

12. English 12 (Crs# E204)

Course Length: 2 Semesters

Grade Level: 12

This course consists of a survey of World Literature. The approach is through thematically moving students from analysis to synthesis in the context of multiple cultures and moments in world history. Students gain extensive experience and access to college writing styles, techniques, and processes. A thematic approach to literature provides many opportunities to raise reading and writing levels to college standards. In addition, students have the opportunity to learn study, research, and test-taking skills for future college level classes.

13. AP English Literature and Composition (Crs# E304)

Course Length: 2 Semesters

Grade Level: 12

This course is intended to prepare students for the Advanced Placement Literature and Composition Exam, utilizing curriculum from the College Board. Students who enroll in this rigorous college-level course engage in an intensive study of various great works of world literature. In the summer prior to entering the course, students are expected to read two teacher-selected works and be prepared to take objective tests and write essays to demonstrate their ability to independently comprehend and analyze difficult literature. During the course of the year, students write a research paper and many essays that incorporate the literature and their prior knowledge into well-crafted arguments. By meeting the rigor of this class, students should be prepared for intermediate or advanced college courses. Successful completion of AP Language and Composition.

14. Yearbook (Crs# E212)

Course Length: 2-6 Semesters **Grade Level: 10-12**

This course is an English elective, in which students study multiple journalism skills and graphic design layouts. Students learn basic photography, caption and story writing, computer desktop publishing using PageMaker, as well as budgeting and marketing skills. The experience gained from these areas is used in the design and creation of the school yearbook. Students interested in this course should have superior skills in written and verbal communications, photography and/or art. Students are expected to work on projects beyond class time. All students are expected to sell a minimum amount of advertising.

Prerequisite: Permission of the teacher.

15. Michigan Virtual course descriptions are available at

[HTTPS://MICHIGANVIRTUAL.ORG/STUDENTS](https://michiganvirtual.org/students)

B. FINE/PERFORMANCE ARTS

Traditional Classroom Courses

Introduction to Art

Advanced Studio Art

Ceramics and Sculpture

Drawing and Painting

Band

Concert Choir

Ladies' Chorus

Women's Ensemble

Master Singers' Chorale

MUSE

1. Introduction to Art (Crs# P201)

Course Length: 1 Semester

Grade Level: 9-12

This course is designed to meet the needs of all students. They will become familiar with the elements of art and principles of design, basic art history, as well as a variety of art forms and techniques. Willingness to get involved in the creative process is a more important requirement than the student's talent or previous art experience.

2. Advanced Art Studio (Crs# P200)

Course Length: 1 Semester

Grade Level: 10-12

In this course, advanced students will focus on portfolio development as they continue to develop skills in producing high quality works of art. Emphasis is placed on creating more complex visual statements with a wide range of materials and processes explored. *Prerequisites:* Introduction to Art AND Drawing & Painting or Ceramics & Sculpture AND teacher approval.

3. Ceramics and Sculpture (Crs# P2)

Course Length: 1 Semester

Grade Level: 9-12

This course is designed to allow students to expand on previous art experience. They will explore a variety of three-dimensional media intended to further develop their individual skills and creativity.

4. Drawing and Painting (Crs# P2)

Course Length: 1 Semester

Grade Level: 9-12

This course is designed to allow students to expand on previous art experience. They will explore a variety of two-dimensional media intended to further develop their individual skills and creativity.

5. Band (Crs# P205-9/10, P206-11/12)

Course Length: 2-8 Semesters Grade Level: 9-12

This full-year course provides students a wide variety of musical experiences. The first nine weeks are dedicated to marching band with the band performing at all home football games and occasionally away games. In addition, the band competes throughout the state on Saturdays during the fall season and participates in the MSBOA Marching Band Festival. Following the marching season, the band is split into two bands by grade level (9-10th grade Concert Band and 11-12th grade Symphonic Band). These classes perform concerts throughout the year and participate in District and, when appropriate, State MSBOA Concert Band Festival. The band takes a major trip every four years, with the last trip being to Orlando, Florida. *Prerequisite:* Successful completion of Eighth Grade Band or successful audition with the band directors for all new or transfer students entering Mattawan High School.

6. Concert Choir (Crs# P208)

Course Length: 2-4 Semesters Grade Level: 9-12

This is an audition-only choir of 30-40 voices. This course includes musical training in notation, sight singing and vocal pedagogy. The repertoire includes standard choral literature, swing choir and limited choreography. The ensemble performs in numerous school concerts and community events, and participates in competitions. Individuals participate in district and state solo competitions and in the annual musical.

7. Ladies Chorus (Crs# P207)

Course Length: 2-4 Semesters Grade Level: 9-12

This course includes musical training in notation, sight singing and vocal pedagogy. The choir performs at numerous school functions and choral competitions/workshops throughout the year. Individuals participate in district and state solo competition and the annual musical.

8. Women's Ensemble (Crs# P209)

Course Length: 2-4 Semesters Grade Level: 10-12

This is an audition-only, upper level choir of 18-24 voices. Juniors and seniors are given admission priority.

The course includes musical training in notation, sight singing and vocal pedagogy. The repertoire includes standard choral literature, vocal jazz, swing choir song and dance. The ensemble performs regularly for school and community functions and participates in numerous musical competitions. Individuals participate in district and state solo competitions and in the annual musical.

9. Master Singers' Chorale (Crs# P210)

Course Length: 2-4 Semesters Grade Level: 10-12

This is an audition-only, upper level choir of 18-24 voices. Juniors and seniors are given admission priority. This course includes musical training in notation, sight singing and vocal pedagogy. The repertoire includes standard choral literature, vocal jazz, swing choir song and dance.

The ensemble performs regularly for school and community functions and participates in numerous musical competitions. Performance is a focus of this class, with more than 20 performances annually. Individuals participate in district and state solo competitions and in the annual musical.

10. MUSE (Crs# P209)

Course Length: 2-6 Semesters Grade Level: 10-12

This is an audition-only, upper level choir of less than 20 voices. Students in this class are expected to already possess excellent music literacy and vocal music ability. This course includes musical training in vocal pedagogy. The repertoire focuses on A Cappella singing and includes standard choral literature, vocal jazz, swing choir songs, and contemporary A Cappella literature. The ensemble performs regularly for school and community functions and participates in numerous musical competitions. Performance is a focus of this class, with more than 20 performances annually. Individuals participate in district, state and regional solo competitions. Students in this class are expected to be enrolled in an additional vocal music class, usually Master Singers or Women's Ensemble.

