Arts <mark>Journalism</mark>	11,12
American Government General Psychology I	11,12 11,12	Marketing	10,11,12
The World Wars	10,11,12	Painting	10,11,12
Current Social Issues and Events	11,12	Photography	10,11,12
	•	Personal Finance	10,11,12
Health/Physical Education		Print Technologies	10,11,12
Health	9	Public Speaking	11,12
Physical Education	9	Sculpture Spanish I (Y)	10,11,12 9,10,11,12
,		Spanish II (Y)	10,11,12
AEMT Pathway		Spanish III (Y)	11,12
Ag Processing	9,10,11,12	Studio Art	11,12
Ag Careers & Work Experience	9,10,11,12	Youth Apprenticeship	12
Ag Sales & Entrepreneurship	9,10,11,12		
Animal Science	9,10,11,12		
Career Exploration & Planning	9,10,11,12		
Computer Aided Drafting (CAD)	9,10,11,12		

HSHS Pathway

Advanced Health	10,11,12
Anatomy/Physiology (Y)	11,12
Anatomy & Physiology I (ATCC)	11,12
Anatomy & Physiology II (ATCC)	11,12
Athletic Development	10,11,12
Career Exploration & Planning	9,10,11,12
Chemistry (Y)	11,12
College Chemistry (Y)	11,12
General Psychology	11,12
College Psychology	11,12
Health	9
Human Development	10,11,12
Individual Sports	10,11,12
College Biology I	11,12
College Biology II	11,12
Lifetime Fitness	10,11,12
Medical Terminology & Careers	9,10,11,12
Certified Nurses Assistant (CNA)	11,12
Physics (Y)	11,12
Sports Officiating	10,11,12
Team Sports	10,11,12
The World Wars	10,11,12
Teachers Assistant	11.12







REGISTRATION WORKSHEET 2024-25

Student Name: Current Grade:

Please take some time to look through the Course Registration Catalog. You can find a link to the Course Registration Catalog on the school website under the High School Tab.

The graduation requirements for each grade level are listed below. Please take some time to look over the course offerings and fill in your choices below. In addition to filling in <u>7</u> periods, please pick <u>four</u> alternate elective classes in case there happens to be a scheduling conflict. If you would like assistance with your choices, feel free to make an appointment with Jennifer Ring.

Class of 2028	Class of 2027	Class of 2026	Class of 2025
English 9	English 10 OR Advanced	English 11 OR AP	English 12 OR AP Literature
	English 10	Composition OR ATCC	OR ATCC Intro. To Literature
		Composition I & II	& ATCC Public Speaking
U.S. History	AP World History OR World History	Sociology AND Economics	American Government
Algebra 1.5 OR Geometry 9	Geometry OR Algebra II- Advanced	Algebra II OR ATCC College Algebra & ATCC Principles of Trig./College Stats	
Environmental Science 9	Biology	Chemistry/ATCC Chemistry OR Physics**	
Health/PE 9			

Grades 9-12: 1.0 cr. Music/Arts - Visual or Performing (Band /Choir),

Credits needed to graduate

25 credits (Required courses - 15.5 credits; Electives – 9.5 credits)

<u>Course</u>	Semester (1)	Semester (2)	
•			
_			
_			
_			
_			
_			
1 st Alterr	native Choice	3 rd Alternative Choice	
2 nd Alter	native Choice	4 th Alternative Choice	

^{*}Credit value is listed in Course Registration Catalog

^{**}Can be completed in grades 11 or 12



Minnewaska Area High School Career Pathways

Our Mission: "Engage Every Student, Every Day!

<u>Our Vision:</u> Minnewaska Career Pathways envisions a dynamic future where students and business partners collaboratively engage in unique learning opportunities within identified Career Pathways, fostering innovation and effectively preparing Minnewaska students for future employment.

Career & College Ready/Pathway Choices

A pathway is a cluster of courses designed to provide learning experiences for students that will prepare them for a specific career area or job field while they meet the requirements for graduation. Pathways provide a student with work-related experiences and an exploratory path to their future career.

Our three pathways will allow students to concentrate their learning and experiences on personal interests and prepare them for Career and College. Students will have the option to take a variety of courses that cross multiple pathways or take courses that immerse and focus primarily on one of our three career pathways:

Agriculture, Engineering, Manufacturing & Technology (AEMT)



Business, Communication & Entrepreneurship (BCE)



Health Sciences & Human Services (HSHS)





Agriculture, Engineering, Manufacturing & Technology

Nurturing a new generation of skilled innovators in agriculture, engineering, manufacturing, and technology, our high school career pathway envisions students harnessing cutting-edige knowledge and hands-on experiences that drive sustainable solutions, cultivate creativity, and engineer a future of growth and prosperity.

ACADEMIC COURSES

- Career Exploration and Planning
- Laker Manufacturing
 Ag Sales and
- Welding
- Exploring Technology CAD
- Robotics
- Intro to Ag

- Wildlife and Natural Resources
- Entrepreneurship
- Drones
- Landscape Design

- Ag Processing
- Ag Careers and Work Experience
- Plant Science
- Animal Science
- Laker Construction
- Shop 101

- Farm to Table [Local Foods]
- Home and Car Maintenance
- Calculus
- Statistics

JOB SKILLS

In addition to have technical skills, employers expect works in this industry to have these skills:

- Communication
- Problem Solvina
- Time Management
- Collaboration
- Critical Thinking
- Decision Making

COMPLETION STANDARDS

- Complete 7 Credits from Pathway
- Earn C or Higher in Pathway
- Complete Senior Capstone Project
- Complete an Approved Work Experience
- Earn a Certificate and Green Cord at Graduation

CAREER EXPERIENCES

- Learn from Industry Speakers
- Attend 9th Grade Career Expo
- Attend 10th Grade Sneak a Peek
- Attend 11th Grade College Fair
- Tour Local Businesses
- Work with Real-Life Industry Projects
- Complete 12th Grade Graduation Capstone



EXPLORE TYPES OF CAREERS

www.careerwise.minnstate.edu/careers

REVIEW THE LOCAL JOB OUTLOOK

www.careerwise.minnstate.edu/jobs

FIND POSTSECONDARY PROGRAMS

www.careerwise.minnstate.edu/education

AEMT (Agriculture, Manufacturing, Engineering & Technology)

Aq Processing

Pathway: AEMT
Prerequisite: None
Credit/Length: .5/semester
Grade: 9,10,11,12

This class will teach you how to process raw products to add value and flavor to your life. We will cover beekeeping, honey collection, meat science, dairy products, as well as vegetable production and processing. Part of this class will be making and trying different recipes to learn what works and what doesn't to help make you a smart consumer at the grocery store.

Ag Careers & Work Experience

Pathway: AEMT
Prerequisite: None
Credit/Length: .5/semester
Grade: 9,10,11,12

This will be a hands-on student driven class. Students will learn about local Ag careers and experience community experts coming into class to share about career pathways, experiences and opportunities. Students will create community partnerships and develop relationships to guide future employment and opportunities. Students will explore and develop skills needed in the workforce and will learn about careers and local job opportunities within the district's communities. Students will create a resume, cover letter and fill out employment forms relating to careers of interest. Students will then meet with community expert mentors and work through their portfolio, practice interview skills and work on developing professional skills needed for the workforce through practice interviews and professional meetings. Second quarter, students will have 3 internship opportunities job shadowing Ag careers within the Minnewaska School district and area communities. Students will complete 7 hours of job shadowing at each experience learning how each business works.

Aq Sales and Entrepreneurship

Pathway: AEMT
Prerequisite: None
Credit/Length: .5/semester
Grade: 9,10,11,12

This course will give students hands-on experience in the field of entrepreneurship and sales. In this class students will learn about the art of sales, starting and running a business, taking orders, production of multiple products and pricing for a profit. The class will utilize the technology of a laser engraver, vinyl printer/cutter, screen print press, and a router CNC machine to design, manufacture, and market many different products.

Animal Science

Pathway: AEMT
Prerequisite: None
Credit/Length: .5/semester
Grade: 9,10,11,12

This course will provide students with the knowledge and skills necessary to continue their education in working with companion animals, livestock, and/or veterinary science. This course will introduce introductory and advanced techniques in the selection and care of small animals and livestock. Students will learn about livestock evaluation, nutrition, and reproduction through a hands-on learning atmosphere.

Calculus I - ATCC

Pathway: AEMT

College Course #: MATH 1426
Setting: Classroom
Prerequisites: Pre-Calculus
Course Length: Semester

H.S. Credit: 1
College Credit: 4
Weighted Grade: .333
Grade: 12

This course introduces students to the basic concepts of differential and integral calculus: beginning with the definition of limits, limits and continuity, progressing to differentiation and integration of functions, sketching of functions, application of definite integrals, concluding with the Fundamental Theorem of Calculus. This class can be taken for 4 credits from ATCC.

Career Exploration and Planning

Pathway: AEMT, BCE, HSHS

Prerequisite: None
Credit/Length: .5/semester
Grade: 9,10,11,12

Career Exploration and Planning is a dynamic course designed to assist high school students in navigating the complex process of identifying and pursuing their career goals. Through a series of interactive activities, assessments, and guided discussions, students will explore their interests, strengths, values, and aspirations to make informed decisions about their future careers. This course will provide students with the tools,

resources, and strategies necessary to develop a personalized career plan and prepare for success in the workforce or further education.

College Algebra - ATCC

Pathway: AEMT

College Course #: MATH 1420 Setting: Classroom

Prerequisite: Accuplacer score of 50 or above

OR MCA score of 1158 OR ACT Math score of 22

Course Length: Semester

H.S. Credit: 1
College Credit: 4
Grade Weight: .333
Available to Grades: 11, 12

College Algebra will continue with the concepts introduced in Algebra II but at a higher rigor. Topics include algebraic expressions, linear equations, algebraic word problems, exponents, systems of linear equations, functions, graphs, and quadratic equations. The focus of this course is to develop math skills to the extent that the learner can apply these skills to solving practical real-world problems. This class can be taken for 3-semester credits from ATCC.

Computer Aided Drafting I (CAD)

Pathway: AEMT
Prerequisite: None
Credit/Length: .5/semester
Grade: 9,10,11,12

Students will be introduced to the fundamentals of computer-aided design and drafting. The semester-long course will go through various lessons in SolidWorks learning how to design parts and components. Students will also learn about different career opportunities involving CAD. Toward the end of the semester, students design a part or assembly of their choosing. Most of the time in this class will be spent on the computers working at your own guided pace.

