

# Mingus Union High School Course Catalog 2020-2021

## High School Course Requirements

**All students must earn 22 credits.** Three academic tracks include: standard track, college bound track, or AP track. Each student will develop a 4-year plan identifying the sequence of courses needed to graduate.

**Standard Track:** The standard track consists of the minimum requirements needed in order for a student to graduate from high school.

**College/University/Dual Enrollment Track:** This track consists of the minimum requirements needed in order for a student to graduate from high school and be admissible to NAU, ASU, or U of A. Students who plan to attend an out of state public or private university should check admissions requirements for those institutions. We partner with Yavapai College to offer college credits for classes listed as Dual Enrollment (DE) please note, most academic DE courses require placement testing the semester prior to the start of the course.

**AP Track:** The AP track consists of graduating from high school, having completed more rigorous classes to possibly earn college credits. In order to earn college credits for AP classes, a student must earn a three or higher on the test.

The following table lists the number of credits needed in each subject area, and minimum grade point average needed. Many subjects require a particular sequence to be followed.

Subject	Standard Track	College Bound/AP Track
ENGLISH	4 credits	4 credits
MATH	4	4
SCIENCE	3	3 (lab sciences)
SOCIAL STUDIES	3	3
FINE ART -OR- CAREER TECHNICAL EDUCATION (CTE)	1 2 (in the same subject)	1 1 (2 in same subject for graduation)
PHYSICAL EDUCATION	1	None required for college admissions 1 credit required for HS graduation
WORLD LANGUAGE	0	2 (in the same language)
ELECTIVE CREDITS	5 or 6	4 or 5
TOTAL NUMBER OF CREDITS	22 credits	22 credits
GRADE POINT AVERAGE (GPA)	No minimum GPA	3.0+ (ACT/SAT Testing recommended)
REQUIRED TESTING	Pass Civics Exam Complete CPR Training	Pass Civics Exam Complete CPR Training

# English Courses

Track	9 <sup>th</sup> Grade	10 <sup>th</sup> Grade	11 <sup>th</sup> Grade	12 <sup>th</sup> Grade
Standard	English 9	English 10	English 11	English 12 or DE English 12
University	English 9	English 10	English 11	English 12 or DE English 12
AP	Honors English 9	Honors English 10	AP Language and Composition	DE English 12

Honors and AP Note: English Honors and AP courses are intended for highly motivated students for whom reading and writing is a passion. Admittance to an Honors course may require the following:

1. Demonstrated commitment to course work.
2. A recommendation from the previous English teacher
3. Parent/Counselor meeting with instructor

Course	Grades	Credits	Prerequisites	Course #
English 9	9	1	None	2010

English 9 is aligned with the Common Core Standards and provides students with an overview of literature across forms and genres (short stories, novels, poetry, drama, and literary nonfiction). Some of the required works will be *To Kill a Mockingbird*, *Romeo and Juliet* and *Greek Mythology*. To begin preparation for the State Standardized Exam, the writing focus is expository and persuasive to increase students' analytical skills. Additional students will begin to read and respond to literary criticism. Also included are skills in using the library, speaking, listening and vocabulary. ***Students are required to complete a minimum of four extended writing assignments (two per semester) in order to receive credit for the class.***

Course	Grades	Credits	Prerequisites	Course #
Honors English 9	9	1	Teacher recommendation	2015

The material students in Honors will build a foundation of knowledge, concepts, and skills needed to engage successfully in a higher level of learning, helping to ensure future success in AP courses. The curriculum for this class meets the expectations of The College Board through the application of Common Core ELA Standards. This course will challenge students to think critically and express content understandings in a variety of ways. Students will be required to read, write, listen, and speak at an academically advanced level, with an emphasis on providing research and evident to support findings, positions, and analysis. ***Students are required to complete a minimum of four extended writing assignments (two per semester) in order to receive credit for the class.***

