WILLIAMSTON HIGH SCHOOL

CURRICULUM GUIDE

2018-19

(Revised 2/27/18)



The Board of Education does not discriminate on the basis of religion, race, color, national origin, sex, disability or age in its programs, activities, or employment. Further, it is the policy of this District to provide an equal opportunity for all students regardless of gender, religion, race, color, national origin or ancestry, age, disability, sexual orientation, marital status, place of residence with the boundaries of the District, social or economic status, and/or any other legally protected characteristic, to learn through the curriculum offered in this District.

Any questions or concerns regarding compliance with this policy may be directed to: Superintendent, Williamston Community Schools, 418 Highland St., Williamston, MI 48895 or (517) 655-4361.

TABLE OF CONTENTS

LETTER OF INTRODUCTION BY THE PRINCIPAL	3
GRADUATION REQUIREMENTS	4
SCHEDULING AND SPECIAL PROGRAMS INFORMATION	5
BUSINESS AND TECHNOLOGY	8
ENGLISH	10
ENGLISH ELECTIVES	12
HEALTH	13
MATH	13
MATH ELECTIVES SENIOR MATH ELECTIVES	14 15
MATH AND SCIENCE ACADEMY	15
PHYSICAL EDUCATION	18
SCIENCE	19
SCIENCE ELECTIVES	20
SOCIAL STUDIES	21
SOCIAL STUDIES ELECTIVES	22
SPECIAL EDUCATION	24
VISUAL, PERFORMING AND APPLIED ARTS (VPAA)	25
VISUAL ARTS PERFORMING ARTS APPLIED ARTS	25 26 27
WORLD LANGUAGES	27
CAPITAL AREA CAREER CENTER OFFERINGS	28
CORE CURRICULUM FLOW CHARTS	29
ENGLISH	
MATH	
SCIENCE	
SOCIAL STUDIES	

Williamston High School 3939 Vanneter Road Williamston, MI 48895 517-655-2142 www.gowcs.net

Dear Parents and Students:

Planning a high school program of study is an important task that takes time and discussion between parent, student and school personnel. The information in this booklet will aid you in making decisions regarding career choices and goals.

We urge you to read carefully the material contained within these pages. When selecting courses, keep in mind your career aspirations and what you plan to do after high school. Thoughtful planning is a necessary ingredient at this point in your life if you want to ensure you have a wealth of opportunities and options available to you after high school.

It is highly recommended that students refer to their four-year plans developed as a part of their EDP (Educational Development Plan). While goals and plans change, it is important to remain focused on what you want to accomplish in your four years of high school.

Some information about scheduling that is necessary to understand in order to prevent confusion and frustration:

- Student choice must drive the master schedule development. Obviously, we cannot offer courses where there is not enough student interest, but to the greatest extent possible, we will offer the courses students choose.
- Required courses must be appropriately staffed. WHS is no different than most Michigan
 high schools in that we can only provide classes for which we have faculty and currently we
 are facing the same budget constraints as other Michigan schools.
- Students must put thought, time and energy into their course selections. When they receive courses which they choose and qualify for, they will not be allowed to drop these courses. Changing courses takes time and resources. These are commodities that I would rather use in helping students to choose the right courses in the first place.
- We will utilize a system of scheduling that has seniors scheduled first, then juniors, sophomores, and finally freshmen. Additionally, we will flip the alphabet yearly, so that over the course of four years students "average out" in terms of scheduling priority.
- Parents and students must view high school courses in the framework of a four-year plan.
 Over the course of four years, students will get the courses they need, just not always in the timeframe they might prefer.

Please provide us with any feedback regarding this course offering guide. We continue to try and make our information concise, understandable, and meaningful. As always, feel free to contact the guidance counselors or me with any suggestions or questions.

Sincerely,

Dr. Jeffrey J. Thoenes

Dr. Jeffrey J. Thoenes

Principal

Graduation Requirements

	Williamston High School Graduation Requirements	College Prep Curriculum Mandated by the President's Council of State Universities of Michigan	NCAA Core Curriculum Division 1*
Total Credits	22 Credits		
English (4 credits)	 ➤ English 9 ➤ English 10 ➤ English 11 ➤ English 12 	4 years (emphasis on reading, writing, thinking & speaking skills)	4 years
Mathematics (4 credits)	 Geometry Algebra I Algebra II 4th Year Math class 	4 years (through Algebra II)	3 years, Geometry or higher
Science (3 credits)	➤ Physical Science➤ Biology➤ Earth Science	2 years (one biological, one physical) 3 years strongly recommended	2 years including one lab course
Physical Education (.5 credit)	One semester Physical Education		
Health (.5 credit)	One semester Health		
Social Studies (3 credits)	➤ US History➤ World History➤ Economics/Civics	3 years (1 year World History and 1 year US History strongly recommended)	2 years
Computer Education (.5 credits)		1 year strongly recommended	
Visual, Performing and Applied Arts (1 credit)	See curriculum guide for courses fulfilling the VPAA credit		
World Language (2 credits)	➤ Spanish ➤ Other language (MVHS)	3 years in one language strongly recommended	
Electives	4 credits		4 years of additional courses from above

^{*}NCAA Core Curriculum Standards differ for Division II schools. Students interested in pursuing athletics in college should register with the NCAA no later than the beginning of their senior year at www.ncaa.org.

SCHEDULING AND SPECIAL PROGRAMS INFORMATION

All students must be fully enrolled and take six (6) credits at Williamston High School each year. One-half (1/2) credit is equivalent to successful completion of a class which meets five (5) periods a week for a complete semester. To receive credit for a selected course, a student must complete the full length of the course as stipulated in the program of studies.

One semester = one-half (1/2) credit

Two semesters = one (1) credit

Each student makes course selections for the following year early in the second semester. Counselors distribute scheduling materials to students at school and discuss the scheduling process.

Advanced Placement (AP) Courses (Two semesters)

Williamston High School offers a number of Advanced Placement courses including Art, Biology, Calculus, Chemistry, Computer Science Principles, English Language, English Literature, Human Geography, Macro-economics, Micro-economics, Physics C, Psychology, Spanish, Statistics, United States Government, United States History, and World History. Students may also take other AP courses online through Michigan Virtual High School. Colleges and universities may award credit if the student receives a qualifying score on the national test given each spring. The College Board has officially endorsed our Advanced Placement courses as meeting the standard for college-level credit.

Blended Learning

Blended courses are classes where a portion of the traditional face-to-face instruction is replaced by web-based learning. Blended learning combines classroom learning with online learning, in which students can, in part, control the time, pace, and place of their learning through the use of technology. Teachers still provide direct instruction but students also learn from web-based activities and instruction. Blended classes can have an altered schedule and may not always meet every day.

<u>Cooperative Highly Accelerated Math Program (CHAMP and CHAMP Plus) (Two semesters)</u> CHAMP, a highly accelerated mathematics program is available to exceptional math students. For more information, see the MSU Gifted and Talented website at www.gifted.msu.edu.

Dual Enrollment

Students may dual enroll for college credit. Williamston High School accepts dual enrollment credits on a pass/fail basis. Transportation costs as well as fees and textbooks are the student's responsibility but tuition costs are shared by both the family and the District. Each student MUST have the permission of the student's counselor <u>and</u> the high school principal prior to enrollment.

Students must apply and be accepted by the hosting post-secondary institution and must meet all deadlines for the institution. In addition, the student must complete the District's dual enrollment form located on the Williamston High School Website under Student Services.

Early College at LCC

The Early College (EC) is a collaborative program between Williamston High School, the Ingham Intermediate School District (IISD) and Lansing Community College and is designed for students entering their junior and senior years of high school who are looking for an opportunity to move into a college environment. Students in the EC attend classes at LCC's main campus tuition free and no longer attend high school. Students are expected to complete the program in three years and, in that time, earn both their high school diplomas and either an associate's degree or technical certification. Credits earned are transferable to most Michigan and national colleges and universities.

<u>Independent Study</u> (IS) - Applicants must meet all prerequisites including but not limited to: (1) Junior or Senior, (2) GPA of 3.0 or higher, (3) ALL Paperwork must be completed and approved before semester begins to qualify. Only one credit of independent study is allowed per school year.

