



CLIMAX-SCOTTS HIGH CURRICULUM GUIDE

2023-2024

Contents

General Information.....	2
Curriculum Guide.....	3
Art Department.....	4
Business Education Department	5
English Department.....	7
Foreign Language Department.....	9
Health/Physical Education Department	10
Mathematics Department.....	11
Music Department	14
Publications	15
Science Department.....	16
Social Studies Department	18
Education for the Arts	20
Career and Technical Education Courses	24
Course Plan	34

General Information

Your program of studies can help you....

Review your progress

Plan your classes each year

Find out about special programs

Your counselor can help you...

Recognize your aptitudes

Understand your abilities

Identify your interests

Plan classes in sequence for your success

Together, with your parent(s) and your counselor, we can create an educational plan that will lead you to your goals for graduation and post-secondary education!

This course catalog is one of the many tools you may use to plan your high school program. It provides brief descriptions of the courses, diploma requirements, and information on special programs available in our county.

Throughout the school year, you have access to test results, career information, college catalogs, college visits, and counselors who want to help you succeed. We look forward to working with you.

This Program of Studies has been prepared as a listing of courses available to Climax-Scotts students during the 2023-2024 school year.

Courses may be altered or deleted by subsequent Board of Education or administrative action after this catalog has been published. Students should maintain close contact with the counseling office to keep informed of courses available.

An updated version is maintained online, which contains corrections and modifications as needed.



Curriculum Guide

Business Education Department

The goals of the Business Education Department are twofold: first, to ensure that every student has basic skills to prepare for a technological world, and second, to provide training in marketable skills for business employment, giving students an understanding of business procedures that can be used in the transition from student to worker and consumer.

Course	Recommended Grade Level
Business Management & Administration (BMA) Computers	10-12
Accounting	10-12
Marketing	10-12
Pre-Employment.....	9

1603 - BMA Computers Grades: 10-12 Credit: 1 (2 semesters)

Prerequisite: None

Purpose: To provide students with the opportunity to gain the basic skills necessary for employment in an office or business-related environment. Students will learn techniques and receive training on equipment/software used in many businesses today, with special emphasis on Microsoft Office 2016. Students have the opportunity to earn articulated credit at KVCC and Davenport University, as long as they receive a “B” or higher in this class. Applications for articulated credit are completed in May of each academic year.

Topics studied:

1. Microsoft Office Specialist Certification 2013
2. Proper interviewing techniques
3. Entrepreneurs/Business Plan
4. Career Pathways – Career Searches
5. “Employability Essentials for Success”
6. Portfolio completion/job shadow

Accounting Grades: 10-12 Credit: 1 (2 semesters)

Prerequisite: None

Purpose: To teach students how to organize personal and business financial information. The course will provide students with basic knowledge to manage their own financial records as well as possibly move into advanced accounting classes at the college level. Also, this course will provide students with the opportunity to gain the basic skills necessary for employment in an office or business-related environment. Students can earn articulated credit at KVCC, Baker College, Davenport University, Ferris State University, Grand Rapids Community College, and Lake Michigan College, as long as they receive a “B” or higher in this class. Applications for articulated credit are completed in May of each academic year.

Topics studied:

1. Recording and reporting of business transaction in journals, ledgers, and financial documents
2. Accounting for a sole proprietorship, corporation, and a partnership
3. Automated accounting systems
4. Employability Essentials for Success
5. Proper Interviewing Techniques
6. Portfolio Completion

Marketing**Grades: 10-12****Credit: 1 (2 semesters)****Prerequisite:** None

Purpose: To develop the student's skills by exploring consumer behavior, purchasing necessities, services, and examining their roles in the marketplace. The students will create various marketing projects.

Topics studied:

1. Role of the consumer in our economy
2. Profit/loss
3. Being an informed consumer
4. Buying essentials
5. The 4 P's
6. Buying services, i.e., insurance, banking

Pre-Employment**Grade: 9****Credit: 1 (2 semesters)****Prerequisite:** None

Purpose: The class begins with a unit on the transition to High School, building communication and conflict resolution skills, exploring connections to the community, understanding learning styles and personal values, goal setting, and respecting diversity. The second portion of the class focuses on exploring each career pathway available. Students will become aware of different fields or careers and consider their interest in each field, and how that will affect their four years of high school. Students will consider the steps that must be taken to reach goals in different career areas, and the connection between core curriculum and the world of work. Students will begin construction of a portfolio that they will use throughout their high school career. The portfolio will contain: Educational Development Plan, autobiography, resume, examples of proficiency, and career pathway explorations. Xello will be used to assist in the process.

English Department

The English Department offers English courses including literature, reading, and writing development, grammar improvement, speaking, and listening. Also offered is instruction in media production and publication.

Course	Recommended Grade Level
English 9	9
English 10	10
English 11	11
English 12	12
Creative Writing	9-12

English 9 (Required) Grades: 9 Credit: 1 (2 semesters)

Prerequisite: None

Purpose: To provide students with an extensive study of basic language skills. Students will be involved in writing paragraphs and compositions where emphasis will be on organization and clarity. Some creative writing and oral work will be assigned. In Literature, the students learn terms and techniques related to each form, read many selections of each and discuss or write about most selections.

Topics studied:

- | | |
|-----------------------------------|------------------------|
| 1. Review of grammar | 2. Reading literature |
| 3. Writing mechanics | 4. Reading non-fiction |
| 5. Paragraph & essay organization | 6. Study skills |
| 7. Research skills | |

English 10 (Required) Grades: 10 Credit: 1 (2 semesters)

Prerequisite: English 9

Purpose: English 10 will continue (with the intent to master) the language arts skills learned in English 9. The focus of the course will be on the construction of a variety of compositions by use of the writing process, pre-writing to publication. Focus will also be on note-taking, listening, and organizational skills as well as strategies meant to assist students in better understanding both fiction and informational texts.

Topics studied:

- | | |
|------------------------------------|--|
| 1. Reading fiction and non-fiction | 2. Writing mechanics and grammar development |
| 3. Defining words in content | 4. The 5 paragraph essay |
| 5. Listening skills | 6. Group dynamics |
| 7. Discussion | 8. Analyzing literature in writing |
| 9. Argument | |

English 11 (Required) Grades: 11 Credit: 1 (2 semesters)

Prerequisite: English 10

Purpose: To begin preparing students for college level reading and writing. The study and analysis of both college level informational and literary texts will be the focus of the reading in the course. For writing, students will write papers in persuasive, narrative, and expository forms, with an emphasis placed on conventional correctness (i.e., grammar and formatting), as well as the use of support, research, and rhetorical methodology.