Drones I

Pathway: AEMT
Prerequisite: None
Credit/Length: .5/semester
Grade: 9,10,11,12

Drones I is an introductory course designed to provide students with a comprehensive understanding of unmanned aerial systems (UAS), commonly known as drones. Students will delve into the fundamental principles of drone technology, including their design, operation, and applications across various industries. Through a combination of theoretical learning and hands-on practical experiences, students will develop essential skills in drone piloting, safety protocols, and basic maintenance.

Drones II

Pathway: AEMT
Prerequisite: None
Credit/Length: .5/semester
Grade: 9,10,11,12

Drones II is an advanced course designed to expand upon the foundational knowledge acquired in Drones 1. Students will deepen their understanding of unmanned aerial systems through advanced theoretical concepts and hands-on experiences. This course will focus on specialized applications of drones, advanced flight maneuvers, data analysis, and emerging technologies in the field.

Exploration in Technology I

Pathway: AEMT
Prerequisite: None
Credit/Length: .5/semester
Grade: 9,10,11,12

This course will provide exploration in Manufacturing and Communication. Students will design and construct a shaker-style table. We will also be using the Laser Engraver to design projects as well as a mirror, in which we will construct a frame. In communications, the students may produce logos for silk-screening shirts. This course will also offer an introduction to programming mobile robots using LEGO Mindstorm EV3 systems with motors, rotation, and sensors (Sound, Light, Touch). All activities will require safe and proper use of power equipment.

Exploration in Technology II

Pathway: AEMT

Prerequisite: Exploration in Technology I

Credit/Length: .5/semester Grade: .10, 11, 12

This course will provide an exploration of wood production and transportation. Safe and proper use of power equipment will be required to design and produce wood products within the reason of their choice. Transportation will include making Co2 cars and terrestrial MTPVs as well as ballistic launching devices.



Farm to Table: Local Foods

Pathway: AEMT
Prerequisite: None
Credit/Length: .5/semester
Grade: 9,10,11,12

Offered: Only offered in the Fall Semester

Local Foods is a course that will focus on local foods and businesses in the Tri-County Area. The class will provide students with opportunities to participate in a variety of activities and lab work. Students will learn about the food that is grown where we live and how to prepare it. Students will learn about the similarities and differences between local small and large businesses and farms. Some of the area businesses the class will collaborate with may include local businesses and farms: Fresha, Bonanza Bean, RDO Potato, MN Sugar, Dorrich Dairy, Glacial Ridge Growers, MN Corn and Soybean Growers, and many more. Local career exploration will also be a focus. Students enrolled in this course formulate, design, and carry out our food-base laboratory and field investigations as an essential course component. Students understand how biology, chemistry, and physics principles apply to the composition of foods, the nutrition of foods, food and food product development, food processing, food safety and sanitation, food packaging, and food storage.

Home and Car Maintenance

Pathway: AEMT
Prerequisite: None
Credit/Length: .5/semester
Grade: 10,11,12

This class is based on increasing the consumer's awareness of a typical house and how it functions. We will cover purchasing, repairing, and maintaining a house. Some time will be spent looking at the automotive industry from purchasing to repairs. Activities will include basic car care, basic electricity, drywall repair, plumbing as well as many other activities.

Intro to Agriculture

Pathway: AEMT
Prerequisite: None
Credit/Length: .5/semester
Grade: 9,10,11,12

This course will give students in Agriculture a chance to learn about many different topics related to Ag in one course. Students will do many hands-on activities during this course that encompass many different aspects of the Agriculture Industry. Topics covered include animal science, plant science, ag mechanics, ag business/communications, natural resources, and food science.

Intro to Statistics - ATCC

Pathway: AEMT

Prerequisite: College Algebra **OR**

Pre-Calculus OR MCA score of 1148

H.S. Credit: 1
College Credit: 4
Weighted Grade: .333
Grade: 11,12

This course is primarily for business, science, liberal arts, psychology, and education majors. Topics studied include descriptive measures for empirical data, theory of probability, probability distributions, sampling distributions of statistics from large and small samples, estimation theory, hypothesis testing, correlation, and regression.

Laker Construction I

Pathway: AEMT

Prerequisite: Woods 1 and/or 2
Credit/Length: .5/semester
Grades: 11, 12

Laker construction is designed to provide students with the skills needed for employment in the entry-level and semi-skilled positions in the construction area. The main purpose of the class is for the students to learn the different skills and types of careers that are available in the construction industry. Students will learn the fundamentals of construction along with safety in the shop and on the job site. Along with safety, students will learn about personal protective equipment and employability skills in the areas of study which are vital to students getting and maintaining employment.

Laker Construction II

Pathway: AEMT

Prerequisite: Woods 1 and/or 2
Credit/Length: .5/semester
Grades: 11. 12

Laker construction is designed to provide students with the skills needed for employment in the entry-level and semi-skilled positions in the construction area. The main purpose of the class is for the students to learn the different skills and types of careers that are available in the construction industry. Students will learn the fundamentals of construction along with safety in the shop and on the job site. Along with safety, students will learn about personal protective equipment and employability skills in the areas of study which are vital to students getting and maintaining employment.

Laker Manufacturing

Pathway: AEMT

Prerequisite: Welding I or CAD Credit/Length: .5/semester Grade: 10, 11, 12

Students will learn about the manufacturing process. Some of the topics covered will include Computer-Aided Design, Fluid Power, Robotics, and Automation. Students will ultimately design a product to manufacture and sell in class. This will be a very hands-on class using computers, welders, as well as the CNC plasma cutter.

Landscape Design

Pathway: AEMT
Prerequisite: None
Credit/Length: .5/semester
Grade: 9,10,11,12

This will be a hands-on student driven class. Students will learn identification of common trees, shrubs, and flowering plants that can be used in the outdoor landscape. Students will also design and draw landscape plans for area sites and have the opportunity to perform some of the installation work to learn the principles of landscaping. Field trips to local areas will provide students with a chance to learn how to maintain the landscape by doing pruning and grafting on trees and shrubs. Students will learn about seeding and care of lawns, including using pesticides on lawns, applying fertilizer, and maintenance of lawn mowing equipment. Throughout the class, students will have the opportunity to explore the career pathways available in many of the horticulture and landscaping fields. Students in this course will be outdoors for the majority of the learning experience and should plan accordingly.

Plant Science

Pathway: AEMT
Prerequisite: None
Credit/Length: .5/semester
Grade: 9,10,11,12

Learn about what makes a plant grow whether it is in soil, water, or another growing media. In this course, you will learn about all different types of plants ranging from flowers to fruits and vegetables to succulents. There will be many hands-on activities where you will get to make floral arrangements, dissect plants to truly understand how they work, and plant different plants to be grown at the school and at home.

Pre-Calculus - ATCC

Pathway: AEMT

College Course #: MATH 1425 Setting: Classroom

Prerequisites: Principles of Trig and Special

Functions/Advanced Trigonometry Course Length: Semester

H.S. Credit: 1
College Credit: 4
Grade Weight: .333
Available to Grade: 12

Topics include algebraic manipulation, graphing, and applications related to polynomial, rational, exponential, logarithmic and trigonometric functions.

<u>Principles of Trig and Special Functions -</u> ATCC

Pathway: AEMT

College Course #: MATH 1432
Setting: Classroom
Prerequisites: College Algebra

Course Length: Semester

H.S. Credit: 1
College Credit: 4
Weighted Grade: .333
Available to Grades: 11, 12

Principles of Trigonometry and Special Functions will deal with circle and right triangle definitions of trig functions. The study of trig identities and proofs will be covered in this class. Also, the application of trigonometric functions to non-right triangles, an investigation into conic sections, and the use of trigonometric functions to model and solve real-life problems. Will also cover vectors in the plane and dot products.

Robotics

Pathway: AEMT
Prerequisite: None
Credit/Length: .5/semester
Grade: 9.10.11.12

Students will learn basic robotics design, construction, and programming through the use of the VEX EXP system. We will go through different learning modules and labs that will teach different skills in understanding robotics and coding. Each unit will provide a different assembly and programming challenge. Students will then have unit competitions based on their designs.

Shop 101

Pathway: AEMT
Prerequisite: None
Credit/Length: .5/semester
Grade: 9,10,11,12

Shop 101 is a course intended for students who have limited experience in the shop setting. This course will cover how to check all the fluids on your car, how to change a tire if you get a flat on the highway, how to change your windshield wipers, and how to care for and replace your license plates. In-home care, we will cover basic electrical needs such as changing a light switch or outlet, how to unclog a sink or a toilet, how to patch a hole in sheetrock, and the do's and don'ts of painting. In woodworking, we will learn the basics of using drills, saws, and the importance of adhesives and proper fasteners. We will wrap up by learning the proper preventative maintenance on appliances and home heating and cooling units.

Welding I

Pathway: AEMT
Prerequisite: None
Credit/Length: .5/semester
Grade: 10,11,12

This course has been developed to give students introductory skills and knowledge in the areas of shop safety, metalworking, and welding. Students will develop and demonstrate skills in arc welding, MIG welding, and plasma cutting. This course is designed to give students experience by doing hands-on welding practice by welding a variety of joints in multiple positions.

Welding II

Pathway: AEMT
Prerequisite: Welding I
Credit/Length: .5/semester
Grade: 11, 12

Students will use their welding skills obtained in Welding I to design and construct, as well as repair. Students will construct individual and group projects. New skills learned in this Welding II class include oxyacetylene welding/torch cutting, TIG/aluminum welding, and CNC machining.

Wildlife and Natural Resources

Pathway: AEMT
Prerequisite: None
Credit/Length: .5/semester
Grade: 9,10,11,12

This course will provide students with an understanding of how humans interact with the environment and the wildlife within it. Students will learn how to be more environmentally conscious about their world. Students will have a chance to learn about wildlife and fish with a heavy emphasis on animals from Minnesota and incorporating hunting and fishing regulations around those animals. We will finish the semester with each student crafting their very own fishing rod.

Woods I

Pathway: AEMT

Prerequisite: Explore Tech. I/II or by Instructor

approval

Credit/Length: .5/semester Grade: .10, 11, 12

This course deals with the construction of cabinets and furniture. Chests, dressers, hutches, and entertainment centers are examples of projects that could be constructed. Joinery skills, fastening, and finishing, along with various construction methods will be covered. There is a strong emphasis on proper machine use, safety, quality, and workmanship.