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C. WORLD LANGUAGES

Traditional Classroom

Courses

Spanish I
Spanish II
Honors Spanish II
Honors Spanish III
Honors Spanish IV
AP Spanish

1. Spanish I (Crs# F211)

Course Length: 2 Semesters

Grade Level: 9-12

This introductory language course is designed to develop students' ability to speak, write, read and understand basic Spanish. Students learn elements of Latin American and Spanish culture through the use of selected readings and projects. Students are expected to use their verbal skills in class.

2. Spanish II (Crs# F212)

Course Length: 2 Semesters

Grade Level: 9-12

This course expands students' verbal and written skills in Spanish. In this, students further develop their ability to read and speak Spanish through the study of language, history, and culture. Students use their Spanish in verbal and written assignments. *Prerequisite:* Successful completion of Spanish I.

3. Honors Spanish II (Crs# F312)

Course Length: 2 Semesters

Grade Level: 9-12

This is an intermediate level course for advanced students who desire a more rigorous learning experience and intend to complete four years of Spanish including AP Spanish. As an honors form of Spanish II, students are expected to complete work at a quicker pace and higher degree of quality than students in Spanish II. This course provides students an opportunity to build a solid foundation of the Spanish language, conversational skills, and communication strategies that will be refined, applied and extended as students engage in more complex ideas, texts, and tasks in high school. This course expands students' verbal and written skills in Spanish. In this course, students further develop their ability to read and speak Spanish through the study of language, history, and culture. Students are expected to use their Spanish language skills in class. *Prerequisite:* Successful completion of Spanish I.

4. Honors Spanish III (Crs# F213)

Course Length: 2 Semesters

Grade Level: 9-12

This advanced language course expands students' abilities to communicate in Spanish through the continued study of language, history, literature, and culture of the Hispanic world. Emphasis is placed on the learning of language and culture from the grammatical and the literary points of view. Taught in the target language, students are required to communicate in that language. *Prerequisite:* Successful completion of Spanish II.

5. Honors Spanish IV (Crs# F2)

Course Length: 2 Semesters

Grade Level: 11-12

Students that enroll in this class should have excelled in all previous Spanish courses. This course is designed for students who desire greater fluency and firmer knowledge of the Spanish language. Students in this course improve oral fluency and listening comprehension skills as well as refine writing skills and grammatical structures. Taught in the target language, students are required to communicate in that language. In addition, students are expected to read literature, write compositions, and speak in the target language. *Prerequisite:* Successful completion of Honors Spanish III.

6. AP Spanish (Crs# F2)

Course Length: 2 Semesters

Grade Level: 12

This course is intended to prepare students for the Advanced Placement Spanish exam, utilizing the curriculum from the College Board. Students enrolled in this class should have excelled in all previous Spanish courses. This course is designed for students who desire greater fluency and firmer knowledge of the Spanish language. Students in this course improve oral fluency and listening comprehension skills as well as refine writing skills and grammatical structures. Taught in the target language, students are required to communicate in that language. In addition, students are expected to read literature, write compositions, and speak in the target language. *Prerequisite:* Successful completion of Honors Spanish IV.

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D. LIFE AND WELLNESS COURSES.

Traditional Classroom Courses

Intro to Health & Wellness
Child Development
Fitness & Sports
Power Training
Food & Fitness
Athletic Training
Advanced Athletic Training
PALS I & II
Peer to Peer
Senior Seminar

1. Introduction to Health and Wellness (Crs# L200)

Course Length: 1 Semester

Grade Level: 9-12

This survey course is designed and highly recommended for those interested in pursuing a career in the medical field. It introduces students to a wide variety of health and wellness issues. Topics include: Community Health - selecting health care and services, being an alert health consumer, strategies for dealing with consumer problems, and public health agencies and their roles; Mental Health - stress management, coping with loss/death, mental health disorders, and suicide prevention; Body Systems - integumentary, muscular, skeletal, nervous, endocrine, circulatory, respiratory, digestive, urinary, and reproductive systems.

Other subjects include sexually transmitted infections and diseases, family planning, and substance abuse. Various guest speakers and hands-on projects are used to enhance the student's learning experiences.

2. Child Development (Crs# L203)

Course Length: 1 Semester

Grade Level: 9-12

This course is designed to prepare students for the responsibilities of dealing with children in their careers, as parents and as members of society. Emphasis is placed on the physical, emotional, intellectual, and social development of children from prenatal to age six. The effects on the family due to a child's development, special needs, and developmental differences are explored. A variety of hands-on experiences with infants, toddlers, pre-school and elementary children are utilized to enhance and provide practical application of learned child development principles.

3. Fitness and Sports (Crs# L210)

Course Length: 1 Semester

Grade Level: 9-12

This course focuses on developing health-related fitness concepts (cardiovascular endurance, flexibility, muscular strength, and nutrition) and sport skill proficiency through participation in various team and individual activities. These activities may include, but not limited to, eclipse ball, ultimate frisbee, tennis, bocce ball, team handball, and speedball. This course meets the Michigan Merit Curriculum graduation requirements for physical education.

4. Power Training (Crs# L211)

Course Length: 1 Semester

Grade Level: 9-12

This advanced course is designed for students who are not participating on an athletic team for the majority of the semester in which this course is taken. The course focuses on the factors and methods of training the human body for the development of strength, power, speed, agility, quickness, and explosiveness. Through a daily training regimen using the Bigger Faster Stronger program, students will have the opportunity to improve upon their own proficiencies in these areas, and also apply what they have learned to future training or activities they may undertake. Grades are based on daily participation and effort, evidence of improvement over interval physical tests, and the completion of all assignments. This course does **not** meet the Michigan Merit Curriculum graduation requirement for physical education.

5. Food and Fitness (Crs# L202)

Course Length: 1 Semester

Grade Level: 9-12

This course is designed for students interested in learning about healthy food and lifestyle choices. Topics studied in this course include: basic principles of nutrition, food preparation techniques, economical and healthy eating and the body's metabolism. This class features a variety of hands-on projects, demonstrations, food preparation labs, and experiments.

6. Athletic Training (Crs# L206)

Course Length: 1 Semester

Grade Level: 11-12

This course is designed for students who are interested in learning more about the athletic training profession. Students learn athletic training terminology, basic human anatomy, a variety of taping and wrapping techniques, and an understanding of basic care and prevention of athletic injuries. Students gain practical experience in the athletic training room and through field observations.