Intensive Studies in Humanities, Arts, Language, and Literature Program (ISHALL)

ISHALL is an accelerated, intensive two-year course in literature and language designed to meet the curricular goals and merit standards of high school English. For more information, see the MSU Gifted and Talented website at www.gifted.msu.edu.

International Exchange and Study Abroad

There are many opportunities for study abroad for one or two semesters or during the summer between the sophomore, junior, and senior years. To prepare for the experience, the following curriculum is strongly encouraged beginning in the 9th grade:

- ≥ 2-3 full years of a world language: Currently, WHS offers Spanish as a world language. However, other opportunities such as Arabic, French, German, Italian, Japanese, Portuguese, or Mandarin may be available on-line or through LCC or MSU.
- > A strong core of social studies classes:
 - American History
 - World History
 - Civics
 - AP World History
- Diverse extracurricular experiences:
 - Model United Nations
 - PALS
 - Hosting an International Exchange Student
 - Participating in the exchange with the Wilhelm Gymnasium of Braunschweig, Germany.

Scholarships are available for International Exchange and Study Abroad:

Dave and Bev Pfeifle, graduates of Williamston High School, have recently established the JEFFREY DAVID PFEIFLE MEMORIAL FUND in their son's name. This fund is targeted to provide financial support to Williamston High School students who wish to travel and study overseas. If interested, please contact Student Services..

Language pour Etudiants Anances de Français (LEAF)(Two Semesters)

LEAF is an accelerated, intensive two-year course in French designed to meet the curricular goals and merit standards of the Michigan Merit Curriculum World Language requirement. For more information, see the MSU Gifted and Talented website at www.gifted.msu.edu.

Math and Science Academy (MSA)

The Williamston High School Math and Science Academy is a program for students accelerated in both math and science. Students are admitted to the Academy only after an application process during the spring of their 8th-grade year. More information about the Academy and the application process can be found at https://www.gowcs.net/domain/72

Michigan Virtual University Courses (MVU)

Students must complete an extensive application process prior to scheduling an appointment to take classes online through MVU or other approved online schools. Only after approval will students be placed in an online course. The variety and number of courses can be found by checking out the MVU web site at www.michiganvirtual.org and clicking on our courses. Students will be enrolled in semester courses through Michigan Virtual High School and will receive the grade earned on their transcript. If there is space available, students can enroll in up to two MVU classes per semester. Some of the more popular course options include the following: Business Ethics, Entrepreneurship, Careers, Mathematics of Baseball, Human Space Exploration, Anatomy and Physiology, American Sign Language, C++ Programming, and Game Design.

Peer2Peer (LINKS – Learning to Inspire New Kinds of Support)

This program is designed for <u>general education students</u> interested in learning about and supporting students with special needs. Students involved in Peer2Peer will work together in an integrated and positive fashion to promote socialization, independence, and strong friendship bonds with students with special needs. Primarily, Peer2Peer students will attend class with their "LINK" who is a student with special needs to facilitate academic achievement and social interaction of the LINK. This course is for 10-12th graders who must apply and be approved by the instructor. Peer2Peer may be repeated.

Personal Curriculum

The Personal Curriculum (PC) is a process to modify specific credit requirements and/or content expectations based on the individual learning needs of a student. It is designed to serve students who want to accelerate or go beyond the Michigan Merit Curriculum requirements and students who need to individualize learning requirements to meet the MMC requirements. The parent or guardian of a student, or an age-of-majority or emancipated minor, may request a personal curriculum. If the school receives such a request, the school must agree to develop the PC according to the law.

The PC allows several flexible options, including:

- Earning additional credit in specific subject areas and counting these credits toward meeting the state requirements.
- Modifying the mathematics content for students who are challenged with meeting the proficiency requirements.
- Allowing modifications of the MMC necessary to demonstrate proficiency for students with an IEP.
- Allowing modifications of the MMC necessary to demonstrate proficiency for students who transfer to a district from out of state or from a nonpublic school.

Special Education

The Special Education programs of Williamston High School are designed for students who qualify based on their Individual Education Plan (IEP). Students receive individually designed instruction to meet their unique educational needs with the express goal of fully maximizing their social, emotional, academic, and psychological growth. Our Special Education programs fully comply with all federal and state requirements.

Testing Out

Williamston High School grants credit to students who already have knowledge or skills taught in a specific high school course and who earn a qualifying score of no less than 80% on a comprehensive assessment developed by the particular curricular department. Students may also be required to demonstrate mastery through basic assessments used in class, which may include, but are not limited to, portfolios, performances, essays, research papers, projects, experiments, and/or presentations. Students who successfully test out of a course may go on to higher levels or take additional courses available to them. By law, students receive credit for the course on their transcript but no grade is computed into the GPA. See Student Services for more information.

Work-Based Learning

Work-based Learning (WBL) is a combination of school-based preparation and actual work experiences designed to enable students to acquire attitudes, skills, and knowledge for career and other life roles in real work settings. WBL is open only to juniors and seniors for either one or two semesters. The student must obtain a job that is listed on their Educational Development Plan (EDP) in their career pathway and must have a related class at the high school or career center. Students must work an average of 10-15 hours per week, depending on the number of hours out of school. Students may receive ½ academic credit for each hour enrolled in the program. Juniors and seniors may have up to three periods of WBL in their schedule. Paid or Unpaid Learner may be taken for one or two semesters in both the junior and senior years. OFFICE AIDES are a part of Work-Based Learning and must complete Business Technology to be eligible for the position.



BUSINESS AND TECHNOLOGY

Students may take Accounting, Advanced Accounting, Business Management, and Personal Finance as Senior-year Math Credit.

College credit may be granted to juniors and seniors only upon successful completion of Accounting (both semester), Business Technology, Personal Finance, and Business Management. See Mrs. Plaxton for details.

After completion of Business Technology, students may apply to be an office aide.

After completion of Accounting (both semesters), students may apply to be an aide at the business office.

Students receive *Visual, Performing, and Applied Arts* (VPAA) credits for courses offered in this department.

Accounting I and Advanced Accounting are offered in a blended format with a combination of face-to-face and online learning.

ACCOUNTING, Two Semesters

Prerequisite: None

Are you thinking about a business major in college? Get your accounting foundation here. Accounting is an essential course for all students to either explore a career in business or for personal financial needs. It is required in any business major in college. This course covers the complete accounting cycle for a proprietorship and merchandising business, along with journalizing and posting transactions. Special journals, worksheets, income statements, balance sheets, and other financial statement are also taught. The use of computers to teach automated accounting simulations is a large portion of this course. This class is offered in a blended format with part of the class being taught online. This course qualifies as a senior-year math credit and is a State-approved CTE class. College credit may be an option for juniors and seniors.

ADVANCED ACCOUNTING, 1ST Semester only as Independent Study Prerequisite: Accounting

This class will reinforce and build upon accounting concepts that were introduced in Accounting. Additionally, Advanced Accounting will include uncollectible accounts, plant assets and depreciation, inventory, notes, interest, and end-of-the-fiscal-period activities. Advanced Accounting will be offered in a blended format with part of the instruction being offered online. This course qualifies as a senior year math credit and is a State-approved CTE class.

ADVANCED BUSINESS SKILLS (BPA CLASS), 1st Semester only as Independent Study Prerequisite: Previous BPA membership and plans to be in BPA again

If you enjoyed participating in Business Professionals of America and would like to further your involvement with the organization, this class is for you. The class will focus on the BPA Workplace Skills Assessment program. Students will enhance their skills in various business related topics such as graphic design, public speaking, economics, and others as they prepare for their specific event. Students will also have the ability to participate in Michigan related events and the Torch program that promotes service to the community.

