

Kingsford High School



2023 - 2024

Course Descriptions

Graduation Requirements

CLASS OF 2024 STUDENTS and BEYOND ARE REQUIRED TO HAVE AT LEAST 24 CREDITS

All 9th-12th grade students must be enrolled in a full-time schedule. 10th, 11th, and 12th grade students who qualify for dual enrollment may count one or two college classes to meet the minimum class requirement.

Credits	Course
4.0 Credits.....	English
4.0 Credits.....	Mathematics
3.0 Credits.....	Social Studies
3.0 Credits.....	Science
2.0 Credits.....	World Language
1.0 Credits.....	VPAA
0.5 Credits.....	Physical Education
0.5 Credits.....	Health
<u>6.0 Credits.....</u>	<u>(Class of 2024 and beyond)</u>

24 Credits minimum to graduating classes of 2024 and beyond

It is important to remember that colleges and/or universities may have a required amount of core classes that you need for college entrance. It would be wise to make sure that you have met or will meet these requirements by the time of application to college. If you plan on participating in any post-high school athletics, you also need to meet the NCAA requirements. If you have any questions or would like assistance with college entrance requirements, please see your School Counselor.

Kingsford High School Advanced Placement (AP Policy)

The following are official Advanced Placement courses at Kingsford High School:
(All AP courses may not be offered each year.)

- **AP Calculus AB**
- **AP Computer Science A**
- **AP Computer Science Principles**
- **AP United States History**
- **AP Literature and Composition**
- **AP Chemistry**
- **Other AP Courses Online**

POLICY:

AP courses are college level courses offered on campus at Kingsford High School. Courses which are designated as “AP” on a student’s transcript will have a 5.0 grading scale applied at the end of each semester if the following guidelines are met:

1. Students must take the course for the full school year.
2. Students must take both Semester 1 and Semester 2 final exams.
3. Student must achieve a minimum of a “C” (or higher) for their semester grade.

Students should take the AP Exam at the end of the school year (May), with payment being made prior to exam ordering in November**. Taking the AP exam does not exempt a student from the school derived final exam but affords them the opportunity to gain college credit for work done at the high school level.

**Students who qualify for free or reduced lunch may qualify for fee reductions from The College Board for AP Exams. Cost per exam is approximately \$95.

The Breitung Township Schools Board of Education has approved this policy.

BREITUNG TOWNSHIP SCHOOL DISTRICT MISSION STATEMENT

The mission of Breitung Township Schools,
 in cooperation with families and our community,
 is to provide a quality educational experience to assist
 all students in developing the knowledge, skills, and
 attitudes necessary to become successful citizens.

(Adopted 2001)

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“This booklet presents the courses we are prepared to offer to students if enrollment and financial conditions warrant their being taught.” (Resolution adopted by the Board of Education on October 27, 1980. Updated 1/31/00.)

STEM Course Information:

Throughout the following course descriptions, you will see references to “STEM”. These courses reflect curriculum that encompasses education relative to the STEM initiative. The purpose of STEM is to ignite, excite and prepare our students for majors and careers in the high-demand fields of Science, Technology, Engineering and Math.

ART

Courses offered by the Art Department stress the value of creative thinking as it applies to all areas of society. Activities are structured to encourage exploration and confidence in problem solving using visual arts as a tool.

ART I (STEM)

Grade: 9, 10, 11, 12

Credit: 1.0 (Year)

Art I is an introduction to a variety of art concepts. This course provides an opportunity for any student wishing to develop skills in creative problem solving. It is also an introduction to basic skills in drawing, painting, sculpture, commercial art, and design. A brief history of art appreciation and crafts are also offered. It is not necessary for the student to have any “natural art ability” to enjoy this course.

Art courses reflect the new Michigan Merit Curriculum for Visual, Performing, and Applied Arts. For more information, refer to the Visual, Performing, and Applied Arts Credit Guidelines link at: http://www.michigan.gov/documents/VPAA_167752_7.pdf.

ADVANCED ART* (STEM)

Grade: 10, 11, 12

Credit: 1.0 (Year)

Prerequisite: Successful completion of Art I

Advanced Art is for the student that is wishing to increase their skill level in aesthetic problem solving. Opportunities for growth will be provided using art principles and their application to all areas of art. History of art and art appreciation is also a part of the course. Students will apply social and psychological aspects of art to the production of artwork.

CRAFT EXPLORATION/PHOTOGRAPHY CRAFT EXPLORATION/POTTERY (STEM)

Grade: 11, 12

Credit: 0.5 each

Students do not have to have previous art experience to enroll in either of the Craft Exploration courses. The courses may be taken first semester only, second semester only, or both to fulfill the entire year.

First semester is Craft Exploration/Photography.

Second semester is Craft Exploration/Pottery.

Emphasis will be on creativity rather than advanced art skills. This class (each semester) may be taken only once for credit.

*=MAY BE TAKEN MULTIPLE TIMES FOR CREDIT.

BUSINESS

INTRO TO BUSINESS/EXPLORATORY

Grades: 9, 10, 11, 12

Full Year (offered every year)

Credit: 0.5 or 1.0 (Students can take either semester or the entire year)

Introduction to Business is designed to expose students to many functions of modern business. Students use an online book to read short lessons, watch videos and view PowerPoints to learn new material and then do a variety of activities to help reinforce the learning. This is a great opportunity for students to get exposure to a wide range of business topics to see if anything piques their interest. It's a fun and hands-on class where students are engaged and learn from a variety of mediums to understand the many facets of business.

PERSONAL FINANCE

Grades: 9, 10, 11, 12

Full Year (offered every year)

Credit: 0.5 or 1.0 (Students can take either semester or the entire year)

This course uses the Foundations in Personal Finance curriculum from Dave Ramsey. This curriculum is engaging and a must for every student in high school. This class will equip students for financial success. We use Ramsey Classroom where students complete lessons, watch videos, take assessments, and have numerous resources and tools available to learn from financial experts. Topics include budgeting basics, saving money, credit and debt, consumer awareness, career readiness, college planning, financial services, the role of insurance, income and taxes, housing and real estate, investing and retirement and global economics.

This course will satisfy the fourth (senior) year math-related requirements of the Michigan Merit Curriculum, when taken as a senior.

ACCOUNTING I

Grades: 9, 10, 11, 12

Semester 1 Course

Credit: 0.5

The first semester of Accounting will teach accounting concepts used in a sole proprietorship. This course is essential for students going into the "world of work" and for college-bound students pursuing a degree in business (administration, management, marketing, finance, etc.). Emphasis is placed on the basic principles, concepts and procedures of accounting. This is accomplished through the use of an automated textbook. Exercises are completed that are concise and clear-cut examples of actual accounting as practiced in the world of business.

This course will satisfy the fourth (senior) year math-related requirement of the Michigan Merit Curriculum, when taken as a senior.

ACCOUNTING II

Grades: 10, 11, 12

Semester 2 Course

Credit: 0.5

Prerequisite: Successful completion of Accounting I

The second semester of Accounting will teach accounting concepts used in a corporation including payroll and payroll taxes. This course is essential for students going into the "world of work" and for college-bound students

pursuing a degree in business (administration, management, marketing, finance, accounting, etc.). Emphasis is placed on the basic principles, concepts and procedures of accounting. This is accomplished through the use of an automated textbook. Exercises are completed that are concise and clear-cut examples of actual accounting as practiced in the world of business.

This course will satisfy the fourth (senior) year math-related requirements of the Michigan Merit Curriculum, when taken as a senior.

ENGLISH

All English courses reflect the Common Core State Standards (CCSS) of the Michigan Merit Curriculum.

ENGLISH 9

Grade: 9 (required)

Credit: 1.0

The goal for English 9 is to build a solid foundation of knowledge, skills, and strategies that will be refined, applied, and extended as students engage in more complex ideas, texts and tasks. In English 9, students will be introduced to the various genres of classic and contemporary narrative and informational texts that will be read and analyzed throughout high school. Ninth graders will connect with and respond to texts by analyzing relationships within and across families, communities, societies, governments, and economies. Through the lens of Inter-Relationships and Self Reliance, they will consider how they build relationships, how their relationships impact others, and their responsibility to society. In English 9 students' learning is organized into five units of study: Introduction to High School Reading, Introduction to High School Writing, Contemporary Realistic Fiction/Novel, Epic Poetry, and Shakespearean Tragedy/Drama.

ENGLISH 10

Grade: 10 (required)

Credit: 1.0

The goal for English 10 is to continue to build a solid foundation of knowledge, skills, and strategies that will be refined, applied, and extended as students engage in more complex ideas, texts, and tasks. In English 10, students will add to the list of various genres of classic and contemporary narrative and informational texts that will be read and analyzed throughout high school. Tenth graders will connect with and respond to texts through Critical Response and Stance. They will learn to evaluate for validity and quality, to balance and expand their perspectives promoting empathy, social action and appropriate use of power. Critical Response and Stance offers students the lens to assess and modify their beliefs, views of the world, and how they have power to impact them. In English 10 student's learning is organized into four units of study: American Colonialism/American Post World War II (Drama, Contemporary Realistic Fiction (Novel), Contemporary Realistic Fiction (Protest Writing and the Great Depression), Poetry and Argument/Rhetoric Analysis.