Grades are based on assignments, written exams, practical exams, and hands-on labs. This class requires a minimum of 10 hours of outside fieldwork.

Prerequisite: Permission of the teacher.

7. Advanced Athletic Training (Crs# L207)

Course Length: 1 Semester

Grade Level: 11-12

This course provides students an opportunity to further their study of athletic training by further developing students' understanding of human anatomy, taping and wrapping techniques, and athletic injuries. In addition, students will learn about therapeutic modalities and basic rehabilitation principles that will prepare them for health-related college level coursework. This course requires a minimum of 10 hours of outside fieldwork. Grades will be based on assignments, professional journal writings/responses, written exams, practical exams, and fieldwork hours. Prerequisite: Introduction to Athletic Training.

8. PALS I (Crs# L220)

Course Length: 1 Semester

Grade Level: 10-12

This course is designed to teach students to become peer leaders, facilitators, and helpers. Students receive training in a wide variety of areas, including communication and listening skills, problem-solving techniques, decision-making options, mediation, and interpersonal relationship skills. They also explore social issues that many students of their age are facing today. Prerequisite: Application process.

9. PALS II (Crs# L221)

Course Length: 1 Semester

Grade Level: 10-12

This course provides students an opportunity to continue using the skills and knowledge that they learned during their initial PALS training. This course allows students to receive more hands-on experience, continue to increase their knowledge about social issues, expand their facilitating skills, and fine-tune their communication abilities. Prerequisite: Successful completion of PALS I.

10. Peer to Peer (Crs# P2P300)

Course Length: 1 Semester

Grade Level: 10-12

The purpose of Peer to Peer (P2P) is to support inclusion through the "linking" of a general education student with a special education student. The LINK student (general education) is trained as a peer mentor who will accompany a student with special needs to one of his/her general or special education classes. The LINK student will model appropriate social skills and behavior in the academic setting for the student with special needs in an effort to successfully support the student with special needs. Training requires time outside of the school schedule before the semester begins with ongoing support provided throughout the semester. P2P will involve MDE approved ASD (Autism Spectrum Disorder) modules. Links will be required to attend training and conferencing over some lunch hours, as well as attend some after school activities. Other responsibilities include, but are not limited to, weekly writing assignments, exceptional attendance, using good communication skills, reviewing and reflecting on current issues and a final project. This is a graded class. This class may be taken more than once with program director approval. Prerequisite: Must complete an application and receive approval of program directors.

11. **Senior Seminar (Crs#L204)**

Course Length: 1 Semester

Grade Level: 12

This capstone course is devoted to preparing students for life decisions. The four components of this course are financial, personal, relationships and the Senior Project. This course presents factual information on a broad number of topics that are necessary for preparing students for living on their own. The financial resources unit focuses on banking information such as opening a checking account, credit and credit cards, loans, taxes, insurance, consumer fraud, the cost of moving out, and the development of a personal budget. The personal resource unit emphasizes personality development, communication and problem solving. The relationship resource unit addresses dating, marriage, and the responsibilities that go along with married life. The senior project entails an out of school experience with a mentor and a project presentation to the senior board. This is a hands-on course where students get the opportunity to learn by doing. Many speakers also enhance the course by providing students the best tools in preparing for life after high school.

1. Essentials of Algebra (Crs# M101)

Course Length: 2 Semesters

Grade Level: 9-12

This course is designed to develop a student's math literacy. Areas of emphasis include: basic operational skills, such as addition, subtraction, multiplication, and division of whole numbers, fractions, decimals and percents and beginning algebra. In addition, students solve word problems, and work with charts and graphs.

2. Algebra I (Crs# M200)

Course Length: 2 Semesters

Grade Level: 9-12

This course is designed to provide instruction in traditional algebraic concepts, as well as statistics, probability, geometry, appropriate calculator use, and computers. The instructional approach is highly integrative. Applications, statistics, and geometry are employed to develop and exemplify the algebra of linear equations and inequalities. Models for arithmetic operations are immediately extended to expressions and equations involving variables. Graphing of lines is heavily emphasized. Probability concepts are studied along with algebraic fractions. Curvilinear functions represented by exponential growth and by parabolas originate from the study of contemporary applications in science and personal finance. Systems, polynomials, and square roots are linked to the study of geometry and motivated by applications.

3. Informal Geometry (Crs# M201)

Course Length: 2 Semesters

Grade Level: 10-12

This course emphasizes geometric vocabulary, constructions and drawings. Theory is introduced, although the emphasis of the course is on practical application. Many algebraic concepts are interwoven within geometric principles. The first semester focuses on the different types of geometry, logic, and congruence developed through transformations, and symmetry. Measurement ideas, including the ideas of area and volume so important for both consumer applications and later mathematics, are studied in the second semester. The study of two-dimensional and three-dimensional figures is examined along with figure similarity. Developing critical thinking skills is a major focus. Prerequisite: Successful completion of Algebra I.

4. Geometry (Crs# M202)

Course Length: 2 Semesters

Grade Level: 9-12

This course develops connections between algebraic and geometric reasoning through a study of synthetic and coordinate geometry. To teach students how to write proofs and construct other mathematical arguments, the course lays a foundation of prerequisite understanding step by step. The first semester focuses on formal definitions of previously developed concepts and works with these along with theorems and postulates to construct a more formal framework that supports the forming and testing of conjectures. Distance-preserving transformations are also studied at this time.

The second semester further develops spatial reasoning through the study of two and three-dimensional figures, shape-preserving transformations, the study of triangles including congruence and similarity, and the study of right-triangle trigonometry. Throughout this course, students will experience geometric thinking and reasoning techniques as accessible and powerful tools that can be used to explore the concept of mathematical proofs as well as to model and

solve real-world problems. Prerequisite: It is recommended that a student obtain a “C” or better in Algebra I.

5. Algebra 2A (Crs# M206)

Course Length: 2 Semesters

Grade Level: 11-12

This course emphasizes applications of the mathematical skills and concepts required by the Michigan Mathematics Standards and Benchmarks. It is designed to help students develop quantitative reasoning, critical thinking, and problem-solving skills through contextual examples. The goal of Algebra II A is to build upon the concepts taught in Algebra I and Geometry while adding new concepts to the students' understanding of math. Algebra II A continues the study of functions by furthering the list of families of functions to be modeled, graphed, and analyzed. Using these functions to model real-world situations is a major theme of the course. The use of technology through a graphing calculator will be stressed (specifically the TI Nspire) whenever appropriate to develop concepts and to solve problems. Prerequisite: Credit for Algebra I and Geometry/Informal Geometry OR taking one of these courses concurrently with this course.

