

# ***BOYNE FALLS PUBLIC SCHOOL***

## ***COURSE DESCRIPTIONS***

### **Mathematics Department**

**Pre-Algebra/Algebra I** - *Three Trimesters* - This course explores the language of algebra in verbal, tabular, graphical, and symbolic forms. A wide range of problem solving activities and applications encourage students to model patterns and relationships with variables, exponents, and functions throughout the course. Examples, exercises, and assessment activities in the course integrate algebra topics with statistics, probability, geometry, and discrete mathematics. Other topics included are properties of real numbers, solution sets, basic operation with polynomials, and solving quadratic equations and systems. This class provides a formal development of the algebraic skills and concepts necessary for students who will take other advanced college-preparatory. This course is aligned with common core and is required for graduation.

**Pre-Geometry/Geometry** - *Three Trimesters* - *Algebra I and Geometry may be taken concurrently with the written consent of the Math Department Chairperson.* This course stresses the use of deductive and inductive reasoning and the investigation of drawing conclusions. Students study properties and relationships, involving the study of lines, angles, planes, congruence and similar plane figures, basic trigonometric ratios, polygons, circles and the relationships of angles and lines of circles. Also included is the study of solid geometry concepts and analysis of topics of spatial figures. The development of the need for proof and its use is emphasized. This course provides students with experiences that will broaden their understanding of geometric shapes and the properties of these shapes. This course is aligned with common core and is required for graduation.

**Algebra II** *Two Trimesters: Grades 11, 12 - Prerequisite: successful completion of Algebra I and Geometry.* Algebra II and Geometry may be taken concurrently with the written consent of the Math Department Chairperson. This course expands the study of Algebra I, furthering the development of functions, polynomials and polynomial functions, rational exponents, the complex number system, matrices, the properties of graphs and properties of graphs of conic sections,

permutations and combinations, logarithmic and exponential functions. Students using graphing calculators and other technological means to develop further their understanding. This course is aligned with common core and is required for graduation.

**Business Math \*** – *Two trimesters* – This course is designed for students interested in developing an awareness of mathematical skills that are needed in business applications. This course will include the following topics: personnel, production, purchasing, sales and marketing, warehousing and distribution, services, accounting, financial planning, and corporate planning. Depending on the interests of the students, other topics may also be covered. This course may also include some of the topics covered in consumer math.

**Accounting \*** – *Two Trimesters* - The accounting course is devoted to presenting basic accounting principles. Learning these principles should provide students with the knowledge necessary to expand their study in various business fields such as management, marketing, and accounting. The accounting class, informs the students about the modern business world. It introduces the students to accounting careers, business terminology, and basic record keeping. This course is highly recommended for any student intending to study business or desiring to seek employment in a business related occupation. Accounting I may also help students develop business and organizational skills that will be beneficial with their own personal finances.

**Senior Math** – *Two Trimesters* – This is a course for making personal economic decisions: budgeting income: borrowing and buying on credit; choosing saving instruments, stocks, bonds, real estate and other investments; life insurance annuities, buying or renting a house and the use of financial institutions.

**Advanced Mathematics courses including, but not limited to Pre-Calculus, Calculus, Trigonometry, and Probability and Statistics are offered as virtual learning courses.**

## **Physical Education and Health Department**

**Physical Education** *One Trimester*: Physical Education is a required course where students are encouraged to maintain lifetime fitness through participating regularly in a variety of health-enhancing activities. Students who are physically fit contribute to the well being of the community through their skills and actions. This course will provide students with a balanced program of fitness, sports, games, and weight training to help demonstrate muscular strength, muscular endurance, cardiovascular endurance, flexibility, and body composition. Through regular activity, students are challenged in the affective, cognitive, physical, and psychomotor domains. This course is required for graduation.

**Health** *One Trimester*- Health Education teaches values that promote and encourage life-long health habits. Through the use of a variety of teaching techniques and health related resources, students learn about the physical, mental, and social health needs of their bodies. This course includes a number of topics such as growth and development, mental health, environmental health, nutrition, interpersonal relationships, consumer health, personal health, alcohol, tobacco, and other drugs, injuries, and health promotion and disease prevention. Also, students receive information about HIV/AIDS, cancer prevention, and organ and blood donor programs. This course is required for graduation.