BUSINESS MANAGEMENT, Semester

Prerequisite: Business Technology

This course builds upon skills that were learned in *Business Technology*. *Business Management* incorporates such areas as international business, entrepreneurship, human resources, finance, systems management, business law, and communication into a variety of projects and applications. The use of technology and real world simulations will be integrated into the course. Students who complete this course may be eligible to receive college credit and work as an office assistant in the high school office. **This course qualifies as a senior-year math credit and is a State-approved CTE class.**

BUSINESS TECHNOLOGY, Semester

Prerequisite: None

This introductory course emphasizes essential business skills with the incorporation of technology. Students will explore the fundamentals of information technology and application in Windows and Microsoft Office with Word, Excel, Access, and PowerPoint. Various applications will focus on international business, information technology, data management and administration with relation to future professions and integration. Students may be provided the opportunity to earn Microsoft certification in this class. Juniors and seniors who complete this course may be eligible to receive college credit and work as an office assistant in the high school office. **This course is a State-approved CTE class.**

DESKTOP PUBLISHING, Semester

Prerequisite: None

Desktop Publishing is an introductory course that will acquaint students with graphic design techniques, principles of page layout and design, as well as desktop publishing terminology and applications. Students will create, design, and publish a variety of professional-looking documents such as menus, awards,

newsletters, flyers, advertising brochures, programs, and booklets. The skills learned in this course will give students a marketable business skill that can be utilized in college or the workforce.

PERSONAL FINANCE, Semester

Prerequisite: None

This course will integrate technology with topics in personal finance including banking, loans, credit, automobile and transportation expenses, homeownership, insurance, taxes, and personal investments. General economic principles will also be introduced. This course provides practical applications for students as they prepare to handle their own finances. Students who complete this course may be eligible to receive college credit. This course qualifies as a senior-year math credit.

SPORTS & ENTERTAINMENT MARKETING, Semester

Prerequisite: None

In this course, students will explore the intriguing world of sports and entertainment from the perspective of marketing. Sports & Entertainment Marketing capitalizes on the popularity of sports. Marketers research the demographics and spending habits of fans in order to maximize profits on the items fans purchase in association with sporting events. The goal of sports marketing is to use the right marketing mix to meet customer needs while generating a profit.

WEB TECHNOLOGY AND MULTIMEDIA, Semester

Prerequisite: None

This hands-on class will provide students with an overview of multimedia and other online resources. Students will learn about each major software tool and through practical examples, will apply their online skills. Students will learn the art of online design through various forms of multimedia including Adobe Photoshop, Flash, and Dreamweaver.

WORK-BASED LEARNING, One or Two Semesters OPEN TO GRADES: 11-12

Prerequisites: EDP, related class, obtain a job in your career pathway, Preapproval from Mrs. Plaxton Work-based Learning is a combination of school-based preparation and actual work experiences designed to enable students to acquire attitudes, skills, and knowledge for career and other life roles in real work settings. The student must obtain a job that is listed on their Educational Development Plan (EDP) in their career pathway and must have a related class at the high school or career center. Students must work an average of 10-15 hours per week, depending on the number of hours out of school. Students may receive ½ academic credit for each hour enrolled in the program. Juniors and seniors may have up to three periods of WBL in their schedule. Paid or Unpaid Learner may be taken for one or two semesters in both the junior and senior years. OFFICE AIDES are a part of Work-Based Learning. You must complete Business Technology to be eligible for an Office Aide position.





ENGLISH

(Four credits of English are required for graduation)

ENGLISH 9, Two Semesters

Prerequisite: None

English 9 is the entry-level course of the English Department and will include the following units:

Speech/ Debate Unit

Romeo and Juliet - read, discuss and analyze Shakespeare's play

The Odyssey – read, discuss, analyze Homer's epic poem

To Kill a Mockingbird - read, discuss, and analyze Harper Lee's novel

Lord of the Flies - read, discuss, and analyze William Golding's novel

Secret Life of Bees/ Flowers For Algernon - read, discuss, analyze, and compare the texts

Continued practice of note taking and outlining, reading of a novel of student's choice

Biography/ Research Paper - outlining, note taking, organization of research paper with MLA

citations.

ENGLISH 9 ENRICHMENT, Two Semesters

Prerequisite: Recommendation

The course covers most of the content as English 9 but also includes a reading and writing improvement component.

ENGLISH 10, Two Semesters

Prerequisite: English 9

English 10 is the sophomore course of the English Department and will include the following units:

A: What is an American? - synthesizing literature, expository writing

American Thought in Time - American ideologies, historical nonfiction, research paper writing

Persuasion in America – persuasive/propaganda techniques, technical writing

B: The American Dream – novel reading, technical writing, EDP completion

The American Playwright – drama, playwriting

The American I Am – novel reading, reflective writing, presentation

<u>Juniors are required to take either English 11 or Advanced Placement English Language and</u> Composition

ENGLISH 11, Two Semesters

Prerequisite: English 10

English 11 is the junior course of the English Department and will include the following units:

A: The Individual and Society – classic novel reading, personal narrative writing

The Truth and the Abstract – poetry, writer biography reading

Heroes - novel reading

Vocabulary, Grammar, and MME Prep

B: Ambition and Conflict - war nonfiction, play reading

Careers - job research, research paper, EDP completion

Personal Liberty and Individual Thought – novel reading, expository writing

Vocabulary, Grammar, and MME Prep

ADVANCED PLACEMENT ENGLISH LANGUAGE AND COMPOSITION, Two Semesters

Prerequisites: A- in English 10, an application, and a required essay

This accelerated ELA class will have two main goals:

- 1. To prepare students for the rigorous demands of college papers and analytical thinking;
- 2. To encourage students to take the National Advanced Placement Exam in May.

*A summer reading list is an expectation of this class: students will be expected to read two novels and two works of nonfiction from a list provided by the instructor.

Cost: The cost of the AP test is approximately \$95. Students with special financial considerations should see their counselor.

Seniors are required to take either English 12 or Advanced Placement English Literature and Composition

ENGLISH 12, Two Semesters

Prerequisite: English 11

English 12 is a college-bound literature and composition class open to all students who have been successful in English 11. The main class goal will be to prepare for the rigorous demands of college reading, writing, research and critical thinking. Students will write a variety of essays and research papers with focus on analysis. Students should plan to read novels as homework for 20-30 minutes a night. English 12 will include the following units:

A: American classics and literary movements unit

War and Peace unit

Crime Fiction unit

B: Search for Equality unit and research paper

Shakespeare unit

ADVANCED PLACEMENT ENGLISH LITERATURE AND COMPOSITION, Two Semesters Prerequisites: B in English 11, an application, and a required essay; Summer Work Required This accelerated ELA class will have two main goals:

- 1. To prepare students for the rigorous demands of college papers and analytical thinking;
- 2. To encourage students to take the National Advanced Placement Exam in May.

*A summer reading list is an expectation of this class:

Roots, The Scarlet Letter, a British classic, an American classic, a play, the poetry of Emily Dickinson, a 17th or 18th century classic, and a world classic.

Cost: The cost of the AP test is approximately \$95. Students with special financial considerations should see their counselor.

ENGLISH ELECTIVES

CREATIVE WRITING, Semester

Prerequisite: None

This is an intensive writing class, which emphasizes the development of the imagination. Students will be writing poetry, short stories, science fiction, mysteries, short plays, children's stories, and essays based on a student's personal experiences. Many forms of writing will be introduced and students will have the chance to experiment with their writing. Emphasis will be placed on writing style, grammar, spelling, story development, ending with the culmination of a polished finished product. Students will have access to the computer lab. Most papers are three pages long and one or two papers are required each week.

FILM LITERATURE. Semester

Prerequisite: None (Courses are independent and may be taken in any order)

Students will be viewing, analyzing, and critiquing both classic and modern films. They will become critical viewers as they explore a variety of literary elements – ideology, theme, symbolism, character development, and tone. Students will write essays, analyses, and reports, and design film projects and presentations.

THE GOOD, THE BAD, AND THE FUNNY

This class will include the following units: Mysteries, Monsters & Mayhem, Good and Evil, Teens in Turmoil, A Soldier's Story, and Comedy.

THERE'S SOMETHING ABOUT...MOVIES

This class will include the following units: Romantic Movies, Documentaries, Big Budget Films, Tributes, Foreign Films, Historical Fiction, and Based on a True Story.