ENGLISH 11

Grade: 11 (required)

Credit: 1.0

The goal for English 11 is to continue to build a solid foundation of knowledge, skills, and strategies that will be refined, applied, and extended as student engage in more complex ideas, texts, and tasks. In English 11, students will add to the list of various genres of classic and contemporary narrative and informational texts that will be read and analyzed throughout high school with a special focus on British and World literature and ACT success. Eleventh graders will connect with and respond to texts through transformational thinking. They will learn to use forward thinking to help make better decisions, to generate new ideas for solving problems, and to find wisdom. They will build a context for change in their lives and develop realistic plans for the future. In English 11 student learning is organized into five units of study: The Power of Language to Transform Lives; Informed Decision-Making; Technology: Potential for Enhancing Human Life; Understanding Human Nature: Coping with Crisis, Chaos, and Change; and The DNA of Survival.

ENGLISH 12**Grade: 12 (required if not taking AP English Literature & Composition or Bay College R & C/Res.Writ.)****Credit: 1.0**

The goal for English 12 is to continue to build a solid foundation of knowledge, skills, and strategies that will be refined, applied, and extended as students engage in more complex ideas, texts, and tasks. In English 12, students will add to the list of various genres of classic and contemporary narrative and informational texts that will be read and analyzed throughout high school with a special focus (research paper) on the question of leadership, leadership qualities and skills, one's responsibility to society, to family members, to school, to the community and to the world. In English 12, units of study include The Leaders We Want and Social Class: Culture, Choice and Connections, while focusing on Research Writing and Career Readiness Standards.

AP ENGLISH LITERATURE AND COMPOSITION**Grade: 12 (either English 12, AP English Lit. & Comp., or Bay College R & C/Res.Writ./Tech. Writ. are required)****Credit: 1.0**

Advanced Placement Literature and Composition is a full-year course of studies in literature and writing which prepares students for the Advanced Placement examination in May. Through the course's accelerated readings and writings, students will learn how to read closely and to analyze critically. Because of its rigor, the course should be considered writing and reading intensive with a substantial and demanding workload. In order to be successful in the course, students must be organized and disciplined in their studies. Students will be expected to manage in-class activities, outside readings, and long-term assignments simultaneously. A recommended summer reading list with assessments will be distributed to all students enrolled in the course.

The course provides students with the skills and strategies in reading and composition to prepare them for the rigor of academia. By the end of the year, students should be able to understand the conventions of literary discourse, develop an appreciation of literature, and write accurately and insightfully about what they have read. The content of the course corresponds with district curriculum, state standards, and Advanced Placement objectives.

WORLD LANGUAGE

FRENCH

Learning any foreign language is helpful in satisfying greater global understanding. It is also true that after a person learns one foreign language, they are much more adept at learning another. But why French? French is the language that is spoken closest geographically to us here in Michigan. French is spoken in all of the world's continents. French is used in many international organizations such as the Red Cross, the United Nations, and at the Olympics. It is taught as a second language throughout the world.

FRENCH I

Grade: 9, 10, 11, 12

Credit: 1.0

French I introduces the student to the French-speaking world and its culture. The four skills of listening, speaking, reading, and writing are stressed to provide a complete approach. An emphasis is made on culture. In investigating other cultures we often better understand our own. This course is intended to equip the student with the fundamentals to communicate and understand the modern world.

In French I, students will be introduced to the French language and culture. This course strives to help the learner acquire knowledge of the language by integrating the four skills of listening, reading, writing and speaking with an emphasis on oral proficiency. Students are expected to speak French in class on a daily basis. Examples of speaking activities include speeches/presentations, games, skits, class discussions, and teacher and/or student directed conversations. Common first year topics include describing oneself, likes, dislikes, preferences, daily life, classes, activities, family, weather, telling time, food, hobbies, and basic conversational topics. They should be able to discuss these things in basic present, recent past, and future tenses.

FRENCH II

Grade: 10, 11, 12

Credit: 1.0

French II is a one-year elective course in which core components include reading, writing, listening, and speaking basic French as well as discussion of Francophone cultures. At the end of this course students should be able to discuss foods, drinks, shopping, clothing, household chores, transportation, and vacation. They should be able to discuss these topics in basic present, past (*passé composé*) and future tenses.

Much of the class will be in the target language - more than French 1. This exposes the students to and creates a feel for the language and culture.

FRENCH III

Grade: 11, 12

Credit: 1.0

Core components of French III include reading, writing, listening, and speaking basic French as well as discussion of Francophone cultures. At the end of this course students should be able to discuss meals, cooking, school, computers, technology, childhood pastimes, exercise, the environment, and health. They should be able to discuss these topics in two different past tenses, present, future, and conditional tenses.

SPANISH

Spanish, the world's third most influential language, is spoken by 330 million people. Spanish is the official language in 21 countries. In the United States of American there are 30 million Spanish speakers and Hispanics make up 12 percent of the population, making them the largest minority group in the country. The United States has the third largest number of Spanish speakers in the world.

Learning Spanish can increase career opportunities in foreign service, law enforcement, education, travel/tourism, social services, foreign trade, medicine and business, just to name a few. Spanish is easy to practice through Spanish TV and radio stations and native speakers. It is also easy to learn due to phonetic spelling and numerous cognates (words which are the same or almost the same as English).

SPANISH I

Grade: 9, 10, 11, 12

Credit: 1.0

Listening, comprehension and speaking, as well as some reading and writing, are stressed through activities designed to encourage students to communicate with one another in both large and small groups. The primary goal of Spanish I is for the student to learn basic speaking skills and function at a basic level in Spanish (in routine school and home situations). Vocabulary lists, mastery of basic regular and irregular verbs in the present tense, common expressions and oral quizzes play a vital role in the curriculum.

SPANISH II

Grade: 10, 11, 12

Credit: 1.0

Prerequisite: Successful completion of Spanish I

Spanish II builds on the material covered in Spanish I with an emphasis on speaking, reading and writing. Again, activities are designed to encourage students to communicate with one another in both large and small groups. As in Spanish I, cultural materials are introduced to enhance greater understanding of the rich and diverse Hispanic history and its role in the development of Western Civilization.

Vocabulary lists, review of basic regular and irregular verbs in the present tense from Spanish I, common expressions and oral quizzes will continue to play a vital role in the curriculum. The preterit, conditional and future tenses will be added. Continued mastery of common expressions will be included, as well as the concept of reading novels in Spanish.

SPANISH III

Grade: 11, 12

Credit: 1.0

Prerequisite: Successful completion of Spanish II

Generally speaking, four years of a foreign language in high school equals two years at the university level. Students would be wise to continue their study of Spanish beyond Spanish II to possibly meet university requirements for foreign language proficiency. The goal of Spanish III and IV is learning to live and function socially in the target culture. In addition to a continued systematic progression of vocabulary study, grammar, oral communication skills and Hispanic culture exposure, students will work more in expressing themselves, as well as continue the concept of reading novels in Spanish.

During the second semester, students at this level travel to Españolandía, a Spanish immersion event at Northern Michigan University.

SPANISH IV**Grade: 12****Credit: 1.0****Prerequisite: Successful completion of Spanish III**

Spanish IV rounds out the curriculum by providing an opportunity for acquiring additional vocabulary and grammar, as well as polishing the basic language skills of comprehension, listening, speaking, reading and writing. The goal is for students to consistently function in Spanish in the upper intermediate level of proficiency in all areas. In addition to a continued systematic progression of vocabulary study, grammar, oral communication skills and Hispanic culture exposure, students will work more in expressing themselves, as well as continue the concept of reading novels in Spanish.

During the second semester, students at this level travel to Españolandia, a Spanish immersion event at Northern Michigan University.

SPANISH V**Grade: 12****Credit: 1.0****Prerequisite: Successful completion of Spanish IV**

Spanish V extends the curriculum by providing opportunities for acquiring additional vocabulary and grammar, as well as continuing to polish the basic language skills of comprehension, listening, speaking, reading and writing. The goal is for students to consistently function in Spanish in the upper intermediate level of proficiency in all areas. In addition to a continued systematic progression of vocabulary study, grammar, oral communication skills and Hispanic culture exposure, students will work more in expressing themselves, as well as continue the concept of reading novels in Spanish. During the second semester, students at this level travel to Españolandia, a Spanish immersion event at Northern Michigan University.

INDUSTRIAL ARTS/ENGINEERING/ROBOTICS

These courses are exploratory in nature and are designed to give vocational, technical and college-bound students exposure to a variety of industrial experiences.

All Industrial Arts courses Michigan Merit Curriculum for Visual, Performing, and Applied Arts. For more information, refer to the Visual, Performing, and Applied Arts Credit Guidelines link at: http://www.michigan.gov/documents/VPAA_167752_7.pdf

ENGINEERING & ARCHITECTURAL GRAPHICS (STEM)

Grades: 9, 10, 11, 12

Credit: 1.0

Prerequisite: None

This is an introductory course exploring the standards used by engineers in architectural, civil, and mechanical engineering. Students will be introduced to the methods architects and engineers use to communicate and generate effective plans of action for today's technical world. Students will use time-tested procedures and the latest computer technology to create plans in accordance with industry practices.

Software Packages used in this course: ArchiCAD, Pro Engineer Creo

This course will satisfy the V.P.A.A. requirement of the Michigan Merit Curriculum.