Course	Grades	Credits	Prerequisites	Course #
English 10	10	1	2010	2020

English 10 builds on freshman skills and continues to prepare sophomore students for state-mandated tests. As part of the curriculum, students will study literature from around the world, primarily Latin America, Asia, Africa, the Middle East, and Russia. Each unit allows for close study of literary works, as well as consideration of historical and cultural context. Required texts include *The Underdogs*, *Cry, the Beloved Country*, *Master Harold and the Boys*, *The Sound of Waves* and *One Day in the Life of Ivan Denisovich*. Writing will be focused on literary analysis, persuasive and expository essays. Students will also take part in student-led seminars, deliver memorized poems or speeches, and continue vocabulary study. ***Students are required to complete three essays in the course of the school year in order to receive credit for the class.***

Course	Grades	Credits	Prerequisites	Course #
Honors English 10	10	1	2015 or teacher recommendation	2025
<p>World Literature is the foundational study underlying Honors English 10; there is a greater concentration on analytical writing, reading and discussions. Weekly vocabulary study comes from a separate vocabulary book and constitutes a hefty percentage of the course grade. Honors students read two additional novels. The <i>Joy Luck Club</i> (Chinese-American) and <i>Things Fall Apart</i> (Africa). As with regular English 10, students are required to satisfactorily complete a minimum of three essays to earn credit for the course. A field trip to the Utah Shakespeare Festival and a collaborative project with the Art Department are part of the enriched course.</p>				

Course	Grades	Credits	Prerequisites	Course #
English 11	11	1	2020	2030
<p>English 11 is devoted to a study of American literature from the early Native American mythology to the late twentieth century. Students build their writing skills from previous years, integrating multiple sources and perspectives into their work, reading literary criticism, and writing longer and more complex research and analytical essays. <b>Students are required to complete a minimum of six extended writing assignments (three per semester) in order to receive credit for the class.</b> Some of the required texts in continued alignment with the Common Core Curriculum are <i>The Crucible</i>, <i>Of Mice and Men</i>, <i>Catcher in the Rye</i>, and <i>The Great Gatsby</i>.</p>				

Course	Grades	Credits	Prerequisites	Course #
AP Language and Composition	11	1	2025 or teacher recommendation	2035
<p>AP Language and Composition is a college-level course for juniors following Honors English 10. This course engages students in becoming skilled readers of prose written in different periods, disciplines, and rhetorical contexts and in becoming skilled writers who compose for a variety of purposes. This reading and writing should make students aware of the interactions among a writer's purposes, audience expectations, and subjects, as well as the way generic conventions and the resources of language contribute to effectiveness in writing. Students must complete a summer reading project which is due on the first day of class. Transfer students must have been enrolled in Honors English in their former school. Successful complete of Honors English 9 and 10 are recommended. It is highly recommended that all students who complete the course take the AP Language and Composition exam in May. <b>Students are required to complete a minimum of six extended writing assignments (three per semester) in order to receive credit for the class.</b></p>				

Course	Grades	Credits	Prerequisites	Course #
English 12	12	1	2030	2040
<p>English 12 is designed to prepare students to be successful in an academic or professional setting after high school. The Common Core focus for English 12 is on European Literature form the Dark Ages to the 20<sup>th</sup> century. Required texts include <i>Hamlet</i>, <i>Frankenstein</i>, and <i>The Metamorphosis</i>. By the end of 12<sup>th</sup> grade, students will have become familiar with some of the major works and ideas of European Literature, have honed their skills of literary analysis, and will have written multiple research-based essays. <b>Students are required to compete a minimum of six extended writing assignments (three per semester) in order to receive credit for this class.</b></p>				

Course	Grades	Credits	Prerequisites	Course #
English 12 DE (Dual Enrollment)	12	1	Must meet Accuplacer requirements	2041
ENG 101 College Composition I		3 YC credits		
English 102 College Composition II		3 YC credits		
<p>English 12 DE (Dual Enrollment) focuses on composing expository and argumentative essays for specific audiences. Emphasis is on the processes of writing, reading and critical thinking with an introduction to research and documentation. The course includes extensive critical reading and writing. Second semester (102) fluency, literary analysis, and critical writing will be emphasized. Students will further develop research skills to write a critical, documented essay. <b>A grade of C or better will earn English 101/102 credit at Yavapai Community College which is transferable to most colleges and universities.</b></p>				