MYTHOLOGY AND FANTASY, Semester

Prerequisite: None

Students will study traditional mythology (Greek, Norse, Celtic, Native American, Egyptian) as well as modern mythology (LORD OF THE RINGS, RAIDERS OF THE LOST ARK, STAR WARS, HARRY POTTER). Extensive reading, research, and discussion will be the focus of the class. Suggested units of study include the following: Heroes—from Hercules to Superman and Captain America, Greek and Roman dramas, urban legends, American mythological creatures, King Arthur/Camelot/Merlin, mythical monsters, and the tragic hero.

YEARBOOK, One or Two Semesters

Prerequisite: None

This class will focus on preserving our school's history through words and pictures. Students will be required to cover extra-curricular activities. Photography, page design and writing skills will be emphasized. Students will also be asked to sell ads. Students may repeat this class every semester that the class is offered. This course qualifies as a Visual, Performing, and Applied Arts (VPAA) credit.



HEALTH

(One half credit of Health is required for graduation.)

HEALTHY LIVING, Semester

Prerequisite: None

This course will instill the importance of preserving and improving health as a lifelong skill. Students will learn about facts pertaining to healthy lifestyle choices. Topics covered will be aspects of wellness, risk factors, stress management, disease prevention and control, nutrition information, sex education, substance use and abuse, first aid, the systems of the body, and mental disorders.



MATH

(Four credits of math are required including Geometry, Algebra I and Algebra II. At least one math course must be taken during the student's senior year.)

ALGEBRA I, Two Semesters Prerequisites: Geometry

The course covers functions, variation, linear functions, systems, quadratic functions, and powers as well as inverses, radicals, exponential functions, trigonometry, and polynomials.

Cost: A graphing calculator (\$90-\$130) is required. Students with special financial considerations should see their counselor.

ALGEBRA I ENRICHMENT, Two Semesters

Prerequisites: Geometry

The course covers the same content as Algebra I but focuses on differentiated learning while meeting the individual needs of students.

Cost: A graphing calculator (\$90-\$130) is required. Students with special financial considerations should see their counselor.

ALGEBRA II, Two Semesters

Prerequisite: Algebra I

The course covers linear, absolute value, quadratic, polynomial, exponential, and logarithmic functions. Transformations of the function families are also studied and emphasized throughout the year. The course also covers solving exponential and logarithmic equations, trigonometric functions and equations, basic probability, and descriptive statistics, as well as normal distribution.

Cost: A graphing calculator (\$90-\$130) is required. Students with special financial considerations should see their counselor.

ALGEBRA II - Extended, Four Semesters

Prerequisite: Algebra I

The course covers the same content as Algebra II but does so over two years instead of one. Consequently, students will earn two (2.0) math credits upon successful completion of this two-year course.

Cost: A graphing calculator (\$90-\$130) is required. Students with special financial considerations should see their counselor.

GEOMETRY, Two Semesters

Prerequisites: None

This course covers angles, lines, coordinate geometry, transformations, polygons, circles, logic, similar figures, and proofs. Also covered will be two- and three-dimensional figures, area, and volume.

Cost: A scientific calculator, compass, and protractor are required (\$15-20). Students with special financial considerations should see their counselor.

GEOMETRY SUPPORT, Two Semesters

Prerequisites: None

This course is for students who need additional support with Geometry (teacher recommendation only). Cost: A scientific calculator, compass, and protractor are required (\$15-20). Students with special financial considerations should see their counselor.

MATH ELECTIVES

ADVANCED PLACEMENT CALCULUS, Two Semesters

Prerequisites: C+ or better in Precalculus

This course is intended for students who have a thorough knowledge of algebra, geometry, trigonometry, and precalculus. The course follows the College Board's Advanced Placement curriculum and is extremely rigorous. Students are expected to take the Advanced Placement exam in May. Successful completion of this exam may result in the granting of college credit. Topics covered include properties of functions, limits, continuity, derivatives, differential calculus with applications, and integral calculus with applications. Following the AP exam, extra topics from 1st semester college calculus will be covered.

Cost: A graphing calculator (\$90-\$130) is required. The cost of the AP test is approximately \$95. Students with special financial considerations should see their counselor.

ADVANCED PLACEMENT COMPUTER SCIENCE PRINCIPLES, Two Semesters

Prerequisite: Algebra I

This course follows the College Board's suggested curriculum designed to parallel a college-level computer science principles course. The course introduces students to the fundamental ideas of computer science and how to apply computational thinking across multiple disciplines. This course teaches students to apply creative designs and innovative solutions when developing computational artifacts. This course covers such topics as abstraction, communication of information using data, algorithms, programming, and the internet. **Cost: The cost of the AP test is approximately \$95. Students with special financial considerations**

Cost: The cost of the AP test is approximately \$95. Students with special financial considerations should see their counselor.

ADVANCED PLACEMENT STATISTICS, Two Semesters

Prerequisites: C+ or better in Algebra II

This course is designed to introduce students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. It is intended for students with a strong background in algebra and high quantitative reasoning ability. Students are expected to take the Advanced Placement exam in May. Successful completion of this exam may result in the granting of college credit. The main themes are exploring data (describing patterns and departure from patterns), sampling and experimentation (planning and conducting a study), anticipating patterns (exploring random phenomena using probability and simulation), and statistical inference (estimating population parameters and testing hypotheses).

Cost: A graphing calculator (\$90-\$130) is required. The cost of the AP test is approximately \$95. Students may optionally wish to purchase AP Statistics study guides (\$20) to prepare for the examination. Students with special financial considerations should see their counselor.

PRECALCULUS, Two Semesters

Prerequisites: C+ or better in Algebra II

This course prepares students for further study in math at the college level. Topics include analysis of polynomial and rational functions, exponential and logarithmic functions, and trigonometric functions. The course also covers trigonometric identities, vectors and polar coordinates, matrices, conics, mathematical induction, and limits. Students will also be introduced to topics featured in traditional calculus coursework. Cost: A graphing calculator (\$90-\$130) is required. Students with special financial considerations should see their counselor.

ROBOTICS AND ENGINEERING DESIGN, Semester

Prerequisite: None

This course will focus on mechanical engineering principles through the designing of a maze robot, drag racing robot, and battle robot. Students will learn computer programming principles through the coding of the robots and coding in a simulation programming language. (Can be taken twice).

SENIOR MATH ELECTIVES

(Seniors must earn ½ credit of math in their senior year. The classes listed below will fill this requirement.)

ACCOUNTING, Two Semesters (MAY BE USED IF NOT ALREADY USED AS ELECTIVE CREDIT)

ADVANCED PLACEMENT CALCULUS, Two Semesters (MAY BE USED IF NOT ALREADY USED AS ELECTIVE CREDIT)

ADVANCED PLACEMENT CHEMISTRY, Two Semesters (MAY BE USED IF NOT ALREADY USED AS SCIENCE CREDIT)

ADVANCED PLACEMENT COMPUTER SCIENCE, Two Semesters (MAY BE USED IF NOT ALREADY USED AS MATH CREDIT)

ADVANCED PLACEMENT MACRO-ECONOMICS, One Semester (MAY BE USED IF NOT ALREADY USED AS SOCIAL STUDIES CREDIT)

ADVANCED PLACEMENT MICRO-ECONOMICS, One Semester (MAY BE USED IF NOT ALREADY USED AS SOCIAL STUDIES CREDIT)

ADVANCED PLACEMENT STATISTICS, Two Semesters (MAY BE USED IF NOT ALREADY USED AS ELECTIVE CREDIT)

BUSINESS MANAGEMENT, Semester (MAY BE USED IF NOT ALREADY USED AS ELECTIVE CREDIT)

ROBOTICS AND ENGINEERING DESIGN , Semester (MAY BE USED IF NOT ALREADY USED AS ELECTIVE CREDIT)

MATH AND SCIENCE ACADEMY (MSA)

MSA Graduation Requirements (Class of 2019)

	Mathematics	Science	Technology/Research
9 th Grade	MSA Algebra I	MSA Biology	MSA Robotics I
10 th Grade	MSA Algebra II	MSA Chemistry	MSA Robotics II
11 th Grade	Precalculus	Earth Science or an AP	MSA Research
		Science Course	
12 th Grade	An AP Math Course	An AP Science Course	