This course will satisfy the fourth (senior) year Math-related requirement of the Michigan Merit Curriculum, when taken as a senior.

This course is a State of Michigan Secondary Career and Technical Education approved program.

MECHANICAL DESIGN & DETAIL (STEM)

Grades: 10, 11, 12

Credit: 1.0

Prerequisite: Successful completion of Engineering & Architectural Graphics

The Mechanical Design program is intended for the student interested in a career in the engineering fields. The Mechanical Design program will cover the following topics:

1. Product design and detailing
2. Manufacturing processes
3. Materials and processes of manufacturing

Software package(s) used in the course: Pro Engineer

This course will satisfy the V.P.A.A. requirement of the Michigan Merit Curriculum.

This course will satisfy the fourth (senior) year Math-related requirement of the Michigan Merit Curriculum, when taken as a senior.

This course is a State of Michigan Secondary Career and Technical Education approved program.

ADV. MECHANICAL DESIGN AND DETAILING**(STEM)****Grades: 11, 12****Credit: 1.0****Prerequisite: Successful completion of both Engineering & Architectural Graphics and Mechanical Design**

The Mechanical Design program is intended for the student interested in a career in the engineering fields and building upon the curriculum covered in Mechanical Design. The Mechanical Design & Detailing program will cover advanced concepts on the following topics:

- Product design and detailing
- Manufacturing processes
- Materials and processes of manufacturing

Software package(s) used in the course: Pro Engineer Creo

This course will satisfy the V.P.A.A. requirement of the Michigan Merit Curriculum.

This course will satisfy the fourth (senior) year Math-related requirement of the Michigan Merit Curriculum, when taken as a senior.

This course is a State of Michigan Secondary Career and Technical Education approved program.

INTRODUCTION TO ENGINEERING DESIGN**(STEM)****Grade: 9, 10, 11, 12****Credit: 1.0**

Students are introduced to the engineering design process through the application of math, science, and engineering standards during hands-on projects. Students will be asked to work individually and in teams to design solutions to a variety of engineering problems. Students will also be introduced to techniques and software packages that aid in the design process and will also be required to use an engineering notebook to document their work.

ROBOTICS**(STEM)****Grade: 9, 10, 11, 12****Credit: 1.0**

This course provides an introduction to robotics for students with limited to no programming background using a TETRIX-MAX Robotics Curriculum. Students will learn to construct, control and program these robots through investigative and exploration activities. The classroom will take on a lab-based approach that uses hands-on activities to introduce the basic concepts of robotics, focusing on the final construction and programming of autonomous mobile robots.

WOODWORKING I**Grade: 9, 10, 11, 12****Credit: 1.0**

Students are responsible for the cost of any project(s) they produce in this class.

The woodworking class is designed to teach “hands on” woodworking techniques. An emphasis is put on practicing good safety procedures while using hand, power, and machine tools in a shop setting. The student will be given required projects to complete within a period of time. Student selected projects will be constructed and completed within a period of time depending on the size and complexity of the project.

This course will satisfy the fourth (senior) year Math-related requirement of the Michigan Merit Curriculum, when taken as a senior.

This course will satisfy the V.P.A.A. requirement of the Michigan Merit Curriculum.

WOODWORKING II**Grade: 10, 11, 12****Credit: 1.0****Prerequisite: Successful completion of Woodworking I**

Students are responsible for the cost of any project(s) they produce in this class.

This course will include the building of major projects such as furniture pieces and storage sheds. Various building construction phases will be incorporated in the class such as truss construction, wall system layouts, and stair layouts. Many woodworking techniques will be covered such as lathe turning procedures, creating raised panel doors and creating various woodworking joints.

This course will satisfy the fourth (senior) year Math-related requirement of the Michigan Merit Curriculum, when taken as a senior.

This course will satisfy the V.P.A.A. requirement of the Michigan Merit Curriculum.

ADVANCED WOODWORKING (WOODS III/IV)**Grade: 11, 12****Credit: 1.0****Prerequisite: Successful completion of Woodworking II/III AND Instructor Approval**

Students are responsible for the cost of any project(s) they produce in this class.

This course will be offered during a class period with Woods I or II students. Advanced students will be working under a different (advanced) curriculum for credit.

This course will satisfy the fourth (senior) year Math-related requirement of the Michigan Merit Curriculum, when taken as a senior.

This course will satisfy the V.P.A.A. requirement of the Michigan Merit Curriculum.

LIFE MANAGEMENT

CHILD DEVELOPMENT AND PARENTING

Grade: 9, 10, 11, 12

Credit: 0.5

Topics include heredity, stages of prenatal development, prenatal care, childbirth, as well as studying all aspects of family types, interactions, relationships, and the family life cycle. Study continues with the mental, physical, social, and emotional development following a logical sequence at different ages for the newborn, infant, toddler, preschooler, etc. Students will develop an understanding of childcare and guidance techniques which will help children develop to their full potential. Observations and opportunities to work with children are made available by visiting day care centers and K-5 classrooms, and possibly visiting the maternity ward at Dickinson County Memorial Hospital.

NUTRITION AND FOODS

Grade: 9, 10, 11, 12

Credit: 0.5

Lab fee to be paid by student: \$10.00

Students will practice and apply management skills in the kitchen. We will practice cooking techniques and following recipes. We will prepare and sample a wide variety of foods. Students will plan meals. We will also study food habits, diet choices, nutritional content of foods, and their effect on health, appearance, and energy level. Students will develop knowledge related to kitchen tools, utensils, electrical appliances, and efficient kitchen designs. Students will also learn proper terms and vocabulary, measurements and equivalents, techniques and procedures, different types of equipment usage and safety, along with the importance of reading recipes and following step by step directions. Students will also gain valuable and stimulating hands-on experience from various kitchen lab situations.

MATHEMATICS

The mathematics courses reflect the new Michigan Merit Curriculum. For more information, refer to the Michigan Merit Curriculum link at:

http://www.michigan.gov/documents/mde/K-12_MI_Math_Standards_REV_470033_7_550413_7.pdf

ALGEBRA I

(STEM)

Grade: 9, 10, 11, 12

Credit: 1.0

Algebra I builds upon a number of key algebraic topics assumed to have been developed in the middle grades, namely a deep knowledge of linear patterns of change and familiarity with nonlinear patterns such as exponential and quadratic. It is expected that students entering Algebra I are able to recognize and solve mathematical and real-world problems involving linear relationships and to make sense of and move fluently among the graphics, numeric, symbolic, and verbal representations of these patterns. In addition, students should be able to apply this knowledge to quadratic and other simple functions.

Algebra I builds on the increasingly generalized approach to the study of functions and representations begun in the middle grades. This is done by broadening the study of linear relationships to include piecewise functions such as absolute value and greatest integer, systems of equations with three unknowns, formalized function notation and recursive representations, and the development of bivariate data analysis topics such as linear regression and correlation. In addition, their knowledge of exponential and quadratic function families is extended and deepened with the inclusion of topics such as rules of exponentiation (including rational exponents), introduction to logarithmic patterns as the inverse of exponential equations, and use of standard and vertex forms for quadratic equations. Students will also develop their knowledge of power (including roots, cubics, and quadratics) and polynomial patterns of change and the application they model.

The specific Algebra I High School Content Expectations can be accessed at:

http://www.michigan.gov/documents/mde/AlgebraI_216634_7.pdf

GEOMETRY

(STEM)

Grade: 9, 10, 11, 12

Credit: 1.0

Geometry builds on a number of key geometric topics developed in the middle grades, namely relationships between angles, triangles, quadrilaterals, circles, and simple three-dimensional shapes. It is expected that students beginning geometry are able to recognize, classify, and apply properties of simple geometric shapes, know and apply basic similarity and congruence theorems, understand simple constructions with a compass and straight edge, and find area and volume of basic shapes.

Students studying geometry in high school further develop analytic and spatial reasoning. They apply what they know about two-dimensional figures to three-dimensional figures in real-world contexts, building spatial visualization skills and deepening their understanding of shape and shape relationships. Geometry includes a study of right triangle trigonometry that is developed through similarity relationships. These topics allow for many rich real-world problems to help students expand geometric reasoning skills. It is critical that connections are made from algebraic reasoning to geometric situations. Connections between transformations of linear and quadratic functions to geometric transformations should be made. Earlier work in linear functions and coordinate graphing leads into coordinate geometry.

The formal logic and proof helps students to understand the axiomatic system that underlies mathematics through the presentation and development of postulates, definitions, and theorems. It is essential that students develop deductive reasoning skills that can be applied to both mathematical and real-world problem contexts.

The specific Geometry High School Content Expectations can be accessed at:
http://www.michigan.gov/documents/mde/Geometry_216636_7.pdf

ALGEBRA II (STEM)

Grade: 9, 10, 11, 12

Credit: 1.0

The goal of Algebra II is to build upon the concepts taught in Algebra I and Geometry while adding new concepts to the student's repertoire of mathematics. In Algebra I, students studied the concept of functions in various forms such as linear, quadratic, polynomial, and exponential. Algebra II continues the study of exponential and logarithmic functions and further enlarges the catalog of function families to include rational and trigonometric functions. In addition to extending the algebra strand, Algebra II will extend the numeric and logarithmic ideas of accuracy, error, sequences, and iteration. The topic of conic sections fuses algebra with geometry. Students will also extend their knowledge of univariate and bivariate statistical applications.