Topics studied:

1. Exploring the human condition through literature; relating literary themes to our own lives
2. Forming strategies to encounter difficult texts
3. Enhancing technical writing skills for higher level writing
4. Learning how to process and utilize information
5. Synthesizing information with critical thinking in written and oral forms
6. Developing rhetorical strategies to persuade audiences
7. Developing strategies to decipher difficult vocabulary
8. Utilizing and mastering the writing process of prewriting, writing, editing, and revising
9. Learning how to share research with audiences
10. Using language as a creative form of self-expression

English 12 (Required)

Grades: 12

Credit: 1 (2 semesters)

Prerequisite: English 10

Purpose: To prepare students for college and/or the professional world. This course is a melding of both college preparation and workplace preparation. Students will continue to develop their understanding of college level reading and writing while also learning strategies to become successful contributors to the workforce. To achieve these objectives, a wide range of texts will be studied, including but not excluded to literary texts, informational texts, and current events in the media. Students will also learn how to write for numerous types of audiences, including but not excluded to academic, social, and professional.

Topics studied:

1. Exploring the human condition through literature; relating literary themes to our own lives
2. Forming strategies to encounter difficult texts
3. Enhancing technical writing skills for higher level writing
4. Learning how to process and utilize information
5. Synthesizing information with critical thinking in written and oral forms
6. Developing rhetorical strategies to persuade audiences
7. Developing strategies to decipher difficult vocabulary
8. Utilizing and mastering the writing process of prewriting, writing, editing, and revising
9. Learning how to share research with audiences
10. Using language as a creative form of self-expression

Creative Writing

Grades: 9-12

Credit: 1 (2 semesters)

Purpose: To explore all of the areas of creative writing, including short stories, poetry and short plays. This will involve criticism and revision, possible imitation of models, publication and performance presentations and creative writing forums, and possible investigation into job markets and careers. Students will share with others almost everything written for the class. Participation will also be required in constructive criticism of others' writing. A portfolio of student's semester writing will be created as part of the final exam.

Topics studied:

- | | |
|---------------------------|-----------------------------|
| 1. Scene description | 2. Short Stories |
| 3. Character Sketches | 4. Revision |
| 5. Poetry Forms and Types | 6. One-Act Plays |
| 7. Descriptive/Narrative | 8. Memorization |
| 9. Dialogue Sketches | 10. Reading and Performance |

Foreign Language Department

Climax-Scotts is currently offering Spanish I and Spanish II to meet the Michigan Merit Curriculum foreign language requirements.

Course	Recommended Grade Level
Spanish I	7-12
Spanish II	8-12

Spanish I **Grades: 7 -12** **Credit: 1 (2 semesters)**

Prerequisite: None

Purpose: Students begin Spanish by focusing on the four key areas of foreign language study: listening, speaking, reading, and writing. This course represents an ideal blend of language learning pedagogy. Each unit students study consists of a new vocabulary theme, reading and listening comprehension activities, speaking, writing activities, multimedia presentation, interactive activities, cultural activities, and practice which reinforces vocabulary and grammar. There is a strong emphasis on providing context and examples for the language concepts presented in each unit. Students should expect to be actively engaged in their own language learning, become familiar with common vocabulary terms and phrases, comprehend a wide range of grammar patterns, participate in simple conversations, respond appropriately to conversational prompts, compare cultural practices, products, and perspectives of various Spanish-speaking countries. It is also important to assess language progression throughout the semester. This course has been aligned to Michigan World Language Standards.

Topics studied:

- | | |
|---|---|
| 1. Common vocabulary | 2. Conversational terms and phrases |
| 3. Grammar patterns | 4. Conversational speaking |
| 5. Writing using vocabulary and grammar | 6. Read, write, speak, & listen for meaning |
| 7. Analyze & compare cultural practices | 8. Demonstrate proficiency through assessment |

Spanish II **Grades: 8-12** **Credit: 1 (2 semesters)**

Prerequisite: Spanish I

Purpose: To provide a more in-depth study of the Spanish language allowing students to increase fluency and proficiency. Students will increase their vocabulary and grammatical competencies in the four key areas of foreign language study.

Topics studied: A basic construction of the topics studied in Spanish I with increased depth of study and language complexity.

Health/Physical Education Department

Physical Education is designed to promote and create an awareness of physical fitness, both now and in the future. These classes are offered to teach skills that can be carried on into life after graduation. Team sports are offered for those students who enjoy working in groups to achieve a common goal. Each Physical Education class will receive instruction in weight training and fitness activities for lifetime application.

Course	Recommended Grade Level
Health/Physical Education	9
Advanced Physical Education.....	10-12

Health/Physical Education	Grade: 9	Credit: 1 (2 semesters)
----------------------------------	-----------------	--------------------------------

Prerequisite: None

Purpose: To provide students with a background in basic health and physical education principles which can be applied to both physical and mental health throughout their lives.

Topics studied:

- | | |
|----------------------------------|------------------------|
| 1. Substance use and abuse | 2. Teen Suicide |
| 3. Physical Fitness | 4. Reproductive Health |
| 5. Personal appearance/hygiene | 6. Volleyball |
| 7. Disease: Major killers | 8. Soccer/Speed Ball |
| 9. Personality | 10. Softball |
| 11. Body systems | 12. Weightlifting |
| 13. First Aid/CPR | 14. Circuit Training |
| 15. Nutrition and exercise | 16. Football |
| 17. Emotions and human relations | 18. Basketball |
| 19. Stress and your health | |

Advanced Physical Education Grades: 10 -12 Credit: 1 (2 semesters)

Prerequisite: 9th grade PE and permission of the instructor.

Purpose: To provide students with the opportunity to improve muscular strength and power, speed and endurance. Students will receive instruction on executing power and Olympic lifts as well as lifts to improve balance and coordination. This class is designed to improve the athleticism in any student.

Topics studied:

- | | |
|----------------------|-------------------------------|
| 1. Major muscles | 2. Elements of fitness |
| 3. Circuit training | 4. Sports training principles |
| 5. Interval training | 6. Methods of weight training |

Mathematics Department

The offerings within the Mathematics Department are designed to give each student the skills needed to prepare an individual for jobs or further education after graduating and for certain science classes. Four (4) math credits are required for graduation and a student must take a math class their senior year.

Course	Recommended Grade Level
Algebra A	9
Algebra B	11
Algebra I.....	8-9
Geometry	9-11
Algebra II.....	9-12
Consumer Math	11-12

Algebra A

Grade: 9

Credit: 1 (2 semesters)

Prerequisite: None

Purpose: Designed for students to go at a slower pace than Algebra I course. Students will be introduced to the first steps of higher mathematics This is the first half of Algebra I.

Topics Studied:

1. One and two variable statistics
2. Linear equations, inequalities, and systems
3. Functions
4. Introduction to exponential functions

Algebra B

Grade: 11

Credit: 1 (2 semesters)

Prerequisite: Algebra A, Geometry

Purpose: Designed for students to go at a slower pace than Algebra I course. This is the second half of Algebra I.