MSA Graduation Requirements (Class of 2020)

	Mathematics	Science	Technology/Research
9 th Grade	MSA Algebra I	MSA Biology	MSA Robotics I
10 th Grade	MSA Algebra II	MSA Physical Science	MSA Robotics II
11 th Grade	Precalculus	MSA Earth Science	MSA Research
12 th Grade	An AP Math Course	An AP Science Course	

MSA Graduation Requirements (Classes of 2021 and beyond)

	Mathematics	Science	Technology/Research
9 th Grade	MSA Algebra I	MSA Physical Science	MSA Robotics I
		MSA Biology A	
10 th Grade	MSA Algebra II	MSA Biology B	MSA Robotics II
		MSA Earth Science	
11 th Grade	Precalculus	College Prep Chemistry or an	MSA Research
		AP Science course	
12 th Grade	An AP Math Course	An AP Science Course	

MATH AND SCIENCE ACADEMY ALGEBRA I, Two Semesters Prerequisite: 9th-grade student in the Math and Science Academy

This course will provide a rich, rigorous foundation in algebra uniquely blended with many hands-on activities and projects that allow the student to apply concepts covered in class. The relationship between functions and real-world phenomena will be emphasized along with the use of technology as a learning tool. Topics will include: linear, quadratic, exponential, polynomial, power and logarithmic functions. Students will also do in-depth studies of variation, exponents, transformations, and solving equations and inequalities.

Throughout the class there will be an emphasis on discussion and discovery of mathematics. Students will

Throughout the class there will be an emphasis on discussion and discovery of mathematics. Students will derive many formulas to see their origins and connections. There will also be cross curricular projects with other MSA classes they are taking.

Cost: A graphing calculator (\$90-\$130) is required. Students with special financial considerations should see their counselor.

MATH AND SCIENCE ACADEMY ALGEBRA II, Two Semesters

Prerequisite: 10th-grade student in the Math and Science Academy

This course covers rational expressions and graphs, trigonometric functions and equations, as well as sequences and series. This course includes work with counting principles, properties and principles of probability, probability distributions, descriptive statistics, z-scores and normal distribution. Students will also be introduced to higher level statistics such as confidence intervals and hypothesis testing in preparation for AP Statistics. The relationships between math concepts and real-world phenomena will be emphasized along with the use of technology as a learning tool. Throughout the class there will be an emphasis on discussion and discovery of mathematics. Students will derive many formulas to see their origins and connections. There will also be cross curricular projects with other MSA classes they are taking.

Cost: A graphing calculator (\$90-\$130) is required. Students with special financial considerations should see their counselor.

MATH AND SCIENCE ACADEMY BIOLOGY, Two Semesters Prerequisite: 10th-grade student in the Math and Science Academy

This course provides students with an understanding of how humans are a part of and subsequently impact biological systems. It equips them with the understandings they need to properly understand the dynamics of life on Earth. The course begins by familiarizing students with the nature of scientific inquiry in biology and establishes two overarching themes of the discipline: interconnectedness of biological systems and evolution. The units that follow proceed through a treatment of cell theory, genetics, evolution and biodiversity. The instructional approach of the course is one of constructivist inquiry where students' master key concepts and skills through the pursuit of focus questions using explorative activities, experimentation, concept writing and substantive classroom discussion. There will also be cross curricular projects with other MSA classes they are taking. The course also includes problem-based learning for real-world issues related to biology. This course is aligned to the Michigan Science Standards in Biology.

MATH AND SCIENCE ACADEMY EARTH SCIENCE, Two Semesters Prerequisite: MSA Biology

In this course, students will utilize scientific practices to discover knowledge and overarching concepts related to Earth and space science. Students will recognize unifying themes that integrate the major topics of Earth and space science including Earth and its place in the universe, the solar system, plate tectonics, and physical geology including the formation and chemical makeup of rocks and minerals. The course will also cover weather and the use of forecasting tools, climate and the components of climate change, water, ocean circulation and topography, including map making techniques, natural resources, and global sustainability. The curriculum integrates critical thinking and laboratory skills that apply the elements of experimental design, detailed observation, accurate recording, data interpretation, and analysis and scientific reporting. There will also be cross curricular projects with other MSA classes they are taking. This course is aligned to the Michigan Science Standards in Earth Science.

MATH AND SCIENCE ACADEMY PHYSICAL SCIENCE, Two Semesters Prerequisite: 9th-grade student in the Math and Science Academy

Physical science is a course that is comprised of two components, physics and chemistry. Each component will be taught over a semester's time. Each semester will emphasize cross-cutting science concepts that are shared among all science disciplines. This course will emphasize the scientific process, utilizing evidence to support a scientific claim while completing laboratory work to support and investigate material. During the physics portion of the course students will mainly study Newtonian Mechanics including constant velocity and accelerated motions, forces, vectors, collisions. Other topics include energy conservation, wave properties and electric charges. During the chemistry portion of the course, students will study interactions of atoms, subatomic particles, periodic table, chemical bonding, law of conservation of mass and simple chemical reactions. This course will give students a great foundation to be successful in AP Physics 1 as well as AP/College Chemistry Prep and AP Chemistry.

MATH AND SCIENCE ACADEMY RESEARCH, Two Semesters Prerequisite: 11th-grade student in the Math and Science Academy

This course is designed to allow students to research an area of interest as well as go through many of the processes mathematicians and scientists use in their professional careers. Students will learn how to critically and formally analyze research articles and papers from several sources. This will serve as the backdrop for the students conducting a complete research project, from concept to completion, throughout the year. Students will also be expected to give a formal, public presentation of their findings at the Michigan High School Research Symposium as well as the MSA Showcase (community event). Further, students will write a formal article to a scholarly magazine in the hopes of getting their research published. Students will also apply for summer research opportunities that interest them.

MATH AND SCIENCE ACADEMY ROBOTICS I, Semester Prerequisite: 9th-grade student in the Math and Science Academy

This course will focus on mechanical engineering principles through the designing of a maze robot, drag racing robot, and battle robot. Students will learn computer programming concepts through the coding of the robots and coding in a simulation programming language.

MATH AND SCIENCE ACADEMY ROBOTICS II, Semester Prerequisite: 10th-grade student in the Math and Science Academy



This course will focus on mechanical engineering principles through the designing of competition robots in both autonomous and remote control modes. Part of Project Lead the Way (PLTW), this course is an introduction to engineering design and will focus on the design process and its application. Students interested in architecture, interior design, and all engineering fields will benefit from this course. Students will begin by sketching and learning the basics of technical drawing before using a professional 3D modeling software (INVENTOR) to help them design solutions to problems. Students will also make 3D versions of their work using a 3D printer.



PHYSICAL EDUCATION

(One half credit of PE is required for graduation. Students may take more than one semester of classes in this department.)

LIFEGUARD TRAINING (AMERICAN RED CROSS)

Prerequisites: Minimum Age Requirement: 15 (by the end of the semester)

- Swim 300 yards continuously using either front crawl using rhythmic breathing or breaststroke;
- Swim 20 yards using front crawl or breaststroke, surface dive head first to a depth of 10-13 feet, retrieve a 10 lb. object, return to the surface, and swim 20 yards on back to the starting point with the object;
- Tread water for two minutes without the use of hands;
- Signed agreement with the student and parent or guardian.

In this course, students will learn a variety of swimming safety and water rescue techniques certified by the American Red Cross. Upon successful conclusion of the course, students may become certified lifeguards. Cost: \$50.00 includes American Red Cross lifeguarding manual, whistle and lanyard. Materials must be purchased by the second week of the course. Proper swim attire required.

SPORTS PREP, Semester

Prerequisite: Students must be a member of a fall, winter, or spring sports team to enroll and may enroll even when not in their sport season. This course focuses on preparing student athletes to excel in their individual sport. Class will be centered on strength building, endurance, flexibility, agility, and obtaining knowledge of nutrition for their sport. Students may repeat this class every semester that the class is offered.