Woods II

Pathway: AEMT

Prerequisite: Woods I or by Instructor

approval

Credit/Length: .5/semester Grade: 10, 11, 12

This course deals with the construction of cabinets and furniture. Chests, dressers, hutches, and entertainment centers are examples of projects that could be constructed. Advanced skills in joinery, fastening, and finishing, along with various construction methods will be covered. Students are also required to turn in a project on the Lathe. There is a strong emphasis on proper machine use, safety, quality, and workmanship. Students should have taken a previous Technology Class before they take Woods II.



Business, Communication & Entrepreneurship

Empowering high school students through innovative business education, fostering a passion for entrepreneurship, and cultivating essential skills for successful careers, as we strive to shape future leaders and contributors to a dynamic and evolving global economy.

ACADEMIC COURSES

- Career Exploration and Planning
- Entrepreneurship
- Accounting
- Public Speaking
- Digital Media and Yearbook
- Ceramics
- Studio Art

- Economics
- = Sculpture
- Intro to Business
- Photography
- Marketing
- Graphic Design
- Intro to Cooking
- Global Foods

- Interior Design and Housing
- Computer Essentials
- Drawing
- Culinary Arts
- Independent Living
- Painting
- Print Technologies
- Intro to Art

- Band
- Choir
- Spanish I, II, III, and IV
- Coop-Work
 - Based Learning
- Intro to Drama and
 Theatre Arts
- Journalism

JOB SKILLS

In addition to have technical skills, employers expect works in this industry to have these skills:

- Active Listening
- Problem Solving
- Time Management
- Collaboration
- Critical Thinking
- Decision Making

COMPLETION STANDARDS

- Complete 7 Credits from Pathway
- Earn C or Higher in Pathway
- Complete Senior Capstone Project
- Complete an Approved Work Experience
- Earn a Certificate and Purple Cord at Graduation

CAREER EXPERIENCES

- Learn from Industry Speakers
- Attend 9th Grade Career Expo
- Attend 10th Grade Sneak a Peek
- Attend 11th Grade College Fair
- Tour Local Businesses
- Work with Real-Life Industry Projects
- Complete 12th Grade Graduation Capstone



EXPLORE TYPES OF CAREERS

www.careerwise.minnstate.edu/careers

REVIEW THE LOCAL JOB OUTLOOK

www.careerwise.minnstate.edu/jobs

FIND POSTSECONDARY PROGRAMS

www.careerwise.minnstate.edu/education

BCE (Business, Communications & Entrepreneurship)

Education Requirement: 1.0 credit of Art (Visual, Performance) is required for graduation.

MUSIC - PERFORMANCE ART

Varsity Band

Pathway: BCE

Prerequisite: 8th Grade Band or Director

Approval

Credit/Length: 1 for year if in Band every day,

and .5 if in Band every other day Grade: 9, 10, 11, 12

Varsity Band is comprised of mainly underclassmen who were in band in grades 5-8. Those joining a band without this experience must have the approval of the director before registering. Members of the band program who do not choose to audition for Concert Band, or who need additional musical growth will be placed in Varsity Band. Continued emphasis is given to the development of musicianship and basic skills through a large repertoire of appropriate-level band literature. Students in Varsity Band will perform at scheduled concerts, pep band events, and area festivals, (including large group contests and solo and ensemble contests). All full band performances are required and performance schedules are given out well in advance. This class will run one year in length.

Concert Band

Pathway: BCE

Prerequisite: Varsity Band/Audition

Credit Value: 1 for year Grade: 10, 11, 12

Concert Band is comprised of 10th - 12th grade students with previous experience in Varsity Band. Admittance into Concert Band is based on prior experience and an audition, and placement is the discretion of the director. In Concert Band, students will work towards more advanced techniques and musicianship through group and independent performances. Continued emphasis is given to the development of advanced skills through a large repertoire of appropriate level band literature. Students in Concert Band will perform at scheduled concerts, pep band events, clinics, area contests and festivals (including large group contest and solo and ensemble contest), special school functions, and occasionally regional and national tours as they become available. All full band performances are required and performance schedules are given out well in advance.

Concert Choir

Pathway: BCE

Prerequisite: Varsity Choir/Audition

Credit Value: 1 for year Grade: 10, 11, 12

Membership in this choir will be determined by an audition procedure for students. The Concert Choir will perform at scheduled concerts, clinics, contests, festivals, special school functions, and occasionally regional and national tours as they become available. Students perform at solo contests. Students are eligible to audition for Jazz Choirs.

Varsity Choir

Pathway: BCE Prerequisite: None

Credit/Length: 1 credit for the year if in Choir

every day, and .5 if in Choir every other day

Grade: 9, 10

The purpose of this choir is to further enhance the student's performance capabilities and his/her understanding of the voice. They will perform at scheduled concerts and area festivals and also be eligible to compete in the subsection solo and ensemble contests. They will be eligible to audition for Jazz Choir. This class will run one year in length.



OTHER BCE COURSES

Accounting I

Pathway: BCE
Prerequisite: none
Credit/Length: .5/semester
Grade: 10.11.12

Business activities touch the lives of everyone. Students will begin their study with the basic accounting cycle using double-entry accounting principles and proceed to more complex activities.

Accounting II

Pathway: BCE

Prerequisite: Accounting I Credit/Length: .5/semester Grade: 10,11,12

This class is a continuation of Accounting and expands into the areas of payroll, adjusting and closing entries, dealing with uncollectible accounts, depreciation, promissory notes, and corporate accounting. Students will use data to record statements, and perform period-ending closing tasks to complete the accounting cycle using both manual and electronic methods. Substantial time will be spent on computerized accounting.

Career Exploration and Planning

Pathway: AEMT, BCE, HSHS

Prerequisite: None Credit/Length: .5/semester Grade: 9,10,11,12

Career Exploration and Planning is a dynamic course designed to assist high school students in navigating the complex process of identifying and pursuing their career goals. Through a series of interactive activities, assessments, and guided discussions, students will explore their interests, strengths, values, and aspirations to make informed decisions about their future careers. This course will provide students with the tools, resources, and strategies necessary to develop a personalized career plan and prepare for success in the workforce or further education.

Ceramics I

Pathway: BCE

Prerequisite: Intro to Art recommended

Credit/Length: .5/semester Grade: 10,11,12

Students will explore the elements of art and principles of design and apply these fundamentals to the creation of artworks using clay. Activities will include hand-built and wheel-thrown pottery and sculpture. Students will finish the clay creations with a variety of glaze and

finishing techniques. Students will study periods of art history and artists that inspire the assigned projects.

Ceramics II

Pathway: BCE

Prerequisite: Intro to Art, Ceramics I

Credit/Length: .5/semester Grade: 10,11,12

Students will explore the incorporate the elements of art and principles of design into their advanced clay building creations. Activities will include hand-build and wheel-thrown pottery ceramic and sculpture. Students will finish their work by applying glaze and other finishing techniques. Students will study periods of art history and artists that inspire the assignment projects.

Computer Essentials I

Pathway: BCE Prerequisite: none

Credit/Length: .5/semester Grade: 9,10,11,12

Offered: ODD years (23-24)

Skills you will use and never lose! This course provides an understanding of the AHS computer system and introduces appropriate formatting of personal and school documents by developing proficiencies in word processing. Keyboarding techniques will also be reinforced throughout the course. This is a "must-have" class, allowing students to transfer essential computer skills to other academic areas. Learn these skills now to save time and improve grades in high school and college coursework with fast and accurate computer output. Upon successful completion of this course, students may earn Tech Prep College Credit: ADMS 1202 or BUSM 1207.

Computer Essentials II

Pathway: BCE Prerequisite: none

Credit/Length: .5/semester Grade: 9,10,11,12

Offered: ODD years (23-24)

Take your skills to the next level. You will refine your keyboarding skills and develop skills that you can use in business and real-life situations. Along with advanced office applications, you will continue adding to your knowledge base in spreadsheet, database, and presentation applications.



CO-OP Placement (Work Based Learning)

Pathway: BCE

Prerequisite: You must have a job and must have completed, or be enrolled, in a high school

business course.

Credit/Length: .5/semester

Grade: 11 (2nd half of year), 12

Co-op placement is for students who wish to do an internship in an area of interested career choice. Students will have assignments to build a portfolio. Topics and assignments will be given in areas such as resumes, cover letters, job applications, and job interviews. Weekly reports and evaluations will be part of your portfolio. Students are required to meet a classroom component every Thursday. Students must have reliable transportation with insurance; students driving will have proof of a valid driving license. Students must be passing all classes to participate.

Digital Media/Yearbook

Prerequisite: Graphic Design and/or

Yearbook Experience

Credit/Length: .5/semester Grade: .11, 12

You will be a creative genius by the time you leave this class. We will have a variety of projects that include work in Photoshop, StudioWorks (yearbook program), and working with various digital projects needed by the school. This will be a wonderful opportunity for those of you wanting to go into some kind of digital/graphic design in the future.

Drawing

Pathway: BCE

Prerequisite: Intro to Art recommended

Credit/Length: .5/semester Grade: 9, 10, 11, 12

Students will explore the elements of art and principles of design and apply these fundamentals to the creation of drawings. Students will study the properties of color and composition and create drawings using a variety of media, including pencil, colored pencil, ink, charcoal, and others. Students will study periods of art history and artists that inspire the assigned projects.

Entrepreneurship

Pathway: BCE
Prerequisite: none
Credit/Length: .5/semester
Grade: 10,11,12

Offered: ODD years (23-24)

Our young entrepreneurs will learn from taking an original idea, introducing it to the public and following through with a written business plan. Decisions on the startup of a venture, finances, and growth will all be covered. Marketing and management concepts will be

covered. On-site job visits as well as job shadowing will provide students with real-world experiences.

Foods 1: Intro to Cooking

Pathway: BCE
Prerequisite: None
Credit/Length: .5/semester
Grade: 9,10,11,12

How do your food choices affect your life? Would you like to learn food preparation skills? This class is the study of foods, food preparation, and their nutritional contributions to a healthy lifestyle. This class promotes the development of cooking skills, safe preparation techniques, meal planning, and nutrition. Weekly food labs include breads, poultry, meats, fruits, vegetables, soups, and desserts.

Foods 2: Culinary Arts

Pathway: BCI

Prerequisite: Foods 1: Intro to Cooking

Credit/Length: .5/semester

Grade: 11,12

This course is designed to teach cooking skills and expose students to careers in the food service industry. Class focus will be on trends that impact the food service industry, careers in the food service industry, foodborne illness and their prevention, menu planning, and cost analysis of products. One cooking lab per week will focus on cooking food with creative and artistic appeal. The class will develop and run a Food Business. Sanitation and safety will be emphasized throughout the semester.