Topics Studied:

1. One and two variable statistics
2. Linear equations, inequalities, and systems
3. Functions
4. Exponential functions
5. Introduction to quadratic equations
6. Quadratic equations

Algebra I

Grades: 8-9

Credit: 1 (2 semesters)

Prerequisite: None

Purpose: To introduce students to the first steps of higher mathematics, the main emphasis of the course being finding solutions to various types of equations and inequalities.

Topics studied:

1. One-variable statistics
2. Linear equations, inequalities, & systems

- | | |
|--|--|
| 3. Two-variable statistics | 4. Functions |
| 5. Introduction to exponential functions | 6. Introduction to quadratic functions |
| 7. Quadratic equations | |

Geometry

Grades: 9-12

Credit: 1 (2 semesters)

Prerequisite: Algebra I

Purpose: Geometry is the study of objects in two and three dimensions. This study further develops a student's logical thinking process and analytical abilities. This course is recommended for any student seeking education beyond high school.

Topics studied:

- | | |
|---|--------------------------------|
| 1. Construction and rigid transformations | 2. Congruence |
| 3. Similarity | 4. Right triangle trigonometry |
| 5. Solid geometry | 6. Coordinate geometry |
| 7. Circles | 8. Conditional probability |

Algebra II

Grades: 9-12

Credit: 1 (2 semesters)

Prerequisite: Algebra I

Purpose: A more advanced study of Algebra. Students will learn to master the skills acquired in Algebra I and new functions that will be helpful in other advanced math and science courses.

Topics studied:

- | | |
|---|--|
| 1. Sequences and functions | 2. Polynomials and rational functions |
| 3. Complex numbers and rational exponents | 4. Exponential functions and equations |
| 5. Transformations of functions | 6. Trigonometric functions |
| 7. Statistical inferences | |

Consumer Math

Grades: 11-12

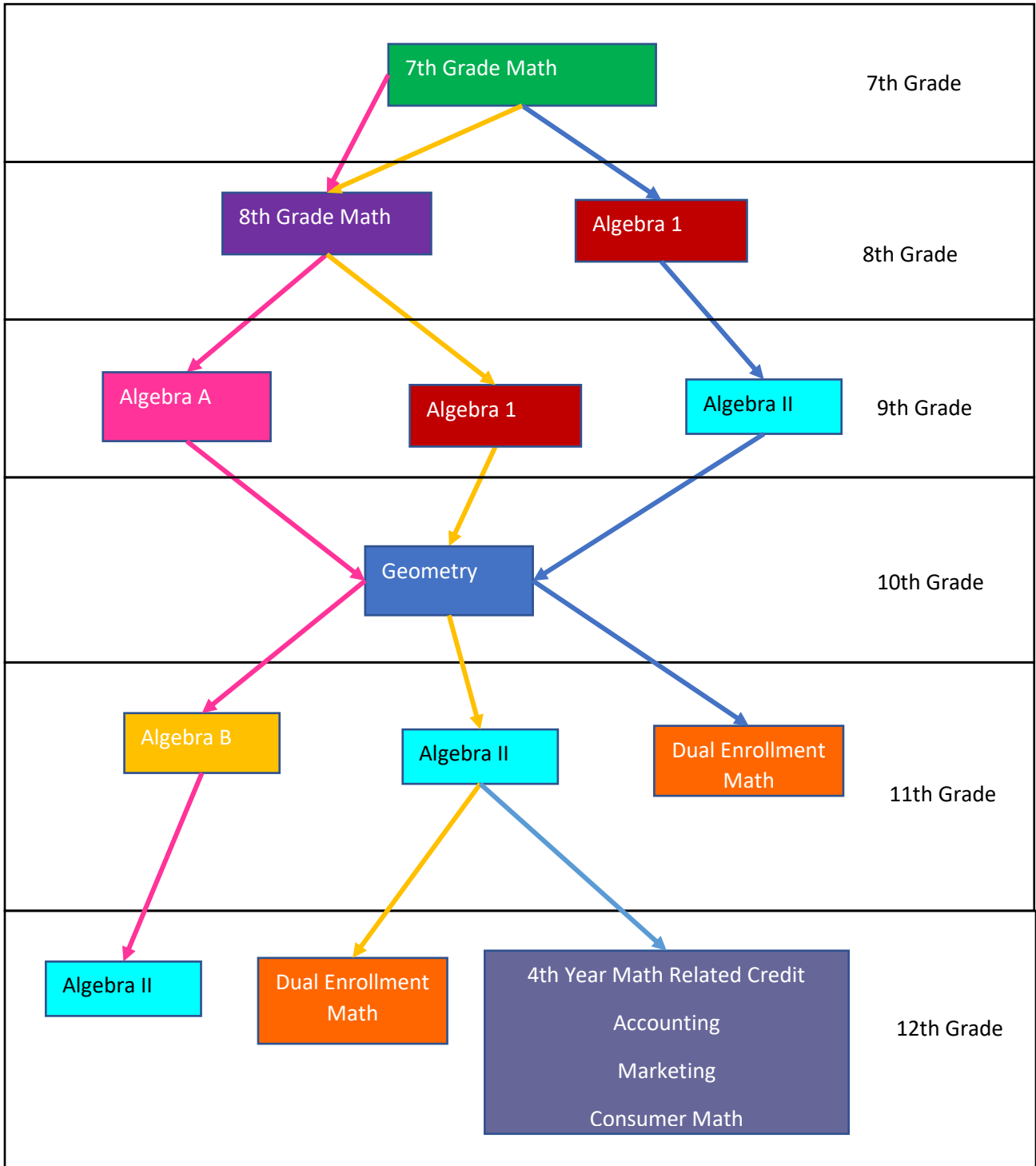
Credit: 1 (2 semesters)

Prerequisite: None

Purpose: This course will cover financial decision making while developing an understanding of the impact personal experiences, attitudes, and values and how they relate to financial decisions and behavior.

Topics studied:

- | | |
|---|------------------------|
| 1. Financial Decision Making In Context | 2. Saving and Spending |
| 3. Borrowing | 4. Earnings |
| 5. Investing | 6. Managing Risk |
| 7. Financing Post-Secondary Education | |



Music Department

The Music Department of Climax-Scotts High School is dedicated to fulfilling the needs and interests of all students in the system. During the school year creative performances, service projects, and travel opportunities are required for students in the program. It is the desire of the Music Department to provide a means for the students to gain an appreciation of all forms of music.