Cost: Proper gym clothes and shoes for activities are required.

TEAM SPORTS, Semester

Prerequisite: None

Students will learn the rules, scoring, and skills needed for participating and understanding team sports. The class will also include general physical conditioning and body awareness through individual, light, moderate, and strenuous activity. The first semester includes football, soccer, speedball, basketball, volleyball, physical conditioning, weight training, floor hockey, wrestling and recreational games. The second semester includes basketball, volleyball, softball, physical conditioning, weight training, and floor hockey. **Students may repeat this class every semester that the class is offered.**

Cost: Proper gym clothes and shoes for activities are required.

WEIGHT TRAINING & PHYSICAL CONDITIONING, Semester

Prerequisite: None

Students will become physically fit and understand the importance of lifelong physical fitness. Methods used will include sprint and distance running, stretching and agility drills, exercise without apparatuses, exercise with apparatuses, heavy rope, jump ropes, and free weights. **Students may repeat this class every semester that the class is offered.**

Cost: Proper gym clothes and shoes for activities are required.



SCIENCE

(Three credits of Science are required for graduation - Physical Science, Biology, and Earth Science)

BIOLOGY, Two Semesters Prerequisite: Physical Science

This course provides students with an understanding of how humans are a part of and subsequently impact

biological systems. It equips them with the understandings they need to properly understand the dynamics of life on Earth. The course begins by familiarizing students with the nature of scientific inquiry in biology and establishes two overarching themes of the discipline: interconnectedness of biological systems and evolution. The units that follow proceed through a treatment of cell theory, genetics, evolution and biodiversity. The instructional approach of the course is one of constructivist inquiry where students' master key concepts and skills through the pursuit of focus questions using explorative activities, experimentation, concept writing and substantive classroom discussion. The course also includes problem-based learning for real-world issues related to biology. This course is aligned to the Michigan Science Standards in Biology.

EARTH SCIENCE, Two Semesters

Prerequisite: Biology

In this course, students will utilize scientific practices to discover knowledge and overarching concepts related to Earth and space science. Students will recognize unifying themes that integrate the major topics of Earth and space science including Earth and its place in the universe, the solar system, plate tectonics, and physical geology. The course will also cover weather, climate, water, ocean circulation and topography, natural resources, and global sustainability. The curriculum integrates critical thinking and laboratory skills that stress the development of experimental design, detailed observation, accurate recording, data interpretation, and analysis. This course is aligned to the Michigan Science Standards in Earth Science.

PHYSICAL SCIENCE, Two Semesters

Prerequisite: None

Physical science is a course designed to address the major topics of the essential high school physics content expectations and important chemistry concepts including those fundamental to biology. Together, physics and chemistry provide the means to understand all ideas in life and earth sciences and the rationale for theories that guide engineering and design. The course proceeds through units that inquire into electricity and magnetism, wave theory, mechanics, matter, atomic and elemental chemistry and energy. The instructional approach of the course is one of constructivist inquiry where students master key concepts and skills through the pursuit of focus questions using explorative activities, experimentation, concept writing and substantive classroom discussion. This course is aligned to the Michigan Science Standards in Physics and Chemistry.

SCIENCE ELECTIVES

ADVANCED PLACEMENT BIOLOGY, Two Semesters Prerequisites: B in Biology; Summer Work Required

Recommended: Anatomy & Physiology (previously or concurrently),

Advanced Placement Biology is a beginning-level college biology course and is intended for those students who will use the biological sciences for career preparation or who have an intense interest in biology as a science. On successful completion of the course, students are strongly urged to take the Advanced Placement Test in biology in mid-May. A passing grade on this test is accepted for credit in Introductory Biology by many colleges and universities in the United States. The course consists of an intensive survey of biology using a college-level text as well as multiple laboratory experiences. Topics covered in AP Biology include chemistry and cells, genetics, evolution, evolutionary history of life, plant form and function, animal form and function, and ecology. This extensive scope of topics requires a commitment to a large amount of time outside of the classroom.

Cost: The cost of the AP test is approximately \$95. Students with special financial considerations should see their counselor.

COLLEGE CHEMISTRY PREP, One Semester

Prerequisites: Physical Science

College Chemistry Prep is designed to explore the basics of AP chemistry course material. It is designed to get students prepared to take AP chemistry or provide students with a basic understanding of chemistry topics covered in a 1st-year college course. Topics covered will be chemical reactions (types/balancing),

stoichiometry, and thermochemistry. This course will use experiments to support learning while giving students a college-level lab experience.

ADVANCED PLACEMENT PHYSICS 1: Algebra Based, Two Semesters Prerequisites: B- or better in Algebra 1

AP Physics 1 is an algebra-based, introductory college-level physics course that explores topics such as Newtonian mechanics (including rotational motion); work, energy, and power; mechanical waves and sound; and introductory, simple circuits. AP Physics 1 can be taken as an introductory course with no prior physics coursework necessary. This course is designed to enable you to develop the ability to reason about physical phenomena using important science process skills such as explaining causal relationship, applying and justifying the use of math, designing experiments, analyzing data, and making connections and predictions. This course is useful for potential science and computer science majors as well as anyone interested in Physics and majoring in a non-science field in college.

Cost: The cost of the AP test is approximately \$95. Students with special financial considerations should see their counselor.

ANATOMY AND PHYSIOLOGY, Two Semesters

Recommended: B in Biology

Covers the basics of human anatomy and physiology including anatomical terminology, basic biochemistry, cells and tissues, and the integumentary, skeletal, muscular, nervous, endocrine, cardiovascular, lymphatic/immune, respiratory, digestive, urinary, and reproductive systems. Introduces common human disease processes. Prepares anyone interested in medical or health professions to take advanced anatomy and physiology courses. A variety of assessments will be used to evaluate students including but not limited to dissections, drawings, posters, presentations and written work.

FORENSICS, Semester Prerequisite: None

Forensic Science is the application of science to matters of law. This course will introduce students to the procedures used by forensic scientists in the criminal justice system. Topics will include processing crime scenes, handling of physical evidence, microscopic identification of hairs, fibers and paint, fingerprints, DNA technology and its uses, and forensic science on the internet.

SCIENCE ADVANCED PLACEMENT COURSES NOT OFFERED DURING THE 2018-19 SCHOOL YEAR

(These courses are listed in the Course Guidebook so students may anticipate them being offered in the 2019-20 school year.)

ADVANCED PLACEMENT CHEMISTRY, Two Semesters

Prerequisites: B in MSA10 Physical Science or College Chem Prep; Summer Work Required

AP Chemistry is the equivalent of an introductory college-level chemistry course in both the content and the laboratory experience. On successful completion of the course, students are strongly urged to take the Advanced Placement Test in chemistry in mid-May. A passing grade on this test is accepted for credit in *Introductory Chemistry* by most colleges and universities. AP Chemistry builds on the skills and knowledge attained in 1st year chemistry and provides the student with an opportunity to develop a deeper understanding of chemistry and the ability to think critically and to solve problems.

Cost: The cost of the AP test is approximately \$95. Students with special financial considerations should see their counselor.



SOCIAL STUDIES

(Three credits in Social Studies are required for graduation)

CIVICS, Semester

Prerequisites: U.S. History & Geography

This course will analyze the foundations, origins, structure, and functions of civic and political life. Additionally, students will investigate the role and responsibilities of the individual within society. Students will analyze and interpret information in developing their understanding. The purpose of Civics intends for students to make reasoned and informed decisions and understand how citizens can fully participate in American society.

ECONOMICS, Semester

Prerequisites: U.S. History & Geography

The students will be introduced to traditional methods of macroeconomic measurement and analysis and economic theory. They will examine the economy of the United States in relation to the global economy. In addition, they will be introduced to microeconomic principles and day-to-day decision-making in the business world

UNITED STATES HISTORY & GEOGRAPHY, Two Semesters

Prerequisite: None

The first semester (U.S. History "A") will cover subjects within Reconstruction, Industrialization, Imperialism, the Progressive Movement, World War I and the Great Depression. The second semester (U.S. History "B") will begin with World War II, the Cold War, the Korean War, the Civil Rights Movement, Vietnam, Reaganomics, and more recent U.S. history. The students will also have to demonstrate the ability to identify the 50 states along with other key geographic features.