## Math Courses

Track	9 <sup>th</sup> Grade	10 <sup>th</sup> Grade	11 <sup>th</sup> Grade	12 <sup>th</sup> Grade
Standard	Algebra 1	Geometry	Algebra 2	Discrete Math or DE College Math
University	Algebra 1  -OR-  Geometry	Geometry/ Honors Geometry  -OR-  Algebra 2/ Honor Algebra 2	Algebra 2/ Honors Algebra 2  -OR-  DE College Math  -OR-  DE Pre-Calculus	Discrete Math  -OR-  DE College Math  -OR-  DE Pre-Calculus  -OR-  AP Calculus
AP	Honors Geometry	Honors Algebra 2	DE Pre-Calculus	AP Calculus
<p>Honors and AP Note: Math Honors and AP courses are intended for highly motivated students for whom math is a high interest subject. Admittance to an Honors course may require the following:</p> <ol style="list-style-type: none"> <li>1. Demonstrated commitment to course work.</li> <li>2. A recommendation from the previous math teacher</li> <li>3. Parent/Counselor meeting with instructor</li> </ol>				

Course	Grades	Credits	Prerequisites	Course #
Algebra 1	8 or 9	1	None	3010
<p>Algebra 1 provides the students with the basic structures of algebra necessary for higher mathematics, science and technological endeavors. It introduces properties of the real number system. An emphasis is placed on operations and polynomials, factoring techniques, solving linear and quadratic equations, solving systems of equations, graphing functions, solving and graphing inequalities and working with rational and radical expressions.</p>				

Course	Grades	Credits	Prerequisites	Course #
Geometry	9 or 10	1	3010	3020
<p>Geometry is designed to help students discover the purpose and usefulness of geometry in real-world applications. Using the properties and tools of geometry, students explore, investigate and solve problems. Using both inductive and deductive reasoning, students learn to do geometric proofs. Algebra skills are built upon and practices throughout the course.</p>				

Course	Grades	Credits	Prerequisites	Course #
Honors Geometry	9 or 10	1	3010 w/ final grade of B or teacher approval	3025
<p>Honors Geometry explores the relationships, measurements, and properties of one, two and three dimensional objects. Logical reasoning skills, along with the techniques and knowledge of algebra that are needed to solve higher-level mathematical and real world problems. This course will emphasize the further development of skills, techniques, and connections to the concepts of geometry and extend the understandings of algebra to include coordinate geometry. Topics for the course include but are not limited to: foundations of geometry, proof and logic, congruence and similarity in triangles, polygons, circles, and transformations. Honors Geometry is designed to be more challenging while providing opportunities for students to take greater responsibility for their learning.</p>				

Course	Grades	Credits	Prerequisites	Course #
Algebra 2	10-11	1	3010	3030
<p>This course includes simplifying polynomial, rational, and radical expressions; solving quadratic, rational and radical equations; introducing functions and their representation, applying mathematics in real-world contexts and using appropriate technology.</p>				

Course	Grades	Credits	Prerequisites	Course #
Honors Algebra 2	10-11	1	3010 with final grade of B or teacher approval	3035
<p>Honors Algebra 2 is a math course in the study of algebraic expressions, equations, inequalities, exponential and logarithmic functions, discrete math topics, systems of equations, polynomials, probability and statistics, relations and trigonometric functions. This course compliments and expands the mathematical content and concepts of Algebra 1. Honors mathematics courses are intended to be more challenging than standard courses and provide multiple opportunities for students to take greater responsibility for their learning.</p>				

Course	Grades	Credits	Prerequisites	Course #
Integrated Math	11-12	1	Approved Personal Math Curriculum	3028
<p>Integrated Math Applications (Personal Curriculum) Course description: This course is designed to review and continue the studies of Algebra and Geometry with their applications. Students will study the algebra topics of linear equations, inequalities, functions, and systems; quadratic, polynomial, radical, and exponential functions; and properties of exponents.</p>				

Course	Grades	Credits	Prerequisites	Course #
Discrete Mathematics/Modeling	12	1	3010, 3020, 3030	3040
<p>Discrete Mathematics and Modeling is designed to help students continue to make connections and build relationships among algebra, arithmetic, geometry, and discrete mathematics. Topics include construction and using mathematical models, graph theory including Euler and Hamilton paths and circuits, matrix operations and their applications, consumer mathematics and critical thinking skills, including the study of symbolic logic.</p>				

Course	Grades	Credits	Prerequisites	Course #
College Math DE (Dual Enrollment)	11 or 12	.5	3010, 3020, 3030, YC Accuplacer Score	3152
MAT 150 College Mathematics		3 YC credits		
Survey of mathematical topics and applications. Includes statistics, probability, exponential functions, finance, dimensional analysis and other selected discrete math topics. Note: Computer use and graphing calculator required (TI-83/84 recommended). Prerequisite: ACT Math score of at least 23, or an SAT Math score of at least 530, or a satisfactory score on the mathematics skills assessment.				