Global Foods

Pathway: BCE
Prerequisite: None
Credit/Length: .5/semester
Grade: 10,11,12

Offered: Only offered in the Spring

Semester

Would you like to learn to prepare foods from around the world? Students would learn about the influences of culture on our foods. Students will participate in a weekly food lab based on foods from around the world. Student projects would include researching a culture and its food from the country of their choice. This class runs 1 semester in length.

Graphic Design

Pathway: BCE
Prerequisite: None
Credit Value: .5

Grade: 9,10,11,12

This course introduces students to the design process and the principles of design. Emphasis will be placed on problem-solving and relating graphic design to communication. Students will study the principles of design, color theory, and typography and will use major design software including Adobe Photoshop, Adobe Illustrator, and InDesign. Design elements of both print and Web publications will be introduced. Students will also explore career options in the graphic design industry.

Independent Living

Pathway: BCE
Prerequisite: None
Credit/Length: .5/semester
Grade: 10,11,12

This class will focus on students living independently on their own after high school. The focus of the semester is to develop skills in the areas of money management, resumes, college applications, quick and easy food preparation, housing decisions, time management, getting along with roommates, goal setting, and decision-making.

Interior Design and Housing I

Pathway: BCE
Prerequisite: None
Credit/Length: .5/semester
Grade: 9,10,11,12

Do you like to redecorate your room? This class is designed to help you learn to make wise housing choices, learn about art principles and their application to decorating choices, study floor plans, room and furniture arrangement and selection, study housing styles, and look at how technology has changed our housing environment. Students will have the opportunity to apply what they have learned each Friday in a hands-on lab. A final project will be building a house model and CAD project of a house online for a person with special needs.

Intermediate Spanish I-Central Lakes College (Spanish III)

Course Title: Intermediate Spanish I – Central

Lakes College

College Course #: SPAN 2401
Setting: Classroom
Prerequisites: Spanish I, II

H.S. Credit: 1.25 Course Length: Year College Credit: 4
Weighted grade: .333
Available to Grades: 11, 12

This course is a review of the fundamentals in grammar and vocabulary covered in the first year (or years) of Spanish language study, with amplification to more advanced structures and complex language usage. The remaining verb tenses (future, conditional, subjunctives) will be introduced through reading, writing and speaking. Graded level readers are used for pronunciation, comprehension and cultural information, providing topics in art, music, politics and current events. Short essays and conversations complete the language skill practices. SPAN 1402 or equivalent (2-3 years of high school Spanish) recommended.

Intermediate Spanish II – Central Lakes College (Spanish IV)

College Course #: SPAN 2404
Setting: Classroom
Prerequisites: Spanish I, II, III

H.S. Credit: 1.25
Course Length: Year
College Credit: 4
Weighted grade: .333
Available to Grades: 12

This course follows SPAN 2401 in sequence of grammar acquisition. The review begins with the present subjunctive formation and uses. Continued emphasis will cover reflexives, ser/estar, passive voice, perfect tenses, and finally, the introduction of the imperfect subjunctive. Grammar practice and the perfecting of language structures are emphasized. Vocabulary will reflect upper-level constructions, idioms, words frequently confused, and cultural variances. This course is also designed to promote communication in the target language. Graded-level readers provide reading practice, grammar review, vocabulary building, and cultural reference. Role play, videos, newspapers, and magazines serve as a basis for class discussion and enhance reading, listening, and comprehension skills. The class is taught in Spanish with some grammar lessons in English.

Intro to Art (previously Basic Art)

Pathway: BCE
Prerequisites: None
Credit/Length: .5
Grade: 9, 10

Students will explore the elements of art and principles of design and apply these fundamentals to the creation of 2-dimensional and 3-dimensional artworks. Activities will include drawing, painting, printmaking, and sculpting with a variety of media. Students will study periods of art history and artists that inspire the assigned projects.

Intro to Business

Pathway: BCE Prerequisite: None

Credit/Length: .5/Fall semester only

Grades: 10. 11. 12

This is a basic business course designed to acquaint students with the activities associated with a business. Students will gather a basic understanding of general business, economics, entrepreneurship, and business. Overall, the course gives students broad exposure to business operations and a solid background for additional business courses.

Intro to Drama and Theatre Arts

Pathway: BCE
Prerequisite: none
Credit/Length: .5/semester
Grade: 9,10,11,12

This semester-long, activity-oriented course is designed to introduce students to the basics of theater and drama by building upon the student's Creativity, Critical Thinking, Communication, and Collaboration. Students will produce a one-act performance for elementary or high school students. Students are also encouraged to audition for Minnewaska's MSHSL One-Act

Journalism

Pathway: BCE
Prerequisite: English 9

Credit/Length .5 (elective)/semester

Grade: 10. 11. 12

This semester-long course provides students with a comprehensive introduction to journalism's principles, practices, and ethics. Through theoretical study and hands-on experience, students will develop essential skills in news gathering, writing, editing, and multimedia storytelling. This course is for students interested in exploring the field of journalism and developing their writing and critical thinking skills. Whether students aspire to pursue a journalism career or become more media literate citizens, this course offers a valuable foundation for their future endeavors.

Marketing

Pathway: BCE
Prerequisite: None
Credit/Length: .5/semester
Grade: 10, 11, 12

"Nothing happens in our economy until someone sells something – be it a product, service, or idea!" Students will be introduced to business technology. Emphasis will be placed on the proper steps of the selling process, ethics in selling, and career opportunities in sales and sales management. The promotion mix, what makes a good advertisement successful; the setting up of

effective displays, and an actual promotional plan for a product/service will be topics also touched upon. Students will study marketing, management, and the role of business in society.

Painting

Pathway: BCE

Prerequisites: Intro to Art recommended

Credit/Length: .5/semester Grade: .10, 11, 12

Students will explore the elements of art and principles of design and apply these fundamentals to the creation of paintings. Students will study the properties of color and composition and create paintings using a variety of media, watercolor paint, acrylic paint, and others. Students will be challenged to express their original ideas through their work. Students will study periods of art history and artists that inspire the assigned projects

Photography

Credit/Length: .5/semester

Prerequisite: Intro to Art recommended

Credit Value: .5

Grade: 10, 11, 12

Students will explore the elements of art and principles of design and apply these fundamentals to the creation of artwork using the camera. Students will learn the basics of digital photography including composition and photo editing using Photoshop. Students will be challenged to express their original ideas through their work. Students will study periods of art history and artists that inspire the assigned projects.

Personal Finance

Pathway: BCE
Prerequisite: None
Credit/Length: .5
Grade: 10,11,12

The focus in this class is giving students the tools and knowledge to manage their finances. The class will explore consumer decision-making skills and consumer rights and responsibilities. The class will focus on budgeting, banking services, savings, investing, credit, insurance, and making wise money management decisions. The class will also look at housing choices and quick meals. This is a class that will benefit ALL senior high students!

Print Technologies

Pathway: BCE

Prerequisite: Intro to Art recommended

Credit/Length: .5/semester Grade: .10, 11, 12

Students will explore the elements of art and principles of design and apply these fundamentals to the creation of artwork using multi-print techniques. Students will learn the basics of printmaking through the use of foam, linoleum, wood, screen, technology, laser printer and other printing platforms. Students will be challenged to express their original ideas through their work. Students will study periods of art history and artists that inspire the assigned projects.

Public Speaking - ATCC

Pathway: BCE

College Course: COMM 1415 Setting: CLASSROOM

Prerequisite: English 10 and Qualifying

Accuplacer Score

Course Length: Semester

ATCC Credit: 3

Grade Weight: .333 (high school elective if not

on ATCC trek)

Available to Grades: 11, 12

This course will begin with personal analysis, self-evaluation, and confidence-building techniques. The following unit will be the science of public speaking. Students will develop competencies in critical listening and the delivery of various types of speeches. Classroom activities will include the presentation of impromptu and different speeches. This class runs 1 semester in length. To be taken as a senior if the post-secondary goal is "Selective" 4-vear College/University. - See course matrix. Can be taken as an elective by those not on this track.

Sculpture

Pathway: BCE

Prerequisite: Intro to Art recommended

Credit/Length: .5/semester Grade: .10, 11, 12

Students will explore the elements of art and principles of design and apply these fundamentals to the creation of 3-dimensional sculptures including free-standing, relief, and mobile. Media will include clay, plaster, wire, and a variety of other materials. Students will study periods of art history and artists that inspire the assigned projects.

Spanish I

Pathway: BCE
Prerequisite: None
Credit/Length: 1/year long
Grade: 9,10,11,12

In this year-long course, students will be introduced to the basics of the Spanish language by using comprehensible input. Input is the primary focus which has a strong emphasis on listening and reading. As the year progresses, students will work towards output; speaking and writing. Students will explore a variety of cultural topics through songs, reading, co-created stories, discussion, short films, and games. At the end of this course, students will be interpreting, expressing, and negotiating the meaning of basic messages in the Spanish language. Daily participation is essential to learning!

Spanish II

Pathway: BCE
Prerequisite: Spanish I
Credit/Length: 1/year long
Grade: 10,11,12

In this year-long course, students will be building upon the skills acquired in Spanish I. Continued emphasis will be placed on listening and reading longer texts, while also incorporating more speaking and writing. Students will continue to explore a variety of cultural topics through songs, reading, co-created stories, discussion, short films, and games. At the end of this course, students will be interpreting, expressing, and negotiating the meaning of basic and expanded messages in the Spanish language. Daily participation is expected.

<u>Spanish III</u>

Pathway: BCE

Prerequisites: Spanish I, II
Credit/Length: 1, year-long course

Grade: 11, 12

This course is a review of the fundamentals in grammar and vocabulary covered in the first years of Spanish language study, with amplification to more advanced structures and complex language usage. Many verb tenses (present, past, future, conditional, subjunctives) will be introduced and reviewed through reading, writing, and speaking. Graded-level readers are used for pronunciation, comprehension, and cultural information, providing topics in art, music, politics, and current events. Short essays and conversations complete the language skill practices.

Studio Art

Pathway: BCE

Prerequisite: Intro to Art recommended

Credit/Length: .5/semester Grade: .11, 12

Students will use their knowledge of the elements of art and principles of design to create about 30 finished artworks. Students will be challenged to express their original ideas and develop a personal style. Students will work independently much of the time to explore their own interests and expand their abilities.