WORLD HISTORY & GEOGRAPHY, Two Semesters

Prerequisite: U.S. History & Geography

The class will begin with 300 C.E. and continue to the present day. Students will explore the expanding and intensified hemispheric interaction, the emergence of the first global age (15th-18th centuries), an age of global revolutions (18th Century – 1914), global crisis and achievement (1900-1945) and the Cold War and its aftermath. In the first semester, students review the world prior to 300 C.E., and continue with an exploration in world events from 300 C.E. to 1800 C.E., culminating with the effects of the Columbian Exchange. In the second semester, students take the class beginning with the Enlightenment through the Industrial Revolution as well as political revolutions, two World Wars and continued globalization in the 20th and 21st centuries.

SOCIAL STUDIES ELECTIVES

ADVANCED PLACEMENT PSYCHOLOGY, Two Semesters

Prerequisites: Summer Work Required

Recommended: Semester-long psychology course (B or better), either traditional or online
The AP Psychology course is designed to introduce students to the systematic and scientific study of the
behavior and mental processes of human beings and other animals. Students are exposed to the
psychological facts, principles, and phenomena associated with each of the major subfields within
psychology. They also learn about the ethics and methods psychologists use in their science and practice.

Cost: The cost of the AP test is approximately \$95. Students with special financial considerations should see their counselor.

ADVANCED PLACEMENT UNITED STATES GOVERNMENT, Two Semesters MEETS CIVICS REQUIREMENT

Prerequisites: B in both U.S. History & Geography and World History & Geography; Summer Work Required

This AP class is designed to be similar to a beginning level college political science class and is offered for high school juniors and seniors. The purpose will be to prepare students for college reading, writing, and analytical thinking and to encourage students to take the AP Test in May. Topics will include the functions of the national government, Constitutional framework, civic rights and responsibilities, the political process and elections, and the role of the media on political decision making. The activities will include discussions, debates, group seminars, advanced readings, and research on current events will be a key in helping students prepare for college.

Cost: The cost of the AP test is approximately \$95 with optional supplemental materials approximately \$25.00. Students with special financial considerations should see their counselor.

ADVANCED PLACEMENT WORLD HISTORY, Two Semesters Prerequisites: B in U.S. History & Geography; Summer Work Required MEETS WORLD HISTORY REQUIREMENT

The Advanced Placement World History course is designed to be a college-level, freshman World History course. The course will help students prepare for the AP World History test and for college even if they decide not to take the test. Students will develop a greater understanding of the evolution of global processes and contacts, and the interaction with different types of human societies. This understanding is advanced through a combination of selective factual knowledge and appropriate analytical skills. Through the year students will explore the nature of changes in international frameworks and their causes and consequences, as well as comparisons among major societies. Students will be required to read a college level textbook and complete several writing assignments throughout the year along with vocabulary development.

Cost: The cost of the AP test is approximately \$95. Students with special financial considerations should see their counselor.

PSYCHOLOGY. Semester

Prerequisite: None

Psychology is the study of human behavior. The course units of study are all rooted in Scientific Inquiry and will explore six broad content domains: Biopsychology, Development and Learning, Sociocultural Context, Cognition, Individual Variations, and Applications of Psychological Science. The learning goals and course curricula are directly aligned to the American Psychological Association's National Standards for High School Psychology. Learning will take place by means of experiments, individual and team projects, videos, reading, and lectures.

SOCIOLOGY, Semester; Due to the rigor of the coursework and reading, this class is recommended for motivated learners.

This course will examine human society including both social action and social organization. Sociology is the study of group behavior and interaction and differs from psychology, which is the study of individual behavior. The content is covered through lectures, class discussions, book work, and some projects.

SOCIAL STUDIES ADVANCED PLACEMENT COURSES NOT OFFERED DURING THE 2018-19 SCHOOL YEAR

(These courses are listed in the Course Guidebook so students may anticipate them being offered in the 2019-20 school year.)

ADVANCED PLACEMENT MACRO-ECONOMICS, Semester

MEETS ECONOMICS REQUIREMENT

Prerequisites: B in both U.S. History & Geography

AP Macro-economics reviews the fundamental principles which govern economic activity at both the level of the aggregate economy. In addition to preparing a student for the AP Exam in macro-economics, a major emphasis of this course will be on the development of critical thinking skills and the application of economic principles and methodologies in problem solving. Consequently, the course will incorporate a wide variety of activities including formal instruction in writing; presentations; research projects; and problem solving activities in addition to traditional lectures, exams and homework problems.

Cost: The cost of the AP test is approximately \$95. Students with special financial considerations should see their counselor.

ADVANCED PLACEMENT MICRO-ECONOMICS, Semester MEETS ECONOMICS REQUIREMENT

Prerequisites: B in both U.S. History & Geography

AP Micro-economics reviews the fundamental principles which govern economic activity at the level of the individual and firm. In addition to preparing a student for the AP Exam in micro-economics, a major emphasis of this course will be on the development of critical thinking skills and the application of economic principles and methodologies in problem solving. Consequently, the course will incorporate a wide variety of activities including formal instruction in writing; presentations; research projects; and problem solving activities in addition to traditional lectures, exams and homework problems.

Cost: The cost of the AP test is approximately \$95. Students with special financial considerations should see their counselor.

ADVANCED PLACEMENT UNITED STATES HISTORY, Two Semesters

Prerequisites: B in both U.S. History & Geography or permission from Principal

This AP class is designed to be similar to a beginning level college American history class and is offered for high school juniors and seniors. The content will begin with the early exploration of North and South America and bring us to present time in the U.S. The course is divided into themes of society, culture, economic development, international relations, and political structure. Its purpose will be to prepare students for college reading, analytical thinking and to encourage students to take the AP Test in May. Group seminars on major political or social issues, advanced readings, and analysis of major foreign and domestic policies will be a key in helping students prepare for college.

Cost: The cost of the AP test is approximately \$95. Students with special financial considerations should see their counselor.

SPECIAL EDUCATION

(Students must have a current IEP to access these courses)

CERTIFICATE OF COMPLETION

Those students achieving a Certificate of Completion instead of a diploma must earn the following credits. The requirements may be fulfilled in a variety of ways, including, but not limited to, Career/Technical Education, college credit courses, online learning, project-based learning, traditional courses, alternative educational experiences, and work-based learning.

- Four credits in English language arts.
- Four credits in math.
- Three credits in science.
- Three credits in social studies.
- One credit in Visual, Performing and Applied Arts.
- One half credit in Physical Education and one half credit and Health.
- 6.0 credits in electives.
- All high school students must also participate in an online course or learning experience.

PERSONAL CURRICULUM (PC)

For some students, a PC may offer the best opportunity to succeed in high school and achieve postsecondary goals. A parent may want to consider this option if his or her child struggled with middle school curriculum and will require extensive support to meet high school requirements or is currently having difficulty meeting high school course requirements. The parent(s) or legal guardian(s) of a student, or an emancipated "age of majority" student may request a PC. School personnel may also request a PC or recommend that students and parents consider the PC option. See "Personal Curriculum" on Page 7 for more details.

ACADEMIC LAB

Prerequisite: Eligibility for this class is determined by the IEP process

This course is designed to provide Resource Program support to students with disabilities. Eligibility for this class is determined by the IEP process. Students will work independently or with support. This class will include development of various study, organizational, self-determination, and time management techniques.

BASIC CLASSROOM, Two Semesters

Prerequisite: Eligibility for this class is determined by the IEP process

This program is designed for students to build functional academic skills and transfer these skills across real-world settings. Students will work in small groups to continually practice socialization as well as socially appropriate and functional communication. Additionally, students will explore and expand their knowledge of the local community and have opportunities for employment/job skill development.

MODIFIED ALGEBRA I: Two Semesters

Prerequisites: teacher recommendation, an IEP, and a documented math disability

Modified Algebra I addresses the Ingham County Power standards for Algebra I and satisfies the requirements for a diploma. The course covers pre-algebra skills, functions, linear functions, systems, quadratic functions, and powers. In addition, the students will work on math related IEP goals.

