

# **2024-2025 Course Catalog**



**MOUNTAIN IRON-BUHL  
HIGH SCHOOL**

**MOUNTAIN IRON, MN**

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Dear Parents, Guardians, and Students,

As you review this Course Catalog, please pay close attention to graduation requirements and plan ahead. Mountain Iron-Buhl ISD 712 requires a minimum of 24 high school credits to graduate. All requirements for graduation must be completed for a student to be eligible to participate in commencement exercises.

**2024-2025 Mountain Iron-Buhl High School Local Graduation Requirements for grades 9-12:**

English	4 credits	Social Studies	4 credits
Mathematics	3 credits	Science	3 credits
Including Algebra, Geometry & Algebra II		Including Biology and Chemistry or Physics	
Phys. Ed.	.5 credit	Health	.5 credit
Fine Arts	1 credit	Electives	8 credits
		Total	24 credits

Students entering their junior and senior year should be making sure they are prepared to meet any entrance requirements for the post-secondary plans they may have. Students are encouraged to take a rigorous course load every year, most importantly their senior year, which should include a math class if possible.

Mountain Iron-Buhl offers a variety of classes to meet the needs of our students. College in the Schools courses are college credit classes offered in the high school. In order to be eligible to take these courses, juniors must have a cumulative GPA of 3.0 and seniors need a 2.5. Students will receive 1 high school credit for a full year course while each college determines their own credit load per course. This is a great benefit for students to enjoy their high school years while receiving college credits.

Students are given adequate time to select the courses of their choice. All efforts are made to assign the courses requested. Final course offerings will be determined by enrollment, scheduling, and budget constraints. The administration reserves the authority to alter any student's registration in order to best help the student secure courses as near his or her desires as possible. Students who have failed courses will have their registrations altered accordingly.

Prior to registration, Mrs. Hultman will meet with classes by grade level and review graduation requirements, new course offerings, College in the Schools (CIS) and Post Secondary Education (PSEO) opportunities, as well as answer any other questions that may arise regarding the registration process. Course registration is an important part of a student's education. Families are encouraged to discuss course selections and graduation requirements. If you have any questions or would like to set up an appointment with the principal or counselor, contact them at any time.

We look forward to another exciting and productive year at MI-B!

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## **ENGLISH COURSES**

### **World Literature**

**Grade 10**

**Semester I and II, 1 credit**

This course will involve continued development of the English language. Oral and written skills are stressed through grammar and usage, composition, oral speaking and presentation skills. Students will be introduced to literature of the world which concentrates on literature and cultures from around the world as well as the reading of various novels. (MCCC 01058)

### **American Literature**

**Grades 11-12**

**Semester I and II, 1 credit**

This course will involve continued development of the English language. Oral and written skills are stressed through grammar and usage, composition, oral speaking and presentation skills. Students will be introduced to American literature which concentrates on literature of the United States as well as the reading of various novels. (MCCC 01054)

### **American Literature: 1865-Present (CIS)**

**Grades 11-12**

**Semester I, .5 credit  
3 college credits**

A survey of the writings of American authors from 1865 to the present, American Literature 1865 through the present places special emphasis on literary works whose authors represent the cultural diversity of American society. Special attention is given to writers not historically represented in the literary canon, including female, Native-American, African-American, and immigrant authors. Readings include stories, plays, and poems within the context of United States' history, keeping a close eye on unequal power relations between groups as well as the ethnic, regional, and cultural diversity of American society. MnTC Goal Area: 6 & 7

### **Multicultural American Literature (CIS)**

**Grades 11-12**

**Semester II, .5 credit  
3 college credits**

Multicultural American Literature encourages awareness of cultural diversity in America. Readings explore themes related to culture, identity, society, language, and values, and consider historical and contemporary issues of politics, ethnicity, and the development of national identity. Literature represents diverse voices in genres such as fiction, non-fiction, and poetry. MnTC Goal Area: 6 & 7

### **Mass Communication (CIS)**

**Grades 11-12**

**Semester I, .5 credit  
3 college credits**

This course provides a survey of the theories and concepts important to understanding mass communication. A strong emphasis will be placed on the effects of newspapers, magazines, radio, television, Internet, and social media on a global society. The role and responsibility of the mass media in a free society will be analyzed. MnTC Goal Area: 5 & 9 (Note: This is an English elective and not one of the four required English credits needed for MI-B's high school diploma)