Course	Recommended Grade Level
High School Band.....	9-12
Choir.....	9-12
Jazz Band.....	9-12

High School Band **Grades: 9-12** **Credit: 1 (2 semesters)**

Prerequisite: Teacher recommendation

Purpose: The purpose of the organization is to provide a far-reaching educational experience in the field of instrumental music. The goals are to make the band program the best it can be in performance achievement, musical knowledge, musical and performance exposure, and to develop intrinsic values of self-discipline, pride, respect, and cooperation. The ultimate goal of study is to develop a life-long appreciation for music. Students should consider band a yearlong commitment and plan accordingly.

Class Required Activities/Responsibilities: The Marching Band performs at all home football games, Homecoming and Memorial Day parades, and some years at regional marching competitions. The Concert Band performs at three (3) concerts during the year, usually in December, March, and May as well as Band Festivals, plus graduation. The Pep Band performs at all Friday home basketball games. Other responsibilities required of band students are to attend any trip or field trip that may occur and attend after-school rehearsals in preparation for marching and concert seasons. Band camp is required and graded. ***All marching students must attend the camp that occurs in August.***

Topics studied:

- | | |
|----------------------------------|--------------------------|
| 1. Fundamentals of Marching Band | 2. Music history |
| 3. Concert Band | 4. Music theory |
| 5. Popular and traditional music | 6. Music appreciation |
| 7. Critical listening | 8. Aesthetic sensitivity |

Choir **Grades: 9-12** **Credit: 1 (2 semesters)**

Purpose: Choir allows students to study and participate in an activity-oriented class. The choral program exposes students to a variety of music styles; develops vocal techniques and is a means of stimulation creative, artistic, social, and musical growth. The choir performs at least two (2) concerts a year, usually in December and May. Additionally, the choir goes Christmas caroling, performs for local groups and associations, and attends the Vocal Music Day at a local university.

Topics studied:

- | | |
|---------------------|-----------------|
| 1. Vocal techniques | 2. Music theory |
|---------------------|-----------------|

3. Musical styles
5. Music history

4. Music appreciation
6. Critical listening

Jazz Band

Grades: 9-12

Credit: 1 (2 semesters)

Prerequisite: Permission of Instructor, Joint membership in High School Band

Purpose: Students will learn and develop musical skills in jazz. Emphasis will be on jazz styles, rhythms, articulations, and improvisation, as well as introductory jazz history and theory. Students will develop advanced sight-reading skills, and learn to read basic chord symbols, changes, and lead sheets. Students will demonstrate these skills in school concerts and extra-curricular performances. The jazz band performs in at least two (2) concerts per year, usually in December and May, and participates in the TAC Jazz Festival in April.

Publications

Publications

Grades: 11-12

Credit: 1 (2 semesters)

Prerequisite: Maximum class size of 15 students. Enrollment in class is by teacher approval only, based on student's qualifications and teacher recommendations.

Purpose: The main project of the class will be to produce the school yearbook. Production will involve several phases of publishing, including: design and layout, photography, and advertising. Production work will include a variety of styles of writing and use of a web-based computer program to aid the production process. As part of the class and grade, students will be required to actively sell advertising space, as outside advertisement is the major source of funding for this publication. In addition, students are expected to take pictures at events at the school, requiring their attendance at sporting events. Deadlines must be met throughout the year. Failure to meet deadlines will result in removal from the class.

Topics studied:

1. Photography
2. Advertising
3. Graphic design, layout, and lettering

3. Skeletal system and function
5. Muscular system and function
7. Sense organs and functions

4. Cellular Biology
6. Human Biology
8. Heredity

Chemistry

Grades: 11-12

Credit: 1 (2 semesters)

Prerequisite: Algebra I

Purpose: The first component of this course is an overview of the study of structure and properties of matter and extends this focus to explaining the outcome of a simple chemical reaction based on the outermost electron states of atoms, trends in the periodic table, and knowledge of the patterns of chemical properties. The second component illustrates that the release or absorption of energy from a chemical reaction system depends upon the changes in total bond energy. The third component of this course focuses on application of scientific principles and evidence to provide an explanation about the effects of changing the temperature or concentration of the reacting particles on the rate at which a reaction occurs. The fourth component of the course is a focus on the design of a chemical system by specifying a change in conditions that would produce increased amounts of products at equilibrium. The fifth component of this course has the student use mathematical representations to support the claim that atoms, and therefore mass, are conserved during a chemical reaction.

Topics studied:

1. Structure & properties of matter
2. Chemical reactions
3. Nuclear processes
4. Types of Interactions
5. Stability & instability
6. Energy in chemical processes & life

Government**Grade: 11****Credit: .5 (1 semester)****Prerequisite:** None

Purpose: Through the study of current events as well as the origins of the national government, students will be exposed to information that will allow them to be more responsible citizens.

Topics studied:

1. Power, authority, and government
2. Foundations of American government
3. Political participation & behavior
4. The legislative branch
5. The executive branch
6. The judicial branch
7. The United States & the world

Economics**Grades: 11****Credit: .5 (1 semester)****Prerequisite:** None

Purpose: Students will study the basic concepts of economics.

Topics studied:

1. The economic fundamentals
2. How Markets work
3. Economic institutions & organizations
4. Economics of the public sector
5. Measuring & managing the economy
6. Globalization & the global economy

Education for the Arts

DANCE

Beginning Dance Studio

Comstock / Loy Norrix / Kalamazoo Central / Parchment

Learn the basic elements and discipline of formal dance technique, exploring classical modern dance, ballet, jazz, hip hop, and cultural dance styles. Exploration of dance-related subjects will include movement improvisation, composition, and dance history. Students gain performance skills, learn how to choreograph their own dances and are required to participate in EFA dance concert at end of each term. They will have the opportunity to take field trips to see live dance concerts and attend master classes. Students will work with professional dance educators and guest artists.

Intermediate Dance Studio

Kalamazoo Central / Loy Norrix

Intermediate Dance is for students who have completed a beginning EFA class, or have previous dance/movement experience, and are committed to a full year of dance instruction. Students will further their training through in-depth instruction and structured small group student exploration in formal dance technique, classical modern dance, ballet, jazz, hip hop, and cultural dance styles. Exploration of dance-related subjects will include movement improvisation, composition, and dance history. Students will gain performance, composition, and choreographic skills, develop observation, analysis, critical thinking, and reflection skills. Students will prepare and produce a dance presentation each trimester. The class will take field trips to professional dance concerts and work with master guest artists.

LITERARY ARTS

Creative Writing Online

Web based

Through the study of written works in various forms and the regular practice of writing, students will achieve a better understanding of the creative writing process. Additionally, students will collaborate on a few projects, and will read and critique one another's work through small group workshops (held through discussion forums). Students will turn in four major creative writing assignments, regular creative writing exercises, three short reflections, a recording of student performing one of their assignments, and an online portfolio.

