

2025-2026

# **Armada High School**

Curriculum Guide

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#### Introduction

Welcome to the Armada High School Curriculum Guide. Selecting classes is a very important process and should be undertaken with careful deliberation. Students and their parents or guardians should evaluate all options and choose courses that fulfill graduation requirements, meet college expectations, and reflect career interests. For your reference, a graduation audit sheet can be found in <a href="#">Appendix A</a>.

Armada High School will make every effort to honor all student course requests. Please note requests for dual enrollment or online courses must be made no later than May 1st of the prior school year. In addition, there are times when scheduling conflicts occur. Students are asked to provide alternate choices in the event primary requests are not possible.

Once the scheduling process is complete and schedules are printed, the schedule is in place for the entire school year. Students may request scheduling changes through the Armada High School Counseling Department. Schedules will not be changed after the first week of classes in any given trimester.

Please note that the master school schedule is developed for the entire school community. Creating a new schedule for a student upsets the balance of staffing in the building and disrupts the learning opportunities for others.

All of the listed courses may also be taken virtually, on-line, or in a blended capacity.

#### Career Pathways

Career Pathways are broad groupings of careers sharing similar characteristics. There are six career pathways:

- Arts and Communication
- Business, Management, Marketing and Technology
- Engineering/Manufacturing and Industrial Technology
- Health Services
- Human Services
- Natural Resources and Agriscience

According to the U.S. Bureau of Labor Statistics, there are more than 12,000 career options to consider. By dividing the thousands of different occupations into six groups, it becomes easier for students to navigate, plan, and make choices about their future. The occupations grouped in each Career Pathway share similar characteristics. The employment requirements for the careers within each pathway call for many common interests, strengths, and competencies. Within each pathway are careers that encompass the entire spectrum of educational training requirements, providing opportunities for all students at all ability levels.

By identifying a pathway or pathways of interest, students can begin to relate school subjects to future goals. It also encourages students to see how their interests, talents and goals relate to groups of careers.

Exploring the pathways to find those that align with personal interests, skills and abilities can assist in discovering occupations that may be the most rewarding in the future. In addition, it can help students to create their educational development plan and choose which courses may be the most beneficial and relevant to them.

#### **Arts and Communication**

This is the pathway of creativity. Careers in this path are related to humanities and performing arts, visual, literacy, and media arts. If you are innovative, imaginative, or enjoy communicating your ideas through writing, music, and art, this may be just the pathway for you.

### **Business, Management, Marketing and Technology**

This is the pathway of organization and leadership. Careers in this pathway are related to the business environment and include sales, marketing, finance, accounting, management and operating computers. If you enjoy working with numbers, finances, computers, or carrying ideas from planning to development, this may be the pathway for you.

#### Career Pathways

#### **Engineering/Manufacturing and Industrial Technology**

This is the pathway of implementation. Careers in this pathway are related to the design, development, installation, and maintenance of technology and physical systems. If you are mechanically inclined, curious about how things work, like reading diagrams, or enjoy working with your hands, this may be the pathway for you.

#### **Health Science**

This is the pathway of physical wellness. Careers in the pathway involve laboratory science, research, preventive care, or treatment of people and animals. If you enjoy caring for people or animals who may be sick or if you enjoy learning about health, disease, medicine, or how the body works, then this may be the pathway for you.

#### **Human Services**

This is the pathway of service. Careers in this pathway involve protecting, teaching, counseling, or advising people. If you enjoy public or personal service in areas such as education, government, law, law enforcement, leisure and recreation, military, religion, childcare, or social services, this may be the pathway for you.

#### **Natural Resources and Agriscience**

This is the pathway of environmental maintenance. Careers in this pathway are related to agriculture, environment, and the natural resources of our planet. If you enjoy being outdoors and are interested in nature and protecting the environment, this may be the pathway for you.

For more information about Career Pathways or to take an interest survey to determine your pathway, please visit the counseling office.

#### **English Language Arts Department**

The English Language Arts program at Armada High School is a sequential, integrated program that focuses on the development of ideas and skills through the five Language Arts components: writing, reading, listening, speaking, and viewing.

It is the goal of the program that all students will:

- Communicate ideas and information effectively;
- Demonstrate reading, writing, listening, speaking, and viewing skills;
- Identify their strengths and weaknesses as writers, speakers, listeners, and viewers;
- Summarize, interpret, apply, analyze, synthesize, and evaluate text through speaking and writing or through an artistic response;
- Demonstrate an understanding of the cultural significance and historical impact of literature as it relates to society; and
- Demonstrate research, documentation, and technical writing skills.

#### Course Sequence in English Language Arts

Grade Level	Course Options
9th grade	English 9 Honors English 9
10th grade	English 10 Honors English 10
11th grade	English 11 AP Language and Composition
12th grade	English 12 Ferris State University Concurrent Enrollment English 150 (ENGL 1503 credits and ENGL 2503 credits or ENGL 1503 credits and LITR 1503 credits) AP Literature and Composition

## English Language Arts Department Course Offerings and Descriptions

English 9 3 trimesters (1.5 credits) Grade 9	
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English 9 focuses on the use of oral and written communication. The written communication section of the class will address process writing skills to communicate effectively with a variety of audiences. As part of the writing process, students will use the library and other resources to develop a knowledge base for informational documents. The study of literature will focus on short stories, poetry, fiction, drama, non-fiction and informational texts.

Tionors English 5	Honors English 9	3 trimesters (1.5 credits)	Grade 9
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Teacher Approval Recommended 75th Percentile NWEA Scores Recommended in Language and Reading

This course will progress at an accelerated rate and requires students to think critically by analyzing and synthesizing information from language and literature. Students will demonstrate knowledge and application of writing skills in several expository and creative writing assignments. Oral communication skills will focus on intelligent, thoughtful responses to literature. In this course, students will explore the various forms of literature as well as informational texts. A summer reading novel and assignment will be required.

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This course continues the development of oral and written communication. Students will focus on refining grammar and usage skills and developing vocabulary. The goal of this class is to create thinkers who take responsibility and become actively involved in their own writing process and reflection. Research writing will also be investigated. There will be an emphasis on American authors and the historical contexts which influenced their writing.

# English Language Arts Department Course Offerings and Descriptions

Honors English 10 3 trimesters (1.5 credits) Grade 10

Teacher approval required

75th Percentile NWEA Scores Recommended in Language and Reading

Progressing at an accelerated rate, this rigorous course requires students to think critically by analyzing and synthesizing information from language and literature. Standard usage, functional grammar, correct spelling and punctuation are expected in all writing assignments. Students will have the opportunity to further develop and improve their individual styles and skills, as they explore different points of views in creative and expository writing. There will be an emphasis on American authors and the historical contexts which influenced their writing. Summer reading and assignment will be required.

English 11	3 trimesters (1.5 credits)	Grade 11
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English 11 will focus on literature and how it parallels the universal human experience. There will be an emphasis on British authors and the historical contexts which influenced their writing. Standard usage, functional grammar, correct spelling and punctuation will be emphasized in all writing assignments. Composition, speaking, listening, vocabulary and grammar will be integrated through a variety of class activities and projects.

AP Language & Composition	3 trimesters (1.5 credits)	Grade 11
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Students are expected to take the AP Test in spring 75th Percentile NWEA Scores Recommended in Language and Reading

The Advanced Placement (AP) Language and Composition class is open to any student who wishes to have the opportunity to experience a college level course while in high school. The course requires students to think, write, and read critically, while analyzing various nonfiction pieces. Students must be self-motivated to succeed in this course. Lengthy assignments, sophisticated reading techniques, and exposure to AP exam-type questions make this a college level course.

## English Language Arts Department Course Offerings and Descriptions

English 12	3 trimesters (1.5 credits)	Grade 12
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This course is for students NOT enrolled in AP Literature and Composition and/or the concurrent enrollment Ferris English class. The course content of Senior English will be covered here, however, additional and accelerated exposure to all language art components will be required. Seniors will analyze and synthesize information which will dictate communication in speech, writing, and multimedia avenues necessary for college and the workplace.

AP Literature & Composition	3 trimesters (1.5 credits)	Grade 12

Students are expected to take the AP test in spring 75th Percentile NWEA Scores Recommended in Language and Reading

The Advanced Placement (AP) Literature and Composition class is designed for exceptional English students. The course requires students to think, write, and speak critically while studying great works of classical and contemporary world literature in preparation for the Advanced Placement Test. Students must be self-motivated. Lengthy reading assignments, sophisticated writing techniques and exposure to AP exam-type questions make this a college level course.

Ferris State University English (ENGL 150 & ENGL 250)	3 trimesters (1.5 credits)	Grade 12
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Prerequisite: 450 on the EBRW portion of the SAT to receive college credit

This course is equivalent to Ferris State University's ENGL 150 and ENGL 250--the entry-level writing course for all college freshmen. Students will learn to organize and develop papers for diverse audiences and purposes, including how to discover and focus on a topic, develop ideas, gather support, and draft and revise papers effectively. Fundamental language skills and introduction to library research and argumentation are also taught.

Ferris State University English	3 trimesters (1.5 credits)	Grade 12
(ENGL 150 & LITR 150)		

Prerequisite: 450 on the EBRW portion of the SAT to receive college credit

This course is equivalent to Ferris State University's ENGL 150 and LITR 150--the entry-level writing course and literature course for all college freshmen. Students will learn to organize and develop papers for diverse audiences and purposes, including how to discover and focus on a topic, develop ideas, gather support, and draft and revise papers effectively. Fundamental language skills and introduction to library research and argumentation are also taught.

Creative Writing I	1 trimester (0.5 credit)	<b>Grades 10-12</b>
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The goals of this course are to acquaint beginning writers with a variety of fiction, drama, poetry, and creative nonfiction writing; to provide opportunities for production and publication of their own work; and to introduce a basis for a writing workshop format. Students will experience all stages of the writing process and use different conference methods as tools for assessment. Publication of revised works will be strongly encouraged. Students may be held responsible for the construction of an individual book/class magazine at the end of class.

Creative Writing II	1 trimester (0.5 credit)	Grade 10-12
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Prerequisite: Successful completion of Creative Writing I

This course will be organized as a writer's workshop and intended for motivated students interested in seeing their work (primarily fiction) published. Continued exposure to professional pieces, review of traditional grammar usage rules, and assessment of pieces from different conference methods will be used as tools to aid the writer. Progressive mastery of varied forms/genre (evident in students' portfolios) and submission of pieces for publication will form the major basis for class grade. Only serious students should take this course, as it involves intensive writing and revising with after school and evening work a strong possibility.

Public Speaking	1 trimester (0.5 credit)	Grades 9-12
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The purpose of this course is to develop effective communicators. Students will demonstrate appropriate speaking and listening skills in both formal and informal communication situations. The emphasis in the course is frequent speaking experiences that build student confidence.

Public Speaking II	1 trimester (0.5 credit)	Grades 9-12
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This course will make use of the communication skills acquired in Public Speaking and will continue to build off those skills. Students will demonstrate the art of expressing and exchanging ideas in speech. Emphasis will be placed upon the ability to compose, critically analyze, and deliver information through verbal, vocal, and visual interactions.

## 21st Century ELA 1 trimester (0.5 credit) Grades 11-12

This course will focus on the evolving role of the English-Language Arts field in the 21st Century. The goal will be to prepare students for the changes in English beyond the scope of the core ELA courses and enhance the skills of students with a passion for English. Topics highlighted will include: Creative Writing; Reading; Visual Language Arts; and digital literacy (social media and blogging). Students will expand their writing skills through creative writing exercises, an introduction to journalism styles, and minimal forms of poetry, and literature to film analysis.

Yearbook	3 trimesters (1.5 credits)	Grades 9-12
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Prerequisite: Completed Application and Teacher Recommendation Students will be responsible for designing and producing the school yearbook to be issued late in the second semester. Students will serve as staff in the following departments: photography, layout/writing, business/ad sales. Students and parents are required to read and sign a contract regarding expectations. After school, evening work, and advertising sales will be required.

#### Mathematics Department

It is the belief of the mathematics staff of Armada Area Schools that mathematics is one of the fundamental skills of learning. The basics of mathematics, along with other essential communication skills, are ingredients that cannot be excluded from any student's formal training.

We recognize qualitative literacy as being necessary for survival in a rapidly changing technological society. It is therefore agreed that despite the differences that exist in learning potential or individual student's achievement, there are certain common goals for all students in mathematics: the development of problem-solving and critical thinking skills; the facility to analyze data, make quantitative and qualitative comparisons, identify trends, and make valid conclusions and predictions; the capacity to make estimates and recognize reasonable results; and the appropriate utilization of related equipment such as calculators and computers and the ability to adapt to new technology.

We regard the skills of mathematics as part of being an educated person and critical to post-secondary training and employment. Furthermore, we consider cooperation with parents, the community, industry, and those in higher education essential in the development and delivery of a mathematics program which effectively educates our children and communicates the need for this education to all.

#### Goals and Objectives

In accordance with the stated philosophy of the Armada Area Schools Mathematics Department and the standards recommended by the National Council of Teachers of Mathematics, the mathematics staff strives to meet the following objectives:

- To encourage critical thinking and to help students learn to reason objectively and analytically;
- To promote the development of problem-solving skills;
- To provide a meaningful mathematics course for students which is consistent with learner's mathematics aptitude, past achievement, and future requirements;
- To maintain a program of study which is consistent with expectations of the workplace and post-secondary training programs; and
- To offer relevant computer training to as many students as possible, and utilize technology as an integral component in classroom instruction whenever feasible.

#### Course Sequence in Mathematics

Mathematics adheres to the following sequence: Algebra I, Geometry or Honors Geometry, and Algebra II or Honors Algebra II. Following completion of Algebra II or Honors Algebra II, students can elect to continue with Pre-Calculus (typically 11th or 12th grade) and AP Calculus (typically 12th grade), or they may choose to take a math elective during their 12th grade year.

Please note that a mathematics related course is required of all 12th grade students. In addition, all students are encouraged to challenge themselves. Once a student receives credit in a course, he/she may not take a class at a lower level.

# Mathematics Department Course Offerings and Descriptions

### Algebra I 3 trimesters (1.5 credits) Grades 9-12

Algebra I aims to deepen and extend student understanding built in previous courses by focusing on developing fluency with solving linear equations and inequalities and systems; extending these skills to solving quadratic and exponential functions; exploring functions, including sequences, graphically, numerically, symbolically, and verbally; and using regression techniques to analyze the fit of models to distributions of data.

### Honors Algebra I 3 trimesters (1.5 credits) Grades 9-12

This course is offered to students by teacher recommendation and is an accelerated version of the Algebra I course. Students are challenged with a quicker pace and more in-depth look at the course concepts.

## Geometry 3 trimesters (1.5 credits) Grades 9-12

This course is to be taken after the successful completion of Algebra I. Geometry aims to formalize and extend the geometry that students have learned in previous courses. It does this by focusing on establishing triangle congruence criteria using rigid motions and formal constructions, building a formal understanding of similarity based on dilations and proportional reasoning, developing the concepts of formal proof, exploring the properties of two— and three-dimensional objects, working within the rectangular coordinate system to verify geometric relationships, proving basic theorems about circles, and using the language of set theory to compute and interpret probabilities for compound events.

# Mathematics Department Course Offerings and Descriptions

<b>Honors Geometry</b>	3 trimesters (1.5 credits)	Grades 9-12
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This course is offered to students by teacher recommendation and is an accelerated version of the Geometry course described above. Students are challenged with a quicker pace and a more in-depth look at the course concepts.

### Algebra II 3 trimesters (1.5 credits) Grades 9-12

This course is to be taken after successful completion of Algebra I and Geometry. Algebra II aims to apply and extend what students have learned in previous courses by focusing on finding connections between multiple representations of functions, transformations of different function families, finding zeros of polynomials and connecting them to graphs and equations of polynomials, modeling periodic phenomena with trigonometry, and understanding the role of randomness and the normal distributions in making statistical conclusions.

## Honors Algebra II 3 trimesters (1.5 credits) Grades 9-12

Prerequisite: Honors Geometry

This course is offered to students by teacher recommendation and is an accelerated version of the Algebra II course, described earlier. Students are challenged with a quicker pace and a more in-depth look at the course concepts.