### **Intro to Creative Writing (CIS)**

**Grades 11-12**

**Semester II, .5 credit  
3 college credits**

This course introduces students to the craft of literary genres, such as poetry, fiction, non-fiction, and playwriting. Students read creative works, applying critical and analytical lenses, while learning and applying genre-specific techniques to original works. Students may participate in workshops or peer review to develop and practice the skills to discuss, critique, and revise writing. MnTC Goal Area: 6 (Note: This is an English elective and not one of the four required English credits needed for MI-B's high school diploma)

**Journalism I or II****Grades 10-12****Semester I, .5 credit**

This course will introduce students to the many formats of communication through media. The class is divided into three main groups: creating the yearbook, video production with a green screen, and media/communications group. Depending upon the size of the class, seniority will take precedence over who will be in the yearbook group.

\*The yearbook group will plan, organize, and create the yearbook as well as lead the sales and marketing of the book

\*The video production group will learn how to create videos using a green screen and learn how to use the supporting technology and publish various digital media formats to the student body.

\*The media/communications group will experience the many forms of mass media communications through a variety of hands-on projects. Some of the projects will be digitally published to the student body.

Students in Journalism II will take on leadership roles such as editors, producers, and managers. (Note: This is an English elective and not one of the four required English credits needed for MI-B's high school diploma) (MCCC 11101)

**Mass Media I or II****Grades 10-12****Semester II, .5 credit**

This course is a continuation of Journalism-semester one: experiencing the many formats of communication through media. Students will continue working on the school yearbook and ultimately the publication of the yearbooks. Students will work on advancing their knowledge from semester one by creating and publishing digital media.

\*The yearbook group will plan, organize, and create the yearbook as well as lead the sales and marketing of the book

\*The video production group will learn how to create videos using a green screen and learn how to use the supporting technology and publish various digital media formats to the student body.

\*The media/communications group will experience the many forms of mass media communications through a variety of hands-on projects. Some of the projects will be digitally published to the student Body.

Students in Mass Media II will take on leadership roles such as editors, producers, and managers. (Note: This is an English elective and not one of the four required English credits needed for MI-B's high school diploma) (MCCC 11101)

**FACS COURSES****FACS 10-12****Grades 10-12****Semester I and II, 1 credit**

This class will focus on advanced and creative cooking. The course will cover skills, terminology, food creativity, labs, international studies, food and kitchen safety and careers in hospitality. There will also be a unit on clothing care, upcycling, color, clothing construction and care.

## **FINE ARTS COURSES**

### **Painting & Ceramics**

**Grades 10-12**

**Semester I and II, 1 credit**

Students will spend the fall semester working on painting. They will learn the basic techniques for using acrylic and watercolor. The spring semester will be focused on ceramics, using hand-building techniques to create original works of art. Students will explore the nature of clay and glazes, hand building methods, under glazing, and glazing techniques. Wheel throwing is also introduced with expectations for basic levels of achievement, including cylinder, bowl, and plate forms, as well as slip casting using plaster molds. (MCCC 05157)

### **Senior Band**

**Grades 9-12**

**Semester I and II, 1 credit**

Senior Band will allow students to continue to work on important concepts of good musicianship, such as intonation and balance, as well as experience music of different styles and forms. Senior band members will have opportunities to perform throughout the year, including concerts, contests, and pep band. Students will also have the opportunity to perform solos and ensembles at subsection and section music contests. Attendance and participation at ALL performances is MANDATORY. (MCCC 05101)

### **Senior Choir**

**Grades 9-12**

**Semester I and II, 1 credit**

Senior choir gives students the opportunity to develop their vocal and aural skills through performance of various musical styles and forms. Choir members will have many opportunities to perform throughout the school year, including concerts, contests, graduation, as well as various community events. Students will also have the opportunity to perform solos and ensembles at subsection and section music contests. Attendance and participation at ALL performances is MANDATORY. (MCCC 05110)

## **INDUSTRIAL TECHNOLOGY COURSES**

### **Welding and Cutting**

**Grades 11-12**

**Semester I and II, 1 credit**

This course is designed to introduce the student to common Welding and Cutting practices used in industry. Safety and proper procedures are used as we discover SMAW (ARC), GMAW (MIG), GTAW (TIG), and Oxy-Fuel (GAS) Welding. Torch and Plasma Cutting will also be covered. (MCCC 13207)