Advanced Creative Writing

Web based

This class is open to motivated writers who have successfully completed the Creative Writing Online class. Students will submit an individualized writing project to the instructor in any creative writing genre. Instructor will develop with students a relevant research plan and writing / revision calendar. Students will receive feedback from instructor and peer student writers. Final writing product will be shared in an on-line portfolio and submitted to student writing festivals.

Comics, Manga and Graphic Novel Arts

Web based and at High School

Learn to write and produce compelling, artistic and inventive comics or manga, and Graphic Novels. Research the history of comics, study the elements of story, plot, and character development, and the productive use of imagery, layout, and composition. Work individually and collaboratively on projects and develop projects through manipulation and editing of found media and open source graphics.

MEDIA ARTS

Film and Video Arts

Kalamazoo Central and Vicksburg High Schools

Film & Video Arts introduces students to the creation and study of time-based media in video and film. They work with the latest digital technology in creating a variety of works that help them mold and define their own personal visual style for innovative, artistic communication.

Advanced Video Arts Studio

Vicksburg High School

AVAS is a project-based video class for 9-12 grade students who have already taken at least one semester of a video or TV production class. The class will concentrate on individual student films that will be used for portfolio work and entered into video competitions. Students will learn about lighting, sound, directing and advanced filming and editing techniques.

3D Computer Animation and Game Design

Epic Center Public Media Network

Introduction to the technical and creative fundamentals of 3D Animation software. Students will learn core concepts such as modeling, mapping, story board/scripting, and rendering. Students will create original characters and environment designs, animate characters in a game landscape, and design storyboards using gaming logic and strategies.

KVCC Media Arts

Kalamazoo Valley Community College – Center for New Media - EFA/KVCC Dual Enrolled Program

Fall Semester: ANM 120: Creative Business Standards, MF and ANM 100 Adobe Creative Suite

Winter Semester: ANM 143 Adobe Illustrator, MF and ANM 142 Adobe Photoshop, TWR

Create artworks using computers as tools and learn how art communicates emotions and ideas. Projects include digital photograph manipulation, art for the Internet, stereo 3D images, digital painting, and combining traditional media with new technologies.

Digital Studio Art

Web based and Epic Center Public Media Network

This class will introduce the basics of drawing and painting using digital means, in the process also giving them an introduction to the basics of digital imaging using Adobe Photoshop and Illustrator. The course is built around the core elements of visual art, such as line, shape, value, and color with an additional emphasis on learning and using the tools of imaging software.

Digital Photo Art

Web based and Epic Center Public Media Network

This class will introduce, enhance and refine students' ability to express themselves with the aid of digital cameras. Students will learn proper photographic technique, computer enhancement of photos,

printing and professional presentation techniques. Students will have many assignments ranging from core photography fundamentals to immersive pieces of personal expression. They will leave class with the beginnings of a portfolio and knowledge to continue and expand their work in the future.

VISUAL ARTS

Visual Arts Exploration: Wednesday Evenings. One Semester.

Kalamazoo Institute of Arts

Explore creating sculpture, photography, jewelry, painting and more at the Kalamazoo Institute of Arts. Work alongside practicing professional artists as they share their knowledge and expertise in art making.

Advanced Visual Arts Studio: School Day. Full-year.

Kalamazoo Institute of Arts

Deepen your creativity and visual arts skills at the Kalamazoo Institute of Arts. Take advantage of the professional facilities, equipment, and master guest artists. This studio class offers advanced study in sculpture, oil painting, jewelry, photography, welding, printmaking, ceramics, and more. Develop a Visual Arts Portfolio and learn presentation skills to apply for college scholarships and student art shows.

THEATRE and PERFORMING ARTS

Advanced Musical Theatre

Portage Northern High School

Using a workshop approach, students will experience an in-depth study of musical theatre to enhance their appreciation of the genre and improve their practical performance skills in acting, vocal and dance performance. Mentored by theatre, vocal and dance educators and guest artists, students will explore, perform, and critique various aspects of musical theatre from the past to the present. Emphasis will be placed on creative and innovative approaches to performing works.

Theatre Improv and Scriptwriting

Comstock and Climax-Scotts High Schools

Through in-depth study and practice students will learn the basics of improvisation, writing, directing and acting for the stage, as well as integrating image and music into their own theatrical performances. Students work with practicing artists exploring different forms of theatre, from classical to contemporary. These experiences will inform the development of each student's distinct writing style. Students will participate in a minimum of two class performances and visit area theatres to experience a variety of stage productions.

Hip Hop 180

Location TBD

Activate your voice and amplify your vision through the power of performance rap/poetry, music, and movement. Dig into the history of Hip Hop culture and social justice leadership to build skills, decipher contexts, and determine truths. Then merge your artistic and activist knowledge and techniques to enact meaningful, positive social change in y(our) community.

Music Studio: **NEW CLASS** Tues/Thurs Afternoon. One Semester.

Epic Center

Learn to create and record your own music from the first beat to the last chord. Students will develop

deep listening skills to break down the elements of music composition: rhythm, tempo, melody, harmonics, and lyrics. With these musical tools, students will compose new music, mash-up music genres, and re-envision and create cover songs. Students will learn the basic techniques of studio recording and post-production.

Career and Technical Education Courses

ARTS AND COMMUNICATION CAREER PATHWAY

Art & Design Career Skills

This course allows students to explore and perfect skills in various art media, use professional quality art materials, work on Macintosh computers and tablets, and learn the Adobe Creative Suite programs including Photoshop, Illustrator and InDesign. Students will attend trips to art exhibitions and performances, design firms and school of art tours. Students will research various post-secondary programs and careers in commercial art and design, which may include animation, digital art, fashion design, graphic design, interior design, photography, printmaking, visual art and more. Designers working in the industry, as well as representatives from post-secondary institutions will visit the classroom to consult with students. Students will create a resume, assemble a professional portfolio and attend a portfolio review in preparation for college admissions and internships.

This class may be taken for multiple years.

- CC, WL, SC, MA, VPA, EMC

Media Production

This course is ideal for students who want to learn how to create media content using visual, audio, graphic and storytelling production techniques for internet, podcasting, television, film, and radio. Students will gain work experience in such skills as video editing, audio production, video composition, graphic composition, effective communication and more. This class provides students with the opportunity to enter local and national competitions as well as airing student work on Public Media Network stations.

- CC, WL, SC, VPA

BUSINESS MANAGEMENT, MARKETING & TECHNOLOGY PATHWAY

Basic Accounting/Accounting I

This course provides students with basic recordkeeping skills in small businesses. Using both manual and computerized methods, students start accounting systems, record business transactions for sole proprietorships and partnerships, and practice petty cash and payroll procedures.

- CC, WL, SC, MA, EMC

Advanced Accounting/Accounting II

Students who enroll in the second year become proficient in computerized systems, advanced application, analysis and financial decision making. Competencies include departmentalized accounting procedures, completing payroll, budgeting, and financial analysis.