6. Algebra 2B (Crs# M207)

Course Length: 2 Semesters

Grade Level: 11-12

This course emphasizes applications of the mathematical skills and concepts required by the Michigan Mathematics Standards and Benchmarks. It is designed to help students develop quantitative reasoning, critical thinking, and problem-solving skills through contextual examples. The goal of Algebra II B is to build upon the concepts taught in Algebra II A while adding new concepts to the students' understanding of math. Algebra II B continues the study of families of functions by increasing the variety of real-world applications to be studied in order to complete the students' experience with Algebra II concepts outlined in the Michigan Merit Curriculum. Graphing will be emphasized to take advantage of the geometric intuition that students possess. The use of technology through a graphing calculator will be stressed (specifically the TI Nspire) whenever appropriate to develop concepts and to solve problems. Prerequisite: Credit in Algebra II A or 1st semester of Algebra II.

7. Algebra II (Crs# M203)

Course Length: 2 Semesters

Grade Level: 9-12

This course emphasizes the development of facilities with algebraic forms, linear and quadratic expressions, powers and roots, and functions based on these concepts. Logarithmic, trigonometric, polynomial, and other special functions are studied.

The use of these forms and functions to model work-based situations is a major theme. Geometric ideas are utilized throughout the text. Measurement relationships are analyzed from an algebraic viewpoint. Transformations are employed to analyze graphs. In general, graphing is emphasized to take advantage of the geometric intuition that students possess. Notions of a mathematical system found in geometry (postulates, theorems, etc.) are utilized. Many connections with computers are made in this course. Graphing calculators are utilized whenever appropriate to develop concepts and to solve problems. Discrete and continuous domains and work with algorithms are included because of their importance in a computer age. Prerequisite: It is recommended that a student obtain a “C” or better in Geometry, “B” or better in Informal Geometry, or receive a teacher recommendation.

8. Honors Algebra II (Crs# M300)

Course Length: 2 Semesters

Grade Level: 9-12

This course is a very rigorous study of Algebra II concepts. It is intended for students planning to take Honors Trigonometry & Precalculus and AP Calculus prior to graduation. The course focuses on developing the student's ability to write, use, and apply algebraic functions in varied contexts, emphasizing more conceptually difficult applications, with less emphasis on review of previously learned algebraic topics. Students will also learn about appropriate applications of computerized algebra (CAS) systems and dynamic geometry systems (DGS). Linear, quadratic, power, exponential, logarithmic, trigonometric, polynomial functions are all studied in depth, as well as quadratic relations (conics), probability, sequences and series. Geometric concepts are also incorporated to reinforce understanding of previously learned topics and to enhance the student's ability to make mathematical connections. Computer programs are developed and/or utilized whenever appropriate to reinforce concepts and to solve problems. Connections to real world applications in business, science, engineering, and the social sciences are emphasized throughout the course. Prerequisite: "B" or better in Geometry and Algebra I, and teacher recommendation.

9. Functions, Statistics & Trigonometry (FST) (Crs# M204)

Course Length: 2 Semesters

Grade Level: 9-12

This course provides instruction in data and function analysis, function models, exponential and logarithmic functions, trigonometric functions, inverse functions, probability, sequences, series, polynomials, quadratic relations, and graphing. Upon entering this course, students should have a strong background in solving systems of equations. Students should be proficient at graph analysis, algebra, and geometry. Students need a graphics calculator to analyze and simulate experiments. This visual information allows students the opportunity to explore concepts with more depth. By completing this course with a grade of "B" or better, students will have a strong background for a Pre-calculus or a first-year Calculus course. Prerequisite: "C" or better in Algebra II or teacher recommendation.

10. Honors Trigonometry & Pre Calculus (HTP) (Crs# M301)

Course Length: 2 Semesters

Grade Level: 9-12

This advanced and accelerated course is a rigorous study of mathematical concepts for students intending to take AP Calculus. Students should excel in the areas of graphical analysis, algebra, geometry, and graphics calculator usage prior to registering for this course. Students will develop, describe, investigate, and apply general function properties and use them to develop polynomial functions, bivariate models, exponential and logarithmic functions, trigonometric and circular functions, recursive relationships, sequences and series, parametric equations, conic sections, polar equations, and vector representations. Students examine and apply all of these concepts to a variety of mathematical and real-world contexts. Students need a sophisticated graphics calculator to analyze and simulate relationships. This visual information allows students the opportunity to explore concepts with more depth and meaning. By completing this course with a grade of "B" or better, students will have an excellent background for a first-year college Calculus course. Prerequisite: "B" or better in Algebra II and teacher recommendation.

11. AP Calculus AB (Crs# M302)

Course Length: 2 Semesters

Grade Level: 9-12

This course is intended to prepare students for the Advanced Placement Calculus AB exam, utilizing the curriculum from the College Board. Students intending to enroll in this class should have excelled in all previous mathematics courses. Topics for this rigorous college-level course include: functions, graphs, limits, differentiation, integration, applications, logarithmic and exponential functions, trigonometric functions, slope fields, separable integrable functions, continuity, and integration techniques. This 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 the students and instructor to confirm written work, to implement experimentation, and to assist in interpreting results. By successfully completing this course with a "B" or better, students should be prepared for intermediate and advanced college courses since the demands of this course are equivalent to those made by full-year introductory college calculus sequence courses. Prerequisite: "C" or better in FST or teacher recommendation.

12. AP Statistics (Crs# M303)

Course Length: 2 Semesters

Grade Level: 9-12

This course is intended to prepare students for the Advanced Placement Statistics exam, utilizing the curriculum from the College Board. This course introduces students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. The framework for this course includes four broad conceptual themes: exploring data through graphical and numerical techniques, planning a study for the collection of valid data, anticipating patterns through probability and simulations, and statistical inference as a guide to the selection of appropriate models.

Technology is used regularly by the students and instructor to graphically display data, fit mathematical models to data, and facilitate the simulation approach to probability. Writing is also an integral part of this course, as students are required to analyze data and justify their conclusions. Introductory statistics courses such as this are often required for students with majors in social sciences, natural sciences, business, engineering, and mathematics. Prerequisite: "B" or better in Algebra II.