Youth Apprenticeship Program

Pathway: BCE
Prerequisite: None
Credit/Length: .5/semester

Grade: 12

Youth Apprenticeship (YA) integrates school-based and work-based learning to instruct students in employability and occupational skills defined by Minnesota industries. This program will provide training based on statewide youth apprenticeship curriculum guidelines, endorsed by business and industry. Students are instructed by qualified teachers and skilled worksite mentors. Students are simultaneously enrolled in academic classes to meet high school graduation requirements in a youth apprenticeship-related instruction class and are employed by a participating employer (right now F.A.S.T.) under the supervision of a skilled mentor. Students work 10-15 hours per week during the school year and are encouraged to work during the summer, depending on business needs. To participate, students must be on track for high school graduation, have explored the career area they want to participate in, be interested in participating in a hands-on learning experience, and be at least 16 years old. Students need to work at least 450 hours in a semester or 900 hours in a year-long commitment.





Health Science and Human Services

Empowering high school students in the health sciences and human services career pathway to become compassionate and skilled professionals, fostering a commitment to holistic well-being, innovation in healthcare and transformative service to individuals and communities.

ACADEMIC COURSES

- Career Exploration and Planning
- Anatomy and Physiology
- Chemistry
- Physics
- Medical Terminology and Careers

- Advanced Health
- Lifetime Fitness
- World Wars
- Health
- Human Development
- Biology

- AmericanGovernment
- Certified NursesAssistant [CNA]
- Sports Officiating
- Individual Sports
- Teachers Assistant

- Psychology
- AthleticDevelopment
- Sociology
- Work Experiences

JOB SKILLS

In addition to have technical skills, employers expect works in this industry to have these skills:

- Communication
- Collaboration
- Time Management
- Decision Making
- Critical ThinkingProblem Solving
- Interpersonal Skills

COMPLETION STANDARDS

- Complete 7 Credits from Pathway
- Earn C or Higher in Pathway
- Complete Senior Capstone Project
- Complete an Approved Work Experience
- Earn a Certificate and Blue Cord at Graduation

CAREER EXPERIENCES

- Learn from Industry Speakers
- Attend 9th Grade Career Expo
- Attend 10th Grade Sneak a Peek
- Attend 11th Grade College Fair
- Tour Local Businesses
- Work with Real-Life Industry Projects
- Complete 12th Grade Graduation Capstone



EXPLORE TYPES OF CAREERS

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FIND POSTSECONDARY PROGRAMS

www.careerwise.minnstate.edu/education

HSHS (Health Sciences & Human Services)

Education Requirement: 1.0 credit of Physical Education/Health is required for graduation.

Advanced Health

Pathway: HSHS
Prerequisite: Health 9
Credit/Length: .5/semester
Grade: 10,11,12

Advanced Health Studies is an intensive course designed to provide high school students with a comprehensive understanding of health and wellness from a multidisciplinary perspective. Building upon foundational knowledge acquired in introductory health courses, this advanced-level course will delve deeper into complex topics related to physical, mental, and social well-being. Through a combination of theoretical learning, practical applications, and critical analysis, students will develop the skills necessary to make informed decisions about their health and contribute positively to the health of their communities.

Anatomy/Physiology

Pathway: HSHS Prerequisite: Biology

Credit/Length: 1, year-long course

Grade: 11, 12

This course will cover the areas of anatomy, physiology, and pathology of the human body, within the topical areas of the skeletal, and muscular, integumentary, digestive systems. The later part of the course will cover the respiratory, circulatory, excretory, and nervous systems of the body. The students will participate in numerous labs, dissections, oral presentations, and research activities. This course is recommended for those students pursuing post-secondary options in the medical and health fields. The class will run for one year in length.

Anatomy/Physiology I - ATCC

Pathway: HSHS

College Course #: BIOL 1417 Setting: Classroom

Prerequisite: Biology & ATCC requirements

Course Length: Semester

H.S. Credit: 1
College Credit: 4
Weighted Grade: .333
Available to Grades: 11, 12

This course provides the learner with an understanding, knowledge, and application skills needed in the area of anatomy and physiology. Students recognize and apply anatomical and medical terminology descriptions of cellular and tissue anatomy and physiology.

Foundational skills are then directed toward gaining an

understanding of the cells, tissues and organs constituting the integumentary, skeletal, muscular, and nervous systems. The normal structure and function of these organ systems are emphasized. Where appropriate, dissections, symptoms, laboratory signs and diagnosis of system pathology are used to illuminate normal processes.

Anatomy/Physiology II - ATCC

Pathway: HSHS
College Course #: BIOL 1419
Setting: Classroom

Prerequisite: Biology & ATCC requirements

Course Length: Semester

H.S. Credit: 1
College Credit: 4
Weighted Grade: .333
Available to Grades: 11, 12

This course provides the learner with understanding, knowledge, and application skills needed in the area of anatomy and physiology. Learners apply anatomical and medical terminology and an understanding of cellular and tissue anatomy and physiology toward gaining an understanding of the organs constituting respiratory, digestive, urinary, reproductive, endocrine, and lymphatic systems. The normal structure and function of these organ systems are emphasized. Lab experience is included. Dissections, symptoms, laboratory signs, and diagnosis of system pathology are used to illuminate normal processes where appropriate. Prerequisite: BIOL1417.

Athletic Development

Pathway: HSHS
Prerequisite: MAHS PE 9
Credit/Length: .5/semester
Grade: 10,11,12
(Max enrollment of 32 students)

Athletic development will be the objective of this course. The format will consist of alternating workouts of strength training and speed agility training. Workouts will be meant to increase Strength, Power, Agility, and Linear Speed. Students will be assessed in the 40-yard dash & 10-yard fly, Pro Agility, Vertical Jump, Med Ball Toss, Front Squat, Bench Press, and Clean.

Career Exploration and Planning

Pathway: AEMT, BCE, HSHS

Prerequisite: None
Credit/Length: .5/semester
Grade: 9,10,11,12

Career Exploration and Planning is a dynamic course designed to assist high school students in navigating the complex process of identifying and pursuing their career goals. Through a series of interactive activities, assessments, and guided discussions, students will explore their interests, strengths, values, and aspirations to make informed decisions about their future careers. This course will provide students with the tools, resources, and strategies necessary to develop a personalized career plan and prepare for success in the workforce or further education.

Chemistry

Prerequisite: Algebra I

Credit/Length: 1, year-long course

Grade: 11, 12

It is required that students take a year of chemistry <u>or</u> physics. Topics include scientific measurements, matter and energy, basic atomic structure, chemical equations, and chemical quantities. Additional studies include chemical bonding, equilibrium, states of matter, solutions, acid/base chemistry and oxidation/reduction chemistry. The laboratory component of the course includes the collection, evaluation, and interpretation of data. The course is one year long.

Fundamentals of Chemistry - ATCC

Pathway: HSHS

College Course: CHEM 1405 Setting: Classroom

Prerequisite: Algebra I, Accuplacer

Course Length: Year
H.S. Credit: 1.25
College Credit: 4
Weighted Grade: .333
Available to Grades: 11, 12

This course provides the learner with an understanding of the principles and theories of chemistry. It includes concepts of inorganic chemistry, basic rules of valence, atomic and molecular structure, laws of chemical combination, types of reactions, acids and bases, rate calculations, and gas laws. It also introduces the learner to the basics of modern organic chemistry. Lab experience is included.

General Psychology I

Pathway: HSHS
Prerequisite: None
Credit/Length: .5/semester
Grade: 11, 12

Psychology is an interesting and dynamic course, taught through lecture, discussion, and demonstration. A course in General Psychology is designed to spur further interest and inquiry into the topic. This course will explore the History and Research methods employed in psychology along with Learning Theory, Intelligence, Motivation, Development, Stress Reactions, Personality, Personality Disorders, Methods of Treatment, and Social Psychology.

GENERAL PSYCHOLOGY (MState/partnered with Benson HS)

Pathway: HSHS
Prerequisite: None
Credit/Length: .5/semester
Grade: 11, 12

note: if you choose to register for College Psychology, you need to register through our General Psychology I course. Please see academic counselor for this request.

The following topics are covered in order to give interested students additional information regarding psychology: research in psychology, biological aspects of psychology, sensation, perception, learning, memory, cognition and language, consciousness, cognitive abilities, motivation and emotion, human development, health, stress and coping, personality, treatment of psychological disorders, social cognition and social influence.

Health 9 (Required)

Prerequisite: None Credit/Length: .5/semester

Grade: 9

Units covered in this course will include the following: first aid, community health, family life education, mental and emotional health, personal health, prevention and control of disease, substance use and abuse (drugs). The students will discuss a variety of issues dealing with dating, parenting, responsible behaviors, proper body care and maintenance, how and when to say "no," peer pressure, and healthy choices. This class will run on an A & B day schedule, opposite of Phy Ed 9 for the whole school year.

Human Development

Pathway: HSHS
Prerequisite: None
Credit/Length: .5/semester
Grade: 10.11.12

This course will explore family life and marriage. Students will learn about child development from birth to teen years through readings, videos, speakers, and hands-on experiences. Students will also explore careers in child development. Students will select a self-directed project for the semester in the area of family, child development, or careers.

Individual Sports

Pathway: HSHS
Prerequisite: None
Credit/Length: .5/semester
Grade: 10, 11, 12

This course offers the student an opportunity to develop advanced skills in a variety of individual sports. Activities may include Tennis, Golf, Badminton, Cross Country Skiing, Frisbee Golf, Pickleball, Spike ball, Dance, Aquatics, and more. Students will be expected to demonstrate knowledge of the rules and strategy of the games and exhibit cooperation and a high level of participation.

<u>Introduction to Biology I - ATCC (Primarily ONLINE)</u>

Pathway: HSHS College Course #: BIOL 1410

Setting: **Zero Hour Course- 1st

<u>Semester: Online platform w/in person assessments</u>
Prerequisite: Biology & ATCC requirements

Course Length: Semester

H.S. Credit: 1
College Credit: 4
Weighted Grade: .333
Available to Grades: 11, 12

This course provides the learner with many principals and theories of biology. It includes an understanding and evaluation of the scientific method, chemistry, cellular biology, photosynthesis, cellular respiration, genetics, evolution, and genetic engineering. The course will also investigate the concepts of nutrition, the genetic relationship to cancer, genetically modified organisms, and the issue of global warming. Lab experience is included.

Introduction to Biology II - ATCC (Primarily ONLINE)

College Course #: BIOL 1411

Setting: **Zero Hour Course- 2nd
Semester: Online platform w/in person assessments

Prerequisite: Biology & ATCC requirements

Course Length: Semester

H.S. Credit: 1

College Credit: 4
Weighted Grade: .333
Available to Grades: 11, 12

This course provides the learner with many principles and theories of biology. It includes an investigation of the biodiversity, classification, species, and populations of life. Addressed in this course are the fundamentals in human health and disease, ecology, conservation, biodiversity, and growth rate changes of humans and plants. Lab experience is included. Knowledge of basic genetics is suggested.