- CC, WL, SC, MA, EMC

AP Computer Science Principles

AP Computer Science Principles is an introductory college-level computing course. Students cultivate their understanding of computer science through working with data, collaborating to solve problems, and developing computer programs as they explore concepts like creativity, abstraction, data and information, algorithms, programming, the internet, and the global impact of computing.

- WL, SC, MA

Banking & Finance

This course provides students with a background in customer service, personal finance, budgeting, investment planning, and business financial management. Students gain exposure to the various career options in the field. They learn how the financial decisions that they make today affect their future.

- CC, WL, SC, MA

Business Administration Management & Operations (BMA)

This course provides students with a solid foundation of business skills, knowledge and understanding that are necessary for success in a global society. Topics include human resources, operations and quality management, communications, business management and leadership, project management, business ethics, international business, employability skills, career exploration and more. Students will utilize information technology and software applications to complete business projects and share ideas. Students will learn to solve business problems that occur in the working environment. This exciting business class prepares students for employment and for the pursuit of a business degree after high school.

- CC, WL, SC, MA, VPA, EMC

Computer Science/Software Engineering

Computer Science Software Engineering provides an excellent introduction into the computer science world through engaging students in computational thinking. In this course, students create interactive stories using a programming language called Scratch; work in teams to create simple apps for mobile devices using App Inventor; learn introductory elements of text-based programming in Python, and analyze data using Excel. Students will use Arduino Microprocessors to configure circuitry for modern day lifestyles. Students will learn the impact of a computing society and the application of computing across career paths.

- CC, WL, SC

Culinary Arts

This program provides students with the opportunity to learn about the restaurant and food service industry. The curriculum, ProStart, was created by the National Restaurant Association and complies with all State standards. Students learn basic food preparation and explore different fields of the culinary trade. Instruction and learning activities are provided in a food lab using hands on experiences. The curriculum includes, but is not limited to, front-of-the-house duties, as well as back-of-the-house duties. Additional activities provide instruction in a wide range of topics from management and employability skills to catering. Students participate in culinary competitions and acquire industry recognized certifications needed to succeed in the industry and post-secondary education.

- CC, WL, SC, MA, VPA, EMC

Information Technology I

Students enrolled in this program will be exposed to numerous Information Technology specialty areas and choose one of the following career paths to focus on for the year. PC Technician: This path provides a thorough overview of what it means to work as a Tier 1 technician for an IT department. Students will

learn about hardware, Windows and Linux operating systems, printers, scripting, networking, security and troubleshooting. Eligible certifications include CompTIA's IT Fundamentals and A+, Microsoft's Networking, Operating Systems, and Security Fundamentals; and TestOut's IT Fundamentals and PC Pro. Cisco Networking: Students in this path will experience a comprehensive introduction to the networking field and in-depth exposure to fundamental networking, LAN switching, wireless LANs, basic routing, Cybersecurity, WAN concepts, VPNs, QoS, virtualization, and network automation. Threaded throughout the course are security concepts and skills including threat mitigation through LAN security, ACLs, and IPsec. Eligible certifications include Cisco's CCNA and CompTIA's Network+.

- CC, WL, SC, MA, EMC

Information Technology II

Students returning for second year of Information Technology will take a deeper dive into opportunities, work semi- independently and focus on one or more of following areas of IT: cybersecurity, servers, Linux, or cloud.

Cybersecurity: Initial topics will include an introduction/refresher into Python coding, Linux, and IoT devices. Students will then dive into the world of ethical hacking.

Servers: The course is designed to prove mastery of the skills required to administer Windows Server, including installation and implementation of storage solutions, Hyper-V, and Windows containers; networking with DNS, DHCP, IP address management, and advanced infrastructure; and administration of Active Directory Domain Services, group policy, Nano Server, and more.

Linux: Linux is everything from cars and smartphones to servers and supercomputers, as a vast number of enterprises use Linux in cloud, cybersecurity, mobile and web administration applications.

Cloud: This course is conditional upon current applications with Microsoft and Amazon partnerships. Students will learn what the cloud is and how it works, differentiate between cloud computing and deployment models, and describe the basic global infrastructure of the cloud.

- CC, WL, SC, MA, EMC

Marketing/Entrepreneurship

Marketing is the process of planning, pricing, promoting, selling and distributing ideas, goods or services to create exchanges that satisfy a customer. Course work teaches the principles of advertising, display, sales, merchandising, economics and marketing in a global economy. Students train in techniques that businesses and organizations use to persuade consumers to buy products or use services. Students will learn about types of social media and the social media strategies businesses utilize to meet their marketing goals. This exciting course teaches many transferable skills that students can use immediately in the workplace or to pursue a business degree at a postsecondary institution.

- CC, WL, SC, MA, VPA, EMC

ENGINEERING, MANUFACTURING, INDUSTRIAL TRADES PATHWAY

Automotive Technology

This National Institute for Automotive Service Excellence (ASE) certified program covers these areas of automotive service: engine, brakes, electrical & electrical systems, steering & suspension, auto & manual transmissions and air conditioning. Students may have the opportunity to become state

certified, as well as to earn credit towards completion of an associate degree or other post-secondary training.

Students may take this course for two years.

- CC, WL, SC, MA, AL, EMC

Aviation Technology

Students in this course are dually enrolled and have the opportunity to earn college credit through Kellogg Community College (KCC) in addition to high school credit. The KCC aviation coursework is part of a bridge agreement with Western Michigan University, College of Aviation and is delivered as on-line courses. Instructional support is provided by CTE to ensure student success at the college level. This program is designed to introduce students to many aspects of the aviation industry and is intended for students with an interest in pursuing any career related to aviation. Students will develop a broad knowledge base in subject areas ranging from evolution of airplanes and commercial aviation, flight operations, weather, airspace, navigation, regulations, and aircraft systems. Students have the opportunity to interact with industry experts and visit leaders in the field of aviation for career exploration. The program will feature many hands-on labs.

Students may take this course for two years.

Dual Enrollment at Kellogg Community College with bridge agreement to WMU-College of Aviation

- CC, WL, SC, MA

Computerized Manufacturing

This exciting, fast-paced pre-engineering course provides advanced technology training in computer-aided design and computer manufacturing systems. All equipment is state of the art including Haas and Mazak CNC machining centers. The course uses CAD software including SolidWorks, Mastercam and KeyCreator. It also features demonstrations and maximizes student laboratory work (80% hands-on). Students gain planning, organizing and decision-making skills while also developing acceptable attitude, interpersonal and equipment-related skills. Paid co-op opportunities are available to second-year students who are placed at local manufacturers. Computerized Manufacturing prepares students for immediate employment, advanced schooling and/or apprenticeship opportunities with local area employers.

Students may take this course for two years.