Course	Grades	Credits	Prerequisites	Course #
Elementary Statistics DE (Dual Enrollment)	11 or 12	.5 credits	3152	3153
MAT 167 Elementary Statistics		3 YC credits		
Statistical tools and techniques used in research and general applications. Description of sample data, probability, and probability distributions, point and interval estimates of population parameters, hypothesis testing and correlation and regression. Note: Computer use and graphing calculator required (TI 83/84 recommended). Prerequisite: MAT 142 or 152 or satisfactory score on mathematics skills assessment.				

Course	Grades	Credits	Prerequisites	Course #
Pre-Calculus DE (Dual Enrollment)	11 or 12	1 credits	3010, 3020, 3030, YC Accuplacer Score grades of "B" or higher in algebra, geometry, and algebra 2, and reading proficiency	3050
MAT 187 Pre-Calculus		5 YC credits		
Topics from college algebra and trigonometry essentials to the study of calculus and analytic geometry, includes linear, quadratic, polynomial, rational, exponential, circular; and trigonometric functions, trigonometry, systems of equations, and matrices. Note: Computer use and graphing calculator required (TI-83/84 recommended. Use depends on the teacher discretion). <b>This class is Dual Enrollment with Yavapai College.</b>				

Course	Grades	Credits	Prerequisites	Course #
Calculus 1 DE (Dual Enrollment)	11 or 12	.5 credit	3050	3061
MAT 220 Calculus and Analytic Geometry I		3 YC credits		
Introduction to calculus of single variable functions. Includes limits, the fundamental principles of differentiation and integration, techniques for finding derivatives of algebraic and trigonometric functions and applications of derivatives. Note: Computer use and graphing calculator required (TI-83/84 recommended).				

<b>Course</b>	<b>Grades</b>	<b>Credits</b>	<b>Prerequisites</b>	<b>Course #</b>
Calculus 2 DE (Dual Enrollment)  MAT 230 Calculus and Analytic Geometry II	11 or 12	.5 credit  3 YC credits	3061	3062
Concepts, techniques and applications of integration, infinite series, and introduction to differential equations. Note: Computer use and graphing calculator required (TI-83/84 recommended).				

## Science Courses

<b>Track</b>	<b>9<sup>th</sup> Grade</b>	<b>10<sup>th</sup> Grade</b>	<b>11<sup>th</sup> Grade</b>	<b>12<sup>th</sup> Grade</b>
<b>Standard</b>	<b>Earth Science</b>	<b>Biology</b>	<b>Living Systems</b>  -OR- <b>Ecology</b>	
<b>Agricultural Science Track</b>	<b>Agriscience 1</b>	<b>Agriscience 2</b>	<b>Agriscience 3</b>  -AND- <b>Chemistry -OR- Physics</b>	<b>Agriscience 4</b>
<b>University 3-4 Science credits recommended</b>	<b>Earth Science</b>  -OR- <b>Biology</b>	<b>Biology - OR- Living Systems -OR- Ecology - OR- Chemistry</b>	<b>Living Systems/Ecology</b>  -OR- <b>Chemistry</b>	<b>Chemistry</b>  -OR- <b>Physics</b>
<b>Advanced Placement (AP)</b>	<b>Honors Biology</b>	<b>Honors Chemistry</b>	<b>AP Biology</b>	<b>AP Chemistry</b>

Honors and AP Note: Math Honors and AP courses are intended for highly motivated students for whom math is a high interest subject. Admittance to an Honors course may require the following:

1. Demonstrated commitment to course work.
2. A recommendation from the previous math teacher
3. Parent/Counselor meeting with instructor