## Pre-Calculus 3 trimesters (1.5 credits) Grades 9-12

Eligible to receive Ferris State University credit in MATH 120 and MATH 130 Prerequisite: Must receive a 580 or higher on the math portion of the PSAT or SAT Teacher Approval Required

Pre-Calculus "A" adds the finishing touches to the Algebra branch of mathematics. We quickly review each family of functions and complete the big picture of the commonalities and differences between the different families. Solving and graphing higher order functions are the primary focus of this trimester. Pre-Calculus "B" is an introduction to trigonometry. We begin the trimester investigating the unit circle. From there we move on to graphing the trigonometric functions, verifying identities, and finally complete the trimester solving trigonometric equations. Vectors and polar coordinates are also introduced. A strong background in the fundamentals of Algebra is essential.

# Mathematics Department Course Offerings and Descriptions

AP Calculus 3 trimesters (1.5 credits) Grades 11-12

Prerequisite: Pre-Calculus

Students are expected to take the AP test in spring. Topics covered include: historical development, analytic geometry, functions, graphs, limits, derivatives and their applications, techniques of integration, applications of integration, solving first order differentials, trigonometric functions, logarithmic functions and exponential functions. Students will be prepared to take the AB calculus portion of the Advanced Placement Exam.

Statistics 2 trimesters (1.0 credit) Grade 11-12

Prerequisite: Algebra I, Geometry, and Algebra II

Statistical analysis techniques are introduced in this course. The course uses a wide range of relevant issues to provide a realistic basis for problems dealing with statistical and data analysis. Application areas include health care, business, economics, social and physical sciences, engineering, education, and leisure activities.

AP Statistics 3 trimesters (1.5 credits) Grades 11-12

Prerequisite: Algebra I , Geometry, and Algebra II \*Course can be taken concurrently with Precalculus

Students are expected to take the AP test in the spring.

AP Statistics is a College Board class that is intended as an introductory college-level statistics course. The course introduces students to major concepts and tools for collecting, analyzing, and drawing conclusions from data. Students build their understanding of statistics using technology, investigations, problem solving, and writing as they explore concepts like variation and distribution; patterns and uncertainty; and data-based predictions, decisions, and conclusions.

Medical Math 1 trimester (0.5 credit) Grades 11-12

This course is designed for students who have either taken Medical Science I or are currently enrolled in the course. Students will learn to apply mathematical computations related to healthcare procedures and to apply mathematical principles to conversation equations used in the healthcare delivery system. Emphasis will be placed on principles involving temperature, weights, and measures related to medical professions. We will also calculate dosages and analyze diagrams, charts, graphs, and tables to interpret healthcare results.

Prerequisite: Algebra II

In this course, students will review some algebraic and geometric topics while applying those topics in the context of things they will have to deal with as adults. Some of these topics would include: linear functions by looking at rate of change problems, exponentials through the scope of financing and how credit cards actually work, evaluating loan options, mortgages, etc. Statistics through looking at some studies and the different kinds of studies one can do.

# Mathematics Department Course Offerings and Descriptions

Intro to Probability and Statistics	1 trimester (0.5 credit)	Grades 11-12
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Statistics are all around us. We see them in sports, news articles, in the games we play, and even in voting. In this course students will investigate how to use probability to analyze information and make decisions in the context of situations like those mentioned above. After developing and establishing the necessary background skills, we'll learn how to predict if you're likely to win or lose money on a deal or in a game, we'll consider a variety of voting systems to see which may be the most fair representation of the people, and we'll look at some of the features of graphs and statistics that can be misleading to help us learn to spot loopholes and problems with statistical arguments.

Sports Math	2 trimester (1 credit)	Grade 12
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Prerequisites: Algebra I, Geometry, and Algebra II

Sports math is a senior elective math credit that is designed to explore and deepen the understanding of mathematics through the examination of sports science and sports analytics.

Introduction to Game Theory	1 trimester (0.5 credit)	Grades 11-12
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In this course, students will play a variety of games and determine what makes the games fair or unfair for some or all of the people involved. Is it better to be player one or player two? If you're currently losing the game, is it possible to change the outcome? We'll also investigate how games can become more complicated when humans are involved in decisions along the way. People playing poker sometimes bet on a terrible hand, for example. After building this background, we'll look at the connections this work has with how decisions are made on the battlefield or in economics. We'll also look at some of the situations where intuition tells us a certain decision makes the most sense while strategy says something totally different.

If you're the sort of student that always wondered why math had to work the way your teachers told you, then this course may be of interest to you. We'll journey through a world where circles have multiple sides and corners, where the number 25 can be written as 11001, where two parallel lines are not always the same distance from one another, and where the shortest distance between two points is not a straight line. In the process we'll discover how computers encode data and how you can send information securely over the internet.

# Mathematics Department Course Offerings and Descriptions

ster (0.5 credit) Grades 9-12	
9	ester (0.5 credit) Grades 9-12

#### Teacher Approval Required

This course is a supplemental course to Algebra I and is assigned to those students who can benefit from additional support in the development of a solid Algebra base to prepare for Algebra II. Students are provided additional work-time on their daily assignments with the teacher working with individual students as necessary. This course may be repeated as necessary.

Algebra II Assist	1 trimester (0.5 credit)	Grades 9-12
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#### Teacher Approval Required

This course is a supplemental course to Algebra II and is intended to help those students struggling with advanced concepts in mathematics. Students will have additional practice time and be required to show participation in mastering the various standards. This course may be repeated as necessary.

0.5 credit) Grades 9-12

#### Teacher Approval Required

This course is a supplemental course to Geometry I and is intended to help those students struggling with advanced concepts in mathematics. Students will have additional practice time and be required to show participation in mastering the various standards. This course may be repeated as necessary.

Advanced Algebra II	1 trimester (0.5 credit)	Grades 11-12
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Prerequisite: Algebra II

Advanced Algebra II will allow students to delve into topics, including conics (parabolas, ellipses, and hyperbolas), matrices, sequences, induction, and the Binomial Theorem.

Trigonometry 1 trimester (0.5 credit) Grades 11-12
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Prerequisite: Algebra II

Trigonometry will allow students to explore the concept of trigonometric functions and identities. Students will learn about the sine, cosine, and tangent functions, their graphs, the unit circle, and real-life applications of trigonometric functions.

Introduction to the	1 trimester (0.5 credit)	Grades 11-12
Concepts of Calculus		

Prerequisite: Algebra II

Introduction to the Concepts of Calculus is intended to provide students with a basic understanding of the three core ideas of Calculus: Limits, Derivatives, and Integration. It should serve as an overview of the most important concepts for those that may be interested in taking a complete course in calculus in the future or those that are curious to understand more about what calculus is.

The standards for learning in the course will be related to the standards for the AP Calculus course, but focusing more heavily on conceptual understanding and a reduced set of functions compared with the AP course. Additionally, students will learn to understand the language and notation we use as mathematicians to communicate about topics in Calculus.

#### Science Department

"Science, mathematics, and technology do not create curiosity. They accept it, foster it, incorporate it, reward it, and discipline it-and so does good science teaching."

In order to be prepared for the global society, students must be scientifically literate. The impact of science and its technological applications in every phase of human life demands that students be exposed early and continually to the ideas and processes of the scientific world. Science instruction at Armada High School is designed to provide experiences that develop skills in problem solving and develop an inquiry approach to the study of the following areas: integrated science, biology, advanced biology, anatomy and physiology, chemistry, environmental science, and physics. Science instruction also serves to stimulate curiosity and provide experiences which allow students to achieve a satisfying understanding of themselves and their world.

Processes and skills are considered to be the core of the science program and students are required to be involved in hands-on, real-life activities in individual and group settings as an essential component of the science curriculum.

To understand the world in which they live, students must become problem solvers and discoverers. This approach reinforces the scientific method and strengthens the ability to generalize. When the concepts are learned through scientific investigation and reasoning, they are more clearly understood and retained longer.

Science education should provide experiences that develop observation skills, open-mindedness, critical thinking, the withholding of judgment until the facts are known, and a willingness to change an idea when new evidence is discovered.

#### Course Sequence in Science

Grade Level	Course Options
9th grade	Physical Science Honors Chemistry
10th grade	Biology Honors Biology
11th grade	Chemistry or AP Chemistry Physics or AP Physics Environmental Science or AP Environmental Science
12th grade	Science Elective AP Chemistry and/or AP Biology

#### **STEM Designation**

Students who complete the STEM Honors Diploma Program may receive a STEM designation on their diploma. Eight courses and three electives, as indicated on the chart in Appendix B, must be completed to be eligible for the designation.

# Science Department Course Descriptions and Offerings

Biology	3 trimesters (1.5 credits)	Grades 10-12

This course is a study of the fundamentals of biological science. Students in Biology will study a variety of topics that include cellular structure and function; heredity and genetics; classification; and a variety of living organisms and their characteristics. Student investigations emphasize accurate observations, collection of data, data analysis and the safe manipulation of scientific apparatus and materials during field and laboratory investigations.

Honors Biology	3 trimester (1.5 credits)	Grades 10-12

Prerequisite: Chemistry or Physical Science

In Honors Biology students will utilize a mixture of inquiry, lecture, and reflection to study: The patterns and products of change in organisms; The interactions and interdependence of organisms; The continuity and reproduction of organisms; The growth, development, and differentiation of organisms; The matter and organization of organisms; How organisms maintain consistency at the individual through ecosystem levels.

### AP Biology 3 trimesters (1.5 credits) Grades 10-12

Prerequisite: Biology

Students are expected to take the AP test in the spring.

Advanced Biology is designed to be the equivalent of a two-semester introductory college biology course. As recommended by the College Board, students develop an understanding of the major topics of biology, including biochemistry, molecular biology, cells, heredity, evolution, organisms and populations.

### Chemistry 3 trimesters (1.5 credits) Grades 10-12

Chemistry is the study of the structure, composition, and behavior of matter. Students study a variety of topics that include: characteristics of matter, transformations during physical and chemical changes, atomic structure, periodic table of elements, behavior of gasses, bonding, nuclear fusion and fission, chemical equations, properties of solutions, acids and bases, and chemical reactions. Student investigations emphasize accurate observations, collection of data, data analysis, and the safe manipulation of scientific apparatus and materials during laboratory investigations.

Laboratory Practices	1 trimester (0.5 credits)	Grades 11-12
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Students will have the opportunity to gain more experience in a range of laboratory techniques that will help them prepare for post secondary labs. The course covers basic laboratory skills to more advanced techniques. This course has a lab forward focus with hands-on experiences.

### Honors Chemistry 3 trimesters (1.5 credits) Grades 9-12

Chemistry is the study of the structure, composition, and behavior of matter. Students study a variety of topics that include: characteristics of matter, transformations during physical and chemical changes, atomic structure, periodic table of elements, behavior of gasses, bonding, nuclear fusion and fission, chemical equations, properties of solutions, acids and bases, and chemical reactions. Student investigations emphasize accurate observations, collection of data, data analysis, and the safe manipulation of scientific apparatus and materials during laboratory investigations.

## AP Chemistry 3 trimesters (1.5 credits) Grades 10-12

Prerequisite: Chemistry

Students are expected to take the AP test in the spring.

AP Chemistry is equivalent to a college level general chemistry course that provides rigorous study in four major areas: structure of matter, states of matter, reaction and descriptive chemistry. Students must be highly motivated to tackle this rigorous course.

## Physical Science 3 trimesters (1.5 credits) Grade 9

Physical Science addresses the Michigan Essential Content Expectations for Chemistry and the Michigan Essential Content Expectations for Physics. Students develop an understanding of the major topics of chemistry and physics; including forces and motion, energy associated with heat, electromagnetic systems, light and sound and energy transformations, matter, changes in matter, energy transfer and conservation. Through a variety of laboratory experiences, students acquire the skills of inquiry and apply their understanding of scientific concepts.

Physics	3 trimesters (1.5 credits)	<b>Grades 10-12</b>
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In physics, students conduct laboratory investigations, use scientific methods during investigation, and make informed decisions using critical-thinking and scientific problem-solving. Students study a variety of topics that include: Newton's laws of motion, forces, thermal energy, work and simple machines, waves, sound, light, electricity, magnetism and rocketry. Student investigations emphasize accurate observations, collection of data, data analysis, and the safe manipulation of scientific apparatus and materials during laboratory investigations.

AP Physics 3 trimesters (1.5 credits) Grades 11-12

Prerequisite: Algebra II

Students are expected to take the AP test in the spring.

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

AP Physics 1 3 trimesters (1.5 credits) Grades 11-12

Prerequisite: Algebra II

AP Physics 1 is an algebra-based, introductory college-level physics course. Students cultivate their understanding of Physics through inquiry-based investigations as they explore topics such as Newtonian mechanics (including rotational motion); work, energy, and power; mechanical waves and sound; and introductory, simple circuits.

AP Physics C: 3 trimesters (1.5 credits) Grades 11-12
Mech/Elec/Mag

Prerequisite: Algebra II, concurrent with Calculus

Students are expected to take the AP test in the spring.

The AP Physics C: Mechanics course (Approximately 2 trimesters) is equivalent to a one-semester, calculus-based, college-level physics course. It is especially appropriate for students planning to specialize or major in physical science or engineering. The course explores topics such as kinematics; Newton's laws of motion; work, energy and power; systems of particles and linear momentum; circular motion and rotation; and oscillations and gravitation. Introductory differential and integral calculus is used throughout the course.

Time permitting, the AP Physics C: Electricity and Magnetism course (Approximately 1 trimester) is a calculus-based, college-level physics course, especially appropriate for students planning to specialize or major in physical science or engineering. The course explores topics such as electrostatics; conductors, capacitors, and dielectrics; electric circuits; magnetic fields; and electromagnetism. Introductory differential and integral calculus is used throughout the course.

Honors Anatomy & 3 trimesters (1.5 credits) Grades 11-12
Physiology

Prerequisite: Biology

Anatomy and Physiology is a course in which there is an extensive examination of the structures and functions of the ten human body systems. The theme-structure determines function-is emphasized in this laboratory and lecture program. It is recommended that Biology and Chemistry be taken before this course.

Botany	1 trimester (0.5 credit)	<b>Grades 11-12</b>

Prerequisite: Biology

Botany is a one trimester course that will study the structure, function, physiology, diversity and ecology of plants. In addition to the biological study of plants and their functions, this class will also have an identification component where students will use a dichotomous key to identify different species of trees and plants found around the school and in Armada.

### Earth Science 3 trimesters (1.5 credits) Grades 10-12

Earth science will emphasize the characteristics and conditions of the earth, formation and history of the earth, plate tectonics, origin and composition of minerals and rocks and the rock cycle, processes and products of weathering, natural energy resources, interactions in watersheds, characteristics of the atmosphere and the role of energy in weather and climate.

## Honors Earth Science 3 trimester (1.5 credits) Grades 10-12

Prerequisite: Chemistry

This course provides students with honors-level Earth Science curriculum focusing on geology, oceanography, astronomy, weather, astronomy, weather, and climate. The main purpose of Earth Science is to introduce students to the inner workings of Earth and its systems as well as including vital science practices.

Geology	1 trimester (0.5 credit)	Grade 12
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Prerequisite: Earth Science

Geology is a one trimester course that will focus on the surface and internal processes of the Earth and how they form and shape our world. This will include studying plate tectonics, minerals, rocks, volcanoes, earthquakes, glacier movement, rivers and lakes, and the history of the formation of the planet.

Physics of Sports	3 trimesters (1.5 credits)	Grades 10-12
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Prerequisite: Taken concurrently with Algebra II

The course follows a fairly traditional physics format as far as topics go, but examples and labs make use of different sports and how we can apply them to the current topic. Trimester I: Constant velocity motion and acceleration. Trimester II: Forces, projectile motion, circular motion. Trimester III: Energy and momentum.

Space Science	1 trimester (0.5 credits)	<b>Grades 10-12</b>
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Space science will emphasize the characteristics and life cycle of stars, exploration of the universe, role of the sun in our solar system, planets, and the orientation and placement of the earth. Student investigations emphasize accurate observations, collection of data, data analysis, and the safe manipulation of scientific apparatus and materials during laboratory investigations.

This class will focus on bone and muscle anatomy and physiology, aspects and effects of training, and biomechanics of athletics. It is designed for students who want to know more about how to best utilize their training to maximize performance in their sports, as well as for people interested in getting started on their own fitness journeys.

# Science Department Course Descriptions and Offerings

Zoology A 1 trimester (0.5 credit) Grades 11-12

Prerequisite: Biology

Zoology is the study of animals. This course will cover the Animal kingdom and scientifically-based knowledge of the diversity and structure of animals and how they differ from other kingdoms of life. Students will learn about the structure, function, and diversity of animals—including the study of biological concepts and processes, such as diversity, anatomy, evolutionary relationships, functional adaptations, environmental relationships, reproduction, heredity, development, and homeostasis. Class will be discussion based with laboratory exercises and dissections. The laboratory component includes the study of the taxonomy and systematics on animal phyla and the anatomy and morphology of representative taxa. This trimester will focus on introducing animals and the invertebrate phyla. Optional to take Zoology B which will focus on vertebrate animals.