**Personal Fitness** - *One Trimester* - This one trimester course is a continuation of Physical Education and designed to promote knowledge and awareness of the need for increased fitness levels, which are needed to enjoy an active lifestyle. In order to maintain or achieve an active lifestyle, physical activity is necessary. Students need to understand that the components of fitness, power, flexibility, muscular strength, muscular endurance, and cardiovascular endurance can be measured, developed, and improved. By learning and utilizing a self-improvement program designed to improve these qualities, it is hoped that the students will improve their level of physical fitness in addition to developing a sense of pride and self-discipline in making fitness and physical activity a part of their daily life throughout adulthood.

**Advanced Physical Education** \* – *One Trimester*- Advanced Phys. Ed. is a course designed for students to set and accomplish personal fitness goals. Students research, outline, and implement a personal fitness program. The program allows them to achieve personal goals that are set in the beginning of the trimester. Students learn the major muscle groups and proper safety. Things that may be included are: weight lifting, plyometrics, flexibility, and aerobic fitness.

**Additional Physical Education and Health related courses are offered as virtual learning courses.**

## **Science Department**

**Physical Science** – *Two Trimesters* – Survey of Physical Science that involves the classification and composition of matter, chemical and physical changes, energy, motion, magnetism, light and sound. Course is heavily emphasized with technology.

**Biology** – *Two trimesters* – The study of all living things. This class is heavy in laboratory exercises often accompanied by technology. Biology is devoted to the study of living things and their processes. Throughout the year this course provides an opportunity for students to develop scientific process skills, laboratory techniques, and an understanding of the fundamental principles of living organisms. Students will explore biological science as a process, cell structure and function, genetics and heredity, evolution and classification, diversity of living organisms and their ecological roles, and an introduction to animal structure and function. There are twelve units that will be assessed at the end of the unit with a state mandated assessment. This course is required for graduation.

**Chemistry**- *Two trimesters* – The study of matter. High use of laboratory settings. Course is rich in technology and problem solving. Chemistry is the study of the composition of matter and the changes that matter undergoes. Throughout the year this course provides an opportunity for students to develop scientific process skills, laboratory techniques, and an understanding of the fundamental principles of matter. Students will explore forms of energy and energy

transfer, and properties and changes in matter. There are twelve units that will be assessed at the end of the unit with a state mandated assessment. This course is required for graduation.

**Independent Science Projects\*** - *One-three trimesters* – an interdisciplinary class that combines mathematics and science while using available technology to do hands-on projects. Students will study the relationships of data collected in primary scientific research as well as learn proper laboratory methods. The scientific method will drive the process employed by the students. The class combines knowledge of biology and chemistry with an understanding of functions and statistics. Each student will receive ½ credit in math or science upon completion of each trimester class.

**Anatomy/ Physiology\*** - *Two trimesters* –Anatomy and Physiology is an upper level comprehensive investigation of the human body. Practical application of life systems are examined and observed in some laboratory situations. Biology prerequisite is highly advised.

**Botany\*** - *One Trimester* - Botany is devoted to the study of Plants. Throughout the trimester this course provides an opportunity for students to develop scientific process skills, laboratory techniques, and an understanding of the fundamental principles of plants. Students will explore plant life and its role in our society.

**Advanced Biology\*** – *One Trimester* - Exploration of environments and the ways that organisms adapt to them. Exploration of several phylums, species, and an overview of human anatomy and physiology.

**Forensics\*** - *Two Trimesters* - Forensic Science uses multiple scientific disciplines to the investigation of criminal or civil questions of the law. In this course we will use biology, chemistry, and physical science to investigate and understand evidence and how it relates to our legal. Students will actively participate in labs and activities relating to the investigation of crime scenes and the analysis of evidence.

**Additional Science courses are offered as virtual learning classes**

### **Fine Arts Department**

**Art -One trimester:** An introductory class to both two- and three-dimensional art. This class will focus on the elements of design and is intended to explore as many media as possible. Components of art history are included in the course.

**Advanced Art -One trimester:** This class will build on skills learned in the Elements of Art class and will use a variety of mediums. This class will be focused on creating a portfolio, and technical and creative development of the student artist. *Prerequisite:* Elements of Art or permission from art instructor

**Drawing and Painting\*-One trimester:** This class will build on drawing and painting techniques and composition, using a variety of media and focusing on principles of design. Components of art history are included in the course.