MODIFIED ALGEBRA II, Two Semesters

Prerequisite: Algebra I, teacher recommendation, an IEP, and a documented math disability. Modified Algebra II addresses the Ingham County Power standards for Algebra II and satisfies the requirements for a diploma. The course covers linear, absolute value, quadratic, polynomial, and exponential functions. In addition, the students will work on math related IEP goals.

MODIFIED GEOMETRY, Two Semesters

Prerequisites: teacher recommendation, an IEP, and a documented math disability.

Modified Geometry addresses the Ingham County Power standards for Geometry and the requirements for a diploma. This course covers angles, lines, triangles, transformations, polygons, circles, logic, similar figures, and proofs. Also covered will be two- and three-dimensional figures, area, and volume. In addition, the students will work on math related IEP goals.



VISUAL, PERFORMING, AND APPLIED ARTS





ADVENTURES IN ART: ART FOR BEGINNERS, Semester

Prerequisite: None

Be art smart! This course is designed for the beginner high school art student. Get your "feet wet" by learning to draw, paint, design, and sculpt. Become more cultured by learning about artists and world cultures. Each student will refine their craftsmanship in this art "boot camp." Students will keep their own sketchbook of research, techniques and sketches.

EAT, BREATHE, ART: ADVANCED ART, Semester

Prerequisite: Adventures in Art: Art for Beginners or teacher approval/signature based on current portfolio.

Be a well-rounded artist! This course focuses on refining the abilities of the student artist by teaching development of fine craftsmanship, media techniques, and originality. Artists will work from observation and research and will keep a progressive sketchbook of research, techniques and sketches. **This class may be taken more than once.** Projects the second time around will be significantly larger and more challenging.

PLAYING WITH CLAY: CERAMICS FOR BEGINNERS, Semester

Prerequisite: None

Do you like working with your hands? Then, roll up your sleeves because this is the art class for you! This course is an introduction to the development of skills and techniques used with three-dimensional art forms such as clay handbuilding techniques and the additive/subtractive sculptural process. Students will keep a progressive sketchbook of research, techniques and sketches. There will also be a focus on history, vocabulary and famous 3D artists as they relate to our studies.

ADVANCED CERAMICS: HARD CORE EDITION, Semester

Prerequisite: Playing with Clay: Ceramics for Beginners or teacher approval/signature based on current portfolio

This course is for the advanced ceramics and sculpture student. This course is a further exploration of the skills and techniques used with three-dimensional art forms such as pottery wheel techniques, glazing techniques and carved sculptures. Students will keep a progressive sketchbook of research, techniques and sketches. We will continue to build on vocabulary and knowledge of 3D art history and famous artists as they relate to our studies.

FUN WITH PHOTOGRAPHY, Semester

Prerequisite: None

Do you like taking pictures? In this course, students will learn how to capture action and abstract photos, macro photography techniques, shoot portraits, landscapes, cityscapes and work with photo manipulation. Students will keep a progressive blog of research, techniques and post their photographs. Take pictures like the pros, have fun in school, and get credit for it!

ART BUFFET: EXPLORING MULTIMEDIA, Semester

Prerequisite: None

Not sure about art? Then, this is the course for you! We will experiment with a variety of media including, but not limited to paint, collage, sculpture and more. Along with these media, vocabulary, history and famous artists will be explored. This course is a fast medley of fun art activities and the culture behind them. Collaboration, participation, and installation will be a part of this course.

TELEVISION BROADCASTING, Semester

Prerequisite: Grades 11-12 only (10th-12 grades; Teacher or counselor approval).

The two main goals of the class will be to produce an 11-minute show, once a week, titled *Williamston Weekly*, which highlights school and student activities, along with producing the daily school

announcements. Students will be expected to contribute to the class through in-front-of and behind-the-camera activities (filming, editing, and acting). Students should be aware that much of the filming has to be done outside of the scheduled class period. Students with previous Television Broadcasting class credit may apply for advanced opportunities with Instructor.

PERFORMING ARTS

CHOIR (BEL CANTO), Two Semesters

Prerequisite: None

Bel Canto is a non-auditioned treble choir. Students will learn both the basics of healthy singing and music reading through performances. The choir will perform works ranging from the Renaissance to modern popular music as well as everything in between and will perform at four concerts per year, as well as the MSVMA Choral Festival to be evaluated by established choral educators. For experienced singers, greater emphasis is placed on individual leadership and continued vocal growth. For newer singers or students joining choir for the first time, this will be an opportunity to learn about music, have experiences as a performer and learn vocal techniques. Additionally, Solo and Ensemble and opportunities will be available.

CHOIR (VERISMO), Two Semesters

Prerequisite: None

Verismo is a non-auditioned mixed choir. Students will learn both the basics of healthy singing and music reading through performances. The choir will perform works ranging from the Renaissance to modern popular music as well as everything in between and will perform at four concerts per year, as well as the MSVMA Choral Festival to be evaluated by established choral educators. For experienced singers, greater emphasis is placed on individual leadership and continued vocal growth. For newer singers or students joining choir for the first time, this will be an opportunity to learn about music, have experiences as a performer and learn vocal techniques. Additionally, Solo and Ensemble and opportunities will be available.

JAZZ BAND, Semester (This course is offered during Zero Hour) Prerequisite: Audition

In this class students will explore through reading music and performance styles, jazz band music. Students will develop jazz symbol reading and interpretation, jazz literature styles, and improvisation. Students will also have an opportunity to study the history of jazz music through the use of various media. Students may repeat this class every semester that the class is offered.

SYMPHONY BAND, Two Semesters

Prerequisites: Audition

The high school band participates in various performances throughout the year including home football games, community parades, and MSBOA festivals. The literature performed in this group is selected to improve and refine student musical achievement and understanding.

THEATER PRODUCTION, Semester

Prerequisite: None

Over the course of a semester, this class will explore all aspects of theater production and perform one major play. Students will be expected to be involved with many aspects of play production such as set building, light and sound technology, costuming, makeup, advertising and acting (not all students are expected to take or are guaranteed an acting role). This class involves a significant time commitment beyond the classroom; after-school rehearsals, dress rehearsals and performances are to be expected. This course will work around sports schedules so that all students will have an opportunity to participate in drama.

Extracurricular activities usually do not interfere too much with this class. <u>Students may repeat this class every semester that the class is offered</u>. Attendance is required during dress rehearsal week and the performances are the final exam in this class.



All courses offered in the Business and Technology Department count as Applied Arts.

YEARBOOK, One or Two Semesters

Prerequisite: None

This class will focus on preserving our school's history through words and pictures. Students will be required to cover extra-curricular activities. Photography, page design and writing skills will be emphasized. Students will also be asked to sell ads. **Students may repeat this class every semester that the class is offered.**



WORLD LANGUAGES

SPANISH

SPANISH I, Two Semesters

Prerequisite: None

Students will develop linguistic strategies in Spanish for real life situations and applications. Skills will be at a survival level, focusing on reading, writing, listening, and speaking as well as the study of the Hispanic culture.

SPANISH II, Two Semesters

Prerequisite: Spanish I

As in Spanish I, students will continue to develop linguistic strategies in Spanish for real life situations while deepening their understanding and usage of the Spanish language. Students will focus on reading, writing, listening, and speaking as well as the study of the Hispanic culture.

SPANISH III, Two Semesters

Prerequisite: Spanish II

As in Spanish II, students will continue to develop linguistic strategies focusing on reading, writing, speaking, and reading for fluency in Spanish. The course will incorporate the study of historical, social, and cultural issues as well as literature from various sources.

SPANISH IV, Two Semesters

Prerequisite: Spanish III

As in Spanish III, students will continue to develop linguistic strategies focusing on reading, writing, speaking, and reading for fluency in Spanish. The course will incorporate the study of historical, social, and cultural issues as well as literature from various sources.

CAPITAL AREA CAREER CENTER (CACC)

SEE http://cacc.inghamisd.org/cacc/ for more information about available programs