### **Small Gas Engines**

**Grades 9-12**

**Semester I and II, 1 credit**

Topics include shop safety, tool usage, parts identification, basic maintenance and repair. First, students will start and run a Briggs-and-Stratton motor to check for proper operation. Next, the engines are completely disassembled, make repairs and adjustments, and reassemble. Finally, we will start the engines and ensure that they are running smoothly. Students can bring in their own engines from home and work on them. (Students are not required to bring an engine from home. There are extra engines in the shop). As always, careers in the world of engine technology are explored. (MCCC 20110)

### **Woodworking**

**Grades 9-12**

**Semester I and II, 1 credit**

This is an introduction to woodworking and it's endless uses in everyday life as a renewable resource. Students will safely construct their projects using a variety of tools and machines. The many careers in woodworking will be covered as well. (MCCC 13054)

**Advanced Woodworking****Grades 10-12****Semester I and II, 1 credit**

This is a continuation of Woods I. Students may choose to build several small projects or one large project. The many careers in woodworking will be covered as well. (MCCC 13054)

**MATHEMATICS COURSES****Geometry****Grades 10-12****Semester I and II, 1 credit**

Geometry is a rich environment in which students of mathematics can explore the relationships among points, lines, and planes in two and three dimensions. Topics covered include measurement, angles, lines, triangles, polygons, congruence, similarity, circles, area, volume, constructions, basic trigonometry, and a continuous review of basic algebra. Geometry and Algebra II courses may be taken during the same school year with mathematics department approval. (MCCC 02072)

\*Pre-requisite: Must have completed Algebra I with a passing grade or with teacher discretion.

**Algebra II****Grades 10-12****Semester I and II, 1 credit**

Topics covered in this course will include: (1) linear functions and linear programming; (2) rational algebraic expressions; (3) the quadratic equation; (4) polynomial functions; and (5) trigonometric functions. Geometry and Algebra II courses may be taken during the same school year with mathematics department approval. (MCCC 02143)

\*Pre-requisite: Must have completed Algebra I with a passing grade.

**Algebra II Concepts****Grades 10-12****Semester I and II, 1 credit**

This is a second year Algebra course. Emphasis is placed on mathematical structure, number systems and their properties. It will cover topics in Linear Algebra, Quadratics, Polynomials, Rational Functions, Matrices, Exponential and Logarithmic Functions, Analytic Geometry, Complex Numbers, Sequences and Series, and Probability and Statistics. (MCCC 02121)

**Math for Business****Grades 10-12****Semester I, .5 credit**

This course introduces students to the mathematical concepts and applications necessary for successful business careers. Topics will include finance charges, cash discounts, commissions, payroll, tax deductions, simple and compound interest, net present value. Students will get the opportunity to create, sell, and determine the net profit of a product. (MCCC 02157)

**Personal Finance****Grades 10-12****Semester II, .5 credit**

Personal finance is designed to help students understand the impact of individual choices on occupational goals and future earning potential. Topics covered will include income, insurance, money management, spending and credit, as well as saving and investing. (MCCC 02152)

**College Algebra (CIS)****Grades 11-12****Semester I, .5 credit  
3 college credits**

College Algebra emphasizes the concepts of functions and solving equations. The course focuses on linear, quadratic, polynomial, rational, radical, exponential, logarithmic, and inverse functions and their graphs. MnTC Goal Area: 4

\*Pre-requisite: Must have completed Algebra II with a C or higher

**Trigonometry (CIS)****Grades 11-12****Semester II, .5 credit  
2 college credits**

This course consists of right triangle trigonometry, laws of sines and cosines, applications, trigonometric identities, and graphing. Identifying and graphing conic sections and solving nonlinear systems are also included. MnTC Goal Area: 4

**PHYSICAL EDUCATION AND HEALTH COURSES****Team Sports****Grades 11-12****Semester I and II, 1 credit**

Students will experience sports they can participate in for a lifetime. Throughout the year, the class will take a variety of field trips for hands on learning. Students will learn and participate in weight training, skiing, curling, tennis, badminton, fishing, cycling, bowling, swimming, broomball, skating, softball, and many other activities. (MCCC 08003)