**Digital Photography\*- One trimester:** An introductory class to digital photography. The class will be focused on learning the functions of a DSL camera, printing to an ink jet printer, and basic tools in Photoshop. Heavy emphasis on composition.

**Additional fine arts courses, including but not limited to, music appreciation and art appreciation are offered as virtual learning courses.**

### **Business, Vocational Education and Technology Dept**

**BMA I - One Trimester** – Introduction to Business, Information Technology & Applications, Communications, Career and Professional Development

**BMA II \*- One Trimester** - Data Management and Administration, Business Planning & Entrepreneurship, Human Resources / Personnel

**BMA III - One Trimester** – Operations and Quality Management, Business Management & Leadership, Project Management

**BMA IV** – One Trimester – International Business, Financial Analysis/Economics, Law, Ethics and Government.

**Business Law\***-*One Trimester* – Law and legal institutions in society, emphasizing areas of law relevant to business operations, general legal, and social environment with emphasis on business ethics; role of contracts in business; and employment obligations.

**Computers \***- *One Trimester* - Uses of computer hardware and software in business and society; computer terminology; program definition and flowcharting/algorithms; introduction to programming using general purpose language and word processing, spreadsheet, database, graphics, multimedia, and Internet.

**Entrepreneurship\*** - *One Trimester* – An introduction to the creative and innovative managerial practices of successful entrepreneurship. This course reviews the significant economic and social contributions entrepreneurs provide to society, the intense lifestyle commitment, and the skills necessary for entrepreneurial success. Provides an overview of the entrepreneurial process.

**Web Design\*** - *One Trimester* - This course introduces students to basic web design using HTML (Hypertext Markup Language) and CSS (Cascading Style Sheets). The course does not require any prior knowledge of HTML or web design. Throughout the course students are introduced to planning and designing effective web pages; implementing web pages by writing HTML and CSS code; enhancing web pages with the use of page layout techniques, text formatting, graphics, images, and multimedia; and producing a functional, multi-page website.

**Publications/Yearbook** – *Two Trimesters* - Students will be learning various software applications to assist and enhance the publication process. Create publications such as yearbook, school paper or other production possibilities.

**Web Media Development\***- *One Trimester* - Create image/video/audio applications to enhance business. Software used: Flash, Java, GIMP, Audacity, Acrobat Pro, and others.

**Senior Seminar \***- *One Trimester* – Senior Seminar is a student success course that will assist students in navigating the terrain of higher education, to improve their academic performance, to help determine strengths and goals, and to implement strategies to enhance personal, academic, and career success.

**Personal Finance** – *One Trimester* – The Personal Finance class focuses on students learning to manage an income.

**Additional technology-related, business, and vocational courses are offered through virtual learning courses.**

### **Language Arts Department**

**English 9-** *Two trimesters* - English 9 is designed to produce students proficient in the areas of reading, writing, speaking and listening. The English 9 curriculum at Boyne Falls High School is based upon the *Michigan Merit Curriculum*. These units align with the *Common Core State Standards* currently under development. This course is required for graduation.

**English 10-** *Two trimesters* - English 10 is designed to produce students proficient in the areas of reading, writing, speaking and listening. The English 10 curriculum at Boyne Falls High School is based upon the *Michigan Merit Curriculum*. These units align with the *Common Core State Standards*. This course is required for graduation.

**English 11-** *Two Trimesters* - English 11 is designed to produce students proficient in the areas of reading, writing, speaking and listening. The English 11 curriculum at Boyne Falls High School is based upon the *Michigan Merit Curriculum*. These units align with the *Common Core State Standards*. This course is required for graduation.

**English 12- Two trimesters** - English 12 is designed to produce students proficient in the areas of reading, writing, speaking and listening. The English 12 curriculum at Boyne Falls High School is based upon the *Michigan Merit Curriculum*. These units align with the *Common Core State Standards*. This course is required for graduation.

**Speech- One Trimester** - Impromptu speaking, informative speaking, persuasive speaking, speaking for a special occasion, drama, and an introduction to parliamentary procedure.

**Technical Writing\*- One Trimester-** A focus on the parts of speech, punctuation, expressive writing, descriptive writing, informative writing, and reflective writing.