13. AP Calculus BC (Crs# M304)

Course Length: 2 Semesters

Grade Level: 9-12

Upon entering this course, students should have excelled in all previous mathematics courses and earned at least an A or B in AP Calculus AB. Students should also excel in the areas of advanced algebra, geometry and graphics calculator usage. The Advanced Placement Calculus BC curriculum from the College Board is followed in this course. Topics included are a quick review from material covered in AP Calculus AB such as functions, graphs, limits, differentiation, integration, applications, logarithmic and exponential functions, trigonometric functions, slope fields, separable integrable functions, continuity, and integration techniques. This will be extended by a study of parametric functions, polar functions, vector functions, indefinite integrals, sequences and series. This 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 the students and the instructor to reinforce the relationships among the multiple representations of functions, to confirm written work, to implement experimentation, and to assist in

interpreting results. Students will need a sophisticated graphics calculator to analyze and simulate experiments. Graphics calculators will be provided for in-class use. Students completing this course with a “B” or better will have an excellent background to succeed in passing the AP Calculus BC exam and/or to succeed in a college calculus sequence. *Prerequisite:* “B” or better in AP Calculus AB.

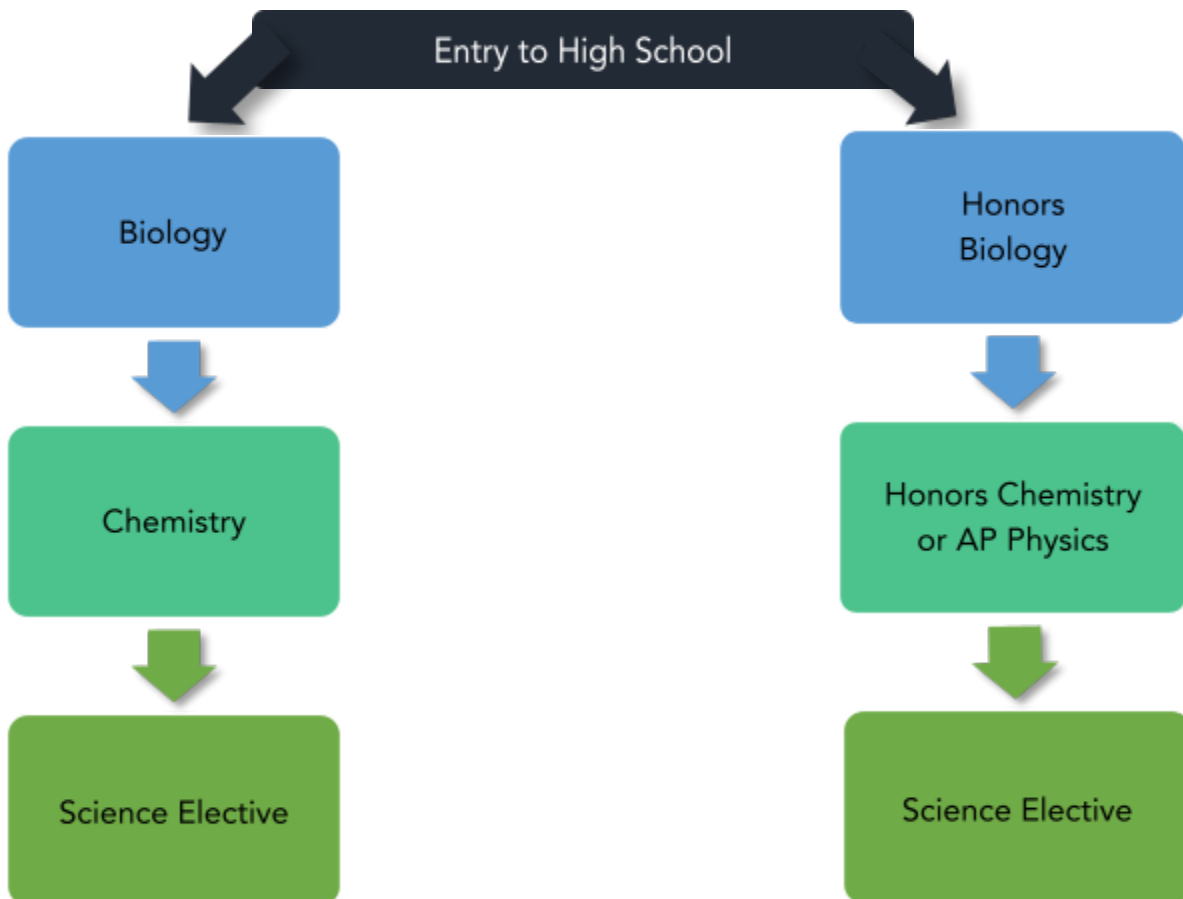
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F. SCIENCE COURSES.

Traditional Classroom Courses

Biology
Honors Biology
AP Biology
Chemistry
Honors Chemistry
AP Chemistry
Physics
AP Physics
Honors Anatomy and Physiology
Environmental Science
AP Environmental Science

High School Science Course Pathways



Science Electives

AP Biology

AP Chemistry

AP Environmental
Science

Honors Anatomy

Environmental
Science

Forensic Science

Michigan Virtual
Options

1. **Biology (Crs# S202)**

Course Length: 2 Semesters

Grade Level: 9-10

This course is the study of living organisms and their relationship to each other and to the environment in which they live. It is designed to allow all students, regardless of career choice, to fully understand and appreciate the fundamental features of living organisms. Biology includes student-designed projects, lab investigations, and classroom discussions. Students are encouraged to think and become productive members of our living world by discovering how relevant biology is in their lives. The major disciplines addressed include: cell biology and genetics, microbiology, zoology, ecology, and botany.

2. **Chemistry (Crs# S203)**

Course Length: 2 Semesters

Grade Level: 10-12

This course consists of the study of matter and the energy related to chemical change. Students learn the language of chemistry, how to write the expressions of chemistry, and will further develop analytical thinking skills and laboratory investigative procedures. The mathematical relationships of chemical formulas and chemical equations are incorporated. *Prerequisite:* Successful completion of Biology and Algebra I.