Course	Grades	Credits	Prerequisites	Course #
Earth Science	9	1	None	5010
<p>Earth Science is designed to familiarize students within the physical world in which they live and some rock and mineral identification. The earth as a dynamic sphere is studied through the investigation of earthquakes, volcanoes, continental drifting, chemical/physical weathering and erosions. Students will also be exposed to methods of geological age dating as well as basic meteorology, astronomy, and environmental science. Specific emphasis is placed on understanding Arizona's dynamic weather. The main curricular focus will be on mastery of content associated with the performance objectives from the Arizona State Science Standards. This course meets a college preparatory lab science requirements for entrance to an Arizona university.</p>				

Course	Grades	Credits	Prerequisites	Course #
Biology	9-12	1	5010 or 8 <sup>th</sup> grade science teacher recommendation	5020
<p>This course is designed to help students become aware of the major concepts of Biology including ecology, the cell, genetics, and evolution. A major emphasis is the teaching of the scientific method and inquiry. Laboratory experience leads to many open-minded investigations and class discussions. Upon completion of this course, students will have a greater awareness and understanding of populations, communities, and ecosystem relationships. The curricular focus will be on mastery of content associated with the objectives from the Arizona State Science Standards. <b>This course meets the college preparatory science requirement for entrance to an Arizona university.</b></p>				

Course	Grades	Credits	Prerequisites	Course #
Living Systems	10-12	1	5020	5025
<p>This course is designed to help students become aware of the major concepts of Living Systems by building on the framework and concepts introduced in Biology. Topics to be discussed are the major kingdoms of organisms and the unique characteristics as well as the human systems. A major emphasis is the teaching of the scientific method and inquiry. Laboratory experience leads to many open-minded investigations and class discussions. Upon completion of this course, students will understand our uniqueness as well as our similarities when compared to other organisms. <b>This course meets the college preparatory science requirement for entrance to an Arizona university.</b></p>				

Course	Grades	Credits	Prerequisites	Course #
Honors Biology	9-12	1	A or B in 5010, instructor approval or 8 <sup>th</sup> grade teacher recommendation	5030
<p>This course is designed for the accelerated student to become aware of major concepts in Biology. A major emphasis is the teaching of the scientific method and inquiry. Laboratory experience leads to many open-minded investigations and class discussions. This course covers all content from both Biology and Living Systems and thus pacing is for the advanced students only. The main curricular focus of semester 1 will be on mastery of content associated with the performance objectives from the Arizona State Science Standards. This course meets the college preparatory science requirements for entrance to an Arizona university.</p>				

Course	Grades	Credits	Prerequisites	Course #
AP Biology	11-12	1	Pass 5030 or instructor approval	5031
<p>AP Biology is an introductory college-level biology course. Students cultivate their understanding of biology, through inquiry-based investigations as they explore the following topics: evolution, cellular processes, energy and communication, genetics, information transfer, ecology, and interactions. <b>This course meets the college preparatory science requirement for entrance to an Arizona university.</b></p>				

Course	Grades	Credits	Prerequisites	Course #
Ecology	10-12	1	5020 or 5030	5040
<p>This course is designed to familiarize students with the local flora and fauna, the relationship between the biotic and abiotic environment, and experimental procedures to determine the effects of potential interactions between various components of the human and natural environment. The main curricular focus will be on mastery of content associated with the performance objectives from the Arizona State Science Standards. This course concentrates on the Arizona ecosystems and <b>meets a college preparatory lab science requirement for entrance to an Arizona university.</b></p>				

Course	Grades	Credits	Prerequisites	Course #
Honors Chemistry	10-12	1	5020 or 5030 and Algebra 2 (can be concurrent)	5054
<p>Chemistry course; presentation of material is accelerated and more detailed to prepare students for the rigor of college-level coursework. Additional topics, such as quantum theory, thermodynamics, kinetics, and equilibrium problem-solving, etc. are covered for enrichment and preparation for AP Chemistry. <b>This course meets the college preparatory science requirement for entrance to an Arizona university.</b></p>				