Lifetime Fitness

Pathway: HSHS

Prerequisite: MAHS PE 9
Credit/Length: .5/semester
Grade: 10, 11, 12

The purpose of this course is to help students develop and actively participate in a program that will enhance personal fitness, presently and in years to come. Activities in this course will include activities related to the 11 different Fitness Components (Cardiovascular Endurance, Muscular Strength, Muscular Endurance, Flexibility, Body Composition, Agility, Balance, Power, Speed, Coordination, and Reaction Time). This IS NOT an organized sport based class. Students will design workout plans for selected components of fitness which will help them improve their current level of fitness and establish goals for lifetime fitness.

Medical Terminology and Careers

Pathway: HSHS
Prerequisite: none
Credit/Length: .5/semester
Grade: 9,10,11,12

Medical Terminology and Careers is a comprehensive course designed to introduce students to the language and concepts essential for understanding the healthcare field. This course will provide students with a strong foundation in medical terminology, enabling them to effectively communicate within various healthcare settings. Additionally, students will explore a wide range of healthcare careers, gaining insight into the responsibilities, educational requirements, and pathways within each profession.

Nurses Assistant & Home Health Aide (CNA)

Pathway: HSHS

College Course: PNSG 1640 Nursing Assistant/Home

Health Aide

Setting: Minnewaska Area HS CNA Lab and

Clinicals at Local Nursing Homes

Prerequisite: Accuplacer Reading score of 55 or higher; Must be age 16 by the time of Certification Test

(January & June)

Course Length: First Semester

H.S. Credit: .75 College Credit: 3 Weighted Grade: .333

Grade Level: 11, 12 (limited to 16 students per

semester)

This semester-long course presents a curriculum to develop skills, attitudes, and knowledge essential to giving direct and supportive care as a Nursing Assistant in a long-term care facility or as a Home Health Aide. The course meets OBRA requirements for training nurse assistants and home health aides and meets the Minnesota Board of Nursing standards. Skills are practiced and demonstrated in a supervised laboratory setting at MAHS and within a clinical environment, at local Nursing homes, as well. The class time schedule will change during clinical training. Students will be required to have 100% attendance during the clinical training. Students will also be required to wear scrubs during clinical experiences. This course will be transcribed as PNSG 1640 Nursing Assistant/Home Health Aide (3 credits) at ATCC.

Physics

Pathway: HSHS
Prerequisite: Algebra II

Credit/Length: 1, year-long course

Grade: 11, 12

The laws of physics and its concepts underlie many areas of science. The purpose of this course is to acquaint students considering a four-year baccalaureate degree with these laws and concepts. The course will include problem-solving, laboratory experiences, data collection mathematical analysis, evaluation, and interpretation. Topics include vectors, forces, motion, work and energy, fluids, heat, waves, electricity, and magnetism.

Sports Officiating

Pathway: HSHS
Prerequisite: None

Credit/Length: .5 (Fall Semester Only)

Grade: 10,11,12

Have you ever thought about being a referee? Sports Officiating is a new class designed for students who have an interest in being a sports official. In this course, students will learn the rules, gameplay, and guidelines for various sports such as football, volleyball, basketball,

baseball, and softball, In addition, they will learn the philosophy of officiating, positioning, and mechanics for each sport and the role a sport official plays in maintaining fair play. Students will be able to gain real experience refereeing lower-level games at Laker activities.

Team Sports

Pathway: HSHS
Prerequisite: None
Credit/Length: .5/semester
Grade: 10, 11, 12

This course offers the student an opportunity to develop advanced skills in various team sports. Activities may include Touch Football, Soccer, Lacrosse, Basketball, Volleyball, Ultimate Frisbee, Team Handball, Broomball, Water Polo, and more. Students will be expected to demonstrate knowledge of the rules and strategy of the games and exhibit cooperation and a high level of participation.

The World Wars

Pathway: HSHS
Prerequisite: None
Credit/Length: .5

Grade: 10, 11, 12

The first part of the course will take a look at World War I. The class will look into the causes, its battles, results, and long-term consequences which ultimately led to World War II. Students will then explore the Second World War, looking at its causes and the rise of Fascism and Nazism, as well as the ascension of the military empire of Japan. This class will run 1 semester in length.

Youth Service (Teacher's Assistant)

Pathway: HSHS
Prerequisite: None
Credit/Length: .5/semester
Grade: 11, 12

This elective is an independent study class for students to perform a service that is of their choice and is meaningful to the school or our community. Students will attend a one-day orientation to discuss their project with the Youth Services Coordinator. Students must be willing to commit to complete 50+ hours of Youth Service per quarter to earn one credit. Other requirements include the completion of weekly journals and a final paper.

ENGLISH / LANGUAGE ARTS

Education Requirement: 4 credits in Language Arts are required for graduation.

English Course Matrix:

Post-Secondary Goal	9 th Grade	10 th Grade	11 th Grade	12 th Grade
Certificate; On-The-Job Training	English 9	English 10	English 11	English 12
2 year post-secondary options	English 9	English 10	AP Language & Composition	AP Literature & Composition
"Selective" 4 year College/University	English 9	Advanced English 10	*ATCC Comp I/II	ATCC Lit/ATCC Public Speaking

English 9

Prerequisite: None

Credit/Length: 1, year-long course

Grade: 9

During the freshman year the research process will be stressed. Freshmen will write several types of paragraphs with an emphasis on sentence and paragraph structure. A research paper will also be written. Students will prepare and present a variety of speeches. The students will also read a play, short stories, a novel, and various pieces of nonfiction throughout the semester. Grammar will continue to be practiced as well as exercises in vocabulary study. This course will run 1 year in length.

English 10

Prerequisite: English 9; Post-secondary goal of Technical/Community College; Traditional 4 Year College/University or Certificate; On-The-Job Training

Credit/Length: 1, year-long course

Grade: 10

This course will require student involvement in the reading of novels, plays, poems, an epic, and short stories. In addition, composition units will emphasize a variety of writing experiences ranging from short, expository papers to those of a longer, analytical nature. Basic grammar exercises will continue to be practiced as

well as exercises in vocabulary study. This course will run 1 year in length.

Advanced English 10

Prerequisite: English 9; Post-secondary goal

of "Selective" 4 year College/University
Credit/Length: 1, year-long course

Grade: 10

Students in 10th-grade Advanced English will continue their preparation for college-level skills in the areas of reading and writing. This course will prepare students for Composition I and II in their junior year. This course will broaden the perspectives of students as we deal with literature from a variety of sources to assist them in becoming culturally, technologically, and academically literate citizens within their communities. Through the application, analysis, evaluation, and creation of complex ideas that are often abstract and multi-faceted, students are challenged to think and collaborate critically on the content they are learning. There will be a strong emphasis on literacy analysis and building strong composition skills. This course will run 1 year in length.

English 11

Prerequisite: English 10; Post-secondary goal

of Technical/Community College; Traditional 4 Year

College/University

Credit/Length: 1, year-long course

Grade: 11

English 11 is a year-long class in which students read a variety of literature including novels, plays, short stories, essays, and poetry. Numerous writing assignments will be covered throughout the year such as essays, literary analyses, reflective responses, and an in-depth research paper. ACT prep vocabulary and grammar units will continue to be practiced at this level as well.

AP English Language and Composition

Prerequisite: English 10, Advanced English

10., and the Post-secondary goal of

Technical/Community College; Traditional 4 Year

College/University

Credit Value: 1, year-long course

Weighted Grade: .333 Grade: 11

This course is designed to thoroughly challenge students as they become "skilled readers of prose written in a variety of rhetorical contexts, and in becoming skilled writers who compose for a variety of purposes." (The College Board, *AP English Course Description*, May 2010, Page 4) Students will attain skills through the close analysis of various media and essays. Their critical thinking will be demonstrated by writing various essays, responding to short answer questions, and through class discussion. This course will culminate with the AP English Language and Composition Exam. When a student passes this exam they will receive college credit for an introductory English course. Throughout the course, we will be examining test and essay questions that reflect the rigor of this exam.

Composition - ATCC

College Course Title: Composition I & II

College Course #: ENGL 1410 (Sem 1) & ENGL

1420 (Sem 2)

Prerequisite: Qualifying Accuplacer Score

and Advanced English 10

Course Length: Semester Setting: CLASSROOM

College Credit: 3
Grade weight: .333

H.S. Credit: .75 credits each semester

Available to Grades: 11

This course deals with the fundamentals of expository writing based on reading or personal experience. It stresses organization, the process of writing, English grammar, mechanics, and style. Emphasis is on the strategies of exposition as well as effective description and narration. This course offers students an introduction to the academic research process, as well. Students learn the process method of writing that can be utilized in business, academic, and creative writing. The 2nd semester is a continuation of Composition I (ENGL1410), with stress on analytical writing, research, and documentation of supporting evidence. Learners

write critical analysis, cause/effect, and persuasive essays.

Prerequisite: College-level writing score on a placement test or a minimum grade of 'C' in ENGL0350 (College Prep Writing) Post-secondary goal of "Selective" 4-year College/University.

AP English Literature and Composition

Prerequisite: English 11, AP Language &

Comp., or ATCC Comp.

Credit Value: 1, year-long course

Weighted Grade: .333 Grade: 12

As stated by the college board, "The AP English Literature and Composition course focuses on reading, analyzing, and writing about imaginative literature (fiction, poetry, drama) from various periods. Students engage in close reading and critical analysis of imaginative literature to deepen their understanding of the ways writers use language to provide both meaning and pleasure. As they read, students consider a work's structure, style, and themes, as well as its use of figurative language, imagery, and symbolism. Writing assignments include expository, analytical, argumentative essays that require students to analyze and interpret literary works. The AP English Literature and Composition course aligns with an introductory college-level literature and writing curriculum. There are no prerequisite courses for AP English Literature and Composition. Students should be able to read and comprehend college-level texts and write grammatically correct, complete sentences."

Intro to Literature - ATCC

College Course Title: Modern American Literature

College Course #: ENGL 1475 Prerequisite: ENGL 1410

College Credit: 3
Grade weight: .333

H.S. Credit: .75, semester-long course

Grade: 12

This course deals with the fundamentals of reading and responding to literature. It stresses the application of literary terms through analysis and reaction. Emphasis is on discussing, questioning, and asserting viewpoints. To be taken as a senior if the post-secondary goal is "Selective" 4-year College/University. — See course matrix.