It is the purpose of Algebra II to give the students a rigorous understanding of the expectations included within it. It is also the goal of this model to help students see the connections in the mathematics that they have already learned. For example, students will not only gain an in-depth understanding of circular trigonometry, but will also understand its connections to triangular trigonometry. Connections between trigonometric modeling of cyclic events and the concepts embedded within bivariate modeling with the proper use of statistical techniques will also be made

The specific Algebra II High School Content Expectations can be accessed at:

http://www.michigan.gov/documents/mde/K-12_MI_Math_Standards_REV_470033_7_550413_7.pdf

PRE-CALCULUS (STEM)

Grade: 10, 11, 12

Credit: 1.0

PREREQUISITE: Successful completion of Geometry and Algebra II

Pre-Calculus is a comprehensive course covering trigonometry, Adv. Algebra, theory of equations, and analytic geometry. Work in functions, matrices, trigonometric functions, vectors, polar coordinates, complex numbers, conics, sequences and series, exponential and logarithmic functions and limits are included in the course. This course is designed to prepare the student for AP Calculus.

The specific Pre-Calculus High School Content Expectations can be accessed at:

http://www.michigan.gov/documents/PreCalc_167750_7.pdf

AP CALCULUS (STEM)

Grade: 11, 12 OR Instructor Approval

Credit: 1.0

PREREQUISITE: Successful completion of Pre-Calculus

Advanced Placement Calculus is designed to develop the student's understanding of the concepts of calculus and provide experience with its methods and applications. The course emphasizes a multi-representational approach to calculus, with concepts, results, and problems being expressed geometrically, numerically, analytically, and verbally. Technology is used regularly by students to reinforce the relationships among the multiple representations of functions, to confirm written work, to implement experimentation, and to assist in interpreting results. Through the use of unifying themes of derivatives, integrals, limits and modeling, the

course becomes a cohesive whole rather than a collection of unrelated topics. Students who are enrolled in the AP Calculus class may take the AP Exam to qualify for college credit. The students will make the commitment early by paying for the exam prior to the time that the exams are ordered. The cost of the exam is to be paid by the student. This course is designed to be like a Calculus course offered at the college level. See AP Course Policy in this book.

MUSIC

Music courses reflect the Michigan Merit Curriculum for Visual, Performing, and Applied Arts. For more information, refer to the Visual, Performing, and Applied Arts Credit Guidelines link at: http://www.michigan.gov/documents/VPAA_167752_7.pdf.

KINGSFORD CHORALE*

(STEM)

Grade: 9, 10, 11, 12

Credit: 1.0

Prerequisite: None (Students will need to audition with respect to musical placement)

Kingsford (Concert) Chorale is for students who desire to sing. This is a full year class except with teacher approval. Students perform during the school year both inside and outside of the normal school day. Students will audition with the teacher to be accepted into the class. Styles of music will vary from classical to pop selections. Optional opportunities for performance and enrichment including field trips, summer camps and competitions available. Students who miss a major performance without an excused absence by the director may fail the course.

BAND*

(STEM)

Grade: 9, 10, 11, 12

Credit: 1.0

Must take for the full year unless schedule conflicts occur.

During the first semester, emphasis is placed on marching band performances at all home football games. This is followed by concert band rehearsals culminating with the annual Christmas Concert. In November, volunteers are signed up for pep band in order to provide spirit and pep for ten home basketball games. During the second semester, the concert band prepares for their Spring Concert and festivals, performing a wide variety of music from the classics to popular, with emphasis on large group performance at the solo and ensemble festival. With the warm weather, the band again begins marching rehearsals in order to prepare for the annual Memorial Day Parade. The school year ends with a performance at graduation ceremonies. Other performances may be added as opportunities present themselves. Students who miss a major performance without an excused absence by the director may fail the course.

*=MAY BE TAKEN MULTIPLE TIMES FOR CREDIT.

PHYSICAL EDUCATION/HEALTH

HEALTH

Required for Graduation (Recommended in 9th Grade)

0.5 credit

Health education includes the teaching of health as the complete physical, mental and social well-being, and not merely the absence of disease. Included in the semester is in-depth coverage of total wellness in daily living, dependency type substances and the problems created by these dependencies, nutrition, physical fitness, first aid, human reproduction and sexually transmitted diseases. The introductory health education unit is positive self-esteem and a solid value system. That theme is brought out again throughout the semester.

This course reflects the Michigan Merit Curriculum for Health.

PHYSICAL EDUCATION

Required for Graduation (Recommended in 9th Grade)

0.5 credit

The major emphasis of the co-educational class centers on physical fitness, development of basic body movements and basic skills to be used in individual, dual, and team lifetime sports.

This course reflects the Michigan Merit Curriculum for Physical Education. For more information, refer to the Physical Education Credit Guidelines at:

http://www.michigan.gov/documents/mde/NewMMCPE9-5-2007_213954_7.pdf

WEIGHT TRAINING

Grade(s): 10, 11, 12

0.5 or 1 credit

Prerequisite: Successful completion of Physical Education/Health AND a current physical examination card on file is required of every student in this course.

This is a co-educational elective class with the major emphasis in weight training. Strength conditioning programs play an accepted and important role in the development of proper physical fitness for individuals of all ages. This class will also offer in season and out of season training for student athletes. Weight training will help students relieve stress, get into shape, and improve overall fitness along with learning proper form and techniques for safety in the weight room.

SCIENCE

SCIENCE 9

(STEM)

Grade: 9 (See Graduation Requirements for more information)

Credit: 1.0

One semester of this course (Physical Science-Physics) will cover all of the essential expectations of the four current NGSS standards for Physics:

- Inquiry; Reflection and social implications of science
- Motion of Objects
- Force and Motion
- Forms of Energy and Energy Transformations
- Electricity, Electrical Forces, and Circuits

In the opposite semester of this course (Physical Science-Chemistry) students will understand the nature of science and demonstrate an ability to practice science reasoning by applying it to the design, execution, and evaluation of scientific investigations. Students will demonstrate their understanding that scientific knowledge is gathered through various forms of direct and indirect observations and testing of this information by methods including, but not limited to, experimentation. They will be able to distinguish between types of scientific knowledge (e.g. hypothesis, laws, theories) and become aware of areas of active research in contrast to conclusions that are part of the established scientific consensus. They will use their scientific knowledge to assess the costs, risks, and benefits of technological systems as they make personal choices and participate in public policy decisions. These insights will help them analyze the role science plays in society, technology, and potential career opportunities.

BIOLOGY

(STEM)

Grade: 9 or 10 (required)

Credit: 1.0

Students in high school develop understanding of key concepts that will help them make sense of life science. There are four life science disciplinary core ideas in high school: 1) From Molecules to Organisms: Structures and Processes, 2) Ecosystems: Interactions, Energy, and Dynamics, 3) Heredity: Inheritance and Variation of Traits, 4) Biological Evolution: Unity and Diversity. The performance expectations for high school life science blend core ideas with scientific and engineering practices and crosscutting concepts to support students in developing knowledge that can be applied across the science disciplines.

For more information, refer to the Science High School Michigan Academic Standards link: https://www.michigan.gov/documents/mde/Science_CourseCredit_466083_7.pdf.

CHEMISTRY◇**(STEM)****Grade: 10, 11, 12****Credit: 1.0****Prerequisite: Successful completion of Algebra I (recommended)**

Chemistry will include the study of the properties of matter, the changes that matter undergoes, forms of energy, energy transformations, and the social and environmental impacts of chemistry. Students will also become proficient in lab techniques and procedures with an emphasis on lab safety. The high school expectations for chemistry will be covered. For more information, refer to the Science High School Michigan Academic Standards link: https://www.michigan.gov/documents/mde/Science_CourseCredit_466083_7.pdf.

This course will satisfy the fourth (senior) year Math-related requirement of the Michigan Merit Curriculum when taken as a senior UNLESS this course is being taken to satisfy a science requirement.

ENVIRONMENTAL SCIENCE◇**(STEM)****Grade: 11, 12****Credit: 0.5 (Offered First Semester)****Prerequisite: Successful completion of TWO Science classes**

Students will engage in studies of various ecosystems and the interactions which occur within. In-depth studies of biodiversity, natural selection, adaptation and energy flow through ecosystems to give students a broader understanding of the environment in which we live. This course will satisfy the fourth (senior) year Math-related requirement of the Michigan Merit Curriculum, when taken as a senior. **Students may not take this semester class more than once.**

For more information, refer to the Science High School Michigan Academic Standards link: https://www.michigan.gov/documents/mde/Science_CourseCredit_466083_7.pdf.

ENVIRONMENTAL SCIENCE MANAGEMENT◇**(STEM)****Grade: 11, 12****Credit: 0.5 (Offered Second Semester)****Prerequisite: Successful completion of TWO Science classes**

This course engages students in the scientific processes involved in making sound environmental decisions. Topics include effective management of air, water, and land resources, environmental policies and career explorations. This course will satisfy the fourth (senior) year Math-related requirement of the Michigan Merit Curriculum, when taken as a senior. **Students may not take this semester class more than once.**

For more information, refer to the Science High School Academic Standards link: https://www.michigan.gov/documents/mde/Science_CourseCredit_466083_7.pdf.