Course	Grades	Credits	Prerequisites	Course #
Chemistry	10-12	1	5020 or 5030 and Algebra 2 (can be concurrent)	5050
<p>Chemistry is the study of the composition of substances and the changes they undergo. Through varied classroom and laboratory experiences (such as learning how melting ice freezes ice cream, a copper penny turns to gold, and two liquids form slime) students learn about the complexity of our world. Chemistry contributes to other natural sciences, including biology, geology, and physics, overlapping with agriculture, medicine, and manufacturing. It provides the knowledge to make wise consumer decisions as well as resolving societal issues. The main curricular focus will be on mastery of content associated with the performance objectives from the Arizona State Science Standards. This course meets a college preparatory lab science requirements for entrance to an Arizona university and is a required prerequisite for AP Chemistry.</p>				

Course	Grades	Credits	Prerequisites	Course #
AP Chemistry	11-12	1	5054 or instructor approval	5055
<p>The academic objectives of this course are designed to be the equivalent of a first-year college chemistry course. AP Chemistry requires continual study, good note-taking skills, extensive time and effort, and excellent math skills. Extensive laboratory work is a major component of the course. A primary goal of AP Chemistry is to prepare students to pass the AP Exam in May and obtain college credit. As many as nine credit hours in chemistry at each of the state universities may be earned through the AP exam. Similar benefits are to be found at nearly 2000 universities in the US and around the world. AP Chemistry is also accepted at the state universities as one of the three required lab sciences, even if the student has already taken the honors chemistry course.</p>				

Course	Grades	Credits	Prerequisites	Course #
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Physics: Mechanics/Motion	11-12	1	2 credits of college prep science Algebra 2 (can be concurrent)	5060
<p>In this course, students will deepen and refine their knowledge on matter and energy gained through other science classes. The laws of motion, including kinematics, which describe how things move and dynamics, which explains why things move, are described conceptually and developed through numerous laboratory investigations. Simple machines that transfer energy are studied in detail. The principles of physical and mathematical modeling are used to develop patterns which underlie natural processes. Computers are utilized extensively as a laboratory tool in gathering and analyzing data. Applications of topics covered will be explored in technological fields. The main curricular focus will be on mastery of the associated performance objectives from the Arizona State Science Standards. <b>This course meets the college preparatory science requirement for entrance to an Arizona university.</b></p>				

## Social Studies Courses

Track	9 <sup>th</sup> Grade	10 <sup>th</sup> Grade	11 <sup>th</sup> Grade	12 <sup>th</sup> Grade
Standard	World History	World History	US History	Government & Economics
University	None	World History or AP World History	US History or AP US History	Government & Economics
AP	None	AP World History	AP US History	Government & Economics

Course	Grades	Credits	Prerequisites	Course #
World History	9 - 12	1	None	4010
<p>This course enables students to compare and contrast past cultures and civilizations and to identify how these civilizations have contributed to modern life. It introduces students to the basic concepts in the development of human society with an emphasis on ideas that affect our lives today. First semester focuses on Prehistory to the Renaissance. Second semester focused on the French Revolution to the Modern Era.</p>				

Course	Grades	Credits	Prerequisites	Course #
AP World History	9- 12	1	English Teacher recommendation	4015
<p>AP World History provides a clear framework of six chronological periods viewed through the lens of related key concepts and course themes, accompanied by a set of skills that clearly define what it means to think historically. Emphasis in the course is placed on developing four historical skills; crafting historical arguments from evidence, chronological reasoning, comparing and contextualizing, and historical interpretation and synthesis. The five course themes are 1: Interaction between Humane and the Environment, 2: Development and Interaction of Cultures, 3: State-Building, Expansion and Conflict, 4: Creation, Expansion, and Interaction of Economic Systems, 5: Development and Transformation of Social Structures. Depending on course enrollment, this course may be offered in alternating years. The cost of the exam as well as the purchase of the AP study guide are required.</p>				

Course	Grades	Credits	Prerequisites	Course #
US History	11	1	None	4020
<p>American History explores the history and the political economic development of the United States. First semester focuses on Early Civilizations through Reconstruction. Second semester focuses on the Industrial Age to Modern America. This</p>				

course includes reference to the development of Arizona

Course	Grades	Credits	Prerequisites	Course #
AP US History	11	1	Honors Teacher Recommendation	4025

The objective of this course is to increase the students' understanding of the United States from pre colonization through current affairs. This is a college-level course which subjects enrolled students to a general seminar approach to learning. Additionally, weekly reading and writing assignments require extra out of class involvement. All students are required to take the National College Board AP US History Exam near the end of the course. The cost of the exam as well as the purchase of the AP study guide are required.