**Creative Writing\* – One Trimester-** Creative writing is designed to aid students in creative expression. Students will read and discuss articles on the craft of writing, utilize contemporary short stories and poetry as writing models, engage in lessons designed to increase understanding of various literary techniques, and begin writing a novel.

**Exploratory English\*- One Trimester-** Exploratory is an opportunity to engage in the “arts” aspect language arts. This class is differentiated into six “mini-elective” style units. The goal is to facilitate an exploration of language arts in order to build cultural literacy, to explore a variety of literary genres, and examine the power and impact of language in regards to our culture.

**Shakespeare \*- One Trimester-** Intro to Shakespeare is for all students of all ability levels and reading levels, of every ethnic origin, and in every grade level at Boyne Falls High School. The course is designed with the assumption that Shakespeare studies should be engaging, active, intellectual, energizing and pleasurable. Students will read and discuss biographical information regarding William Shakespeare, experiment with the literary devices used in his plays, sample some of his poetry, engage in acting, compose scripts based upon Shakespearean models and journal reflectively over the course of this trimester. Both the curriculum and unit calendar for this course have been based upon materials from the *Folger Shakespeare Library*.

**Additional English and Language Arts courses are offered as virtual learning classes.**

### **Social Studies Department**

**American Politics \*- One Trimester** –Students in this course will cover: current events on a national and global level, the constitutional framework, the process of proposing amendments on the Bill of Rights, the origins of American political philosophy, the theory of American federalism, the election system, the measurement and influence of public opinion in America, the purpose and influence of political parties and interest groups, the functions of the House of Representatives and the Senate, federal bureaucracy, evolution, history and duties of the Presidency, the judicial procedure of the federal court system, comparing and contrasting ways the US government differs from others, and the interdisciplinary relationships among history, geography, government/civics, and economics in American politics.

**Current Affairs\*- One Trimester** - Current Affairs is designed to provide students with an opportunity to gain an understanding of the world around them through the use of newspapers, magazines, television, radio, and discussion.

**Civics – One Trimester,** The following topics covered in Civics: Foundations of our government, US Constitution, Political Behavior (voting, interest groups, public opinion, etc...), Legislative Branch, Executive Branch, Judicial Branch, Comparative Political Systems, and Core Democratic Values. This course is required for graduation.

**Economics – One Trimester** – Economic issues affect our government, history, and overall way of life. The following topics are covered, relating to microeconomic and macroeconomic concepts: Opportunity Cost, Economic Systems, Supply and Demand, Market Structures, Business Organization, Money, Banking, and Financial Markets, Taxes and Government Spending, Monetary and Fiscal policy, The global economy. This course is required for graduation.

**U.S. History/Geography** – *Two Trimesters* - The class will begin during the second industrial revolution/big business and continue to the present. This is a very interesting time in history since many events have a direct relationship on how the world is now. The following are some topics that will be covered: Big Business, US expansion and Imperialism, Progressive Era, WWI, WWII, Korean War, Vietnam War, Persian Gulf War, Roaring 20's, The Great Depression and New Deal, The Cold War era, Civil Rights. This course is required for graduation.

**Geography\*** – *One Trimester* – A study of the cultural regions of the world that focus on the physical factors such as topography, climate and vegetation in relation to human activities.

**World Cultures\*** – *One Trimester*- A study of the cultural regions of the world that focus on the human interaction with the environment and each other. Students are able to explore some of the global issues facing different parts of the world. They also are able to learn what places are like in different areas of the world.

**World History/Geography** – *Two Trimesters* - World History/Geography will begin during early civilization and include time periods to the present. It is important to understand the history and cultures from around the world. We live in a global community and having a general understanding of the world around us better prepares us to understand this new world. The following are some topics that will be covered: Regional History to 1500, Early Civilization, World Religions, Regional History after 1500, 1st and 2<sup>nd</sup> Industrial Revolutions, Imperialism and Global conflict, The Cold War, The Global Economy. This course is required for graduation.

**Additional Social Studies courses are offered as virtual learning classes.**

## **Social Sciences Department**

**Psychology** *One trimester* – In this course, students will embark on an exploration of the human brain and all of its complexities and will gain a better understanding of human behavior.

## **Foreign Language Department**

**Spanish I** *Two semesters* – This course meets 1 of the 2 world language credit requirements for the Michigan Merit Curriculum.