PHYSICS◇**(STEM)****Grade: 10, 11, 12****Credit: 1.0****Recommended: Successful completion of Algebra II**

Physics is the study of matter and energy and their interactions. It encompasses natural phenomena from very small sub-particles to the entire universe. Principles of physics are used not only to explain natural and human made phenomena, but also to clean our environment, to show our way around (GPS), to save lives (medical imaging), and even to model social networks. The study of physics helps students acquire problem-solving and critical-thinking skills and teaches them to better observe and understand the natural world. Physics concepts are continually used in everyday life. It is, therefore, vital that students learn the basic concepts and principles of Course Descriptions 2019-2020 22 physics. Our society is becoming more dependent on technology rooted in physics. Topics include motion of objects, forces and motion, forms of energy, energy transfer, work, sound waves, light, electricity, and magnetism.

The high school expectations for Physics will be covered. For more information, refer to the Science High School Michigan Academic Standards link:

https://www.michigan.gov/documents/mde/Science_CourseCredit_466083_7.pdf.

This course will satisfy the fourth (senior) year Math-related requirement of the Michigan Merit Curriculum when taken as a senior UNLESS this course is being taken to satisfy a science requirement.

AP CHEMISTRY◇**(STEM)****Grade: 10, 11, 12****Credit: 1.0****Prerequisite: Successful completion of Chemistry**

The AP Chemistry course is designed to be the equivalent of the general chemistry course usually taken during the first college year. For some students, this course will enable them to undertake, in their first year, second-year work in the chemistry sequence at their institution or to register in courses in other fields where general chemistry is a prerequisite. For other students, the AP Chemistry course fulfills the laboratory science requirement and frees time for other courses. AP Chemistry should meet the objectives of a good college general chemistry course. Students in such a course should attain a depth of understanding of fundamentals and a reasonable competence in dealing with chemical problems. The course should contribute to the development of the students' abilities to think clearly and to express their ideas, orally and in writing, with clarity and logic. The AP Chemistry course will also provide a laboratory experience equivalent to that of a typical college course.

Students who are enrolled in the AP Chemistry course may take the AP Exam to qualify for college credit. The students will make the commitment early by paying for the exam prior to the time that the exams are ordered. The cost of the exam is to be paid by the student. See AP Course Policy in this book.

(STEM)

Grade: 11, 12

Credit: 1.0

Prerequisite: Successful completion of Algebra II

Advanced Physics is an algebra-based, introductory college-level physics course that explores topics such as Newtonian mechanics (including rotational motion); work, energy, and power; mechanical waves and sound; and introductory, simple circuits. Through inquiry-based learning, students will develop scientific critical thinking and reasoning skills.

This course will have 25 percent of the instructional time spent in hands-on laboratory work, with an emphasis on inquiry-based investigations that provide students with opportunities to apply the science practices. No prior course work in physics is necessary. The Physics course includes basic use of trigonometric functions. This understanding can be gained in the Advanced Physics course itself, but will require some more time from the student to do this.

ANATOMY AND PHYSIOLOGY I◇

Grade: 11, 12

Credit: 1.0

Anatomy and Physiology I is an intensive study of the structure and function of the human body. This course will include a basic overview of the organ systems and the directional terms used to study the relationship between the anatomical structures of the body. Anatomy and Physiology I will focus on the skeletal, muscular, nervous, cardiovascular, respiratory, and digestive systems. Students will learn how body systems interact to maintain homeostasis, body functions in the healthy and diseased state, and more. Laboratory experiences will include models and dissections of preserved organs and animals. This course is intended for students interested in the healthcare field or other science-based careers.

ANATOMY AND PHYSIOLOGY II◇

Grades: 11-12

Credit: 1

Prerequisite: “B” or better in Anatomy and Physiology I (Adv. Biology) or instructor/administrator approval

Anatomy and Physiology II is an intensive study of the structure and function of the human body. This will include study of the integumentary, endocrine, lymphatic, excretory, female and male reproductive organ systems, as well as special senses. Students will learn how body systems interact to maintain homeostasis, body functions in the healthy and diseased state, and more. Laboratory experiences will include models and dissections of preserved organs and animals. This course is intended for students interested in the healthcare field or other science-based careers.

(◇= Meets 3rd Science requirement)

SOCIAL STUDIES

UNITED STATES HISTORY AND GEOGRAPHY (1870 to Present)

Grade: 9 (Required)

Credit: 1.0

This course is an integrated study of geography and history. It begins with a review of key events focusing on the political and intellectual transformations of America from 1865 and the geographic, economic, social, and demographic trends in America. The primary focus will be on the following four eras: The Development of an Industrial, Urban, and Global United States (1870-1930), The Great Depression and World War II (1920-1945), Post-World War II United States (1945-1989), and America in a New Global Age.

This course reflects the Michigan Merit Curriculum for Social Studies. For more information, refer to the https://www.michigan.gov/documents/mde/SSModel_CourseCredit_556458_7.pdf.

ECONOMICS

Grade: 10 (Required)

Credit: 0.5

This course will focus on the market economy, the national economy, the international economy, and personal finance. Economics literacy will be defined as the ability to identify, analyze, and evaluate the consequences of individual decisions and public policy. Economics Knowledge will include the following:

- Understand the fundamental constraints imposed by limited resources, the resulting choices people have to make, and the trade-offs they face
- Understand how economies and markets work and how people function within them
- Understand the benefits and costs of economic interaction and interdependence among people and nations

This course reflects the new Michigan Merit Curriculum for Social Studies. For more information, refer to the Economics course expectations at:

https://www.michigan.gov/documents/mde/SSModel_CourseCredit_556458_7.pdf.

CIVICS

Grade: 10 (Required)

Credit: 0.5

This course will focus on the conceptual foundations of civics and political life, the origins and foundation of government of the United States, the structure and function of government in the United States, the United States and world affairs, citizens in the United States, and citizenship in action. The substance of the course will focus on the following five significant and enduring questions:

- What are civic life, politics, and government?
- What are the origins and foundations of the American political system?
- How does the government established by the Constitution function to embody the purposes, values, and principals of American constitutional democracy?
- What is the relationship of the United States to other nations and its role in world affairs?
- What are the roles of citizens in American society?

This course reflects the Michigan Merit Curriculum for Social Studies. For more information, refer to the Civics course expectations at:

https://www.michigan.gov/documents/mde/SSModel_CourseCredit_556458_7.pdf.

WORLD HISTORY AND GEOGRAPHY**Grade: 11 or 12 (Required)****Credit: 1.0**

World History and Geography takes a global and comparative approach to studying the world and its past to develop greater understanding of the development of worldwide events, processes, and interactions among the world's people, cultures, societies, and environment. The course is organized using both time and space to engage students in cross-temporal and cross-regional studies. Integrating geography and history, the course is organized within historical eras and different geographic scales. Within each era, students work at three interconnected spatial scales: the global, interregional and regional. The primary focus will be on the following four eras: The Emergence of the First Global Age (15th to 18th Centuries), An Age of Global Revolutions (18th Century-1914), Global Crisis and Achievement (1900-1945), The Cold War and Its Aftermath (the 20th century since 1945).

This course reflects the new Michigan Merit Curriculum for Social Studies. For more information, refer to the World History and Geography course expectations at:

https://www.michigan.gov/documents/mde/SSModel_CourseCredit_556458_7.pdf.

LAW & YOU**Grade: 10, 11, 12****Credit: 0.5**

Law and You is an introduction to law. The course is a practical application of the problems that you may face in everyday life; this is not a study of a series of technical rules or a legalistic approach to law. The course is divided into units entitled, Introduction to the American Legal System, Criminal Law, Civil Law, Family Law, Consumer Law. You will also become familiar with the procedures used by the courts, police and other law agencies. It is designed to help develop a positive attitude toward the law, law agencies and to appreciate positive attitudes in modern life.

GEOGRAPHY**Grade: 9, 10, 11, 12****0.5 Credit**

Geography provides a framework for the geographic knowledge that students should possess and the skills that they should be able to execute. Students will learn the themes of geography and apply them to their surrounding world. Students will also study the relationships between people, places, and environments throughout all of the continents. Special attention will be given to interactions between societies and the cultural aspect of geography.

AP UNITED STATES HISTORY**Grade: 10, 11, 12****Credit: 1.0****Prerequisite: Successful completion of US History**

This course will allow students to study at a more in-depth level. The AP format, as established by The College Board, will enable students to work at the level of a freshmen college course. An AP course will allow for the possibility of students obtaining college credit if they successfully complete the AP test in the spring. The AP test is encouraged, but optional, for students taking the class. The course content takes the nature of a survey course covering the era of colonization to the present. The scope of material covered will help prepare students for the AP test. See AP Course Policy in this book.

MICHIGAN HISTORY**Grade: 9, 10, 11, 12****Credit: 0.5**

This course will provide students with a foundation of our state's history, from exploring the original motives of why natives settled in present day Michigan to the role of our state in the 21st century. Michigan's role in the growing and maturing United States will be examined with special emphasis placed on local history, history of the U.P., the state's contributions in cultural, marine, mining and industrial heritage, as well as Michigan's role during modern world conflicts.