**SCIENCE COURSES****Biology****Grade 10****Semester I and II, 1 credit**

The aim of this course is to provide students with a background in biological science. Emphasis will be on cell biology, genetics, evolution, ecological systems and the human body. There will be an opportunity for lab work and dissections. \*Prerequisite: Successfully completed science 7-9 (MCCC 03051)

**Physics****Grades 11-12****Semester I and II, 1 credit**

This course involves the application of mathematical skills and lab activities to explain the laws of the physical world. Topics will include, but are not limited to: Newton's laws of motion, forces, work & energy, momentum, heat, thermodynamics, waves, light, and electricity. A lab notebook is provided (and required); it constitutes a large portion of the grade. (MCCC 03151)

**Chemistry****Grades 11-12****Semester I and II, 1 credit**

This course is designed to prepare students for chemistry in college. It will include the study of matter in its phases on Earth, the Periodic Table, writing and balancing equations, mass relationships, stoichiometry, gas laws, and other associated chemistry topics. This course uses math skills similar to those learned in Algebra II. (MCCC 03101)



**Anatomy/Physiology****Grades 10-12****Semester I and II, 1 credit**

The Anatomy and Physiology course is designed to give the learner and understanding of the basic organization and principal functions of the living body. Throughout the course, students will explore the anatomical features of the various systems of the human body as well as the functional interrelatedness of the systems. Using manipulatives, hands-on activities, wet-lab activities, and a variety of additional techniques, the students will thoroughly explore the various topics of human anatomy and physiology. (MCCC 03053)

**Environmental Science (CIS)****Grades 10-12****Semester I and II, 1 credit  
4 college credits**

This course is an introduction to basic characteristics of the natural world and an exploration of how natural systems affect and are affected by the social and technological human environment. Students will examine the environmental consequences of selected lifestyle choices in practical and simulated experiences outside of class. MnTC Goal Area: 3 & 10

**Forensic Science****Grades 10-12****Semester I and II, 1 credit**

Forensic Science will teach you how to use the scientific method to solve problems. There will be activities throughout the year to learn observational skills, how to collect evidence, compare evidence on the microscopic level, collect fingerprints and DNA evidence, measure dates of life bones and body evidence, ballistics and solving a fictitious case based on the skills you have gained. (MCCC 03204)

**SOCIAL STUDIES COURSES****World History****Grade 10****Semester I and II, 1 credit**

A required general survey course that starts with the beginnings of humankind and will conclude with the end of the 20th Century. We will survey significant civilizations, events, and people that have shaped how we live today. We will look for unique features as well as commonalities that make up the human condition and the human experience. (MCCC 04051)

**American History****Grades 11-12****Semester I and II, 1 credit**

American History provides students with the opportunity to acquire an understanding of the chronological development of the American people and government by examining the political, economic, social, religious, military, scientific, and cultural events that have affected the rise and growth of the nation.

**American History, 1877-present (CIS)****Grades 11-12****Semester I, .5 credits  
3 college credits**

This course covers the major political, economic, social, and cultural developments in the United States from the Civil War through the present. Special emphasis is placed on issues relating to race, ethnicity, class and gender. MnTC Goal Area: 5 & 7 (MCCC 04101)

**History of World War II (CIS)****Grades 11-12****Semester II, .5 credit  
3 college credits**

This course surveys World War II, focusing on its origins, background, major military operations and events, conclusion of the conflict, and the advent of the Cold War. Included in the course is the study of the rise of dictators; diplomacy in the 1930's and 1940's; the major land, air, and sea battles; the great leaders; the "Home Front"; and the East-West divergence after 1945. MnTC Goal Area: 5 & 8 (MCCC 04101)

**STEM COURSES****Aerospace Engineering****Grades 9-12****Semester I & II, 1 credit**

Engineering I follows the PLTW based curriculum. In Engineering I, Introduction to Engineering Design, you will learn how engineers apply a design process to solve real-world problems. You will work individually and as a member of collaborative teams to apply math, science, and a variety of engineering tools, including 3D modeling software, to design, document, and communicate your engineering work. In Engineering I, Aerospace Engineering, you will explore the fundamentals of air and space flight and orbital mechanics. You'll apply what you learned to design components of flight systems including an airfoil, a propulsion system, and a rocket as well as learning to fly on our flight simulators.