Zoology B 1 trimester (0.5 credit) Grades 11-12

Prerequisite: Zoology A

Zoology B is an extension to Zoology A. The course will cover the same concepts as Zoology A, except it will be focused on vertebrate animals, both local vertebrates and important vertebrates around the world.

AP Environmental Science 3 trimester (1.5 credit) Grades 11-12

Prerequisite: Physical Science or Chemistry and Biology

This course is interdisciplinary, involving the fields of ecology, biology, ocean, and atmospheric sciences, climatology, chemistry, geology, toxicology, geography, economics, politics, and ethics, etc. The goals of the AP Environmental Science course are to (1) provide students with the scientific principles, concepts, and methodologies required to understand the interrelationships in the natural world, (2) to identify and analyze environmental problems or challenges (both natural and man-made), (3) to evaluate the relative risks associated with these problems, and (4) to examine alternative solutions for resolving and/or preventing them.

#### Social Studies Department

In order to assure the advancement of civic awareness and competence, Armada Area Schools has committed itself to a social studies curriculum that develops well-informed, critical thinking individuals who are prepared to meet the social and personal responsibilities of a democratic society.

Armada Area Schools utilizes the State of Michigan K-12 Social Studies standards and curriculum. This curriculum is dedicated to promoting the ideals of diversity, dignity of all people, an understanding of interrelationships, both past and present, within societies, as well as the integration of history, geography, the humanities and interdependence of all nations in a world community.

#### Course Sequence in Social Studies

Grade Level	Course Options
9th grade	U.S. History II/ Geography A AP U.S. History
10th grade	Government/Civics and Economics
11th grade	World History AP World History
12th grade	Elective Course(s)

# Social Studies Department Course Descriptions and Offerings

U.S. History II/Geography	3 trimesters (1.5 credits)	Grade 9
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US History II is a continuation of Eighth Grade US History I. We begin in the 1880s and concentrate on major events such as Western Expansion, Industrialization, Imperialist Policies, Progressive Reforms, the Great Depression, both World Wars, the Cold Wars Arms Race, Civil Rights, the Korean and Vietnam War.

## Government/Civics 1 trimester (0.5 credit) Grade 9-10

This is a survey course in the principles of American government. Instruction focuses upon six main areas: fundamentals of government, political participation, institutions of national government, civil liberties/rights, public policy & state and local government. Students are asked to think critically by extrapolating meaning from readings, participating in role-playing, discussions, and periodic assessments.

## Economics 1 trimester (0.5 credit) Grade 9-10

This survey course in economics employs lecture, readings, class discussion and projects to help students understand how economic decisions impact everyday life. Students will have the opportunity to explore the differences between various competing economic systems, market structures and economies that existed in the past and those that exist today. Students will also develop an understanding of issues such as supply and demand, budgets, credit cards and basic household economics.

## World History I/Geography 3 trimesters (1.5 credits) Grade 11

The goal of this course in World History is to provide an awareness of how current events tie in with the historical past, as the class moves from the beginnings of civilization through the 18th and 19th century. Due to the scope of both the textbook and the material being covered (namely the history of the entire world); this course will be a survey over the major events of the past including: Ancient Egypt, Greece, and Rome through the Middle Ages, Renaissance and French Revolution. Course emphasizes historical investigation, discussion, projects, analysis and written expression.

Physical and Human	1 trimester (0.5 credit)	Grades 10-12
Geography		

Prerequisite: American History

Physical and human geography provides an overview of the physical characteristics of our planet and how humans interact with their surroundings. The class focuses on topics such as thinking geographically, population and migration, culture, agriculture, urban geography and development and industrialization.

# Social Studies Department Course Descriptions and Offerings

AP World History 3 trimesters (1.5 credits) Grades 11-12

Students are expected to take the AP test in the spring 75th Percentile NWEA Scores Recommended in Reading.

Taking much of the key creative aspects out of World History I and Honors World History, the Advanced Placement (AP) World History course will cover the history of the world, from early civilizations to present day, with an emphasis on Western Civilization, along with Eastern cultures. Students should be self-motivated, as the course emphasizes lecture, discussions, projects, analysis and written expression of ideas.

### AP United States History 3 trimesters (1.5 credits) Grades 9-12

Students are expected to take the AP test in the spring. 75th Percentile NWEA Scores Recommended in Reading.

The Advanced Placement (AP) American History course will cover the history of the United States from exploration to the present. Because of the advanced nature of this course, only 12th grade students with superior skills should enroll. Students taking this course should be self-motivated with a history, social studies orientation from previous course work.

### AP Psychology 3 trimesters (1.5 credits) Grades 11-12

Students are expected to take the AP test in the spring. 75th Percentile NWEA Scores Recommended in Reading.

AP Psychology is an introductory college-level psychology course. Students cultivate their understanding of the systematic and scientific study of human behavior and mental processes through inquiry-based investigations as they explore concepts like the biological bases of behavior, sensation and perception, learning and cognition, motivation, developmental psychology, testing and individual differences, treatment of abnormal behavior, and social psychology.

# Social Studies Department Course Descriptions and Offerings

Psychology I	1 trimester (0.5 credit)	<b>Grades 11-12</b>
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This high school class is one that everyone should take because it is a study of the individual. Through lectures, discussions, readings, activities, and projects you will have the opportunity to learn about how our minds work and why we behave as we do. In this introductory course we will learn about the basics of psychology—approaches to psychology, the structure and function of the brain, learning and memory, sensation and perception, personality, sleep and dreams, and child development. Active participation is required through critical thinking, sharing your opinions, and working cooperatively. Reflections of one's own experiences help students gain insight and self-awareness while we apply the major theoretical perspectives of psychology.

Psychology II	1 trimester (0.5 credit)	<b>Grades 11-12</b>

Prerequisite: Psychology I

In this follow-up to Psychology I, we will learn beyond the basics of psychology—treatment and therapy, emotions, thinking and language, the dynamics of intelligence, motivation, personality, psychological disorders, social psychology, and stress. Through lectures, discussions, readings, activities, and projects, you will have the opportunity to learn about how our minds work and why we behave as we do. Active participation is required through critical thinking, sharing your opinions, and working cooperatively. Reflections of one's working cooperatively. Reflections of one's own experiences help students gain insight and self-awareness while we apply the major theoretical perspectives of psychology.

Psychology III	1 trimester (0.5 credit)	Grades 11-12
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Prerequisite: Psychology I and Psychology II

The Psychology III 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.

# Social Studies Department Course Descriptions and Offerings

Global Awareness 1 trimester (0.5 credit) Grades 11-12

This class deals with current events on the international, national and local scene. Students will research and discuss topics that are currently or have recently affected our world. They will also investigate the historical events that have led to current problems. Topics range from a series of large issues like the Middle East, the role of media, China and Vietnam to smaller, more personal issues like ethics, genocide, fast food, and the role of corporations on our lives. The class relies heavily on the discussion of these and several other topical, sometimes controversial issues.

Global Awareness II 1 trimester (0.5 credit) Grades 11-12

Prerequisite: Global Awareness I

This course is a continuation of Global Awareness and will get more in depth on topics that were explored in the first class. Topics range from a series of large issues like 20th century World History, the Middle East, China, and Africa. Also smaller, more personal issues like globalization, modern politics, war, ethics, and other valuable issues relevant to each student's world. Reading, exploring blogs or online news and research will be major components of the class. He class relies heavily on the discussion of these and several other topical, sometimes controversial, issues. Students will be better prepared for the diversities of the world outside the community and will be on their way to becoming Global Citizens.

20th Century Music History 1 trimester (0.5 credit) Grades 11-12

This class explores the historical and social links that exist between music during the past 100+ years, mostly in America, but not exclusively. The course looks at the roots of popular music, starting with slave songs and hymns of pre-Civil War times, and moving up through the foundations of jazz and blues until the early 1950s. The social and musical focus will then shift to rock 'n' roll as we look at how music reflects the spirit of time, with regards to issues such as war, politics, economics, and social change.

Rock 'n' Roll History II 1 trimester (0.5 credit) Grades 9-12

Prerequisite: 20th Century Music History highly recommended

This is a one trimester class that serves as a sequel and bridge from 20th Century Music part one. The previous course set a foundation with blues, 50s, and 60s rock 'n' roll as a reflection of history, culture, and politics of those times. This sequel course will look more specifically at the 70s, 80s, 90s, 2000s, and beyond, with a special focus on how newer genres like progressive rock, hip hop, alternative, punk, heavy metal, and electronic music have shaped culture and reflected the modern history of the USA and the outside world, along with generational social, political, and cultural changes.

Sci-Fi/Horror Film Studies	1 trimester (0.5 credit)	Grades 9-12
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Prerequisite: History of Cinema course highly recommended

This is a one trimester class that takes the lessons from the History of Cinema introductory course and applies them to the specific film genres of horror and science fiction. Both genres, as in literature, use monsters, mythology, aliens, futuristic settings, dystopia, artificial intelligence, etc. to reveal dark truths about humanity, history, politics, and other important socio-cultural issues in unique ways that often more "serious" genres and films cannot.

Ferris Humanities A/B	2 trimester (1.0 credit)	Grades 10-12
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Prerequisite: Students must have a 2.5 GPA and be a junior or senior. Sophomores with a 2.5 GPA and prior teacher permission may be eligible.

This is a two trimester course that combines lessons from the History of Cinema course and the 20th C Music course, while adding in additional writing and analysis through different lenses. Students who complete both trimesters are eligible to earn 3 Ferris State University credits (HUMN 240).

History and Appreciation of Cinema	1 trimester (0.5 credit)	Grades 9-12
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This class explores the development of cinema and production through history and differences in production of famous movies. Early silent-cinema and case studies of major productions are investigated. The impact of history on theater production is researched by students. The Golden Age of theater and the influence of wars on movies are connected. Students will be brought into the "me" 80's decade and independent film industry of the 90's. Globalization of Hollywood, beyond 2000 will wrap up the course.

#### World Language Department

World language study today focuses on communication. Proficiency in listening, speaking, reading and writing are stressed throughout the course of language study. The target language, used in realistic situations, is supported by authentic materials showing the relevance of studying a foreign language. Foreign language lessons are developed based on the five C's of the National Foreign Language Standards: communication, cultures, connections, comparisons, and communities.

#### Course Descriptions and Offerings

Spanish I 3 trimesters (1.5 credits) Grades 9-12
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The Spanish I course focuses on the acquisition of a basic vocabulary and elementary language structures. Students will develop the ability to listen and understand, to speak, to read, and to write the Spanish language in simple form. The customs and cultures of Spanish-speaking countries will be explored.

Spanish II	3 trimesters (1.5 credits)	Grades 9-12
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Prerequisite: Spanish I

The Spanish II course is a continuation of Spanish I, aimed at increasing knowledge of the language and culture, and improving all communication skills. Emphasis will be placed on acquiring more complex language structures and on building vocabulary.

Spanish III	3 trimesters (1.5 credits)	Grades 9-12

Prerequisite: Spanish II

The Spanish III course stresses vocabulary acquisition and focuses on the use of the many verb tenses. Students will develop the ability to converse and write more freely, expressing their own thoughts and feelings. Spanish literary selections are introduced, along with further study of Hispanic culture.

Spanish IV 3 trimesters (	i.5 credits) Grad	des 9-12
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Prerequisite: Spanish III

The Spanish IV course reinforces all aspects of the Spanish language studied in the preceding courses. Emphasis is placed on building fluency and freedom of expression. Hispanic civilization and literature are studied in further detail.

# World Language Department Course Descriptions and Offerings

AP Spanish 3 trimesters (1.5 credits) Grades 11-12

Students are expected to take the AP test in spring.
75th Percentile NWEA Scores Recommended in Reading and Language.

This course is designed to help you use what you know already to interpret and create authentic texts and speech in Spanish. You will apply what you have learned to texts and conversations. New vocabulary and grammar will be driven by student questions and inquiry as we work through the various authentic materials. This course is rigorous and requires student participation and engagement. Topics of study include: beauty and aesthetics; contemporary life; families and communities; global challenges; personal/public identities; and science/technology.

#### Physical Education Department

Physical education is a sequential educational program that provides students with the knowledge, skills, fitness, and attitudes necessary to lead a healthy lifestyle.

A physically educated person who participates in health-enhancing physical activity:

- Demonstrates competence in selected motor skills;
- Assesses, achieves, and maintains physical fitness;
- Applies cognitive concepts in making wise lifestyle choices; and
- Exhibits appropriate personal-social character traits while participating in physical activity.

A full credit (1.0) of physical education is required for graduation. A maximum of one  $\frac{1}{2}$  credit (0.5) may be taken in any given trimester. A  $\frac{1}{2}$  credit (0.5) of this requirement can be earned as a two season member of an Armada High School sponsored athletic club or organization or two seasons in the Armada marching band program. Please note that Health is excluded from this athletic/band credit alternative.

#### Course Descriptions and Offerings

Grades 9-12

Recreation and Fitness is the introductory course to High School Physical Education. The course has a focus on fitness and fitness testing, as well as an introduction to individual, team and recreational games. Students will learn skills related to each activity, rules, and strategies in order to successfully participate in each activity.

Recreation and Fitness I (Fall Only)

Tennis, Softball, Ultimate Frisbee, Outdoor Team Handball, Disc Golf, Soccer, Field Hockey

Recreation and Fitness II (Winter Only)

Volleyball, Badminton, Indoor Soccer, Basketball, Pickleball, Speedball, Team Handball

Recreation and Fitness III (Spring Only)

Speedmitten, Disc Golf, Capture the Flag/Adventure activities, Track and Field, Golf, Volleyball, Badminton, Softball

Team Sports	1 trimester (0.5 credit)	Grades 9-12
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This elective is designed to give students a well-rounded program in team activities. Team activities may include: volleyball, basketball, soccer, flag football, softball, speedball, floor hockey and mass games. Rules, strategies, teamwork and sportsmanship within each activity will be discussed and studied. Students will learn to appreciate physical activity and how it is related to good health habits. Students will be required to pass physical and written tests.

# Physical Education Department Course Descriptions and Offerings

## Racquet Sports 1 trimester (0.5 credit) Grades 9-12

This course is designed for students to develop and improve the skills and knowledge necessary to participate successfully in a variety of racquet sports. Participation will result in a better understanding of activities for life-long fitness. Students are expected to learn more advanced skills and strategies and demonstrate them in game situations. Racquet sports that may be included are: tennis, pickleball, badminton, speedminton and table tennis.

### Weight Training 1 trimester (0.5 credit) Grades 9-12

Students in this course will learn and use safe and correct weight lifting and training to develop muscular strength, muscular fitness, and total body symmetry. An individual program will be designed for each student. Activities will include personal assessment, goal-setting, instruction in weight room safety and spotting, individual training, individual testing, and a record keeping folder. Students are evaluated on completion of daily workouts, strength and fitness development and/or improvement, knowledge of basic principles and techniques of weight training as they affect human physiology, and completeness of record keeping (portfolio).

### Walk Fit 1 trimester (0.5 credit) Grades 9-12

A physical education option if individual and team games are not of interest. The Walk Fit course is designed to help students develop a healthy lifestyle pattern by using walking as a form of physical activity. Students will walk everyday in class for the entire class period. The class will walk together as a group with the instructor setting the pace.

Health	1 trimester (0.5 credit)	Grades 9-12
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This course will enable students, as individuals and as members of our society, to make informed decisions, modify behaviors, and change social conditions, in order to enhance health. Students will learn how to obtain, interpret, and apply health information and services in ways that protect and promote personal, family and community health.

## Basketball and Fitness 1 trimester (0.5 credit) Grades 9-12

This one trimester course is designed to meet the fitness needs of both boys and girls who want to use the sport of basketball for cardiovascular exercise. With the class focus on basketball game play, students will use half of the daily class time in half court skill development activities and the other half of class on full court 5 on 5 competition. All students will demonstrate basketball game play knowledge and take turns with officiating responsibilities of the full court game (approx. 1 time per month). Daily sportsmanship is required.

Fit for Life	1 trimester (0.5 credit)	Grades 9-12

The purpose of this class is to learn about life-long fitness for any student, whether you are an athlete or not. Students will learn optimal wellness including nutrition, stress, and body weight management and reducing risk factors for disease, along with fitness and strength training. This class is designed to teach the student to be accountable for lifelong health and fitness, beyond high school.