TECHNOLOGY

WORD/POWERPOINT/EXCEL/ACCESS

Grade(s): 9, 10, 11, 12

Full Year (offered every year)

Credit: 0.5 or 1.0 (Students can take either semester or the entire year)

Students in this course will become proficient in Microsoft Office which is a suite of applications designed to help with productivity and completing common tasks on a computer. Students will work hands-on to create and edit documents containing text and images, work with formulas, data and charts in spreadsheets, create dynamic presentations, and learn how to create powerful databases and apply queries to search for ranges of data. Students leaving this class will confidently have the fundamental computer knowledge needed to complete a wide range of tasks which will be beneficial to them beyond their high school career.

GAME DESIGN/PROGRAMMING

(STEM)

Grade: 9, 10, 11, 12

Credit: 1.0

Prerequisite: Successful completion of Algebra I (B or Better)

Did you know that computer programmers have an average starting salary of around \$100 per hour? Computers are an increasingly important part of our world and computer programmers are essential to today's society. This course is an introductory course in computer programming. It focuses on building applications that are well structured and maintainable using the Microsoft Visual Basic programming environment. Create your own inventions, games and other programs on the computer! This process can be challenging but the results can also be very satisfying and rewarding. This language is very powerful and provides programming tools to support state-of-the-art graphical applications.

Students can learn software development fundamentals in the context of useful, real-world applications. Students will quickly learn how to create their own professional-quality Visual Basic programs and build the programs as executable files which can be run on any compatible computer. Topics include using controls to manipulate the mouse, dialog boxes and windows, pointers, interactive graphics, multi-dimensional arrays, animation techniques, loops, timers, error handlers, decisions, structures, modules/procedures, MDI forms, and database management. This class is an excellent step to higher-level programming. Try computer programming and see if this is the computer career you have been looking for!

This course will satisfy the fourth (senior) year Math-related requirement of the Michigan Merit Curriculum, when taken as a senior.

AP COMPUTER SCIENCE A

(STEM)

Grade: 10, 11, 12

Credit: 1.0

Prerequisite: Successful completion of Geometry and Game Design/Programming.

This programming course is a full year class that teaches the Java programming language. This class will follow the national Advanced Placement standards and preps the student for taking the national exam for college credit. The student will learn problem-solving techniques, program design, and methodology in development of programs, program constructs, debugging analysis, and algorithms. The student will also grasp a better understanding of how software and hardware are designed and work in conjunction with one another. The structure of the class is to expose the students to many different programming scenarios in which they will have

to design mathematical algorithms. The students will be using Sun Microsystem's Java Development Kit and the Eclipse IDE as the programming tools.

See AP Course Policy in this book.

This course will satisfy the fourth (senior) year Math-related requirement of the Michigan Merit Curriculum, when taken as a senior.

COMPUTER SCIENCE PRINCIPLES

(STEM)

Grade(s): 10, 11, 12

Credit: 1.0

Prerequisite: Successful completion of Algebra I (C or better)

The AP Computer Science Principles (CSP) curriculum is a full-year, rigorous, entry-level course that introduces high school students to the foundations of modern computing. The course covers a broad range of foundational topics such as programming, algorithms, the Internet, big data, digital privacy and security, and the societal impacts of computing.

This course is not a tour of current events and technologies. Rather, this course seeks to provide students with a “future proof” foundation in computing principles so that they are adequately prepared with both the knowledge and skills to live and meaningfully participate in our increasingly digital society, economy, and culture.

The course starts with learning about what is involved in sending a single bit of information from one place to another and ends with students considering the implications of a computing innovation of their own design.

Along the way students learn:

- How the Internet works and its impacts on society.
- How to program and rapidly prototype small JavaScript applications both to solve problems and to satisfy personal curiosity.
- How to collect, analyze and visualize data to gain insight and knowledge.
- How to evaluate the beneficial and harmful effects to people and society brought on by computing innovations

The course requires a significant amount of expository writing (as well as writing computer code).

****This course meets the Michigan Merit Curriculum Online Learning Experience requirement for graduation.**

DIGITAL VIDEO EDITING (I/II)

(STEM)

Grade(s): 10, 11, 12

Credit: 1.0

Prerequisite: None

An introduction to video editing...The first semester of this course will include writing a storyboard and script, shooting video correctly, lighting techniques, importing and selecting video footage, graphic files and audio clips and outputting video in basic popular formats. Students will learn how to shoot and select video footage using a basic visual vocabulary, choose audio clips that support video, and create graphic elements that communicate using font, color and positioning and assemble and trim elements to community emotion to the audience. Video projects may include training videos, music videos, highlight videos, and commercials. Successful completion

of DVE I would count toward the mandatory VPAA graduation (1) credit requirement. Students will be expected to provide their own access to a smartphone or compatible video recording device.

In the second semester, students will learn advanced editing techniques and learn additional video editing applications, including those integrated in the Adobe Creative Cloud applications. Focus will shift in the second semester to advanced concepts including advanced trimming, mates, transitions, filters, titles, and their applications in the video industry. Students will also learn advanced finishing techniques for effective distribution online, television, and cinema. Students will work in various HD resolutions including 4K. Successful completion of DVE would count toward the mandatory VPAA graduation (1) credit requirement. Students will be expected to have access to a smartphone or other compatible device that can record video.

PHOTOSHOP and/or WEB DESIGN (STEM)

Grade: 9, 10, 11, 12

Credit: 0.5 (each semester)

Web Design

In Web Design, students will first learn to design web pages by learning raw HTML and CSS. Students will utilize different text editor programs and will learn how to develop and post web pages on the internet as well as the school's internet. The class will cover topics such as HTML tagging, styling, using tables, inserting graphics, and types of graphic files used on the Internet. Students will learn the basics of forms and how data can be entered and saved via a Web page.

Photoshop

This digital photo editing class uses the professional graphics program Photoshop CS6 from Adobe Corporation. The program allows students to create and edit multi-layered digital photos combining different photographs and pictures into one collage of digital graphics. Students will learn how to scan images, utilize a digital camera, add special effects to photos, manipulate photos, and learn all of the different types of formats used when saving a graphics file. Students will also learn how a computer monitor and printer distinguish colors and how to adjust photos for printing and displaying on an Internet web page. Students will also learn to use Adobe Bridge in the development and preparation of graphics for the Web including animated GIF files.

OTHER

VIRTUAL LEARNING ELECTIVE – BY APPLICATION ONLY

Registration for this course must be completed during the scheduling window for 2023-2024. Students cannot add/enroll in this course at any time after the scheduling window closes without prior staff/administrator approval.

Grade: 10, 11, 12

Credit: 0.5 per semester

Students are able to take classes through an online learning system. See the Counseling Office for more information, eligibility testing, etc. Students interested in taking an online class must see the school counselor(s) for the listing of courses available and the registration materials. Grades are awarded and calculated into the GPA based on the KHS grading scale. The following approved providers and links contain course offering information:

- **Michigan Virtual:** <https://michiganvirtual.org/courses/students/>
- **Edgenuity:** <https://www.edgenuity.com/solutions/high-school/#online-courses>

DUAL ENROLLMENT -- Postsecondary Credit

Registration for this course must be completed during the scheduling window for 2023-2024. Students cannot add/enroll in this course at any time after the scheduling window closes.

Grade: 10, 11, 12

By Application Only

Students in grades 10, 11 or 12 who are enrolled in at least 1 high school course, and who have met all eligibility requirements may participate in post-secondary options.

Tenth, 11th and 12th grade students are also eligible to take courses within subjects for which there are no endorsements, such as philosophy, anthropology, psychology, sociology, computer science and/or foreign language courses not offered by Kingsford High School, as long as all eligibility requirements have been met. A course which qualifies for tuition support must be a course that is not offered by the school district; an academic course as opposed to an “activity course”; a course that is not a hobby, craft, or recreational course; a course that is not in the areas of physical education, theology, divinity, or religious education; and a course that the postsecondary institution normally applies toward satisfaction of degree requirements.

College level equivalent courses (Advanced Placement) offered by Kingsford High School have precedence over an entry-level postsecondary course. At the time an eligible student enrolls in a postsecondary course, he or she will designate whether the course is for high school or postsecondary credit, or both, and will notify the high school and the postsecondary institution of his or her decision.

Prior to registering for dual enrollment, students must apply and be accepted by the postsecondary institution as a high school student. Students must see a school counselor for additional instructions. It is highly recommended that students have a minimum GPA of 3.0. In addition, students must have taken either the ACT, SAT or the PSAT Test. The school district will pay tuition or a portion of the tuition for postsecondary options as determined by the state aid formula.

SENIOR (COLLEGE) SEMINAR:**Grade: 12****Credit: 0.5 or 1.0**

Prerequisite: Students taking this course must be enrolling in a post-high school educational/degree-seeking program. The entire curriculum of this course along with all graded coursework is specific to students furthering their education beyond high school.

(Can be taken for either semester or for a full year.) Grades will be awarded on a Pass/Fail basis, with students being required to earn a minimum of 60% to be awarded credit.)

This online course will be provided via Moodle for Kingsford High School Seniors whose goal is to attend college in the fall following graduation. Students will need to report to school on the first day of class for initial orientation as well as on the pupil count day for the State. If a student fails to attend on either day, he/she will be removed from the course and placed into a traditional classroom setting. Weekly attendance will be taken through online assignment submissions. Students will be required to submit proof of accomplishing tasks such as applying to several colleges, completing several scholarships, acquiring letters of recommendation, completing the KHS Universal Scholarship Application, filing the FAFSA form for federal aid, and much more.