3. **Honors Chemistry (Crs# S303)**

Course Length: 2 Semesters

Grade Level: 10-12

This course is a much more rigorous study of the Chemistry content and is designed for those students interested in a science-related career. In addition to learning the general chemistry curriculum, students in this course will engage in more advanced AP Chemistry preparatory content specific to atomic structure, periodic trends, solutions, chemical kinetics and thermodynamics, acids and bases, oxidation and reduction, electro chemistry and organic chemistry. Students in Honors Chemistry will be expected to use mathematics as a tool to develop scientific thought, with an emphasis on data analysis, interpretation, and presentation. *Prerequisite:* Successful completion of Algebra I and Biology with a grade of B or better. It is strongly recommended a student have successfully completed or be concurrently enrolled in Algebra II.

4. Physics (Crs# S207)

Course Length: 2 Semesters

Grade Level: 10-12

This course is for the college-bound student with an interest in math and science-related fields and how the world works. Investigations are used to develop critical thinking and reinforce physics concepts. Students need good math skills in advanced algebra and trigonometry. Units in this course include: force, motion, vectors, energy, momentum, waves, sound, light, electricity and magnetism. Skills in lab procedures and problem solving are stressed.

Prerequisite: Successful completion Algebra II or teacher recommendation.

5. Forensic Science (Crs# S213)

Course Length: 2 Semesters

Grade Level: 10-12

This course provides students with a basic introduction to the field of forensic science. Students will discover the various roles and responsibilities associated with a career in forensics. Students will learn basic crime scene analysis skills used by investigators in both the field and lab. In addition, students will be given an overview of the various forms of evidence left by criminals at the scene of the crime as well as the opportunity to apply this knowledge to hypothetical situations. Special focus will be placed on real world application of the knowledge presented to allow students a chance to experience some of what forensic scientists experience on a daily basis. Graphic content notification: Due to the nature of this course, some content may be disturbing to some students. Images of dead and decaying bodies, as well as content that involves murder cases, drug overdoses, and sexual assault, will be addressed.

6. Honors Anatomy & Physiology (Crs# S305)

Course Length: 2 Semesters

Grade Level: 11-12

This course is designed to challenge those students pursuing a career in a medical arena, as well as students seriously interested in a higher degree of understanding of the structure and function of the human body. Major systems of the body are addressed, employing a variety of student participatory methods, combined with student-teacher dialog. Students memorize scientific terminology relating to the location, structure, and function of body organs. In addition to useful information for potential careers, a secondary outcome of this class is that students utilize this information in day-to-day living experiences. Prerequisite: Successful completion of Biology with a grade of "B" or better.

7. AP Chemistry (Crs# S304)

Course Length: 2 Semesters

Grade Level: 11-12

This course is a second-year chemistry course that is designed to be the equivalent of an introductory college level chemistry course. This course is intended to prepare students for the Advanced Placement Chemistry exam, utilizing the curriculum from the College Board. Topics for this course include: the structure of matter, kinetic theory of gasses, chemical equilibrium, chemical kinetics, and concepts of thermodynamics are taught in considerable depth.

Prerequisite: Successful completion of Algebra II and Honors Chemistry with a grade of "B" or better; or teacher recommendation.

8. AP Biology (Crs# S306)

Course Length: 2 Semesters

Grade Level: 11-12

This course is a second-year biology course intended to prepare students for the Advanced Placement Biology exam, utilizing the curriculum from the College

Board. It is designed for students who may pursue a career in the biological sciences, as students in this course will investigate the more intricate details of the living world. Topics for this rigorous college-level course include biochemistry, metabolic pathways, genetics, taxonomy, botany, evolution and ecology. All topics are approached with a molecular emphasis. Lab investigations are an integral part of this course. By successfully completing this course, students should be prepared for intermediate and advanced college courses since the demands of this course are equivalent to those made by full-year introductory college biology courses. *Prerequisite:* Successful completion of Biology with a grade of a "B" or better or teacher recommendation. In addition, it is strongly recommended that the student have successfully completed Chemistry.

9. AP Physics (Crs# S307)

Course Length: 2 Semesters

Grade Level: 10-12

This course is designed for students who are interested in maximizing their physics experience. Having a background in physics may be helpful but is not required to take the course. Successful completion of this course prepares students for the AP Physics Exam.

This course covers five major curricular areas: Newtonian mechanics, fluids and thermal physics, electricity and magnetism, waves and optics, and atomic and nuclear physics. *Prerequisite:* Successful completion or concurrent enrollment in pre-calculus or higher.

10. AP Environmental Science (Crs# S310)

Course Length: 2 Semesters

Grade Level: 11-12

The AP Environmental Science course is the equivalent of a one-semester, introductory college course in environmental science, through which students engage with the scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world. The course requires that students identify and analyze natural and human-made environmental problems, evaluate the relative risks associated with these problems, and examine alternative solutions for resolving or preventing them. Environmental science is interdisciplinary, embracing topics from geology, biology, environmental studies, environmental science, chemistry, and geography.

11. Michigan Virtual course descriptions are available at

[HTTPS://MICHIGANVIRTUAL.ORG/STUDENTS](https://michiganvirtual.org/students)