Sports Conditioning 1 trimester (0.5	credit) Grades 9-12
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This course is designed for students who participate in a school-sponsored team sport to develop an advanced level of performance skills and knowledge of concepts related to that sport. The course will focus on developing a thorough knowledge of all aspects of the sport, including application of rules in complex situations, strategy and tactics necessary for successful team performance, and personal physical fitness. Students will be expected to take leadership responsibility for team motivation and success.

### Career and Technical Education Department

### **Business Department**

The goals and objectives of the business department are as follows:

- To prepare students for the world of work.
- To help students adapt themselves to a changing business world.
- To help students develop the business skills needed to achieve their personal and career goals.
- To help students become knowledgeable consumers.

## Business Department Course Descriptions and Offerings

Accounting I	2 trimesters (1.0 credits)	Grades 10-12
Accounting	z tilliesters (1.0 credits)	Grades 10-12

This is a two semester introductory class in which students will learn accounting operations. Students will learn the complete accounting cycle for a sole proprietorship and a partnership. Computerized accounting will be introduced. Simulations will be used to reinforce concepts of the accounting cycle and procedures.

Accounting II	2 trimesters (1.0 credits)	Grades 11-12
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Prerequisite: Accounting I with a grade of "C" or better

This two semester course is designed for those students who wish to further study the field of accounting. A continuation of Accounting I with emphasis placed on corporate accounting, students will learn advanced accounting techniques such as payroll, inventory, depreciation, and taxes. Computerized accounting will continue to be utilized. Simulations will be used to reinforce concepts of the accounting cycle and procedures. This is an excellent class for students who wish to pursue a career in business.

Entrepreneurship	1 trimester (0.5 credit)	Grades 10-12
Entrepreneurship	1 trimester (0.5 credit)	<b>Grades 10-12</b>

Prerequisite: Marketing I and Marketing II

This course provides a basic foundation in the area of Entrepreneurship. Students will work with classmates and ideas in order to build a foundation for future entrepreneurship opportunities. Students will leave with the basic knowledge it takes to build and run a small business.

## Business Department Course Descriptions and Offerings

Finance 1 trimester (0.5 credit) Grades 9-12

This required course will assist students with developing the necessary financial skills to succeed in society. Students will develop positive money management skills and create a financial plan for the future to assist in achieving their financial goals. The course meets the national standards for Economics and Personal Finance and includes the following topics: Financial Planning, Career Planning, Money Management, Purchasing Strategies and Legal Protection, Banking and Credit, Housing, Investing, and Real Estate.

### Introduction to Marketing I 1 trimester (0.5 credit) Grades 10-12

Students will learn the basic marketing concepts in this course. Content will include an exploration of topics such as marketing and economic systems, the consumer market, and special markets. Projects and case studies will be used, along with the textbook, to cover the material. To be eligible to work in the school store, students must successfully complete both Marketing I and II.

### Introduction to Marketing II 1 trimester (0.5 credit) Grades 10-12

Prerequisite: The successful completion of Introduction to Marketing I

Students will continue to learn basic marketing concepts in this class. This trimester, topics will include: market research, product development, pricing, placing and promoting products. Projects and case studies will be used, along with the textbook, to cover the material. To be eligible to work in the school store, students must successfully complete both Marketing I and II.

## School Store Operations I 3 trimesters (1.5 credits) Grades 11-12

Prerequisite: Completed Application and Teacher Recommendation and successful completion of both Marketing I & II

In this course, students will learn the functions of retail marketing and merchandising through the management of the school store and the completion of the textbook related to the school store. Students may elect to take this course for a second year.

## School Store Operations II 3 trimesters (1.5 credits) Grades 11-12

Prerequisite: Completed Application and Teacher Recommendation and successful completion of both Marketing I & II

In this course, students will learn the functions of retail marketing and merchandising through the management of the school store and the completion of the textbook related to the school store. Students may elect to take this course for a second year.

Sports/Entertainment Marketing	1 trimester (0.5 credit)	Grades 10-12
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Prerequisite: Marketing I and Marketing II

This course provides a basic foundation in the area of sports marketing. Students will advance current marketing knowledge through the study of a niche form of marketing. Students will leave with a refined knowledge of the basics of marketing as well as a new understanding for sports and entertainment marketing.

# Health Services Department Course Descriptions and Offerings

	Introduction to Medical Science	1 trimester (0.5 credit)	Grades 9-12
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Introduction to Medical Science is a one trimester course for students interested in learning about over 300 different careers in medicine and health science. This class will examine the history of medicine and explore the five health career pathways. Introduction to Medical Science is the first class in a series of classes designed to prepare the high school student for a successful transition into a college or university health science program.

Medical Science I	3 trimesters (1.5 credits)	Grades 10-12
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Science Credit Course

This course uses advanced investigative approaches to the study of human and social sciences as related to medicine and health care. Emphasis includes the language of medicine, body chemistry, anatomy and physiology and the current and futuristic study of disease and disorders. This course will earn science credit. This course is a prerequisite to Medical Science II.

Medical Science II 3 trimesters (1.5 credits) Grades 11-12	
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Prerequisite: Medical Science I or Anatomy and Physiology with a B or higher

This course prepares potential health care workers for performance in an advanced technical or professional health career. Emphasis placed on professional development, infection control in health care, communication and teamwork, safety, bioethical/legal practices and problem solving and decision making in the health care setting. Job Shadowing will be a component to this class and will require student transportation (themselves or car pools) to health care locations in the area. Job Shadowing in the health care setting will require a TB test, Flu vaccine and proof of the Hepatitis B vaccine. Students will take the National Health Science Assessment at the conclusion of this course. Passing this assessment will earn them a certificate offered by the National Consortium for Health Science Education and measures student mastery of basic skills and knowledge that workers in all aspects of the health industry need to know. Students will also earn BLS/CPR Certification (Required to work in most healthcare facilities).

## Health Services Department Course Descriptions and Offerings

Accelerated Medical Science	3 trimesters (1.5 credits)	Grade 12
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This course is designed for Seniors only who are serious about entering a health related field of study upon graduation. This is a fast paced course that will cover all 12 segments of the Therapeutic Health Science Pathway. This course requires a strong science aptitude. Students will take the National Health Science Assessment at the conclusion of this course. Passing this assessment will earn them a certificate offered by the National Consortium for Health Science Education and measures student mastery of basic skills and knowledge that workers in all aspects of the health industry need to know. Students will also earn BLS/CPR Certification (Required to work in most healthcare facilities).

### Certified Nursing Assistant 3 trimesters (1.5 credits) Grade 12

This class will be offered through dual enrollment with Macomb Community College. After completing this course, students will be able to take the State Certification test to become a Certified Nursing Assistant which will allow them to work in Nursing homes and Hospital settings. There will be a mandatory student/parent meeting in May with details about this course. Students must be able to pass a drug test as well as a physical exam and be able to lift 40 lbs. Prerequisites for this course is at least one of the following: Medical Science I or Anatomy. Students are encouraged to take Medical Science II before or concurrently. Only 20 spots will be available due to instructor/student ratios set by the State of Michigan. If more than 20 applicants are received, another class may be added or entry will be decided on the student's previous coursework, grades and school attendance/behavior. Students with previous school suspensions related to drugs or violence will not be admitted. Students will also be required to purchase their own scrubs and textbook. Purchasing their own stethoscope is also highly recommended but not required. Students will also be required to complete 32 hours of onsite clinical hours that will take place outside of school hours (information to be discussed at parent/student meeting).

<b>Medical Math</b>	1 trimester (0.5 credit)	<b>Grades 11-12</b>
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This course is designed for students who have either taken Medical Science I or are currently enrolled in the course. Students will learn to apply mathematical computations related to healthcare procedures and to apply mathematical principles to conversation equations used in the healthcare delivery system. Emphasis will be placed on principles involving temperature, weights, and measures related to medical professions. We will also calculate dosages and analyze diagrams, charts, graphs, and tables to interpret healthcare results.

## Health Services Department Course Descriptions and Offerings

<b>Medical Terminology</b>	2 trimesters (1 credit)	Grades 10-12
Medical Terminology	2 trimesters (1 credit)	Grades 10-12

This course is eligible for 3 Ferris State University credits (MRIS 103). Students need a 850 cumulative score on the SAT.

This course will be offered online and can be taken during any open period in the student's schedule or added during "0" hour. This is a fast paced college level course that teaches the basic design of medical terminology and how to easily remember, pronounce and apply the meanings of all the prefixes, roots and suffixes that combine to form over 11,000 complex medical terms. Students will be required to log in online and participate in discussions, watch presentations and complete homework and tests within a set timeframe. Previous coursework in Medical Science I or Anatomy is HIGHLY encouraged. Baker, Macomb and SC4 may accept college credit within certain programs.

# Introduction to Veterinary Science 1 trimester (0.5 credit) Grades 10-12

This course explores careers available in the veterinary field. Students will discover a wide range of skills and procedures from basic animal care and first aid to surgical procedures, suturing and CPR. By utilizing realistic trainers and manikins, students will practice and explore many of the common skills used in the veterinary environment. Skills include: Proper venipuncture technique; Suturing and wound closure; Surgical instruments; Gauze muzzling techniques for both dogs and cats; Veterinary asepsis; Preventative medicine and basic care; Virtual dissection of a cat and pig for exploration and comparison of mammalian anatomy; Canine cephalic venipuncture and feline jugular venipuncture restraint methods; Canine CPR; Exploration of the anatomy and physiology of common animal species. This class will be taught using a facilitator led online class and includes hands-on skills and training.

Emergency Medical Technician	3 trimesters (1.5 credits)	Grade 12
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Students must turn 18 years of age within one year of graduation.

Students enrolled in this program will receive instruction in the fields of pre-hospital and emergency medical training. Students in the class study the human body and treatment required outside the hospital setting. Students will study anatomy and physiology, emergency first aid, bleeding control, shock cardiac arrest management, airway management, and patient treatment at accident scenes. There may be a possibility for students, who successfully complete all requirements—including ER and EMS clinicals, to take the National Registry EMT (NREMT) Exam and be a licensed EMT.

## Health Services Department Course Descriptions and Offerings

Intro to Emergency Medical Responder	1 trimester (0.5 credit)	Grades 9-12
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This class is intended to introduce the students to emergency medicine and careers in emergency medicine. Students will explore the EMR careers through classroom and practical instruction in a variety of patient related situations. Some topics include medical terminology, anatomy and physiology, patient assessment in medical and trauma settings and basic CPR and first aid. There may be an opportunity for job shadowing as well. Emergency Medical Responders provide immediate lifesaving care to critical patients who access the emergency medical services system. EMRs have the knowledge and skills necessary to provide immediate lifesaving interventions while awaiting additional EMS resources to arrive. EMRs also provide assistance to higher-level personnel at the scene of emergencies and during transport. Emergency Medical Responders are a vital part of the comprehensive EMS response. Under medical oversight, Emergency Medical Responders perform basic interventions with minimal equipment.

Basic Electrocardiography	1 trimester (0.5 credit)	Grade 12
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Prerequisite: Med Term I, Accelerated Med Sci, or Anatomy

This class will teach students how to perform diagnostic electrocardiograms and telemetry monitoring. Students will learn the basics of an electrocardiogram and over 25 different heart rhythms. If proficient, I propose that the student could take a proficiency exam to prepare them for industry. The goal of this class is to enhance the basic skills learned in Medical Sciences or EMT classes. It can also prepare the student for a job in the hospital as an ECG Technician or Telemetry Technician.

### **Industrial Technology Department**

Industrial Technology helps to interpret our complex industrial culture for students through direct meaningful experiences. It is the function of this department to supplement the goals of general education by providing opportunities for experiences which will help the student become a more productive, more appreciative, and happier consumer and citizen of our society.

It is the goal of the department that all students will:

- To develop an insight and understanding of industry and technology in our society.
- To discover and develop talents in industrial-technical occupations ranging from technical to professional levels.
- To develop problem-solving abilities related to materials, processes, and products of industry.
- To develop proficiency in the safe and efficient operation of tools and equipment.

### Course Descriptions and Offerings

Introduction to Drafting	1 trimester (0.5 credit)	Grades 9-12
Introduction to Drafting	1 trimester (0.5 credit)	Grades 9-12

In this course students will learn, practice, and apply basic drafting skills that are used today in architecture and engineering careers. Students will cover the following topics: 2D drawings, 3D drawings, dimensioning, architectural planning, design, and construction. In this course students will spend the trimester designing and drawing objects by hand using drafting tools to learn the basic concepts. They will apply these concepts by designing and drafting projects that they will actually produce and test.

Career Internship	3 trimesters (1.5 credits)	Grade 12
Career Internship	3 trimesters (1.5 credits)	Grade 12

Prerequisite: Concurrent enrollment in an Armada CTE course with a grade of "C" or better.

This course is an opportunity for students to receive credit toward graduation while working at a job related to their career pathway. Throughout the class, students will assess their five year goals and develop basic business skills such as: building a resume, writing a cover letter, and career research. Each student must be employed for an average of 10 hours per week for the duration of the class.

Woodworking I	1 trimester (0.5 credit)	Grades 9-12
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Woodworking I is a hands-on course introducing students to techniques, tools, and careers involved with wood working. Students will learn how to safely operate hand and power tools. Students will be involved in planning, designing, and building multiple wood projects. We will cover the following topics: shop safety, hand tools, power tools, wood types and uses, planning projects, executing a project, and finishing a project. Students will have assignments, projects, and tests with each topic.

## Industrial Technology Department Course Offerings and Descriptions

Woodworking II 1 trimester (0.5 credit) Grades 9-12

Prerequisite: Must have passed Woodworking I with a B or better

Woodworking II is a hands-on course teaching students to apply advanced techniques and tools used in woodworking. Students will apply previous woodworking skills to the following topics: wood repair, furniture building, and home remodeling. Students will be involved in planning, designing, and building multiple wood projects. This course will be based on working efficiently and producing quality work.

Building Trades I 3 trimesters (1.5 credits) Grades 10-12

Prerequisite: Woodworking I & Teacher Approval

Building Trades is a hands-on course where students will use what they learned in the woodworking courses and apply it to the basics of building. Students will cover the following topics: Shop Safety, Industry Overview, Employability Skills and Technology Skills, Construction Materials, Construction Tools and Equipment, Building Construction Design-blueprint, etc., Site Preparation and Infrastructure, Common Construction Practices, Residential Construction Techniques, Green Technology, Construction Techniques, Heavy Equipment/ Civil Construction Techniques, and Construction Business Management. In this course, students will not only learn about building concepts but apply them while constructing storage sheds, kids play houses, and other projects. This class is great preparation for any student interested in construction, engineering, architecture, or construction management.

Building Trades II 3 trimesters, 2 hour block (3 credits) Grades 11-12

Prerequisite: Building Trades I & Teacher Approval

The building trades program is designed for students who are interested in entering the construction, electrical, plumbing, heating, or masonry trades. Students will also be exposed to "guest" tradesmen from each facet of home construction. Emphasis will be on helping students understand all of the processes in the construction of a home, as well as the skills involved in each trade. Students who successfully complete this class will have an excellent opportunity for placement in the trade of their choice. Apprenticeship opportunities await the students at the completion of the program.

Renewable Energy I 2 trimesters (1.0 credits) Grades 9-12

Renewable Energy I is a hands-on course introducing students to alternative energy resources. Students will learn about real life problems, technology, and careers using research, experiments, and real life experience. The course will cover the following topics: Wind Energy, Solar Energy, Basic Electricity, Fuel Cells, Bio Fuels, and Geothermal Energy. Students will learn how these renewable energy systems work as well as the pros and cons to using them.

## Industrial Technology Department Course Offerings and Descriptions

Renewable Energy II	2 trimesters (1.0 credit)	Grades 11-12
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Prerequisite: Must have passed Renewable Energy I with a B or better

Renewable Energy II is a hands-on course where students will continue to learn, test, and experiment with alternative energy sources. Students will learn more about current issues with alternative energy, and the products currently available. This course will cover the following topics: Wind Energy, Solar Energy, Photo-Voltaics, Pellet Fuels, Careers and College, Nuclear Power, Hydro-Power, Green Building, and Geothermal Energy Students will design, build, and modify their own alternative energy products. Students will learn from professionals working in the renewable energy field, and have a chance to visit locations that take advantage of renewable energy here in Michigan.