PEER TO PEER LEARNING**Grade: 11, 12****Credit: 1.0****By application only**

This one-to-one pairing of a student with another student in need occurs for one hour during the school day. The Peer to Peer mentor will be assigned to a student in need of assistance due to a documented disability, with daily goals and objectives based on the needs of that individual. Once release forms are signed, the mentor will then work with the special education student on things such as testing, reading assignments aloud, studying, reviewing, social relationships, and the like. This placement is ideal for students looking to make a positive impact on another student's life while growing their own understanding for individual challenges along the way.

The supervising teacher will be responsible for assigning the grade for this course for each 9-weeks and the final grade for the semester. Daily attendance, weekly logs regarding the work with the assigned student, and general conduct will be considered. The course is graded according to the KHS grade scale and does count in the students GPA.

WORK-BASED LEARNING**Grade: 11, 12****Credit: 0.5 per semester/per period (placements can be for 1 or 2 periods per day)****Prerequisite(s):**

- **Student must have their EDP updated in Career Cruising with career field(s) relating to the work-based learning opportunity specified**
- **Attendance will be reviewed**
- **GPA (must be 2.0 +)**
- **Discipline Referrals/Saturday School Referrals will be considered**

Work-Based Learning opportunities are unique on-site workplace experiences, afforded to students contemplating a specified career path, as part of their daily high school schedule. Work-Based Learning extends the traditional

classroom and traditional styles of learning to the real world. It is the perfect pairing of academics and application. It is also an exciting opportunity to earn credit toward high school graduation while working in an exciting career field.

These placements are reserved for students who demonstrate the maturity, commitment, and job readiness skills necessary to succeed in an entry-level job. Mandatory coursework and training are required prior to a placement being made in the community.

Work-based learning experiences (WBLE) provide students with a planned program of job training and other employment experiences related to a chosen career. Depending on the type of learning experience, it may be paid or unpaid placement. A work-based learning experience is coordinated by the school district through a contract (training agreement) with an employer providing an educational experience related to school instruction.

ON TRACK SEMINAR

Grades: 9-11

Credit: 0.5/semester 1.0/school-year

Grading: Pass/Fail

The intent of On Track Seminar is to provide academic support and guidance for students as they adjust to the rigorous academic demands of high school. The course is not subject-specific, yet academic in nature with a strong focus on tutoring, mentoring, and guiding students to academic success. The instructor will work with the Kingsford High School Counseling Office to ensure alignment with the student Educational Development Plan (EDP) and other classroom teachers to ensure overall academic progress. Additionally, the instructor will provide supportive test-taking strategies so students can perform to the best of their ability on classroom assessments and standardized assessments. This course is **HIGHLY RECOMMENDED** for all freshmen, but particularly those who struggled with time management, test-taking, or study skills in middle school.

TECHNICAL EDUCATION CENTER CLASSES

(2-HOUR BLOCK CLASSES)

ALL TECH CENTER CLASSES SATISFY THE FOLLOWING REQUIREMENTS OF THE MICHIGAN MERIT CURRICULUM:

***Visual, Performing, and Applied Arts**

***Fourth (senior) year Math requirement, when taken as a senior**

***Third Science (Chemistry) requirement, after successful completion of first two science credits**

COMPUTER NETWORKING & SECURITY I (Block 1 & 2)

Prerequisite: None

This course aligns with college curriculum in Networking and Cyber Security. It will introduce students to computer concepts in personal computer hardware and software, internet, security, networks and ethics. Students will learn how to use of computer technology for professional and personal use and the skills needed to install, configure, and service hardware, operating systems, and applications. Students will also learn to configure stand alone or networked computer for reliability and security.

Articulated credit available.

Certifications: A+ Certification

Up to 8 Bay College Credits available.

COMPUTER NETWORKING & SECURITY II (Blocks 1 & 2)

Prerequisite: B or better in Computer Networking and Security I or Instructor Permission.

This course validates the knowledge and skills of networking professionals. It is a vendor-neutral certification that recognizes a technician's ability to describe the features and functions of networking components and to install, configure and troubleshoot basic networking hardware, protocols and services. This course continues building upon students' knowledge in computer networking and communication. It provides theoretical knowledge exploring both the hardware necessary to support computer networks and the software needed to utilize and secure those networks. Students will have hands on training in designing, installing, and managing network devices. This includes Basic network topologies, network protocols, and local and wide-area networks. They will learn to trouble shoot problems across networks. Major topics include principles of Wide Area Networks, IP and TCP, routers, routing protocols and configurations, virtual LANs, network management, subnetting, design of LANs and WANs, and security issues. Students completing this course will prepare to take entry level certification exams.

Students in this class are expected to compete in BPA, either Computer Networking or Cisco Administration.

Articulated credit available.

Up to 8 Bay College Credits available.

Certifications: Network+ and CCNA, Route/Switch

Computer Networking and Security III

Third course of study is open to students with permission of instructor and Tech Center Principal. Students may engage in advanced study working toward CISCO and other Industry certifications. Students may also be placed in a workplace learning site.

Students interested in Information Technology should consider the [*Dickinson-Iron Technical Early College program.*](#)

C++ & CREATION W/ UNREAL ENGINE◇ – Block 3 only**Prerequisite:** Algebra I

This one year course will utilize game programming to develop the core skills needed to begin coding with the **C++ or C# formats** which are the two most popular programming languages used by professionals. Student's skills will be challenged by creating progressively complex games. The course will culminate with students creating one ambitious game project which will test their creativity and mastery of the curriculum. There are numerous lucrative employment opportunities for computer and gaming programmers. Students who continue their education in this area will benefit from the foundation this course provides as they prepare to acquire valuable certifications such as; CLA: C Programming Language Certified Associate, CPA: C++ Certified Associate Programmer, CPP: C++ Certified Professional Programmer.

Articulated credit available.**AUTOMOTIVE TECHNOLOGY – NATEF Maintenance and Light Repair - BLOCKS 1, 2 & 3****Prerequisite:** None

This program follows National Automotive Technicians Education Foundation (NATEF) standards for Maintenance and Light Repair. During the two-year program students will learn shop and personal safety, tools and equipment, preparing vehicles for service and workplace employability skills. The program is broken down into modules to develop a general knowledge and understanding of the following topics: Shop Safety, Braking System, automatic and manual transmissions, HVAC systems, Engine Repair, Engine Performance, Suspension and Steering, Electrical systems. Upon completion of the two-year program students will have the base knowledge to pursue further education in the auto repair industry.

Articulated credit available.**Certifications:** NATEF MLR, Michigan Mechanic Certification**AUTOMOTIVE TECHNOLOGY III**

Third course of study is open to students with permission of instructor and Tech Center Principal. Students may engage in advanced study on one of the eight areas of Automotive Licensing. Students may also be placed in a workplace learning site.

CONSTRUCTION TRADES I & II◇ – BLOCKS 1, 2 & 3**Prerequisite:** None

This Course provides students with a wide variety of hands-on experiences, all related to the multi-faceted construction industry. Students have opportunities to use a wide array of power and hand-held tools. Student will be able to learn and practice rough and finish carpentry; basic plumbing and electrical installation; insulation, drywall hanging and finishing; building codes and laws; and general construction safety inside our new Trades Center. Students will be able to practice on the grounds of the Tech Center leveling and layout instruments; proper installation techniques of both concrete flat work and masonry. Students will learn workplace safety, how to read architectural drawings, construction materials, construction tools and equipment, common construction practices, codes and laws, heavy equipment/civil construction techniques, and construction business management. Students in their second year will have the opportunity to be involved in work-based learning to enhance their skills in different trades. Students are prepared for entry-level employment skills in the construction field, entering a trade school apprentice program and for participation in post-secondary construction related programs such as construction management, construction engineering, architecture or becoming a licensed contractor.

Articulated credit available.**Certifications:** OSHA10, Carpenters International

CONSTRUCTION TRADES III

Third course of study is open to students with permission of instructor and Tech Center Principal. Students may engage in advanced study working toward pre-apprenticeship training in a construction related field or work toward a state license exam. Students may be placed in a workplace site.

EDUCATION CAREERS I – BLOCK 2 ONLY**Prerequisite: None**

This course will introduce the student to the profession of teaching. It will allow students to explore and make informed decisions regarding a career in education. Students will be exposed to the process and choices necessary to become teachers; the challenges and opportunities of teaching; educational thought and history; and the organization, control, supervision, financing, and other aspects of American education. Students will assist a mentor teacher for hands-on experience to gain knowledge and an understanding of the field of education from a teacher perspective while enhancing communication skills by working with early childhood, elementary and/or middle school students. Working alongside a professional educator as a Teaching Assistant intern will help solidify your career goal before leaving high school. A criminal background check and TB test are required.