- CC, WL, SC, MA, VPA, EMC

Construction Trades

This course exposes students to many aspects of the new construction and revitalization industry including site layout, carpentry, electrical, masonry, plumbing, tile setting, HVAC, painting and other construction skill areas. Both male and female students will enjoy the hands-on training experience in remodeling and/or new construction of a home that this course has to offer. Classroom training is also an important component of the class. Students interested in this course should understand basic concepts of measurement and mathematics and be able to work indoors or outdoors.

Students may take this course for two years.

This program is a partnership with Kalamazoo Valley Habitat for Humanity.

- CC, WL, SC, MA, VPA

Electrical Technology

Students in this course are dually enrolled and have the opportunity to earn college credit through Kalamazoo Valley Community College. This course provides instruction and training in the areas of applied electricity, residential wiring and code, and safety and first aid. Students will learn basic electrical theory and practices as well as wiring theory and gain lab experience. Upon successful completion of this course, the student should have the knowledge and ability to wire a residence according to the national electrical code. Throughout the program, students gain valuable practical experience working on residential, commercial and industrial wiring. Students interested in this class should enjoy working with mathematical formulas and algebraic concepts.

Dual enrollment at Kalamazoo Valley Community College - 7 College Credits

- CC, WL, SC, MA

Electronics & Robotics

This is an excellent course for students to use their creativity to solve problems and figure out how things work. A hands-on approach will introduce students to concepts and skills in current and emerging technical fields. The course features high-tech equipment and programs in a student-centered classroom. Projects challenge and engage students' minds to provide a strong foundation that could launch them into engineering or other high-tech careers such as alternative energies, robotics and automated systems, optics, biomedical, and nanotechnology

Students may take this course for two years.

- CC, WL, SC, MA, VPA, AL

Engineering in Wood Technology

Engineering in Wood Technology is a course that covers the rudimentary techniques of woodworking and cabinetmaking in relation to industry. This class provides true differentiated training for the real-world of manufacturing and industry, with student directed studies ranging from areas of programming and operation of CNCs, laser engraving and even 3D printing technologies to rustic woodworking using traditional tools such as Japanese pull saws or hand lathes. This course offers higher-level training in management and student leadership via a complex student-run student-led class structure. Students after leaving this class present skills applicable in all walks of life and will be career or college ready.

- WL, SC, MA, VPA

Heating, Ventilation & Air Conditioning

Students in this course are dually enrolled and have the opportunity to earn KVCC college credit in addition to high school credit. This course provides instruction and training in the areas of heating, ventilation, air conditioning and refrigeration as well as the design, installation, and servicing of HVAC/R systems. HVAC prepares students for a technical career upon completion.

Dual Enrollment at Kalamazoo Valley Community College - 12 College Credits

- CC, WL, SC, MA

Mechatronics

Electronics and mechanical components work together to make up complex systems from a car to a robot to automation lines. Mechatronics students learn to design, build, program, and troubleshoot electro-mechanical systems using the principles of mechanics, electronics and computer science. Students learn about electronics, robotics, equipment controls and sensors, programming, hydraulics/pneumatics, CAD/CAM, basic machining, and CNC.

- CC, WL, SC, MA, VPA

Welding

Students in this course are dually enrolled and have the opportunity to earn college credit from Kalamazoo Valley Community College in addition to high school credit. Students must follow all requirements of a dual-enrolled program. Students learn to weld with the most advanced welding processes used today. Content includes the basic safe operation of the ox-fuel welding, cutting and brazing systems. Students also receive training in the basic electric arc welding processes, SMAW (arc), GMAW (mig), and equipment setup, selection and operation. Blueprint reading for welders, welding symbols and basic welder's trade math are included to prepare the student for employment in the welding trade.

Dual Enrollment at Kalamazoo Valley Community College - 6 College Credits

- CC, WL, SC, MA, VPA, EMC

HEALTH SCIENCES PATHWAY

Certified Nursing Assistant (CNA)

Learn to care for patients in a caring and compassionate manner. Students first learn patient care techniques in a simulated lab environment, followed by a clinical rotation at a long-term care facility. This program is designed to introduce students to the fundamentals of health care, core skills, and health care professional behavior. Upon completion of the program, students are offered study and practice sessions to prepare for the state of Michigan competency exam. Once prepared, students will take the Michigan Nurse Aide Competency Evaluation which includes skills and knowledge tests.

- WL, SC

Dental Assisting

Students choosing this program will be dually enrolled through Kalamazoo Valley Community College (KVCC) and can earn both high school and college credit for the course. Students will need to meet the college's entrance expectations, as well as having their schedule open to extended class times and the college's calendar. Enrollment in the CTE Dental Assisting program begins a preferred relationship with the KVCC Dental Hygiene program that could later impact a student's acceptance into the KVCC program. The course prepares students to become dental assistants. Students will learn the fundamental knowledge and skills of dental anatomy, physiology, terminology, dental materials, chairside assisting, sterilization, radiology, laboratory and clinical procedures. Second semester incorporates an internship held in KVCC's Dental clinic and local dental offices. Upon successful completion of this course, students will be qualified for certification from the American Heart Association in Safety and First Aid, and CPR. In addition, students may also be eligible for radiography certification.

Dual enrollment at Kalamazoo Valley Community College - 10 college credits

- CC, WL, SC

Emergency Medical Technician

Students in this class are dually enrolled and have the opportunity to earn both high school and college credit. Students will need to meet the college's entrance expectations, as well as having their schedule open to extended class times and the college's calendar. EMT consists of a sequence of KVCC courses. Each course is a pre-requisite to the next course. Basic EMT provides students with instruction in basic emergency medical technology. The EMT course is a study of the topics and skills necessary to make lifesaving interventions and stabilize patients during transport to a medical facility. The course involves lecture and practical skills labs and introduces the clinical component of EMT education, the minimum level of training required for work on a transporting ambulance. Second semester students will complete clinical hours with a local ambulance service and healthcare agencies. Upon successful completion of this course, students are eligible for Michigan Department of Health and Human Services licensing as a Medical First Responder (MFR). In addition, students may also be eligible to sit for the national Registry Basic EMT licensing examination.

Dual enrollment at Kalamazoo Valley Community College - 10 college credits

- CC, WL, SC, EMC

Health Science

This course introduces the student to health care, with an emphasis on core skills and knowledge applicable to many professional health care disciplines. The curriculum integrates anatomy and physiology, medical terminology, and basic care skills through practical applications found in the health care setting. Students should enjoy working at a fast pace and be considering a healthcare career requiring a minimum of four years of post-secondary education.