Small Engines and 3 trimesters (1.5 credits) Fabrication	Grades 9-12
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This is a hands-on course that will teach students the basics of small gasoline engines. The course will cover the use of 2 Stroke and 4 Stroke small engines. Students will spend time disassembling, measuring, troubleshooting, and reassembling 2 Stroke and 4 Stroke engines. Students will also learn basic fabrication skills: welding, machining, and tube bending. During this course students will design and fabricate a Go-Cart with a roll cage. They will then install a small engine and gear drive system to power the cart.

### **Hospitality Services**

Introduction to Culinary Arts	1 trimester (0.5 credit)	Grades 9-12
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The program is designed to help high school students who have an interest in pursuing a career in food service gain an understanding of the industry through education as well as direct exposure. In the kitchen, students create their own food products from scratch. Culinary Arts prepares students for jobs as personal chefs, catering operations, line chefs, bakers, servers, wine stewards, and managers. The course is designed to teach students all the fundamentals needed to work and succeed in any area of the food service operation such as restaurants, catering, kitchen, or industrial kitchen. Students may also take the fundamental skills they have learned onto culinary school for more advanced instruction.

Culinary Arts I	3 trimesters (1.5 credits)	Grades 9-12
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Prerequisite: Introduction to Culinary Arts

Culinary I is a year long course designed to pick up where we left off in Intro Class. Here we will dive further into the Culinary World and Restaurant management. We will discuss communication and management essentials as it relates to service in restaurants. We will work more with fruits, vegetables, potatoes, grains and meat processing. We will also have the opportunity to serve staff members and participate in other activities outside of school. Students will also have the option to take and receive the "Safe food handlers certificate" upon completing this class. We also have an Armada Chapter for SkillsUSA, where students can compete with other schools in our State and surrounding area. We will also have the opportunity to take a variety of field trips which can offer us work based learning opportunities.

Culinary Arts II 3 trimesters (1.5 credits) Grades 10-12
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Prerequisite: Culinary Arts I

Students will put their skills from Culinary I to use. Students already have a basic understanding of how to cook but now we will talk about restaurant management, food and labor cost, buffet service. Students will prepare and serve teacher lunches, take orders, write menus and descriptions, and be introduced into catering. Competitions will take place in state and regional cooking competitions.

Introduction to Baking	1 trimester (0.5 credit)	Grades 9-12
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Prerequisite: Intro to Culinary

This class is designed to guide you through an exciting, hands-on and creative future in Baking. In this class you will be introduced to a brief history and bakeshop production through the kinds of measurements and mathematical calculations necessary for the basic processes common to nearly all baked goods. We will be introduced to yeast products, quick breads and cookies including pizza dough, cinnamon rolls, muffins, biscuits and a variety of cookies.

### **Hospitality Services**

Baking and Pastry I	1 trimester (0.5 credit)	Grades 9-12
Baking and Pastry I	1 trimester (0.5 credit)	Grades 9-

Prerequisite: Intro to Baking

We will practice the art of chocolate, sugar and candy making. More delicate cakes and desserts, we will work more with plating and presentation.

Beginning Cake Decorating	1 trimester (1.0 credit)	Grades 9-12
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Prerequisite: Intro to Culinary

In this class students will be introduced to the basic piping tips, how to take and complete a cake order. They will practice writing, borders, flowers, splitting and filling cakes, along with making different frostings and fillings.

Breadmaking 1	trimester (0.5 credit)	Grades 9-12
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Prerequisite: Intro to Culinary

In this class we will work with the different types of yeast breads. We will learn different techniques for shaping dough. The different types of dough including sourdough, multi-grain, bagels, english muffins etc.

# Additional Career and Technical Education Offerings Course Descriptions and Offerings

Public Safety 3 trimesters (1.5 credits) Grades 10-12

This course is an exploration of the historical development, current operation, and future trends of criminal justice. Emphasis will be placed on contemporary problems in the definition of law, the enforcement of law, strategies of policing, judicial systems, sentencing strategies, correctional practices, and emerging forms of justice. While the focus of the content will be practices in the United States, we will also look at other cultures and their systems of justice.

Fire Academy 3 trimesters (1.5 credits) Grades 10-12

Program is a State of Michigan approved Firefighter I certification class.

Students must attend a minimum of 90% of classroom training, 100% of practical skills training and submit no less than 90% of homework assignments and pass the class with a 70% or higher to be eligible to test for the Michigan Firefighter I & II Certification which is necessary to become either a part-time or full-time firefighter. The program is run in a para-military fashion, with students wearing required uniforms and daily inspections. In addition, students will be required to participate in physical training (PT) sessions at least twice a week, doing strength and cardiovascular training under the direction of certified fitness trainers. Protective clothing weighs 25 pounds, with the Self-Contained Breathing Apparatus (SCBA) weighing another 25 pounds. In addition to the period block for normal class meeting times, one additional Saturday per month is required, allowing the students more time to get into scenario-based practical skills training. Students will be broken down into work groups, called platoons, for much of the required coursework. During the fire academy, students will be encouraged to apply for Fire Cadet positions in the fire department serving their area. This is not required, as student schedules and home situations may not make this available to students. Fire Cadets are part of a structured program, giving cadets exposure to the fire station, familiarity with apparatus and co-workers, and gives them a roadmap on how to proceed in the organization to a full-fledged firefighter position.

Heavy Machine Operator (AIS)	3 trimesters, 2 hour block (3 credits)	Grades 11-12
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Richmond High School Course Counselor/Administrator Recommendation

This class meets the Michigan Merit Curriculum requirements for Visual, Performing, and Applied Arts for juniors and seniors or Math/Math related credit if taken in their senior year. Richmond High School along with AIS Construction Equipment Corporation offer a program that prepares individuals to apply technical knowledge and skills in the safe operation, maintenance and repair of heavy equipment such as bulldozers, excavators, backhoes, and front-end loaders. This course includes electronics, hydraulics, engine performance, fuel systems, and fundamentals of mechanics related to heavy equipment and diesel operations. Successful completion will afford students an opportunity to earn a sponsorship to Ferris State University worth approximately \$10,000 (tuition costs), apply for acceptance into the AIS Apprenticeship Training Program, or find employment with other heavy equipment or diesel maintenance companies.

### Additional Electives

### Course Descriptions and Offerings

<b>Test Preparation</b>	1 trimester (0.5 credit)	Grades 9-12
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This class is for those wishing to brush up on some test taking strategies for standardized tests and college entrance exams. Students will spend time in each of the core disciplines of Reading Comprehension, Science, Mathematics, and Grammar/Writing. Each discipline has some unique approaches that will be studied and practiced. Curriculum will be reviewed or introduced depending on the needs of each student.

### Teacher Internship 1 trimester (0.5 credit) Grade 12

Students must be technology savvy and knowledgeable with computers for basic repairs, simple maintenance, diagnostics, upgrades, installation of hardware and software. Proficiency in using and in explaining how to use Blackboard, Word, Excel, PowerPoint, Publisher, Weebly and Photo Story is most helpful. Students will be made aware and navigate library specific programs like Plinkit and Destiny. Communication and library researching skills in obtaining information for teachers/students is essential. The course will include 21 Things For Students through Macomb Intermediate School District; MeL online research and informational tutorials; and 'Order in the Library' through the School of Information at the University of Texas at Austin. Enrollment is limited.

### Teacher Cadet 3 trimester (1.5 credit) Grades 11-12

This course is designed for the student who is an aspiring educator and provides an opportunity to learn more about the professional vocation of teaching. The course will expose students to the evolution of teaching as a craft, ask students to analyze their own learning style and teaching approaches that work most favorably for their success. Students will observe teaching in multiple classrooms and write insightful reflections about the profession. The students will learn how to effectively develop lessons of their own. Leadership skills will be enhanced and interpersonal communication techniques will be developed—making this course valuable for any student.

Note: Students may be eligible to receive credit or be waived credit from introductory teaching courses at Oakland University. Please see a counselor for more information.

Student Leadership	3 trimesters (1.5 credits)	Grades 10-12
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This class is designed for students who have a serious interest in student activities and the development of their leadership abilities. Student leadership teaches characteristics of leadership, as well as emphasizes skills, such as goal setting, communication, organization, time management, and project planning. Once skills have been taught, they will be put into practice through hands-on activities and event planning within the school and community.

Using technology that is already on hand, students will be guided to a better, more solid understanding of what their devices can do for them. The class will focus on basic functions that students' devices can complete, while also encouraging proficiency in Google Suite applications and basic Microsoft programs. Throughout the course, digital citizenship and reliable internet search strategies will also be continually practiced.

Science Internship	1 trimester (0.5 credit)	Grade 12

Multiple aspects of teaching Science will be observed as well as performed in a "hands-on" environment. Each student will have the opportunity to complete tasks that are common tasks in the life of a Science teacher as well as the school. A large part of the course will be setting and preparing labs. Each student will research a Science related topic of interest that they will present to other classes at the end of the term. Students will also review many concepts from other Science classes.

#### Additional Electives

### Course Descriptions and Offerings

English/Language Arts 1 trime Internship	er (0.5 credit) Grade 12
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Multiple aspects of teaching English Language Arts will be observed as well as performed in a "hands-on" environment. Each student will have the opportunity to complete tasks that are common tasks in the life of an ELA teacher, as well as the school. Students will research new teaching tools, evaluate current teaching practices, prepare for upcoming lessons, and engage in reflections about teaching practices.

Humanities Leadership	1 trimester (0.5 credit)	Grade 12
Internship		

This course is for students interested in the humanities and leadership. Students selected for the course must have a 3.0 GPA and positive citizenship. They should be involved in extracurricular activities. Students will facilitate activities on campus, maintain online LMS and class websites, organize fundraisers and community outreach programs, and develop Student Council Leadership Team meetings. Other responsibilities may be given, as they arise.

### Athletic Director Approval Required

This class will cover the day to day administrative duties within an athletic office. Duties will include Organization, Game Prep, Scheduling of games and officials, Facility Management, Game Management, Event Management, Budgeting, Transportation, and Community Relations. Only seniors are eligible to take this class and slots are limited and will only be given by instructor approval.

Leadership Development Practices	1 trimester (0.5 credit)	Grades 11-12
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This course provides a practical exploration of individual philosophies and one's relationships with government responsibilities. Also included are studies of the influences of emotional intelligence on problem solving, personal interactions, and conflict resolution. Basic elements of service learning are explored and put into practice.

Teaching Mathematics 1 trimester (0.5 credit) Grade 12 Internship
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Multiple aspects of teaching math will be observed as well as performed in a "hands on" environment. Each student will have the opportunity to complete tasks that are common day to day happenings in the life of a math teacher as well as the school. Students will research new teaching tools, evaluate current teaching practices, prepare for upcoming lessons, and

engage in reflections about teaching practices.

Intro to CISCO Networking Academy	2 trimesters (1.0 credit)	Grades 9-12
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The course will introduce various topics including the Cisco training system, the "Internet of Things", and "Intro to Cybersecurity". (Keep in mind that future Cisco courses will give students the opportunity to earn college credit.)

CISCO Networking Academy	2 trimesters (1.0 credit)	Grade 12
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Cisco Networking Academy is an IT skills and career building program for learning institutions and individuals worldwide. More than 5.5 million people have joined the Networking Academy and become a force for change in the global economy since 1997. The Cisco Networking Academy is a series of courses that will enable students to earn the Cisco Network Administrator Certification. The curriculum is delivered online using a proprietary learning platform in partnership with local learning institutions. An engaging, up-to-date curriculum created by experts in technology and instructional design includes hands-on labs and online activities for the practical application of learned skills. The Cisco Packet Tracer, a network configuration simulation tool, is used for teaching, gaming, and team building.

CISCO Cybersecurity 1 trimester (0.5 credit) Grades Essentials	9-12
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Prerequisite: Intro to CISCO Networking Academy

This course covers foundational knowledge and essential skills for information security, systems security, network security, laws, and techniques used in protecting businesses.

CISCO Routing & Switching Essentials	2 trimesters (1.0 credit)	Grades 9-12

Prerequisite: Intro to CISCO and CISCO Cybersecurity Essentials

This course expands on the knowledge gained in the Introduction to Networks course, going into more detail on the working of routers and switches. The class involves many labs using the actual CISCO routing and switching equipment. This course, along with the first CISCO course, provides the opportunity for students to receive CISCO CCENT certification by taking a CISCO test.

CISCO CCENT Certification Exam Prep	1 trimester (0.5 credit)	Grades 9-12
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Prerequisite: Intro to CISCO, CISCO Cybersecurity Essentials, and CISCO Routing and Switching Essentials

CISCO offers an exam after these courses, so students can receive certification as a "CISCO Certified Entry Network Technician." Certification will allow students to get college credit for these courses at many institutions and set them up for entry-level networking jobs.

## High School DMAT 1 trimester (0.5 credit) Grades 9-12

The DMAT course will empower students to use technology to create a wide range of visual and audio products. Learning goals for this class include online collaboration, graphic design, screenwriting, digital video production, marketing, and news/sports broadcasting. Students will learn to effectively use the equipment and software necessary for careers in a wide variety of media or communications fields. Students will participate in three units: an introduction to the Google apps suite, introduction to film production, and their choice of a yearbook video internship, news and sports broadcasting, career opportunity research and participation, or advanced film production.

Literacy Exploration 9/10/11	1 trimester (0.5 credit)	Grades 9-11
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Teacher Recommendation Required

This course emphasizes reading skills for academic success utilizing critical thinking strategies. Students will be able to determine the structure of the text and identify the critical questions that are being asked in order to improve reading comprehension skills.

Academic Support	1 trimester (0.5 credit)	Grades 9-12

Teacher Recommendation Required

Academic support is a course that allows students to receive supplemental instruction and work on executive function skills within their school day with a teacher.

Dual Enrollment	1-3 trimesters	Grades 9-12
	(credit varies)	

See Counseling Office for Details

All Dual Enrollment Requests must be made no later than May of the prior school year

Students wishing to extend their learning to include courses not currently offered at Armada High School may consider enrolling in college classes. State testing must be completed with minimum passing scores to elect dual enrollment. See the counseling office for additional guidelines and the application process.

Early College of Macomb	3 trimesters (credit varies)	<b>Grades 11-12</b>
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See Counseling Office for Details

The Early College of Macomb (ECM) is an exciting countywide program for high school juniors who want to get a jumpstart on their college education and their careers. In this three-year, career-focused program, students participate in an integrated sequence of high school and college courses with no out-of-pocket cost for books, fees and tuition.

## Armada Conservatory of the Arts Course Descriptions and Offerings

#### Dance

Introduction to Dance (A/B/C)	1 trimester (0.5 credit)	Grades 9-12
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This introductory course will emphasize the general technique of the following styles of dance: jazz, tap, ballet, hip-hop and musical theater. Students will also be instructed in the academic qualities of dance, including terminology, history, music and performance. This course is an opportunity for the students to not only develop basic dance technique, but improve upon their physical fitness. This course is highly suggested for any student interested in dance, but does not have prior experience in dance. It is also suggested for musical theater students. Students may join one or all trimesters of this class. Students will be expected to participate in dance department productions.

Dance Company	3 trimesters (1.5 credits)	Grades 9-12
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Prerequisite: By audition only

Dance Company is a performance based course for advanced dancers. Company members are not only required to perform in dance department productions, but they will also be expected to attend master classes, auditions and/or festivals outside of school to get the greatest amount of experience in the dance world. These students will not only be working on perfecting technical skills, but learning choreography, improvisation, composition, aesthetic design, and teaching skills.

The Art of Dance	3 trimesters (1.5 credits)	Grades 9-12

Prerequisite: By audition only; CONSERVATORY STUDENTS ONLY
The Art of Dance class will be a continuation of Introduction to Dance class or for any student with previous dance education. The class will cover more complex class work, steps, choreography, history, and musicality. The class will meet daily for all three semesters. Daily participation, performances, and class field trips will be required.

Dance Academy	3 trimesters (1.5 credits)	Grades 9-12

Prerequisite: By audition only

This course is for students interested in improving and developing their technical and creative skill levels beyond the "Introduction to Dance" course. This class will continue to work on terminology, history, music and performance, but will start to focus on how to accomplish more challenging skills with correct technical execution for the overall health of their body. Any student can audition for this class, but if a student has successfully completed "Introduction to Dance," the student should be fully prepared to audition for the class. Students will be expected to participate in dance department productions.

# Vocal Music Course Descriptions and Offerings

### Concert Choir 3 trimesters (1.5 credits) Grades 9-12

This is an introductory level course open to all students with a desire to develop their vocal skills. Emphasis is placed on learning to read musical literature. In addition, students will have the opportunity to explore the history of music and develop their ability to analyze and critique musical performances. Students are required to attend scheduled rehearsals and performances that may occur outside of the school day.