Course	Grades	Credits	Prerequisites	Course #
Government	12	.5	4020 or 4025	4030
Economics	12	.5	4020 or 4025	4035

**Government:** Students examine the philosophical foundations of the American political system. In addition, this course offers the basic constitutional structure of the United States. Aspects of this course focus on the Bill of Rights and the role of individual responsibilities to society.

**Economics:** Acquaints students with the economic life of the United States. This course emphasizes the free-market system, with exposure to the global economy and current economic issues. Students examine the practical application of personal finance.

Course	Grades	Credits	Prerequisites	Course #
AP Psychology	11-12	1 - Elective	Honors English 10 or English Teacher Recommendation	4070

Students in the AP Psychology develop understanding of the theoretical underpinnings of psychology, psychological theories, research strategies, brain and nervous system function, the role of personality in behavior, psychological disorders and the range of available treatments. In addition, students understand current laws and ethics regarding research and the field of mental health. This is a college-level course which subjects enrolled students to extensive research and reading outside of the classroom. Depending on course enrollment, this course may be offered alternating years. The cost of the exam as well as the purchase of the AP Study Guide are required.

## World Language Courses

Course	Grades	Credits	Prerequisites	Course #
Spanish 1	10-12	1	None	7510

Spanish 1 will provide the student with a general introduction to the Spanish language: sound system, pronunciation, functional vocabulary related to everyday life, cultural information and basic grammatical structures. Emphasis will be on the acquisition of four skills: listening, speaking, reading and writing. There are two main objectives to the course. Foremost is to give the students the ability to carry on a simple conversation. The second is to provide the students with instruction that teaches a basic understanding of Spanish culture, vocabulary, and grammatical concepts.

Course	Grades	Credits	Prerequisites	Course #
Spanish 2	10-12	1	7510 or instructor approval upon completion of placement test	7520

Spanish 2 builds on knowledge gained in Spanish 1. This course will also reinforce the skills learned in Spanish 1:

listening, speaking, reading and writing. Emphasis is on perfecting pronunciation, mastery of the basic grammatical structures, and increased communicative proficiency. Acquisition of functional vocabulary is expected. Students will be exposed to the past tenses, future, conditional and subjunctive mood. Students will be expected to apply them in their writing and speaking.

Course	Grades	Credits	Prerequisites	Course #
German 1	10-12	1	C or higher in English	7710
This course introduces the fundamental elements of German language within a cultural context. Emphasis is on the development of basic listening, speaking, reading and writing skills. Upon completion students should be able to comprehend and respond with grammatical accuracy to spoken and written German and demonstrate cultural awareness.				

Course	Grades	Credits	Prerequisites	Course #
German 2	11-12	1	C or higher in English & 7710	7720
This course, a continuation of German 1, focuses on the fundamental elements of the German language within a cultural context. Emphasis is on the progressive development of listening, speaking, reading and writing skills. Upon completion, students should be able to comprehend and respond with increasing proficiency to spoken and written German as well as demonstrate further cultural awareness				

## Fine Arts Courses – Performing and Visual

Course	Grades	Credits	Prerequisites	Course #
Chorale/Concert Choir	9-12	1	None	6200
In this course, students learn how to read music, sing, and perform throughout the year. You do not need previous singing experience to take this class. Basic music theory, sight reading rhythms, and vocal production will be covered. Students will be involved with the musical review in January as well learning songs from different genres of music to perform in the community and throughout the year. Participation at concerts and performances is expected and required.				

Course	Grades	Credits	Prerequisites	Course #
Performance Choir	10-12	1	6200	6205
This choir is auditioned and selected the year prior. Students must have completed one year of Concert Choir. Students will be performing college level music and focusing on advanced singing concepts. This group will have more community performances than concert choir.				

Course	Grades	Credits	Prerequisites	Course #
Band	9-12	1	None	6120
This course is open to beginning through advanced band students playing Woodwind, Brass, and Percussion instruments. This ensemble meets as the Marauder Pep Band in the Fall term. They represent MUHS by performing at varsity football games, pep assemblies, community events and graduation. Students will develop technical playing skills, teamwork and skill in music theory and its application. Students can audition and perform in AMEA regional/state band events. This course may be repeated for credit with director's approval. Attendance at all rehearsals and performances is required.				