Potential for Dual enrollment at Kalamazoo Valley Community College

- CC, WL, SC

Professional Health Science

Professional Health Science provides advanced training and experience in the healthcare field. The course includes internship experiences and enrollment in advanced skill mini courses such as phlebotomy, electrocardiography, patient care assistance, and exercise science/sports medicine. Students successfully completing CPR/AED and medical terminology instruction may receive articulated college credit. This second-year course represents the most advanced level of study in the health science program. Students applying to the program must meet specific achievement and performance prerequisites within either Health Science or Fundamentals of Health Science before gaining admission.

Potential for Dual enrollment at Kalamazoo Valley Community College

- CC, WL, SC

HUMAN SERVICES PATHWAY

Cosmetology/Barbering

This is a state-certified program of instruction designed to prepare students to become a licensed professional cosmetologist or barber. Michigan's cosmetology course includes 1,500 clock hours (barbering includes 2,000) of mandatory attendance. In order to complete this requirement, students must be committed to attending the program during an extended day all through their junior and senior years and the summer that falls between. Students not meeting this requirement during their CTE enrollment will need to complete the program at their own expense. Upon successful completion of this prerequisite, students will be prepared to take their Michigan State Board Exam.

Cosmetology/Barbering Licensure available

- CC, WL, SC, VPA

Law Enforcement I

Law Enforcement I introduces students to the many different careers available within the field. The program emphasizes the knowledge, skills, and ethics needed to be a successful police/fire academy recruit. Areas of study include criminal law, patrol procedures, fire ground operations, first aid/CPR/AED certifications, defensive tactics, crime scene investigation, and oral & written communication skills. The program follows MCOLES* and police academy standards, as well as current college curriculum.

Partnered with Kalamazoo Department of Public Safety.

- CC, WL, SC

Law Enforcement II

Law Enforcement II deepens students' understanding of criminal procedures and improves their written and oral communication skills. Eligible students will intern with local public safety agencies during second semester, applying the knowledge, skills, and ethics learned to real world situations.

Partnered with Kalamazoo Department of Public Safety.

- CC, WL, SC

Teacher Academy

Discover the rewards and joys of teaching! The Teacher Academy is designed to introduce students to various careers in the Education and Training Career Cluster. Students will gain yearlong hands-on experience working in a pre- kindergarten, elementary or middle school classroom four days per week. In addition, students will learn the necessary background knowledge of child development and principles of effective teaching through a hybrid program of learning which includes weekly online learning, class meetings, extended research projects, field trips and interviews. Students work under the joint direction of an CTE instructor and a master teacher in their area of interest as they learn to plan and direct instruction for individuals and groups, develop materials, assist with record keeping and complete other responsibilities of teachers and other school personnel.

Students may take this course for one or two years

- CC, WL, SC, VPA

NATURAL/AGRI-SCIENCE PATHWAY

Agriscience: Animals and Plants

Interested in growing plants? Want to know about and do more with animals? Interested in natural resources? This is a year-long, hands-on course that allows you to do it all. One semester is spent learning about plants: how to grow them, how they work, and how they feed the world. Students learn about plants and their relationship and importance to people. Students also study plant classification, cell structure, plant parts and functions, plant processes, plant nutrition and soils. The other semester is based upon animals--all kinds of animals. Students learn about basic biology, behavior, care and handling of a broad range of species. Students study domestic livestock production, animal health and nutrition, animal genetics and reproduction, and animal anatomy and physiology. Students study the selection, breeding, feeding, care, and marketing of animals, as well as the role of pets and other animals and their interactions with humans.

- CC, WL, SC

Conservation Biology

This program introduces students to the exciting careers in Natural Resource Conservation and Wildlife Biology. This laboratory/field-based course involves hands-on learning of ecological science, animal and plant studies (i.e. behavior, identification), job shadowing and field trips. This course will have special emphasis on skills and technology used in this profession. Students will have direct contact with natural resource conservationists and wildlife biologists in this field of study. They will attain the skills necessary to obtain employment in various careers in Natural Resource Conservation and Wildlife Biology.

- CC, WL, SC

Horticulture

Do you like to grow plants? Want to try your hand at it? This year-long class allows students to explore plant biology and classification, plant nutrition, soil quality, water quality and many other plant-related questions. Projects include landscape design, experimenting with soil types, pest control, and managing all facets of an entrepreneurial spring plant sale to cap off the year. Students will discuss the horticulture and landscaping industry (greenhouse, ornamental horticulture, hydroponics, etc.) and its importance to our economy. Students work in the greenhouse, school garden, and local food forest, and grow plants for themselves and for sale.

- CC, WL, SC

Veterinary Science

During the first semester, students will focus on anatomy, medical terminology, hematology, animal breeds, animal health and care, restraint and handling, veterinary lab procedures and parasitology. The second semester will combine continued classroom instruction on specific skills with field work in area veterinary clinics. This program will introduce students to and help prepare students for various jobs in the field of veterinary medicine.

- CC, WL, SC

WORK-BASED LEARNING

CTE Work-Based Learning

An experience for 11th and 12th grade students who have successfully completed a trimester or semester of a CTE course. Students can earn credit and receive a grade while they learn through a paid, related work experience.

Participating students shall:

- Be employed in a coordinator-approved work setting,
- Work at least 10-15 hours per week in class-related, legal employment,
- Receive release time from school, school credit, on-the-job training, and pay, and
- Be evaluated every grading period by his/her employer.

Prerequisite: CTE related class. Successful completion of one trimester or semester of an CTE course and continued concurrent enrollment in CTE.

NOTE: Students are not to be officially enrolled in CTE Work-Based Learning until the Work-Based Learning Coordinator has approved their application and job site. Additionally, employment is subject to forces outside of the control of the school district, therefore, employment cannot be guaranteed. For these reasons, it is recommended that students maintain a full schedule of classes until all conditions are met.

Credit Fulfillment Key

Career and Technical Education courses may fulfill different graduation requirements. Below each course there are letters that indicate how the course may fulfill high school graduation requirements and potentially grant college credit. The following is a key to the abbreviations listed above.

- CC=Potential for college credit at select institutions, see www.kresa.org/cte under Courses for more details
- WL=2nd world language credit
- SC=3rd science credit
- MA=4th year math requirement
- VPA=Visual, performance, and applied art credit
- EMC=Eligible for Early Middle College
- AL=Eligible for algebra II credit

Course Plan

This plan is offered as a guide. Each student will have an individualized Educational Development Plan that will be created and amended as the student progresses through high school.

Students must take a full 7 courses per semester. Students must be full time students regardless of how many credits they have earned.

Students must earn a total of at least 24 credits to be eligible to graduate with a high school diploma.

9th Grade English 9 Biology U.S. History Pre-Employment Health/PE Algebra I or Algebra A Elective	11th Grade English 11 Government/Economics Algebra II or Algebra B 3 rd Science Electives x 3
10th Grade English 10 Chemistry or Physics World History BMA Geometry Spanish Elective	12th Grade English 12 Algebra II or 4 th Year Math Electives x 5