Chorale 3 trimesters (1.5 credits) Grades 9-12

Prerequisite: At least one year of Choir and Audition with Teacher Signature

This course is the advanced level choir for students who are serious about choral performance. The emphasis for this course will be on performance skills and vocal pedagogy. Students will learn to create arrangements and design choreography. Students will have the opportunity to experience performing at different venues throughout the school year. Students are required to attend all performances and rehearsals that may occur outside of the school day.

Varsity Choir 3 trimesters (1.5 credits) Grades 10-12

Prerequisite: Entrance Exam with Teacher Signature

This is an intermediate level course for those students who read music fluently. They will continue to gain knowledge of vocal pedagogy as well as participate in festivals for competition. Emphasis will be placed on Sight Reading and Ear Training in this course. Students are required to attend scheduled rehearsals and performances that may occur outside of the school day.

### Instrumental Music

### Course Descriptions and Offerings

String Orchestra	3 trimesters (1.5 credits)	Grades 9-12
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String Orchestra is offered to students with previous experience on a traditional string instrument. Continued emphasis is given to the development of musicianship skills, aural and technical facility, through a large repertoire of string orchestra literature and technical studies. Student involvement in concert and performance activities will be part of the grading process for this course. Participation in such activities is an essential extension of the requirements, and is also factored into the class grade.

Jazz Ensemble	3 trimesters (1.5 credits)	Grades 9-12
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Jazz Ensemble is a select instrumental organization. Students learn the techniques of swing, jazz and popular style music. Students also learn jazz theory and improvisation. There are rehearsals, performances and festivals outside the school day. Attendance at these activities is a requirement of this course.

## Instrumental Music Courses Offerings and Descriptions

Symphonic Band	3 trimesters (1.5 credits)	Grades 9-12

Symphonic Band is offered to all students with previous experience on a traditional band instrument. Continued emphasis is given to the development of musicianship and basic skills through a large repertoire of appropriate level band literature. In addition to Symphonic Band, students will participate in marching band for summer band camp, home football games, parades and competitions. Student involvement in concert and performance activities will be part of the grading process for this course. There are also special events, rehearsals, or concerts during non-school hours. Participation in such activities is an essential extension of the requirements, and is factored into the class grade.

### Percussion Ensemble 1 trimester (0.5 credit) Grades 9-12

In this course students will explore and develop rhythm skills utilizing multiple types of percussion instruments. Prior musical experience is not needed, but would be helpful. Student involvement in concert and performance activities will be part of the grading process of this course.

# Audio Engineering and Production 1 trimester (0.5 credit) Grades 9-12

In this course students will discover and explore introductory concepts used in music sequencing, notation and recording. No prior musical experience is needed, however, having training on a musical instrument or voice is helpful. Students will create music using sequencing/editing software, synthesizers and drum machines. Students interested in the current methods of music creation and production should consider taking this course.

Intro to Piano/Music Theory	3 trimesters (1.5 credits)	Grades 9-12

This is a class that is designed to introduce music theory and piano skills to the developing musician. No prior musical experience is needed. Students will learn how to read music and play it on the piano. This class would be beneficial to the vocal and musical theater students.

Piano I	3 trimesters (1.5 credits)	<b>Grades 10-12</b>
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Prerequisite: Intro to Piano

This is a course that is designed to continue the development of music theory and piano skills to the intermediate level musician. Prior musical experience is necessary. Students must complete the Intro to Piano/Theory class with a "C" average or better. Students will work on transposition skills in this course, as well. This class would be beneficial to the vocal and musical theater students.

## Instrumental Music Courses Offerings and Descriptions

AP Music Theory 3 trimesters (1.5 credits) Grades 10-12

Students are expected to take the AP test in the spring.

AP Theory is a college leveled course open to students who are serious about studying music. Students will be acquainted with a working knowledge of the essentials of scale construction, chord construction, harmonization of a given melody and a general background in the composition of music. Time is spent on sight singing and dictation of melodies designed to prepare the prospective college-bound music major with a sufficient musical background. Students enrolled in the course may take the Advanced Placement Music Theory Exam. AP Credit given.

#### Theater

### Course Offerings and Descriptions

its) Grades 9-12
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This class would replace the current Intro to Theatre, Theatre I, and Theatre II classes and consolidate them into one year-long course. Students would learn the basics of acting through advanced technique and participate in the Thespian & MIFA competitions for scholarship money.

Acting II	3 trimesters (1.5 credits)	Grades 9-12
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This class replaces the current Advanced Theatre, Voice and Movement, and Improv for the Stage classes and consolidates them into one year-long course.

Introduction to Theater Arts	1 trimester (0.5 credit)	Grades 9-12

This course is designed to emphasize communication by means of dramatic performance. Analysis of play structure and composition, as well as focus on the student's own voice and body, enables students to recognize their own abilities as performers. Additional activities include extensive reading of dramatic literature, critical listening, and study of dramatic production, and theater history.

Theater A	1 trimester (0.5 credit)	Grades 9-12
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Prerequisite: Intro to Theatre

The interested student will participate in the basic principles of acting. The class introduces the fundamentals of acting to help the student "discover" him/herself through improvisation and other exercises. The course grounds the student in basic acting theory. Students will perform both group and individual performance pieces.

# Theater Course Offerings and Descriptions

Theater B 1 trimester (0.5 credit) Grades 9-12

Prerequisites: Intro to Theatre & Theatre A

The course is a continuation of Theatre A. The interested student will interact with multiple genres of theater: Commedia dell'Arte, Greek, Shakespeare and contemporary pieces with attention to scene study. Instructs how to analyze and approach the written text and embody character within each genre. Students will perform pieces from each genre.

Advanced Theatre 1 trimester (0.5 credit) Grades 10-12

Prerequisites: Intro to Theatre, Theatre A & B

The interested student will use scene-specific improvisation to text analysis and scene study; structured improvisation, script and scene analysis, text interpretation and realization, identification and implementation of action and objectives. Students will apply their learning through performance of memorized, prepared scenes.

Voice & Movement 1 trimester (0.5 credit) Grades 10-12

Prerequisites: Intro to Theatre, Theatre A & B

The interested student will establish a working philosophy and vocabulary for voice study. Exercises develop students' understanding and awareness of vocal production necessary for continued study. Students will establish a working knowledge of their bodies. Exercises, improvisation and other techniques will aid in developing awareness of the body as an expressive medium.

Improvisation for the Stage 1 trimester (0.5 credit) Grades 10-12

Prerequisites: Intro to Theatre, Theatre A & B

Through the use of acting exercises drawn from the work of theater director and educator Viola Spolin, students will develop their creativity and self-expression as an actor. Improvisational methods will give students a process to understand and create characters, create short scenarios and produce performance pieces.

Dramatic Literature 1 trimester (0.5 credit) Grades 9-12

Prerequisite: Introduction to Theatre Arts

The interested student will gain an overall view of drama, including the study of Western theater history, play reading, and basic fundamentals of script analysis. Students will study classic and contemporary plays through class readings and performances. Literary papers will be written and the trimester will conclude with each student writing a dramaturgical study of an approved play.

# Theater Course Offerings and Descriptions

Technical Theatre	1 trimester (0.5 credit)	Grades 9-12
Technical Theatre	1 trimester (0.5 credit)	Grades 9-12

The interested student will gain an introduction to theory and practice of theatrical design, text analysis and the ways a production concept and visual metaphor can be communicated in the design of scenery, costumes, makeup, props, and lighting. Students will also learn the principles and practices of stage management, including rehearsal coordination, prompt book preparation, and director/cast/crew relationships during rehearsal for theater, opera, and musical theater. This class combines classroom instruction with practical experience working on current school productions.

Contemporary Theatre Production	1 trimester (0.5 credit)	Grades 10-12
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Prerequisite: Introduction to Theatre Arts

The interested student will research, write, produce and perform short theater pieces that tackle social issues relevant to school aged students. Students will perform these pieces for the public. This class may be repeated for credit. This course would count as English/Psych or Arts credit.

Competition Theatre 2 trimester (1.0 credit)	Grades 9-12
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Prerequisite: Audition/Application ONLY

The interested student will be part of the cast or the production & design team and will create a one act play that will travel to the annual Michigan Interscholastic Forensics Association competition in winter. Competitions take place outside of school time on weekends beginning the end of January and through two weekends in February (based upon performance scores). Students must be available for all competition dates. This course runs first and second trimester only. This course may be repeated for credit.

### Visual Arts

### Course Offerings and Descriptions

Ceramics (Levels 1-3) 1 trimester (0.5 credit) Grades 9-12

Prerequisite: Ceramics 1 has no prerequisite. Ceramics 2 needs level 1, and Ceramics 3 needs level 2.

Ceramics is a project based, trimester long course focusing on the use of clay. Students working with clay, glazes and the kiln will have the opportunity to become involved with design, fabrication, and surface treatment of ceramic artwork through a variety of assigned projects. The course will emphasize good craftsmanship as a necessary ingredient in the pursuit of creative excellence. Emphasis is placed on both traditional ceramic craft and ceramics as fine art.

Advanced students will focus on developing ceramic art for a portfolio and will be encouraged to pursue their own interests in both design and concept.

Students will also be exposed to historical and contemporary artists, diversity in art, design thinking and ideation processes.

Students will learn visual art language, how to critique and present their work.

Pre-assessment activities are designed throughout the course to facilitate differentiation and instructional decision-making.

Drawing and Painting I 1 trimester (0.5 credit) Grades 9-12

Prerequisite: Intro to Art

Drawing is the basis for all other areas of visual arts. This introductory course will focus on understanding the use of line, shape, value, and texture. Students will use a variety of materials and subjects for the purpose of developing technical skills. In addition, the work in this course will emphasize a complete understanding of color theory as it relates to fine arts and commercial design. Students will explore basic painting techniques and historical styles in order to develop their own personal method of expression.

Drawing and Painting II 1 trimester (0.5 credit) Grades 9-12

Prerequisite: Drawing and Painting I

Advanced drawing and painting techniques and units of study based on historical styles will be explored in this course. Emphasis will be placed on complete understanding of perspective as it relates to still life, building interiors and landscape images. Students will complete several figurative studies including drawings and paintings of hands and faces. Students will have an opportunity to explore imaginary subjects in conjunction with a variety of new media such as oil pastels and charcoal.

Drawing and Painting III	1 trimester (0.5 credit)	Grades 9-12
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Prerequisite: Drawing and Painting II

Students will learn the fundamentals of how to create depth in their drawings and paintings. Our focus will be on learning perspective and depth cues (shading, location, scale, contrast, vanishing points, texture, shadows, etc.)

Two Dimensional Design	1 trimester (0.5 credit)	Grades 9-12
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The focus of this course is on elements including areas such as illustration, advertising, product design, lettering and printmaking. The course will also develop the ability to analyze and critique works of art as well as the historical study of two-dimensional design.

Three Dimensional Design	1 trimester (0.5 credit)	Grades 9-12

This course is an introduction to creating sculptural images using a variety of media such as paper, papier mache, and clay, using traditional hand building methods. Students will be introduced to related studies in art history and aesthetic awareness.

# Visual Arts Course Offerings and Descriptions

ter (0.5 credit) Grades 9-12
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This course focuses on the production of a variety of cartoons, including single frame formats, comic strips, as well as the creation of a comic book. In addition, the students will be introduced to basic animation skills, including character development, storyboards, and still frame animation. Drawing I would be helpful for this class, but is not required.

### Digital Photography 1 trimester (0.5 credit) Grades 9-12

Cell phone and/or digital camera Required

The emphasis of this course will be on the exploration of digital camera techniques and the study of photographic subjects. The images generated throughout the trimester will be used in conjunction with Adobe Photoshop CS3/4 in order to produce computer enhanced images. In addition to the production of digital photographs there will be related studies in art history and aesthetic awareness.

### Intro to Art 1 trimester (0.5 credit) Grades 9-12

Intro to Art is designed to give students a wide variety of art exposure. Students will learn basic art concepts (lines, color, shapes, value, texture, space, balance, repetition, contrast, pattern, unity, variety, etc.) and how to use them in their artwork. Students will also explore a wide range of media (colored pencils, crayon, markers, pen, paint, etc.).

Color Theory 1 trimester (0.5 credit) Grades 9
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Students will learn the basic concept of color and how to mix it to achieve the correct value, intensity and hue. Students will acquire a vocabulary of color that will help them see, name and mix colors to match what they see.

Mosaic Building   1 trimester (0.5 credit)   Grades 9-12	Mosaic Building	1 trimester (0.5 credit)	Grades 9-12
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This class gives students an opportunity to create mosaics using Rubik's cubes. Students will first learn to solve the Rubik's and then they will use this knowledge to create beautiful Mosaics of photographs of their choice. A Rubik's cube is a great object to use to create mosaics because it has six different colors and each cube can be changed to have a different pattern. The same method to solve the cube is the same method that can be used to change the cube to make a mosaic.

# Visual Arts Course Offerings and Descriptions

Painting Murals	1 trimester (0.5 credit)	<b>Grades 11-12</b>

Prerequisite: Intro to Painting, Painting I, Painting II, and Color Theory

Students will use their knowledge of drawing and painting, along with their ability to work cooperatively with each other, to create their artwork. Students will learn to use the concept of gridding (using a grid to transfer a small picture into a larger picture) to paint their murals either directly on the surface of the school wall (with administration permission) or on large canvas or wood.

### The Art of Lettering 1 trimester (0.5 credit) Grades 9-12

The Art of Lettering class will allow students to examine different ways of creating art with letters. Students will learn how to create calligraphy (the art of beautiful handwriting), 3-D lettering, versals (fancy, decorated lettering), and Word Art. Three dimensional letter sculpting and using collage to create lettering will also be explored.

# Computer Graphics 1 trimester (0.5 credit) Grades 9-12 (Levels 1-6)

Computer graphics is a project-based, trimester long course that focuses on the use of technology and industry standard software to create digital art. Students will create various means of digital art using Adobe Creative Cloud apps. As students move through the various levels and into the upper levels, the course will be individualized to meet student needs and portfolio goals.

## AP Advanced Art Portfolio 3 trimesters (1.5 credit) Grades 11-12

Prerequisites: Drawing 1, Drawing 2, Intro to Painting, and 2 Dimensional Design Teacher signature required

Students are expected to complete AP requirements.

This course is designed for students that are interested in pursuing art studies at the college level. This is a structured course of study which requires you to create a portfolio that stresses technical skills in combination with individual expression. Students will have the opportunity for independent experimentation that emphasizes the elements and principles of design as well as expressive conceptual issues. The class requires self-discipline and motivation. The final portfolio would be used for art school, college admissions, as well as scholarship opportunities.

### Armada Science Academy/STEM Endorsement

Armada's Science Academy is Armada School Districts center for AP and honors-level classes in Science, Math, Engineering, Technology, and Medical Sciences. The Academy offers a four year program allowing students to be challenged in the various fields offered though our recommended sequence and concentration areas. Modeled like a college course structure, students will have required core courses and electives to complete in order to be designated as an Academy STEM graduate at commencement. See Appendix B. The Academy curriculum focuses on accelerated, problem solving assignments and projects. With hands-on learning, teachers are able to integrate real world applications to students' learning.

### **Math Courses**

Honors Geometry	3 trimesters (1.5 credits)	Grades 9-10
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Geometry is the study of shapes; analysis will be done from a graphical, algebraic and numeric viewpoint. We will also examine transformations, proofs, and logic while the exploration of the concept of similarity leads into trigonometry. In addition to learning geometric skills and concepts, students will develop their ability to think logically, construct arguments and solve problems.

Pre-Calculus	3 trimesters (1.5 credits)	Grades 9-12
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Eligible to receive Ferris State University credit in MATH 120 and MATH 130 Prerequisite: Must receive a 580 or higher on the math portion of the PSAT or SAT Teacher Approval Required

Pre-Calculus "A" adds the finishing touches to the Algebra branch of mathematics. We quickly review each family of functions and complete the big picture of the commonalities and differences between the different families. Solving and graphing higher order functions are the primary focus of this trimester. Pre-Calculus "B" is an introduction to trigonometry. We begin the trimester investigating the unit circle. From there we move on to graphing the trigonometric functions, verifying identities, and finally complete the trimester solving trigonometric equations. Vectors and polar coordinates are also introduced. A strong background in the fundamentals of Algebra is essential.

AP Calculus (AB and BC) 3 trin	esters (1.5 credits)	Grades 11-12
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Students are expected to take the AP test in the spring.