English 12

Prerequisite: English 11

Credit/Length: 1, year-long course

Grade: 12

Students will write purposefully, with a focus on analyzing nonfiction/fiction texts and improving argumentative techniques. This course is designed to help students achieve the writing skills necessary for community and technical college. Writing units will include persuasive writing, analytical writing, editorials, and research. This course will also include personal analysis, self-evaluation, and confidence-building techniques. In addition to writing, students will participate in an extended public speaking unit. In this unit, students will not only deliver a variety of speeches but will develop and demonstrate competencies in active listening. The curriculum covered in this class meets the speaking and listening state standards.

ENGLISH / LANGUAGE ARTS ELECTIVES

Public Speaking - ATCC

Pathway: BCE

College Course: COMM 1415 Setting: CLASSROOM

Prerequisite: English 10 and Qualifying

Accuplacer Score

Course Length: Semester

ATCC Credit: 3

Grade Weight: .333 (high school elective if not

on ATCC trek)

Available to Grades: 11, 12

This course will begin with personal analysis, self-evaluation, and confidence building techniques. The following unit will be the science of public speaking. Students will develop competencies in critical listening and the delivery of various types of speeches. Classroom activities will include the presentation of impromptu and different speeches. This class runs 1

semester in length. To be taken as a senior if the post-secondary goal is "Selective" 4-year College/University. – See course matrix. Can be taken as an elective by those not on this track.

Journalism

Pathway: BCE
Prerequisite: English 9

Credit/Length .5 (elective)/semester

Grade: 10, 11, 12

This semester-long course provides students with a comprehensive introduction to journalism's principles, practices, and ethics. Through theoretical study and hands-on experience, students will develop essential skills in news gathering, writing, editing, and multimedia storytelling. This course is for students interested in exploring the field of journalism and developing their writing and critical thinking skills. Whether students aspire to pursue a journalism career or become more media literate citizens, this course offers a valuable foundation for their future endeavors.

Introduction to Drama and Theatre Arts

Pathway: BCE
Prerequisite: none
Credit/Length: .5/semester
Grade: 9,10,11,12

This semester-long, activity-oriented course is designed to introduce students to the basics of theater and drama by building upon the student's Creativity, Critical Thinking, Communication, and Collaboration. Students will produce a one-act performance for elementary or high school students. Students are also encouraged to audition for Minnewaska's MSHSL One-Act.

MATHEMATICS

• Option A:

Algebra 1.5
 Geometry
 Algebra II
 1 credit
 1 credit
 1 credit

Option B::

Advanced Geometry 9
 Advanced Algebra II
 College Algebra, Statistics, Trigonometry,
 1 credit
 1 credit

Algebra 1.5

Prerequisite: Algebra 8

Credit/Length: 1, year-long course

Grade: 9

This course will be a review and continuation of Algebra 8. Topics will include simplifying algebraic expressions, solving and graphing linear, quadratic, and exponential equations, laws of exponents, systems of equations, polynomial and radical expressions, factoring, and probability.

<u>Geometry</u>

Prerequisite: Algebra 8A or Algebra 1.5

Credit/Length: 1, year-long course

Grade: 9, 10

This course will help develop an understanding of geometric relationships in plane geometry. It will develop the ability to think creatively and critically in mathematical and non-mathematical situations. This course will also emphasize inductive and deductive reasoning skills by doing proofs. Geometry will integrate well with algebra and trigonometry for students who want a solid mathematical background. This class will run 1 year in length.

Algebra II

Prerequisite: Geometry

Credit/Length: 1, year-long course

Grade: 10, 11, 12

This class will run 1 year in length. It is a year-long course for juniors. The course covers a variety of functions including linear, quadratic, exponential, logarithmic, radical, and rational functions. There is also a study of probability and data analysis along with geometry and trigonometry. Students will also learn to model real-world situations and to use a graphics calculator to better understand advanced math topics. This course will prepare students to take the MCA II math test, and the ACT test, and to continue on with their math education in future years both in high school and at the post-secondary level.

MATHEMATICS ELECTIVES

Foundations of Math

Pathway: AEMT

Prerequisite: Geometry and Algebra II

Credit/Length: .5 or 1.0 Grade: 12

This is a two-semester course covering several different areas of mathematics. The course topics will include number sense; algebra; geometry; data analysis; probability; statistics, trigonometry, other Algebra 2 concepts, and real-life math applications. We cover taxes, banking, interest rates, retirement accounts, car loans, mortgages, and more. The class structure will be a mixture of lectures, class discussions, individualized learning, and activities. The goal of this course is to strengthen student math skills and prepare students for the real world.

College Algebra - ATCC

Pathway: AEMT
College Course #: MATH 1420
Setting: Classroom

Prerequisite: Accuplacer score of 50 or above

OR MCA score of 1158 OR ACT Math score of 22

Course Length: Semester

H.S. Credit: 1
College Credit: 4
Grade Weight: .333
Available to Grades: 11, 12

College Algebra will continue with the concepts introduced in Algebra II but at a higher rigor. Topics include algebraic expressions, linear equations, algebraic word problems, exponents, systems of linear equations, functions, graphs, and quadratic equations. The focus of this course is to develop math skills to the extent that the learner can apply these skills to solving practical real-world problems. This class can be taken for 3-semester credits from ATCC.

<u>Principles of Trig and Special Functions -</u> ATCC

Pathway: AEMT

College Course #: MATH 1432 Setting: Classroom Prerequisites: College Algebra

Course Length: Semester

H.S. Credit: 1
College Credit: 4
Weighted Grade: .333
Available to Grades: 11, 12

Principles of Trigonometry and Special Functions will deal with circle and right triangle definitions of trig functions. The study of trig identities and proofs will be covered in this class. Also, the application of trigonometric functions to non-right triangles, an investigation into conic sections, and the use of trigonometric functions to model and solve real-life problems. Will also cover vectors in the plane and dot products.

Pre-Calculus - ATCC

Pathway: AEMT

College Course #: MATH 1425 Setting: Classroom

Prerequisites: Principles of Trig and Special

Functions/Advanced Trigonometry Course Length: Semester

H.S. Credit: 1
College Credit: 4
Grade Weight: .333
Available to Grade: 12

Topics include algebraic manipulation, graphing, and applications related to polynomial, rational, exponential, logarithmic and trigonometric functions.

Calculus I - ATCC

Pathway: AEMT

College Course #: MATH 1426
Setting: Classroom
Prerequisites: Pre-Calculus
Course Length: Semester

H.S. Credit: 1
College Credit: 4
Weighted Grade: .333
Grade: 12

This course introduces students to the basic concepts of differential and integral calculus: beginning with the definition of limits, limits and continuity, progressing to differentiation and integration of functions, sketching of functions, application of definite integrals, concluding with the Fundamental Theorem of Calculus.

This class can be taken for 4 credits from ATCC.

Intro to Statistics - ATCC

Pathway: AEMT

Prerequisite: College Algebra **OR**

Pre-Calculus OR MCA score of 1148

H.S. Credit: 1
College Credit: 4
Weighted Grade: .333
Grade: 11,12

This course is primarily for business, science, liberal arts, psychology, and education majors. Topics studied include descriptive measures for empirical data, theory of probability, probability distributions, sampling distributions of statistics from large and small samples, estimation theory, hypothesis testing, correlation, and regression.

SCIENCE

Education Requirement: 3 credits in Science are required for graduation.

Environmental Science

Prerequisite: none

Credit/Length: 1, year-long course

Grade: 9

Environmental Science is the study of the Earth and its Environment. This course will cover topics such as Methods of Science, Climate Change, Energy, Natural Resources, Weather, Ecology, Human Impact on the Environment, and Space. There are numerous labs and activities to support the understanding of these topics. This class is required and will run one year in length.

Biology

Prerequisite: None

Credit/Length: 1, year-long course

Grade: 10

Biology pertains to the study of life. Students will learn about concepts, theories, and principles in biology through investigation, problem-solving, research, dissection, and other laboratory and outdoor activities.

The key areas of study will include the scientific method, cells, genetics, evolution, ecology, and the six living kingdoms of organisms, with special emphasis on plants, animals, and human biology. This class is required and will run one year in length and is recommended for students who are pursuing any form of post-secondary education.

Chemistry

Prerequisite: Algebra I

Credit/Length: 1, year-long course

Grade: 11, 12

It is required that students take a year of chemistry <u>or</u> physics. Topics include scientific measurements, matter and energy, basic atomic structure, chemical equations, and chemical quantities. Additional studies include chemical bonding, equilibrium, states of matter, solutions, acid/base chemistry and oxidation/reduction chemistry. The laboratory component of the course includes the collection, evaluation, and interpretation of data. The course is one year long.

Chemistry Concepts

Prerequisite: Algebra I

Credit/Length: 1, year-long course

Grade: 11, 12

It is required that students take a year of chemistry or physics. This course will cover the topics of chemistry with a focus on the basic concepts portion of the class. Topics include scientific measurements, matter and energy, basic atomic structure, chemical equations, and chemical quantities. Additional studies include chemical bonding, equilibrium, states of matter, solutions, acid/base chemistry and oxidation/reduction chemistry. The laboratory component of the course includes the collection, evaluation, and interpretation of data. This course is one year long. ***It is not recommended that this course be taken if the student intends to continue on to a four-year college.

Physics

Pathway: HSHS
Prerequisite: Algebra II

Credit/Length: 1, year-long course

Grade: 11, 12

The laws of physics and its concepts underlie many areas of science. The purpose of this course is to acquaint students considering a four-year baccalaureate

degree with these laws and concepts. The course will include problem-solving, laboratory experiences, data collection, mathematical analysis, evaluation, and interpretation. Topics include vectors, forces, motion, work and energy, fluids, heat, waves, electricity, and magnetism.

SCIENCE ELECTIVES

Fundamentals of Chemistry - ATCC

Pathway: HSHS

College Course: CHEM 1405 Setting: Classroom

Prerequisite: Algebra I, Accuplacer

Course Length: Year
H.S. Credit: 1.25
College Credit: 4
Weighted Grade: .333
Available to Grades: 11, 12

This course provides the learner with an understanding of the principles and theories of chemistry. It includes concepts of inorganic chemistry, basic rules of valence, atomic and molecular structure, laws of chemical combination, types of reactions, acids and bases, rate calculations, and gas laws. It also introduces the learner to the basics of modern organic chemistry. Lab experience is included.