Credentials: Child Development Associate or Michigan Youth Development Associate

Dual Enrollment Credit may be available

EDUCATION CAREERS II – Block 2 Only**Prerequisite: Education Careers I**

This course is for students interested in pursuing a career in education after high school. It is an introduction to the application of psychological principles and research to teaching and learning. It will expose the student to the processes of teaching and learning from the constructivism, social cognitive, cognitive, and behavioral perspectives. The study of teaching and learning is an integral part of the preparation of those who will become teachers. Understanding the development of the student, diversity, learning, motivation, classroom management, and instruction will make a teacher more effective and the student a better learner. Classroom field experience is an integral part of the class and a criminal background check and TB test may be required. Additional requirements may be necessary depending on the work site. Successful completion of Careers in Education I with a C or higher is required.

Dual Enrollment Credit available

GRAPHIC COMMUNICATIONS I, II ♦ – BLOCKS 1, 2 & 3**Prerequisite: None**

The Graphic Communications program at the Technical Education Center will prepare students for post-secondary college programs or entry into the work force in the production printing industry. Students will be exposed to and learn foundational skills relative to computer layout and design, press operation, bindery work and customer service. This is an excellent course for male or female students interested in computers, computer graphics, advertising, newspaper work, commercial art, photography, digital photography, tele-finder communications, business communications and commercial production printing. With the advanced software provided in this program, students will be encouraged to use their creative skills in the design of advertisements, product labels, identity marks (logos), brochures, posters/flyers, presentations etc. Students will also learn to edit and manipulate photographs as standalone work or to include in their design projects. Projects will be completed for area business and organizations providing students firsthand experience working with clients. A variety of program related equipment and processes common to the design and print industry will be included.

Articulated credit available.

Up to 8 Bay College Credits available.

GRAPHIC COMMUNICATIONS III ◇

Third course of study is open to students with permission of instructor and Tech Center Principal. Students may engage in advanced study in graphic design including Adobe software. Students may also be placed in a workplace learning site.

HEALTH OCCUPATIONS – CORE◇ - **BLOCKS 1 & 2****Prerequisite: None**

Health Occupations at the Technical Education Center provides students with a core of medical theory and skills needed to enter the health care profession. Core tasks that all students study include: medical ethics, safety, asepsis, body structure and function, assessment, vital signs, communication, emergency procedures (including CPR certification), transporting/transferring/ambulating/positioning, nutrition, hygiene/personal care/comfort, basic medical terminology, medical math and career exploration. Students will experience work-based learning/clinical experiences that are completed in nursing homes, hospitals, and private health care offices throughout our community. Students are responsible for their own transportation to and from clinical sites (in some cases existing bus routes may be utilized). This course prepares students both for entry-level job positions and college programs. Students enrolling in this course are required to under-go a **background check** to verify their eligibility to participate in clinical placements and/or to pursue a career in the health field. In addition students must provide proof they are free of active tuberculosis (**recent TB test**) and have up to date **immunizations**. Some facilities now mandate, prior to clinical placement, students receive a **full drug screen**. If required, the cost of drug screens and background checks will be covered by the Technical Center. Dual enrollment credit is available to students who enroll with Bay College. Specific criteria must be met to earn this credit.

Articulated credit available.

Certifications: CPR, First Aid

Bay College Credits available

HEALTH OCCUPATIONS – MEDICAL TERMINOLOGY◇ - **BLOCK 3****Prerequisite: None**

Health Occupations – Medical Terminology at the Technical Education Center is a college level body systems medical terminology course. Medical terminology is required to interact and function clinically in the health care field. This course is designed to provide a thorough investigation into suffixes, prefixes, and word components. Students will be able to utilize medical terminology as it relates to anatomical structures, pathophysiology and the general healthcare field. Dual enrollment credits are available to students who register with Bay College. Specific criteria must be met to earn these credits.

Articulated credit available.

Bay College Credits available

HEALTH OCCUPATIONS III

Third course of study is open to students with permission of instructor and Tech Center Principal. Students may engage in advanced study working toward a specific health care certification. Students may also be placed in a workplace learning site.

MARKETING & ENTREPRENEURSHIP I – Block 1, 2 & 3**Prerequisite: None**

This is an innovative course designed for students with an interest in marketing and advertising. Instruction will include an introduction to the fundamental marketing concepts through a variety of marketing topics and activities. There will be a strong emphasis on employability skills and communication in the work force. Students will learn how products are developed, branded, and sold to businesses and consumers. Students will analyze industry trends and gain hands-on experience in the marketing of goods, services, and ideas. Students will be able to actively practice these theories through The Market Place (our school store). Topics covered will also include professionalism in the workplace, product planning and positioning, promotion, pricing, selling, economic issues, and the impact of technology on the marketplace. Guest speakers and field trips will also service as a learning opportunity for students. An integral part of the program is participation in the school's business-related competition activities. These will offer marketing students opportunities in leadership, community service, and competitive events.

Articulated credit available.

Dual Enrollment Credit available

MARKETING & ENTREPRENEURSHIP II – Blocks 1, 2, & 3

Prerequisite(s): Must have earned an 80% or higher in Marketing I and have missed no more than 16 days of chargeable absences in the Marketing I class.

Students in Marketing II will need to apply to either be store managers or have transportation so they can be placed at a workplace learning site for a minimum of three days a week. They will be engaged in enhanced studies of marketing and business.

MARKETING & ENTREPRENEURSHIP III

Third course of study is open to students with permission of instructor and Tech Center Principal. Students may engage in advanced study including business management and entrepreneurship. Students will work toward a national retail certification. Students may also be placed in a workplace learning site.

MECHATRONICS I & II– Blocks 1, 2, & 3**Prerequisite: None**

The demand for technically trained engineers, industrial maintenance, and trades people grows, opportunities for high paying careers are almost unlimited. Manufacturing growth and the retirement of the baby-boomers have created steady growth of high paying careers. This course will prepare you for these careers with state of the art trainers to teach you technical skills. These skills include wiring an electrical panel, aligning a mechanical system with motors, shafts, belts, chains and gears, setting up and operating pneumatic and hydraulic systems, wiring and conduit for power distribution, programming Programmable Logic Controllers and FANUC robots, and designing and cutting on computerized CNC machines. There are visits to local industry and student competitions. Certifications include OSHA 10 safety training. Along with industry recognized credentials for skills learned. This course also offers Early Middle College and dual enrollment opportunities. **Articulated credit available.**

Up to 12 Bay College Credits available.

MECHATRONICS III

Third course of study is open to students with permission of instructor and Tech Center Principal. Students may engage in advanced study including Mechanical Drives, Level 2 PLC training, wiring with low voltage. Students may also be placed in a workplace learning site.

Students interested in Mechatronics should consider the *Dickinson-Iron Technical Early College program*.

WELDING TECHNOLOGIES I & II– Blocks 1, 2, & 3

Prerequisite: Must be in grades 11, 12

The Welding Technologies program at the Technical Education Center prepares students for entry level job skills in the Welding field or participation in a community or technical college program. The instructional format is “self-paced” thus allowing students to progress at their own speed. Instruction is provided in safety, cutting and bending steel, shielded metal ARC welding, gas metal ARC welding (wire feed), gas tungsten ARC Welding (TIG), oxyacetylene torch cutting, project layout and construction, daily maintenance of shop and equipment and employability skills. Students are required to complete welding and cutting operations if time and skill level permit on an instructor-approved project. Time in this course is split between lectures and hands-on activities including the completion of required welding operations, a required project, and a project of the student’s choosing.

Up to 4 Bay College Credits available.

WELDING TECHNOLOGIES II

Prerequisite: Must successfully complete Welding I.

Students enrolled as a second-year student in the Welding Technologies program will receive advanced training in 5 welding processes and will participate in the completion of advanced projects as approved by the instructor. Students will learn how to operate a welding robotic cell, design in 2-D CAD software to learn how to develop a file used to cut on a plasma table. In some cases, students will be encouraged to participate in advanced student competitions. Students may also qualify for a work-based learning placement depending on their skill level and availability of placements.

Articulated credit available

Up to 4 Bay College Credits are available

Students interested in Welding should consider the Dickinson-Iron Technical Early College program. For more information see below.

Less-Than Class Size CTE Program – Block 1, 2, & 3

Prerequisite: Approval of Tech Center Principal

The Dickinson-Iron Tech Center can offer CTE programs to students who are interested in CTE programming that are too small to offer as a regular class. The programs must be on the State-Approved Career and Technical Education Less-Than-Class-Size Program list on the Michigan Department of Education Office of Career and Technical Education website. By state definition: “An unpaid state-approved CTE less-than-class-size (LTCS) program provides an opportunity to pupils who, because of unique circumstances, do not have a program available through a regular state-approved CTE program. Each program is contracted with business, industry, or private occupational schools as an alternative method of providing CTE not readily available in a public education institution.” An example of a program run in recent years is Aviation held at the Ford Airport. Interested students should speak with the Tech Center Principal or Work-Based Learning coordinator the spring before they intend to enroll.

◊= Meets 3rd Science (Chemistry) Requirement

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Dickinson – Iron Technical Early College

D. I. T. E. C.

The Dickinson-Iron Technical Early College is partnering with Bay College to offer students in the Education, Welding, Mechatronics, and Networking/Cyber Security programs an early college experience. DITEC is a grade 11-13 program. Students will complete some of their coursework at the Technical Center in grades 11 and 12 through articulated programs while continuing their required graduation classes at their local high school. They will complete their college requirements through Bay College. For more information please contact the Technical Center at 906-779-2697 or Bay College West at 906-217-4301.

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