G. SOCIAL STUDIES COURSES

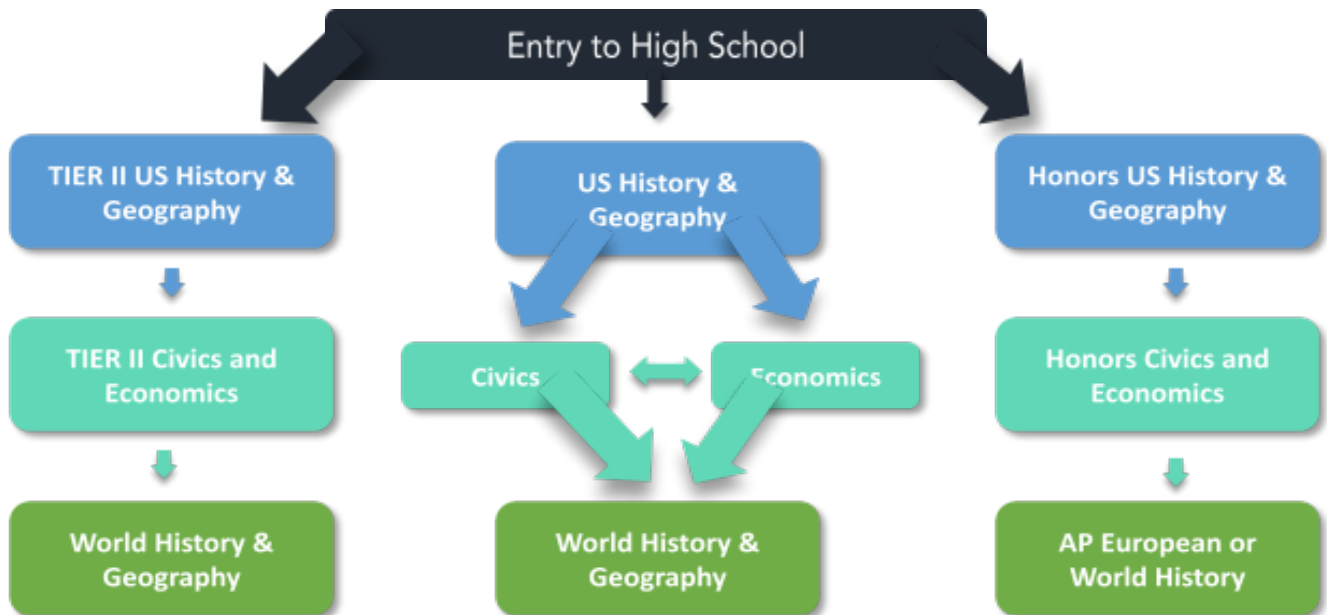
Traditional Classroom Courses

U.S. History & Geography
Honors US History & Geography
Economics
Civics
Honors Civics & Economics
World History & Geography
AP World History
AP US History

AP European History

History v Hollywood (US)
History v Hollywood (World)
Current Global Issues
Sociology
Psychology

High School Social Studies Course Pathways



Additional Social Studies Electives

Sociology

Psychology

AP World History

Student Government

AP European History

AP US History

AP Government and
Politics

Current Global Issues

History vs.
Hollywood

Michigan Virtual
Options

1. US History and Geography (Crs# W200)

Course Length: 2 Semesters

Grade Level: 9

This course focuses on our nation's history from the end of the 19th century to present. Students explore the people and events that shaped our country following the Civil War, including the rise of industrialism, the arrival of reform, the country's rise to world leadership and involvement in World War I, the Roaring Twenties, the New Deal programs, World War II and the reshaping of the post-war world, and our present era. Students gain an understanding of how people and events in the past have shaped our world today and are challenged to make their own significant contributions to American History as individual citizens.

2. Honors US History and Geography (Crs# W200)

Course Length: 2 Semesters

Grade Level: 9

This honors class will focus on the history of the United States from the era of Industrialization to the present (1870 – 2012). Special emphasis will be placed on understanding key components of the Progressive Era, World War I, The Roaring 20's, The Great Depression, World War II, The Cold War and modern American history from 1990 – Present, including a special unit on 9/11 and its impact on our nation. Students that take this class should have strong reading, writing, and critical thinking skills as there will be a particular emphasis on developing all three through the study of history. The class will incorporate primary and secondary source analysis to build upon students' skills in writing a clear thesis statement. The class will incorporate political cartoon analysis to strengthen students' ability to understand key events and differing views of those events. The students will be expected to analyze events in History and connect them with current topics. Lastly, the students will be required to read two books of a historical nature outside of class time in addition to their assigned textbook. This class will prepare students for Advanced Placement coursework, especially AP United States History and will incorporate strategies for teaching, recommended by the Advanced Placement College Board.

3. Economics (Crs# W201)

Course Length: 1 Semester

Grade Level: 10

This course further develops students' economic knowledge and decision-making skills for participation in a global economy. Through this course, students describe and demonstrate how economic forces affect consumer and producer decisions. Students focus on business organization, trade, economic development, and government institutions and policies. Students become more aware of economic issues through use of the media, computer simulations, and class discussions.

4. Civics (Crs# W202)

Course Length: 1 Semester

Grade Level: 10

This course is designed to enable students to discover how the US system of government works. Main topics of study include the formation of our government, three branches of government, the different political parties, and different powers that the government possesses. Students are expected to keep up with the current political situations of the world, as well as the information contained within the textbook. Students discuss how the "real" government fits into the "ideal" government presented in the textbook.

5. Honors Civics and Economics (Crs# W301)

Course Length: 2 Semesters

Grade Level: 10

This course is a much more rigorous study of Civics and Economics and is designed to prepare students for Advanced Placement coursework in the Social Studies content area. This course will be taught as a year-long course. Main topics of study include the formation of our government, three branches of government, the different political parties, and different powers that the government possesses. Students describe and demonstrate how economic forces affect consumer and producer decisions. Students focus on business organization, trade, economic development, and government institutions and policies. Students become more aware of economic issues through use of the media, computer simulations, and class discussions. In addition to learning the general Civics and Economics curriculum, students in this course will engage in a more rigorous academic experience with AP standards in mind. Honors Civics and Economics is distinguished by a difference in the quality of the work expected, not merely an increase in quantity. Students are expected to develop the habits of mind, skills and strategies necessary to engage in complex social studies ideas and texts and then will apply them to real world problems and situations. Students will explore topics in Civics and Economics and their relationship to one another. Through this course, tenth graders will continue to acquire the skills and knowledge necessary to become responsible and effective citizens in a complex world.

6. World History and Geography (Crs# W203)

Course Length: 2 Semesters

Grade Level: 11-12

This course is an overview of Ancient, Medieval, and Renaissance culture and civilization.

Through a developing awareness of the past, students gain insight into the foundations of our modern world. This course surveys the major events, personalities, and geopolitical developments from prehistory through the 20th centuries. Special emphasis is placed upon modern geopolitical blocks, world geography and areas of extreme tension today. People, events, and results are examined to show relevancy with the present. Special emphasis is placed upon

note-taking, organizational skills and daily teacher-led discussions of current events.

7. Psychology (Crs# W215)

Course Length: 1 Semester

Grade Level: 10-12

This course is designed as a survey of multiple topics related to the study of human behavior and thinking. Topics include the history of psychology, personality theory, abnormal behavior and treatment, learning, memory, developmental psychology, sleep and dreams, and stress and conflict.

8. Sociology (Crs# W216)

Course Length: 1 Semester

Grade Level: 10-12

Sociology is the study of society and its group dynamics. This class will focus on American society and the way social forces, including social norms and values, influence individuals. Special emphasis on culture, deviance, social class, race, sexual identity and connotations in society, gender, and family structure. Major themes in sociological thinking include the interplay between the individual and society, how society is both stable and changing, the causes and consequences of social inequality, and the social construction of human life. The class will help students understand how society has shaped their own lives and the lives of their fellow human beings.