**Computer Science Principles****Grades 10-12****Semester I & II, 1 credit**

Engineering II follows the PLTW based curriculum. In Engineering II, Computer Science Principles (CSP) course, you will explore computational thinking as you program using Python. You will gain an understanding of programming through hands-on activities, projects, and problems that are reflective of real-world challenges

**Tech Design****Grades 10-12****Semester I & II, 1 credit**

This course introduces foundational design and technology frameworks and builds skills essential to product design. It follows the design process that includes research, concept generation, and prototyping by leveraging both hardware and digital technologies.

**WORLD LANGUAGE COURSES****Spanish I****Grades 9-12****Semester I and II, 1 credit**

Spanish I is an introduction to the language and culture of the Spanish-speaking world. This course is designed to help learners acquire the knowledge of a second language by utilizing the four skills of reading, writing, listening, and speaking. Development of these four skills will occur in curriculum that emphasizes role-playing games, educational videos, crafts, and plenty of work on oral efficiency. Active participation, regular class attendance, and daily practice are the keys to success in this course and are therefore, strongly encouraged. (MCCC 06101)

**Spanish II****Grades 10-12****Semester I and II, 1 credit**

Spanish II is designed for those students who have successfully completed Spanish I. Emphasis will continue on growth in listening, writing, reading, and speaking in the target language. The instruction of this class will involve a variety of learning activities including singing, role-playing, arts & crafts, and games. Active participation is required throughout the year to grasp further knowledge of the language. Regular class attendance and daily practice are keys to success in this course and are therefore, strongly encouraged. (MCCC 06102)

**Anishinaabe I****Grades 10-12****Semester I and II, 1 credit**

Boozhoo! This course offers the students an introduction to the Anishinaabe language. Through a variety of activities, students will develop a basic vocabulary which will include numbers, colors, objects, greetings, etc., and the beginning of sentence construction. Cultural presentations will allow students to better understand the Anishinabe people. \*Taught virtually through North Woods High School

**VOCATIONAL COURSES****Food Occupations I****Grades 11-12****Semester I & II 2 credits**

Designed for those who are interested in the Food Service Industry. Activity centers around our student run restaurant, "The Ranger Rock Cafe, which is open to MIB faculty/staff and the public (as well as catering for events such as banquets and meetings). Included are basic food handling and safety techniques, food production, cost control methods, operation of commercial food service equipment, and customer service. Future jobs/career paths include Chef, Short-order cook, Food-Preparation Worker, Waiter/Waitress, Host/Hostess, Food Service Management, or Restaurant Owner. Check out our website: [www.foodocc.com](http://www.foodocc.com) (MCCC 16051)

**Food Occupations II****Grades 12****Semester I & II, 2 credits**

Designed for those students who want to continue their Food Occ experience. You will be responsible for assisting Food Occ I students during labs, as a station manager when the restaurant is open and weekly specials. Students in Food Occ. II will be required to take a vocational assessment, the Serve Safe Food Handler Exam. Upon passing students will earn a national certificate. (MCCC 16055)

Pre-requisite: 3.0 or above final grade in Food Occ I, the ability to work independently. (MCCC 1652)

**Career Seminar/Work Experience****Grades 11-12****Semester I & II, 2 credits**

This course will be covering Career and Life Skills components. First semester will include, but not limit to the following: educational goals, applying to colleges, scholarships, jobs, communication skills, banking and money skills, investments, travel, consumerism and future housing. Second semester, students will have the opportunities to be in a professional work environment and have the opportunity to explore possible areas of career interest.

**Nursing Assistant****Grades 11-12****Semester I, 2 credits  
4 College Credits**

This course covers the Introductory Theory and Skills of Nursing. The Units include maintaining a safe and clean environment, communicating information, meeting basic human needs, obtaining/measuring Vital Signs, understanding mental health and social service needs, and caring for clients with special needs, equipment or procedures. The course teaches the student to be able to perform these skills in a healthcare facility or home setting. Instruction is provided through lectures (in person and/or web based), videos, assignments, and Instructor demonstration. The students are given practice time in the lab and subsequently must give return demonstrations of skills learned. The students will experience supervised practical training and application of the skills learned by participating in client care in the skills lab and/or at the clinical site. \*Located on Minnesota North Mesabi Range Eveleth Campus. Students must provide their own transportation.