**Additional Foreign Language courses are offered as virtual learning classes.**

## **Additional Electives**

**Peer to Peer Elective Course Credit Program\***- *One-to Three Trimesters*- Peer to Peer is an elective course that provides students an opportunity to support and model academic and social skills from one non-disabled peer to a peer with a disability. There is a focus on leadership skills, understanding and adapting to individual differences in the school setting, written and verbal communication skills, modeling social experiences, and advocating for others. The curriculum includes and evaluations are based on; journaling and or blogging, participation through internet disability modules, pre/post assessments, attendance, classroom participation with peer, and a final project. Time outside of the classroom may be required. Offered to 9<sup>th</sup> and 10<sup>th</sup> grade students. 0.25 credits offered each trimester. No prerequisites required.

\* Courses not offered 2024-2025

## Dual Enrollment

Dual Enrollment classes are college courses (online or on campus) that may be used for credit at both the high school and college level. High school credit may be granted to students who successfully complete a course of instruction offered by an eligible postsecondary institution. The following requirements apply to such courses of instruction:

1. Application and admission to the postsecondary institution are the responsibility of the student.
2. To receive high school credit for the successful completion of postsecondary institution coursework, the student must obtain prior approval from the counselor/administrator. Approval will be based upon, but not limited to, the following factors:
  - a. Students must have 9th - 12th grade student standing;
  - b. Students must have a 3.0 grade point average and currently passing all classes.
  - c. The following shows the complete list of minimum scores that qualify students for dual enrollment options:

Assessment	Test Section	Content Area	Minimum Dual Enrollment Qualifying Score
EXPLORE	Mathematics	Mathematics	17
	Reading	Reading	15
	Science	Science	20
	English	English	13
PLAN	Mathematics	Mathematics	19
	Reading	Reading	17
	Science	Science	21
	English	English	15
ACT	Mathematics	Mathematics	22
	Reading	Reading	22
	Science	Science	23
	English	English	18
COMPASS	Mathematics	Mathematics	52
	Reading	Reading	88
	English	English	77
MME*	ELA	ELA	2100
	Mathematics	Mathematics	2100
	Science	Science	2100
	Social Studies	Social Studies	2100
PSAT 8/9	Critical Reading	Evidence-Based Reading and Writing	480
	Mathematics	Mathematics	510
PSAT 10	Critical Reading	Evidence-Based Reading and Writing	480
	Mathematics	Mathematics	510
PSAT/NMSQT 11 **	Critical Reading	Evidence-Based Reading and Writing	480
	Mathematics	Mathematics	510
SAT **	Critical Reading	Evidence-Based Reading and Writing	480
	Mathematics	Mathematics	530
ACCUPLACER***	Reading Comprehension	Reading	TBD
	Sentence Skills	Writing	TBD
	Mathematics	Mathematics	TBD

3. Students must be enrolled in both the school district and postsecondary institution during the school district's regular school year.
4. Courses offered for dual enrollment are academic courses that are not offered by the school district or partner schools. These courses may not be available because of a scheduling conflict as determined by the school district.
5. Computation of high school credit for postsecondary institution coursework will be based on the following formula: 3 to 4 semester hours equals .75 unit of high school credit.
6. Upon validation from the issuing postsecondary institution, the student's credit will be recorded on the student's high school transcript.
7. The student is responsible for having the postsecondary institution report the student's grade and credit to the counselor in a timely fashion.

8. Student/parent must provide own transportation if course is located at college.
9. Parents/students will be responsible for any tuition incurred if their son/daughter withdraws after the 100% refund period timeline or any class in which their son/daughter receives a failing grade.

### **Virtual Learning**

A student enrolled in an online learning course may receive high school credit for work completed successfully. The course must be offered by an approved institution. Grades earned in approved courses count toward a student's grade point average, class rank, and eligibility for athletic and extracurricular activities.

Michigan Virtual Learning Course Catalog:

<https://michiganvirtual.org/courses/>

EdOptions Academy Course Catalog:

<http://www.edoptionsacademy.com/course-catalog>

### **CTE Courses**

Students may take a Career and Technical Education Course at a coordinating school in the Char-Em ISD, given that the course works out in favor with Boyne Falls Public School schedule. See guidance counselor for most current course listings.