9. AP European History (Crs# W300)

Course Length: 2 Semesters

Grade Level: 11-12

This course prepares students for the Advanced Placement European History exam and may be taken as an honors level alternative to Western Civilization. The AP European History curriculum from the College Board is followed in this course. AP European History is designed to provide students with the analytic skills and factual knowledge necessary to deal critically with the problems and materials in Ancient, Medieval, and Renaissance culture and civilization. This course studies the major events, personalities, and geopolitical developments from the 17th through the 20th Centuries. People, events, and results are examined to show relevancy with the present. Students learn to assess historical materials – their relevance to a given interpretive problem, their reliability, and their importance – and to weigh the evidence and interpretations presented in historical scholarship. By successfully completing this course, students should be prepared for intermediate and advanced level college courses since the demands of this course are equivalent to those made by introductory college courses.

10. AP Government and Politics (Crs# W301)

Course Length: 2 Semesters

Grade Level: 10-12

This course prepares students for both the AP US Government and AP Comparative exams. This Advanced Placement course in United States Government and Politics is designed to give students a critical perspective on politics and government. This course involves both the study of general concepts used to interpret United States politics and the analysis of specific case studies. It also requires familiarity with the various institutions, groups, beliefs, and ideas that make up the American political reality. By successfully completing this course, students should be prepared for intermediate and advanced college courses since the demands of this course are equivalent to those made by introductory college courses.

- 11. AP US History (Crs# W302)**
Course Length: 2 Semesters **Grade Level: 11-12**
This course prepares students for the Advanced Placement US History Exam. The AP US History curriculum from the College Board is followed in this course. AP US History is designed to provide students with the analytic skills and factual knowledge necessary to deal critically with the problems and materials in United States history from the Discovery and Settlement of the New World through 1974. Students learn to assess historical materials – their relevance to a given interpretive problem, their reliability, and their importance – and to weigh the evidence and interpretations presented in historical scholarship. By successfully completing this course, students should be prepared for intermediate and advanced level college courses since the demands of this course are equivalent to those made by introductory college courses.
- 12. AP World History (Crs# W303)**
Course Length: 2 Semesters **Grade Level: 11-12**
This course prepares students for the Advanced Placement World History Exam. The AP World History curriculum from the College Board is followed in this course. AP World History is designed to provide students with the analytic skills and factual knowledge necessary to examine in detail, the major events, personalities, and politics of the World from the year 600 to present. Students learn to assess historical materials – their relevance to a given interpretive problem, their reliability, and their importance – and to weigh the evidence and interpretations presented in historical scholarship. By successfully completing this course, students should be prepared for intermediate and advanced level college courses since the demands of this course are equivalent to those made by introductory college courses.
- 13. History vs. Hollywood - US (Crs# W225)**
Course Length: 1 Semester **Grade Level: 10-12**
Hollywood films have been presenting versions of history to the average U.S. citizen since the first movie theaters opened across the country. These depictions have striven to evolve and keep up with changes in American values and culture, resulting in changes in how certain historical events and figures are depicted on the screen. This class will ask students to compare and contrast historical events with their popular depictions in film. Students will be watching films that depict major events and themes from history and will examine the ways that social, political, and cultural context affect how these events and themes are depicted. In addition to watching films in class, students will be given supplemental readings and lectures to help give context for the historical basis for films as well as the time period the film was made. Additionally, anachronisms will be discussed and studied, as well as the significance of Hollywood in shaping how moviegoers view the past.
- 14. Current Global Issues (Crs# W226)**
Course Length: 1 Semester **Grade Level: 10-12**
The events and issues of modern society have a dramatic effect on people living in the modern world. In order to better understand the world and the society we live in and to gain an understanding of current events and issues and how these events and issues affect society and individuals is needed. Through analysis and discussion of current issues and events a deeper knowledge of the world and society itself will be gained. The goal of a current events course is for the

student to become aware of the major issues of the day and to have an in-depth understanding and appreciation of current events. The focus of the class will be issues that affect the student as a resident of the World, the U.S., Michigan, and Mattawan. The class will follow daily news events and will be expected to understand the social, political and economic issues on a daily basis. Each week, the class will focus on the historical development of a current issue. The topic may start as news of the Middle East but will then trace the conflict between Israel and her neighbors. The objectives of this course are: to make the connection between current events and history, to enhance the student's understanding of world events, to encourage students to be informed citizens, and to help them to make intelligent decisions as they take their place in history.

15. History vs. Hollywood - World (Crs# W227)

Course Length: 1 Semester

Grade Level: 10-12

History versus Hollywood is a course examining the way in which the movie industry in America has dramatized moments in history. This course will specifically examine world historical events beginning with ancient Greece and ending with the South African Apartheid. This course will provide students with the opportunity to critically examine moments in history and analyze the harmful outcomes of the portrayals done by Hollywood.

16. Michigan Virtual course descriptions are available at

[HTTPS://MICHIGANVIRTUAL.ORG/STUDENTS](https://michiganvirtual.org/students)

H. SPECIAL EDUCATION COURSES

1. THRIVE (Crs# R003)

Course Length: 1-8 Semesters

Grade Level: 9-12

This three-hour block course is designed for students with individualized education plans (IEP's) specific to personal-adjustment and pre-vocational objectives. This course has both traditional academic and experiential learning experiences. This course follows the Life Centered Career Education (LCCE) curriculum for one hour, and work-based skills for the second hour. The work-based portion will be based on work experience in the school and/or in the community. Students in the objective-based program earn a certificate of completion upon achievement of this alternative curriculum. *Prerequisite:* Individualized Education Plan (IEP).

2. Resource (Crs# R002)

Course Length: 1-8 Semesters

Grade Level: 9-12

This three-hour block course is designed for students with individualized education plans (IEP's) specific to personal-adjustment and pre-vocational objectives. This course has both traditional academic and experiential learning experiences. This course follows the Life Centered Career Education (LCCE) curriculum for one hour, and work-based skills for the second hour. The work-based portion will be based on work experience in the school and/or in the community. Students in the objective-based program earn a certificate of completion upon achievement of this alternative curriculum. *Prerequisite:* Individualized Education Plan (IEP).