Calculus AB and Calculus BC are primarily concerned with developing the students' understanding of the concepts of calculus and providing experience with its methods and applications. The courses emphasize a multi-representational approach to calculus, with concepts, results, and problems being expressed graphically, numerically, analytically, and verbally. Applications include a rich selection of problems in biology, business, chemistry, economics, engineering, finance, physics, the social sciences and statistics. Technology will be used throughout this course as one of many methods to solve complex problems that arise in everyday life. This course provides a solid foundation to help students succeed in future advanced math courses at the college level. Students will be prepared for and are expected to take the AP Calculus given in May of each year.

Honors Intro to Statistics	3 trimesters (1.5 credits)	Grades 9-12
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Students are introduced to the research process. Topics covered include basic and advanced statistical analysis, scientific writing, and the presentation of scientific research.

AP Statistics 3	trimesters (1.5 credits)	<b>Grades 11-12</b>
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Prerequisite: Algebra I, Geometry, and Algebra II \*Course can be taken concurrently with Precalculus

Students are expected to take the AP test in the spring.

AP Statistics is a College Board class that is intended as an introductory college-level statistics course. The course introduces students to major concepts and tools for collecting, analyzing, and drawing conclusions from data. Students build their understanding of statistics using technology, investigations, problem solving, and writing as they explore concepts like variation and distribution; patterns and uncertainty; and data-based predictions, decisions, and conclusions.

Honors Algebra II/Trig	3 trimesters (1.5 credits)	Grades 10-12
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This course involves the study of the concept of a function and use in everyday life as well as value in modeling situations deemed valuable in scientific research. Graphing of functions is used throughout with advanced technology such as the TI-83 Plus calculator as well as computer graphing programs such as EXCEL. Matrices, polynomials, quadratic functions, inverses and radicals, exponential and logarithmic functions are also included. Further study is done in trigonometry with emphasis on modeling and graphing of trigonometric functions.

#### Science Courses

### **Descriptions and Offerings**

<b>Honors Chemistry</b>	3 trimesters (1.5 credits)	Grades 9-12
Honors Chemistry	3 trimesters (1.5 credits)	Grades 9-12

Chemistry is the study of the structure, composition, and behavior of matter. Students study a variety of topics that include: characteristics of matter, transformations during physical and chemical changes, atomic structure, periodic table of elements, behavior of gasses, bonding, nuclear fusion and fission, chemical equations, properties of solutions, acids and bases, and chemical reactions. Student investigations emphasize accurate observations, collection of data, data analysis, and the safe manipulation of scientific apparatus and materials during laboratory investigations.

### Honors Physics 3 trimester (1.5 credits) Grades 9-12

In Honors Physics students will learn about the physical world around them and how to think critically to solve a problem. In this lab-based course, students will learn to develop an investigation, collect data, and make conclusions based on that data. They will then use those conclusions to try and solve problems. Throughout the year students will study kinematics (motion), dynamics (forces), momentum, and energy. If there is time available, students will also begin to study waves, sound, and light.

AP Physics 1	3 trimesters (1.5 credits)	Grades 10-12
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Students are expected to take the AP test in the spring.

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

AP Physics C: Mech/Elec/Mag	3 trimesters (1.5 credits)	Grades 11-12
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Prerequisite: Algebra II, concurrent with Calculus

Students are expected to take the AP test in the spring.

The AP Physics C: Mechanics course (Approximately 2 trimesters) is equivalent to a one-semester, calculus-based, college-level physics course. It is especially appropriate for students planning to specialize or major in physical science or engineering. The course explores topics such as kinematics; Newton's laws of motion; work, energy and power; systems of particles and linear momentum; circular motion and rotation; and oscillations and gravitation. Introductory differential and integral calculus is used throughout the course.

Time permitting, the AP Physics C: Electricity and Magnetism course (Approximately 1 trimester) is a calculus-based, college-level physics course, especially appropriate for students planning to specialize or major in physical science or engineering. The course explores topics such as electrostatics; conductors, capacitors, and dielectrics; electric circuits; magnetic fields; and electromagnetism. Introductory differential and integral calculus is used throughout the course.

AP Biology	3 trimesters (1.5 credits)	Grades 9-12
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Prerequisite: Biology/Honors Biology and Honors Chemistry

Students are expected to take the AP test in the spring.

AP Biology is designed to be the equivalent of a two-semester introductory college biology course. As recommended by the College Board, students develop an understanding of the major topics of biology, including biochemistry, molecular biology, cells, heredity, evolution, organisms and populations. Earning a B or higher in both Biology and Chemistry are prerequisites to taking this course.

AP Chemistry	3 trimesters (1.5 credits)	Grades 10-12
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Prerequisite: Chemistry

Students are expected to take the AP test in the spring.

AP Chemistry is equivalent to a college level general chemistry course that provides rigorous study in four major areas: structure of matter, states of matter, reaction and descriptive chemistry. Students must be highly motivated to tackle this rigorous course.

AP Environmental Science	3 trimester (1.5 credit)	Grades 11-12
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Prerequisite: Physical Science or Chemistry and Biology

This course is interdisciplinary, involving the fields of ecology, biology, ocean, and atmospheric sciences, climatology, chemistry, geology, toxicology, geography, economics, politics, and ethics, etc. The goals of the AP Environmental Science course are to (1) provide students with the scientific principles, concepts, and methodologies required to understand the interrelationships in the natural world, (2) to identify and analyze environmental problems or challenges (both natural and man-made), (3) to evaluate the relative risks associated with these problems, and (4) to examine alternative solutions for resolving and/or preventing them.

### Science Course Descriptions and Offerings

Physiology	Honors Anatomy and Physiology	3 trimesters (1.5 credits)	Grades 9-12
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This course is a college preparatory class designed to give students knowledge in human body systems, including the parts that make them up, the way they are organized, and the way they function. There will be rudimentary biomechanics and a review of cellular functions, including cell energetics and genetics. Students will be able to apply their knowledge to help them explain why/how certain variables affect their bodies; variables could include drugs, food, exercise, disease, etc.

<b>Honors Biology</b>	3 trimesters (1.5 credits)	Grade 10
Honors Biology	3 trimesters (1.5 credits)	Grade 10

Prerequisite: Chemistry or Physical Science

In Honors Biology students will utilize a mixture of inquiry, lecture, and reflection to study: The patterns and products of change in organisms; The interactions and interdependence of organisms; The continuity and reproduction of organisms; The growth, development, and differentiation of organisms; The matter and organization of organisms; How organisms maintain consistency at the individual through ecosystem levels.

<b>Honors Earth Science</b>	3 trimesters (1.5 credits)	<b>Grades 10-12</b>

Prerequisite: Chemistry

Earth science will emphasize the characteristics and conditions of the earth, formation and history of the earth, plate tectonics, origin and composition of minerals and rocks and the rock cycle, processes and products of weathering, natural energy resources, interactions in watersheds, characteristics of the atmosphere and the role of energy in weather and climate.

## Anatomy for Athletes 3 trimesters (1.5 credits) Grade 12

Prerequisite: Biology This class will help student athletes know the structures that make up the human body, and how organ systems and cellular functions affect athletic performance. Students will learn how the musculoskeletal, respiratory,

circulatory, digestive, excretory, immune, integumentary, endocrine and nervous systems collaborate to maximize athletic performance. There will be an ongoing project for which athletes will design a plan that will help them realize a higher percentage of their athletic potential based on the physiological demands of the sports they play. Activities and choices that each athlete can do and make to enhance the effect of each system will be added to the plans as the year progresses.

### Science Course Descriptions and Offerings

Research Symposium	3 trimesters (1.5 credits)	Grades 10-12
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Prerequisite: Statistics, Physics or Algebra II (or concurrently)

In this class students will investigate current science research and science issues affecting humanity and or the world, by discerning the differences between easily-accessible internet information, science-magazine articles, and peer-reviewed publications. Students will develop and work on a year-long research project as individuals or in teams, including: Developing a good question; Coming up with a Project; Performing a Literature Review; Accounting for variables; Designing the Project; Collecting and Organizing Data; Analyzing Data; Scientific Communication including Written and Presentation.

Honors Engineering Principles	3 trimesters (1.5 credits)	Grades 10-12

Prerequisite: Chemistry, Statistics, and taken concurrently with Algebra II

In Engineering Principles, you will learn about engineering from mechanics, electronics, and controls perspectives – also known as mechatronics. Mechatronics is the combination of different engineering fields to develop an integrated system. We will spend time working with forces, simple machines, and energy for the mechanics portion. For the electronics part we will study basic electricity and DC circuits. We will then work with Arduino microcontrollers to learn about the controls aspect. There are some ongoing projects that we will continue to work on as well as opportunities to develop your own project. Ongoing projects include working on improvements to an electric go-kart, creating an autonomously controlled RC car, and building a portable charging station using solar panels and a wind turbine on a trailer.

Introduction to Computer 3 trimesters (1.5 credits) Science	Grades 9-10
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Introduction to Computer Science is a course adopted from code.org. Following CSTA standards, the course covers topics such as programming, physical computing, and user-centered design while encouraging students as they build their own websites, apps, animations, games, and physical computing systems.

Computer Science Principles	3 trimesters (1.5 credits)	Grades 10-12
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Prerequisite: Algebra I

This course is an excellent overview of various topics in the field of Computer Science and is a good fit for students who want to learn more about how the internet works and/or the basics of computer programming. It is meant for students with little to no computer science experience and covers the following topics at an entry level: The impact of the internet on society, how the internet works, big data, cybersecurity, and programming/building apps using JavaScript.

Computer Coding 3 trimesters (1.5 credits) Grades 10-12

Prerequisite: "B" or better in Algebra II

This course emphasizes object-oriented programming methodology with concentration on problem solving and algorithm development, and is meant to be the equivalent of a first-semester college-level course in computer science. The programming language is Java.

AP Computer Science 3 credits (1.5 trimesters) Grades 10-12
Principles

Prerequisite: Algebra I

Students are expected to take the AP test in the spring.

This course is an excellent overview of various topics in the field of Computer Science and is a good fit for students who want to learn more about how the internet works and/or the basics of computer programming. It is meant for students with little to no computer science experience and covers the following topics at an entry level: The impact of the internet on society, how the internet works, big data, cybersecurity, and programming/building apps using JavaScript.

Academy	Intro to CISCO Networking Academy	2 trimesters (1.0 credit)	Grades 9-12
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The course will introduce various topics including the Cisco training system, the "Internet of Things", and "Intro to Cybersecurity". (Keep in mind that future Cisco courses will give students the opportunity to earn college credit.)

CISCO Networking Academy	2 trimesters (1.0 credit)	Grade 12
Academy		

Cisco Networking Academy is an IT skills and career building program for learning institutions and individuals worldwide. More than 5.5 million people have joined the Networking Academy and become a force for change in the global economy since 1997. The Cisco Networking Academy is a series of courses that will enable students to earn the Cisco Network Administrator Certification. The curriculum is delivered online using a proprietary learning platform in partnership with local learning institutions. An engaging, up-to-date curriculum created by experts in technology and instructional design includes hands-on labs and online activities for the practical application of learned skills. The Cisco Packet Tracer, a network configuration simulation tool, is used for teaching, gaming, and team building.

CISCO Cybersecurity Essentials	1 trimester (0.5 credit)	Grades 9-12
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Prerequisite: Intro to CISCO Networking Academy

This course covers foundational knowledge and essential skills for information security, systems security, network security, laws, and techniques used in protecting businesses.

CISCO Routing & Switching Essentials	2 trimesters (1.0 credit)	Grades 9-12

Prerequisite: Intro to CISCO and CISCO Cybersecurity Essentials

This course expands on the knowledge gained in the Introduction to Networks course, going into more detail on the working of routers and switches. The class involves many labs using the actual CISCO routing and switching equipment. This course, along with the first CISCO course, provides the opportunity for students to receive CISCO CCENT certification by taking a CISCO test.

CISCO CCENT Certification Exam Prep	1 trimester (0.5 credit)	Grades 9-12
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Prerequisite: Intro to CISCO, CISCO Cybersecurity Essentials, and CISCO Routing and Switching Essentials

CISCO offers an exam after these courses, so students can receive certification as a "CISCO Certified Entry Network Technician." Certification will allow students to get college credit for these courses at many institutions and set them up for entry-level networking jobs.

Students must turn 18 years of age within one year of graduation.

Students enrolled in this program will receive instruction in the fields of pre-hospital and emergency medical training. Students in the class study the human body and treatment required outside the hospital setting. Students will study anatomy and physiology, emergency first aid, bleeding control, shock cardiac arrest management, airway management, and patient treatment at accident scenes. There may be a possibility for students, who successfully complete all requirements—including ER and EMS clinicals, to take the National Registry EMT (NREMT) Exam and be a licensed EMT.

Medical Science I	3 trimesters (1.5 credits)	Grades 10-12
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Science Credit Course

This course uses advanced investigative approaches to the study of human and social sciences as related to medicine and health care. Emphasis includes the language of medicine, body chemistry, anatomy and physiology and the current and futuristic study of disease and disorders. This course will earn science credit. This course is a prerequisite to Medical Science II.

Medical Science II 3 trimesters (1.5 credits) Grades 11-12	ience II 3
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Prerequisite: Medical Science I or Anatomy and Physiology with a B or higher

This course prepares potential health care workers for performance in an advanced technical or professional health career. Emphasis placed on professional development, infection control in health care, communication and teamwork, safety, bioethical/legal practices and problem solving and decision making in the health care setting. Job Shadowing will be a component to this class and will require student transportation (themselves or car pools) to health care locations in the area. Job Shadowing in the health care setting will require a TB test, Flu vaccine and proof of the Hepatitis B vaccine. Students will take the National Health Science Assessment at the conclusion of this course. Passing this assessment will earn them a certificate offered by the National Consortium for Health Science Education and measures student mastery of basic skills and knowledge that workers in all aspects of the health industry need to know. Students will also earn BLS/CPR Certification (Required to work in most healthcare facilities).

Accelerated Medical Science	3 trimesters (1.5 credits)	Grade 12

This course is designed for Seniors only who are serious about entering a health related field of study upon graduation. This is a fast paced course that will cover all 12 segments of the Therapeutic Health Science Pathway. This course requires a strong science aptitude. Students will take the National Health Science Assessment at the conclusion of this course. Passing this assessment will earn them a certificate offered by the National Consortium for Health Science Education and measures student mastery of basic skills and knowledge that workers in all aspects of the health industry need to know. Students will also earn BLS/CPR Certification (Required to work in most healthcare facilities).

#### **Edgenuity Courses**

Armada High School and Armada Continuing Education utilize online learning from Edgenuity. The courses available can be found at <a href="https://www.edgenuity.com/course-lists/Edgenuity-Michigan-Course-List.pdf">https://www.edgenuity.com/course-lists/Edgenuity-Michigan-Course-List.pdf</a> and are listed in

Appendix C.

#### Personal Curriculums

Please note that pursuant to Section 380.1278b amended of the Revised School Code, students in need of modifications to the Michigan Merit Curriculum may consider a personal curriculum. Personal curriculums are intended to assist students wanting to go beyond the Michigan Merit Curriculum or for students who need to individualize their educational plans. Personal curriculums can be requested by parents, teachers of students, and/or students 18 years of age. For more information on personal curriculums, please visit <a href="https://www.michigan.gov/documents/mde/PC">https://www.michigan.gov/documents/mde/PC</a> Guide 1 2015 482101 7.pdf.

#### **Testing Out**

Pursuant to 380.1278(a)(4)(c), students are allowed the opportunity to "test out" of any course offered by Armada High School. Students must demonstrate a reasonable level of mastery of the subject matter (C+ or better) in order to "test out" of the course. A grade of "CR" will be issued, not a letter grade. Students may request to test out of a class during Tiger Days or the final week of a trimester. State guidelines allow one attempt for a course, and you may not test out of a class you have already taken and earned credit in. Test out credit will not be included in the computation of grade point average or class rank.

### **Directory Information**

### ARMADA HIGH SCHOOL 23655 Armada Center Road Armada, MI 48005

High School Office

(586) 784-2400

Mr. Andy Kastl, Principal

Mr. Mark Gosciewski, Associate Principal

Mr. Tim Woelkers, Director of the Armada Science Academy, Safety Director, & Director of Armada Continuing Education

Mr. Tyler Phillips, Athletic Director

**High School Counseling Office** 

(586) 784-2420

Ms. Shannon Mazey, Counselor, A-L

Mrs. Kate Felcyn, Counselor, M-Z

24-hour Attendance Line (586) 784-2401

Fax Line (586) 784-9592

It shall continue to be the policy of the Armada Area Schools *not* to discriminate on the basis of religion, race, national origin, sex, political affiliation or handicap in educational programs, activities, or services and to comply with all requirements and regulations of the U.S. Department of Education. All students shall have an equal opportunity to participate in and benefit from, all academic and extracurricular activities and services.