Introduction to Biology I - ATCC (Primarily ONLINE)

Pathway: HSHS
College Course #: BIOL 1410

Setting: **Zero Hour Course- 1st

<u>Semester: Online platform w/in person assessments</u>
Prerequisite: Biology & ATCC requirements

Course Length: Semester

H.S. Credit: 1
College Credit: 4
Weighted Grade: .333
Available to Grades: 11, 12

This course provides the learner with many principals and theories of biology. It includes an understanding and evaluation of the scientific method, chemistry, cellular biology, photosynthesis, cellular respiration, genetics, evolution and genetic engineering. The course will also investigate the concepts of nutrition, the genetic relationship to cancer, genetically modified organisms, and the issue of global warming. Lab experience is included.

Introduction to Biology II - ATCC (Primarily ONLINE)

Pathway: HSHS
College Course #: BIOL 1411

Setting: **Zero Hour Course- 2nd

Semester: Online platform w/in person assessments

Prerequisite: Biology I & ATCC requirements

Course Length: Semester

H.S. Credit: 1
College Credit: 4
Weighted Grade: .333
Available to Grades: 11, 12

This course provides the learner with many principals and theories of biology. It includes an investigation of the biodiversity, classification, species, and populations of life. Addressed in this course are the fundamentals in human health and disease, ecology, conservation, biodiversity and growth rate changes of humans and plants. Lab experience is included. Knowledge of basic genetics is suggested.



Nurses Assistant & Home Health Aide (CNA)

Pathway: HSHS

College Course: PNSG 1640 Nursing

Assistant/Home Health Aide

Setting: Minnewaska Area HS CNA Lab

and Clinicals at Local Nursing Homes

Prerequisite: Accuplacer Reading score of 55 or higher: Must be age 16 by the time of Certification

Test (January & June)

Course Length: First Semester

H.S. Credit: .75
College Credit: 3
Weighted Grade: .333

Grade Level: 11, 12 (limited to 16 students

per semester)

This semester-long course presents curriculum to develop skills, attitudes, and knowledge essential in giving direct and supportive care as a Nursing Assistant in a long term care facility or as a Home Health Aide. The course meets OBRA requirements for training nurse assistants and home health aides and meets the Minnesota Board of Nursing standards. Skills are practiced and demonstrated in a supervised laboratory setting at MAHS and within a clinical environment, at

local Nursing homes, as well. The class time schedule will change during clinical training. Students will be required to have 100% attendance during the clinical training. Students will also be required to wear scrubs during clinical experiences. This course will be transcribed as PNSG 1640 Nursing Assistant/Home Health Aide (3 credits) at ATCC.

Anatomy/Physiology

Pathway: HSHS
Prerequisite: Biology

Credit/Length: 1, year-long course

Grade: 11, 12

This course will cover the areas of anatomy, physiology, and pathology of the human body, within the topical areas of the skeletal, and muscular, integumentary, digestive systems. The later part of the course will cover the respiratory, circulatory, excretory, and nervous systems of the body. The students will participate in numerous labs, dissections, oral presentations, and research activities. This course is recommended for those students pursuing post-secondary options in the medical and health fields. The class will run for one year in length.

Anatomy/Physiology I - ATCC

Pathway: HSHS
College Course #: BIOL 1417
Setting: Classroom

Prerequisite: Biology & ATCC requirements

Course Length: Semester

H.S. Credit: 1
College Credit: 4
Weighted Grade: .333
Available to Grades: 11, 12

This course provides the learner with an understanding, knowledge, and application skills needed in the area of anatomy and physiology. Students recognize and apply anatomical and medical terminology descriptions of cellular and tissue anatomy and physiology. Foundational skills are then directed toward gaining an understanding of the cells, tissues, and organs constituting the integumentary, skeletal, muscular, and nervous systems. The normal structure and function of these organ systems are emphasized. Where appropriate, dissections, symptoms, laboratory signs, and diagnosis of system pathology are used to illuminate normal processes.

Anatomy/Physiology II - ATCC

Pathway: HSHS
College Course #: BIOL 1419
Setting: Classroom

Prerequisite: Biology & ATCC requirements

Course Length: Semester

H.S. Credit: 1 College Credit: 4 Weighted Grade: .333 Available to Grades: 11, 12

This course provides the learner with understanding, knowledge, and application skills needed in the area of anatomy and physiology. Learners apply anatomical and medical terminology and an understanding of cellular and tissue anatomy and physiology toward gaining an

understanding of the organs constituting respiratory, digestive, urinary, reproductive, endocrine, and lymphatic systems. The normal structure and function of these organ systems are emphasized. Lab experience is included. Dissections, symptoms, laboratory signs, and diagnosis of system pathology are used to illuminate normal processes where appropriate. Prerequisite: BIOL1417

SOCIAL STUDIES

Education Requirement: 3.5 credits in Social Studies are required for graduation.

U.S. History 9

Prerequisite: None

Credit/Length: 1, year-long course

Grade: 9

This course covers American History from World War I through the Vietnam Conflict and Reagan Administration. Emphasis will be placed on social, economic, and political events and their impact on the growth and changes of the United States. Students will study the following: World War I, the Roaring Twenties, the Great Depression, World War II, the growth of the Cold War throughout the world and here in the U.S., the Civil Rights Movement, the Vietnam War era, and related issues. This class will run 1 year in length.

Modern World History 10

Prerequisite: U.S. History 9
Credit Value: 1, year-long course

Grade: 10

Using multiple historical narratives, Modern World History will take students through chronological themes from World Religions to 1st and 3rd World Countries to Contemporary Issues. As we cover these units, students will be challenged to evaluate continuity and changes in society, politics, human-environment interactions, culture, and the economy (SPICE). Students will link the present to the past; they will develop a greater understanding of modern civilization and the current global interdependence that drives relations between nations. This two-semester class is one year in length. All curriculum will follow the standards established by the state of Minnesota.

AP World History

Prerequisite: U.S. History 9
Credit/Length: 1, year-long course

Weighted Grade: .333 Grade: 10 Students will investigate significant events, individuals, developments, and processes from 1200 to the present. Students develop and use the same skills, practices, and methods employed by historians: analyzing primary and secondary sources; developing historical arguments; making historical connections; and utilizing reasoning about comparison, causation, continuity, and change over time. The course provides six themes that students explore throughout the course to make connections among historical developments in different times and places: humans and the environment, cultural developments and interactions, governance, economic systems, social interactions and organization, and technology and innovation. At the end of the course, students will have the option to take the AP course exam to earn college credits.

Economics

Prerequisite: None
Credit/Length: .5/semester
Grade: 11, 12

This course explores economic fundamentals, the price system, competition between companies, supply and demand, the economics of the firm, the economics of the nation, unemployment, inflation, fiscal policy, and monetary policy.

<u>Sociology</u>

Prerequisite: None Credit/Length .5 Grade: 11, 12

This course explores the impact that group behavior can have on society, as well as on the individual. We will be studying the importance of culture and the many influences that make an impression. We will be studying what determines social rules, and what determines

deviance. Also, we will be looking at the impact of institutions such as government, economics, education, sports, religion, family, and population on different cultures.

American Government

Prerequisite: None
Credit/Length: .5/semester
Grade: 11, 12

The class will be exploring the roots of Democracy, the United States Constitution, the Bill of Rights, and the rise of political parties. The students will compare and contrast our system to that of our European counterparts. The class will research different interest groups that influence our legislation at the state and federal levels. We will analyze the presidential, legislative, and judicial branches of our federal government and how it affects students in their daily lives. Students registering for this course must be motivated and active learners. This class is taught in conjunction with ATCC; upon successful completion of this course. This class will run 1 semester in length.

SOCIAL STUDIES ELECTIVES

<u>College Psychology (partered with Benson HS)</u>

Pathway: HSHS
Prerequisite: None
Credit/Length: .5/semester
Grade: 11, 12

note: if you choose to register for College Psychology, you need to register through our General Psychology I course. Please see our academic counselor for this request.

Psychology is an interesting and dynamic course, taught through lecture, discussion, and demonstration. A course in General Psychology is designed to spur further interest and inquiry into the topic. This course will explore the History and Research methods employed in psychology along with Learning Theory, Intelligence, Motivation, Development, Stress Reactions, Personality, Personality Disorders, Methods of Treatment, and Social Psychology.

General Psychology I

Pathway: HSHS
Prerequisite: None
Credit/Length: .5/semester
Grade: 11, 12

Psychology is an interesting and dynamic course, taught through lecture, discussion, and demonstration. A course in General Psychology is designed to spur further interest and inquiry into the topic. This course will explore the History and Research methods employed in psychology along with Learning Theory, Intelligence, Motivation, Development, Stress Reactions, Personality, Personality Disorders, Methods of Treatment, and Social Psychology.

<u>GENERAL PSYCHOLOGY (MState/partnered</u> with Benson HS)

Pathway: HSHS
Prerequisite: None
Credit/Length: .5/semester
Grade: 11, 12

note: if you choose to register for College Psychology, you need to register through our General Psychology I course. Please see academic counselor for this request.

The following topics are covered in order to give interested students additional information regarding psychology: research in psychology, biological aspects of psychology, sensation, perception, learning, memory, cognition and language, consciousness, cognitive abilities, motivation and emotion, human development, health, stress and coping, personality, treatment of psychological disorders, social cognition and social influence.

The World Wars

Pathway: HSHS
Prerequisite: None
Credit/Length: .5

Grade: 10. 11. 12

The first part of the course will take a look at World War I. The class will look into the causes, its battles, results, and long-term consequences which ultimately led to World War II. Students will then explore the Second World War, looking at its causes and the rise of Fascism and Nazism, as well as the ascension of the military empire of Japan. This class will run 1 semester in length.

9

Health/Physical Education

Grade:

Physical Education (required)

Prerequisite: None Credit/Length: .5/semester

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This course is designed to give our 9th graders a look into all of our high school elective Phy Ed courses. We will cover both Team and Individual Sports. We will introduce the benefits of Strength & Speed training. We will focus on the importance of Lifetime Fitness, and how to incorporate physical activity into your life both now and into the future. This class will run on an A & B day schedule, opposite of Health 9 for the whole school year.

Health 9 (Required)

Prerequisite: None

Credit/Length: .5/semester

Grade: 9

Units covered in this course will include the following: first aid, community health, family life education, mental and emotional health, personal health, prevention and control of disease, substance use and abuse (drugs). The students will discuss a variety of issues dealing with dating, parenting, responsible behaviors, proper body care and maintenance, how and when to say "no," peer pressure, and healthy choices. This class will run on an A & B day schedule, opposite of Phy Ed 9 for the whole school year.