		<b>GRADUATION AUDIT SHEET</b>	<b>AUDIT SHEET</b>		
Language Arts			Math		
Engish 9 A	English 9 B	English 9 C	Algebra I A	Algebra I B	Algebra I C
English 10 A	English 10 B	English 10 C	Geometry A	Geometry B	Geometry C
English 11 A	English 11 B	English 11 C	Algebra II A	Algebra II B	Algebra II C
English 12 A	English 12 B	English 12 C	Math Elec A	Math Elec B	Senior Yr.
Science			Social Studies		
Chem/Phy Sci A	Chem/Phy Sci B	Chem/Phy Sci C	Amer Hist A	Amer Hist B	Amer Hist C
Biology A	Biology B	Biology C	Government	Economics	
Sci Elective A	Sci Elective B	Sci Elective C	World Hist A	World Hist B	World Hist C
Health	Phys Ed		Vis/Per/Appl Arts		
World Lang 1 A	World Lang 2 A		Finance		
m U	m o		Career Sequence Courses	urses	
9th - 9.0 credits					
10th - 9.0				<b>Current Credits</b>	ts
11th - 9.0					
12th - 9.0					
36 credits possible					

# Appendix B

	STEM Progam Class Audit Sheet	et
Student:		
Required Core Classes	Elective Classes (Must Take any 3)	
Honors Chemistry	Science Concentration	Technology Concentration
Honors Geometry	AP Biology	Intro to Cisco Networking/Cybersecurity
Honors Statistics	AP Chemisty	Cisco Routing and Switching Essentials
Honors Biology	AP Physics	AP Computer Science Principles
Honors Algebra 2	AP Physics C	
Honors Pre Calculus	AP Environmental Science	
AP Calculus or AP Stats		Medical Concentration
	Engineering Concentration	Anatomy and Physiology
	AP Physics	Accelerated Medical Science
	AP Physics C	Medical Science 1 & 2
	Engineering Principles	EMT
*Note all students must take a minimul	m of 10 different courses that include all of the require	*Note all students must take a minimum of 10 different courses that include all of the required core classes. In some instances, AP Stats can be substituted for Honors Stats, provided the student also takes AP Calculus
**Elective courses (3) can come from any concentration.	any	

# Appendix C

# Michigan course list



ENGLISH LANGUAGE ARTS	SCIENCE
☐ English Language Arts 6	☐ Integrated Science 6
☐ English Language Arts 7	☐ Integrated Science 7
☐ English Language Arts 8	☐ Integrated Science 8
☐ English Language Arts 9 H	☐ Grade 6 Physical Science
☐ English Language Arts 10 H	☐ Grade 7 Life Science
☐ English Language Arts 11 H	☐ Grade 8 Earth Systems Science
☐ English Language Arts 12 H	Biology
☐ Literacy & Comprehension I	Chemistry
☐ Literacy & Comprehension II	☐ Earth and Space Science
☐ Expository Reading and Writing	☐ Physical Science
☐ Introduction to Communications & Speech	Physics
☐ Classic Novels & Author Studies**	☐ Environmental Science
MATHEMATICS	SOCIAL STUDIES
☐ Mathematics 6	☐ World Geography (Grade 6)
☐ Mathematics 7	☐ World History and Geography (Grade 7)
☐ Mathematics 8	☐ Integrated U.S. History (grade 8)
☐ Pre-Algebra	☐ Government/Civics*
☐ Algebra I H	─ World History and Geography
☐ Geometry H	☐ Modern World History
☐ Algebra II H	☐ U.S. History and Geography
☐ Precalculus H	☐ Economics*
☐ Mathematics I	☐ Human Geography
☐ Mathematics II	☐ Civics and Citizenship* •
☐ Mathematics III	•
☐ Mathematical Models with Applications	NATIONAL TEST PREPARATION
☐ Financial Math	
☐ Trigonometry*	☐ ACCUPLACER®
☐ Statistics	☐ ACT WorkKeys®
Concepts in Probability and Statistics	☐ ACT®
	☐ ASVAB® (Math, Verbal, Science)
	☐ GED®
	☐ HiSET®
	□ PSAT®
	□ SAT®
	☐ TASC®

FOR MORE INFORMATION, CONTACT: 877.7CLICKS | solutions@edgenuity.com

# Michigan course list, continued



WORLD LANGUAGES		GENERAL ELECTIVES
Middle School	High School	Middle School
Spanish 1	☐ Spanish I	☐ Health Quest* •
☐ Spanish 2	☐ Spanish II	☐ Keyboarding and Applications*
☐ French 1	Spanish III	☐ Online Learning and Digital Citizenship*
☐ French 2	☐ French I	High Calact
☐ Chinese 1	☐ French II	High School
☐ Chinese 2	☐ French III	Art History I
☐ German 1	☐ Chinese I	Computer Applications: Office® 2016
☐ German 2	☐ Chinese II	Contemporary Health*
☐ Latin 1	☐ German I	Foundations of Personal Wellness
☐ Latin 2	German II	Healthy Living (semester)*
	☐ Latin I	Healthy Living (full-year)
	☐ Latin II	Introduction to Art
		Introduction to Computer Science
AP ADVANCED PLACEME	NT®	Lifetime Fitness (semester)*
All AP courses except Computer Science Pri	nciples, English Literature and Composition.	Lifetime Fitness (full-year)
French, and Spanish require textbooks. Text from online booksellers.		Personal Finance*  Psychology
☐ Biology <sup>†</sup>		☐ Sociology*
☐ Calculus AB		☐ Strategies for Academic Success*
☐ Computer Science Principle	es*	
☐ English Language & Compo	sition	
☐ English Literature & Compos	sition	
☐ Environmental Science <sup>†</sup>		
☐ French Language & Culture		
☐ Human Geography		
Psychology		
☐ Spanish Language & Cultur	е	
☐ Statistics		
☐ U.S. Government & Politics	*	
U.S. History		
☐ World History: Modern		



### Appendix C (continued)

# Michigan course list, continued

CTE ELECTIVES	
CTE Electives can be added to concurrent or site licenses for an additional cost.	
CAREER READINESS	Finance
☐ Career Explorations I*	☐ Banking Services Careers*
☐ Career Explorations II*	☐ Introduction to Careers in Finance*
☐ Career Explorations III*	Government & Public Administration
☐ Career Explorations	☐ Introduction to Careers in Government & Public
☐ Career Management*	Administration*
☐ Career Planning and Development	Health Science
CAREER CLUSTERS	☐ Careers in Allied Health*
Agriculture, Food & Natural Resources	☐ Health, Safety and Ethics in the Health Environment*
☐ Agribusiness Systems*	☐ Health Science Concepts
☐ Animal Systems*	☐ Introduction to Careers in the Health Sciences*
☐ Food Products and Processing Systems*	☐ Introduction to Health Science
☐ Introduction to Agriculture, Food, & Natural Resources*	☐ Medical Terminology
☐ Plant Systems*	□ Nursing: Unlimited Possibilities & Unlimited Potential*†
☐ Power, Structural, and Technical Systems*	☐ Nursing Assistant <sup>†</sup>
Architecture & Construction	☐ Pharmacy Technician <sup>†</sup>
Construction Careers*	Physicians, Pharmacists, Dentists, Veterinarians and Other Doctors*
☐ Introduction to Careers in Architecture & Construction*	Public Health: Discovering the Big Picture in Health Care*
Arts, A/V Technology & Communications	☐ Therapeutics: The Art of Restoring and Maintaining
Fundamentals of Digital Media*	Wellness*
☐ Introduction to Careers in Arts, A/V Technology &	Hospitality & Tourism
Communications*	☐ Food Safety and Sanitation*
<b>Business Management &amp; Administration</b>	☐ Marketing and Sales for Tourism and Hospitality*
☐ Business Computer Information Systems	☐ Planning Meetings and Special Events*
☐ Business Law*	☐ Sustainable Service Management for Hospitality & Tourism*
☐ Introduction to Business	☐ Transportation and Tours for the Traveler*
☐ Keyboarding and Applications*	Human Services
☐ Microsoft® Office® Specialist	☐ Family and Community Services*
☐ Small Business Entrepreneurship	☐ Introduction to Consumer Services*

☐ Introduction to Human Services\*

☐ Personal Care Services\*

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☐ Technology and Business

☐ Teaching and Training Careers\*

☐ Introduction to Careers in Education & Training\*
☐ Introduction to Human Growth and Development\*

**Education & Training** 

## Appendix C (continued)

# Michigan course list, continued

CTE ELECTIVES, CONTINUED	SOCIAL EMOTIONAL LEARNING
CTE Electives can be added to concurrent or site licenses for an additional cost.	Purpose Prep 6-12 and Look Deeper: Race run on the Edgenuity LMS and are available at an additional cost. Purpose Prep K-5 is also available on a separate platform.
Information Technology  ☐ Computer Science Principles * ☐ Fundamentals of Computer Systems* ☐ Fundamentals of Computer Systems *	Purpose Prep  ☐ Character & Leadership Development ☐ Climate & Culture Transformation
☐ Fundamentals of Programming & Software Development* ☐ Introduction to Coding* ☐ Introduction to Computer Science ☐ Introduction to InformationTechnology ☐ Introduction to Information Technology Support & Services* ☐ Introduction to Network Systems* ☐ Network System Design* ☐ New Applications: Web Development in the 21st Century* ☐ Software Development Tools*	☐ College & Career Readiness ☐ Mental Health & Wellness ☐ Personal Development ☐ Restorative Practices and Principles ☐ Social & Emotional Success ☐ Unlock Your Purpose ☐ Trauma-Informed Living  Point Made Learning
Law, Public Safety, Corrections & Security  Corrections: Policies and Procedures*  Fire & Emergency Services*  Forensics: Using Science to Solve a Mystery*  Introduction to Law, Public Safety, Corrections, & Security*  Law Enforcement Field Services*  Legal Services*  Security and Protective Services*	Look Deeper: Race
Marketing  ☐ Careers in Marketing Research*	
Science, Technology, Engineering & Mathematics  Engineering and Design*  Engineering and Product Development*  Introduction to STEM*  Science and Mathematics in the Real World*  Scientific Discovery and Development*  Scientific Research*  STEM and Problem Solving*	
Transportation, Distribution & Logistics  ☐ Careers in Logistics Planning and Management Services*  ☐ Introduction to Careers in Transportation, Distribution, & Logistics*	



# Subscription-based Electives

### THESE ELECTIVES ARE PRICED SEPARATELY BY ENROLLMENT

CAREER AND ELECTIVE COURS	SES by eDynamic Learning	
Edgenuity offers a suite of eDynamic Learning elect and CTE. These electives are priced separately by e	tives on a subscription basis, allowing students to pursue a large enrollment.	ge range of interests in language arts, creative arts, STEM,
MIDDLE SCHOOL ELECTIVES  Middle School 2D Studio Art 1A*  Middle School 2D Studio Art 1B*	<ul><li>☐ Principles of Agriculture, Food, and Natural Resources*</li><li>☐ Veterinary Science: The Care of Animals*</li></ul>	☐ Fashion & Interior Design* ☐ Nutrition & Wellness* ☐ Peer Counseling*
Middle School Coding 1A*     Middle School Coding 1B*     Middle School Digital Art & Design 1A*     Middle School Digital Art & Design 1B*     Middle School Exploring Music 1A*     Middle School Exploring Music 1B*     Middle School Game Design 1A*     Middle School Game Design 1B*     Middle School Journalism 1A*     Middle School Journalism 1B*     Middle School Photography 1A*     Middle School Photography 1B*	ARTS, AUDIO/VIDEO TECHNOLOGY, AND COMMUNICATIONS  Animation* Digital Photography 1A* Digital Photography 1B* Digital Photography II* Introduction to Social Media: Our Connected World* Journalism 1A* Journalism 1B* Music Appreciation* Public Speaking 1A*	INFORMATION TECHNOLOGY  Cybersecurity 1A* Cybersecurity 1B* Game Design 1A* Game Design 1B*  LAW, PUBLIC SAFETY, CORRECTIONS, AND SECURITY  Careers in Criminal Justice* Criminology: Inside the Criminal Mind Introduction to Military Careers* Law & Order:
HIGH SCHOOL GENERAL ELECTIVES  African-American History* American Sign Language 1A* American Sign Language 1B* American Sign Language 2A* American Sign Language 2B* Anthropology I: Uncovering Human Mysteries* Anthropology II: More Human Mysteries Uncovered* Archaeology: Detectives of the Past*	□ Public Speaking 1B*  BUSINESS, MANAGEMENT, & ADMINISTRATION □ International Business: □ Global Commerce in the 21st Century*  EDUCATION & TRAINING □ Early Childhood Education 1A* □ Early Childhood Education 1B* □ Real World Parenting*  ENERGY	Introduction to Legal Studies*  National Security*  Principles of Public Service: To Serve & Protect*  MANUFACTURING  Introduction to Manufacturing: Product Design & Innovation*  MARKETING  Advertising and Sales Promotion*  Sports and Entertainment Marketing
☐ Creative Writing* ☐ Gothic Literature: Monster Stories* ☐ History of the Holocaust* ☐ Mythology & Folklore: Legendary Tales* ☐ Philosophy: The Big Picture* ☐ Social Problems I: A World in Crisis* ☐ Social Problems II: ☐ Crisis, Conflicts, & Challenges* ☐ World Religions: Exploring Diversity*  AGRICULTURE, FOOD, AND NATURAL RESOURCES ☐ Agriscience 1: ☐ Introduction to Agriscience* ☐ Agriscience 2A: Sustaining Human Life* ☐ Agriscience 2B: Sustaining Human Life* ☐ Forestry & Natural Resources*	Renewable Technologies 1A*  Renewable Technologies 1B*  HOSPITALITY & TOURISM  Culinary Arts 1A*  Culinary Arts 1B*  Hospitality & Tourism 1:  Traveling the Globe*  Hospitality & Tourism 2A: Hotel & Restaurant Management*  Hospitality & Tourism 2B: Hotel & Restaurant Management*  HUMAN SERVICES  Cosmetology 1: Cutting Edge Styles*  Cosmetology 2: The Business of Skin & Nail Care*	SCIENCE, TECHNOLOGY, ENGINEERING, AND MATHEMATICS  Astronomy: Exploring the Universe 1A Astronomy: Exploring the Universe 1B Biotechnology 1A* Biotechnology 1B* Concepts of Engineering & Technology Forensic Science I: Secrets of the Dead Forensic Science II: More Secrets of the Dead* Great Minds in Science: Ideas for a New Generation* Marine Science 1A* Marine Science 1B*

# Subscription-based Electives

### THESE ELECTIVES ARE PRICED SEPARATELY BY ENROLLMENT

INSTRUCTIONAL SERVICES ELECTIVES Offered with Edgenuity teachers only  All electives can be taught through a district teacher or a highly qualified Edgenuity instructor. However, the following electives are offered only through Edgenuity's		
Instructional Services to help schools further expand their course offerings with	Edgenuity's instructors.	
☐ Adaptive PE*	☐ Individual Sports*	
Advanced PE 1 & 2	☐ Intro to Coaching*	
☐ Anatomy*	☐ Life Skills*	
☐ Comprehensive PE*	☐ Middle School Fitness Basics 1 & 2	
☐ Concepts in Fitness*	☐ Middle School Intro to Group Sports 1 & 2	
☐ Credit Recovery PE 1 & 2	☐ Middle School Health*	
☐ Drugs & Alcohol*	☐ Middle School Intro to Individual Sports 1 & 2	
☐ Exercise Science*	☐ Middle School Life Skills*	
☐ Family & Consumer Sciences*	Personal Health and Fitness*	
☐ Family Living & Healthy Relationships*	Personal Training*	
☐ First Aid & Safety*	☐ Personal Training Concepts*	
☐ Fitness Fundamentals 1 & 2	☐ Physiology*	
☐ Flexibility Training*	☐ Running*	
☐ Group Sports*	☐ Sports Officiating*	
☐ Health & Personal Wellness*	☐ Strength Training*	
☐ Health Careers*	☐ Walking Fitness*	
☐ HOPE 1 & 2		

- \* One-semester course
- \*\* Supplemental modules (can be used alongside other courses)
- † Not available via Instructional Services
- н Also available for honors
- Available in Summer 2021 in preparation for Back to School

#### Notes

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GED® is a registered trademark of the American Council on Education.