Course	Grades	Credits	Prerequisites	Course #
Jazz Band	9-12	1	6120 or Director Approval	6140
Jazz Band is composed of Brass, Woodwind, Percussion and Vocal students who are interested in the music, style, and history of the Jazz idiom. Students study and perform jazz and related styles using theory and improvisation. This ensemble performs at games, assemblies, community events and graduation. Students can audition and perform in AMEA regional/state band events. Students must audition for this course. This				

course may be repeated for credit with director's approval. Attendance at all rehearsals and performances is required.

Course	Grades	Credits	Prerequisites	Course #
Rock Band	9-12	1	Director Approval	6117
Rock Band is open to beginning through advanced students. Students of guitar, bass, drums, piano and voice make up this ensemble. This ensemble is available to students interested in the music, style and history of Rock and Roll. Students will perform Rock and related styles of music and learn theory and its application. This class performs at school and community events. This course may be repeated for credit with director's approval. Attendance at all rehearsals and performances is required.				

Course	Grades	Credits	Prerequisites	Course #
Rock Band 2	10-12	1	6117 or Director Approval	6118
Students in this ensemble play guitar, bass, drums and/or keyboard. All students are expected to sing and play their instrument(s). Students will study advanced literature in Rock and its related styles. Students will learn theory, improvisation and composition. This class performs at pep assemblies, school events, festivals and events around the Verde Valley. Students must audition for this course. This course may be repeated for credit with director's approval. Attendance at all rehearsals and performances is required.				

Course	Grades	Credits	Prerequisites	Course #
Theatre Arts 1	9-12	1	None	6210
Theater Arts 1 is an acting class designed to guide students to finding characterizations, motivations, and help with improvisation through scenes, monologues, short plays, and self-written plays. The first part of this class teaches the basics of acting through theatre games and activities. The culmination of this class is to present a short one-act play. In addition, students will review professional performances and learn how to critique performers and help their peers progress throughout the semester.				

Course	Grades	Credits	Prerequisites	Course #
Theatre Arts 2	10-12	1	#6210	6220
Theatre 2 is a more focused approach to acting. Students will participate in scenes, independent features, and hopefully the main stage shows. Students will learn various skills such as stage combat, characterization, improvisation, acting exercises, and environment interaction. They will also discover numerous ways to form characters and improve scenes. Improvisation is also a strong component of this class-so be prepared to laugh! This course may be repeated for create with instructor's approval.				

Course	Grades	Credits	Prerequisites	Course #
Theatre Arts 3	11-12	1	#6220	6240
Theatre 3 is a continuation of the concepts introduced in Theatre 2. While it will run concurrent with Theatre 2, Theatre 3 takes you a bit further along the acting process and starts looking into the world of directing. For some scenes, you will be directing a Theatre 2 scenes and adding technical elements to show your concept in a final performance. As will other theatre classes, you will be performing monologues, scenes, one-acts, patchwork, and plenty of improvisation games! However, since you have completed all the methods of Theatre 1 and Theatre 2, it will be time to form your own method of how to develop a character. Pulling form the other acting philosophies, develop your own system that works for you!				

Course	Grades	Credits	Prerequisites	Course #
Beginning Art	9-12	1	None	6010
This course is for beginning art students only. In Beginning Art, two-dimensional and other drawing techniques are studied. The major emphasis is on drawing, but color techniques are included. The students are responsible for keeping a sketchbook and supplying their own materials.				

Course	Grades	Credits	Prerequisites	Course #
Photography	10-12	1	#6010	6013
<p>This course is for students who have completed Beginning Art in high school. This Photography class is an intermediate level class which offers art instruction through photographic techniques. This class introduces the exploration of the elements of art and the principles of design in a manner that allows them to express themselves photographically. Students are responsible for keeping a portfolio and supplying their own materials. Having use of a cell phone for taking pictures is required. The prerequisite for this class is Beginning Art. This course is for serious and motivated art students who did well in Beginning Art.</p>				

Course	Grades	Credits	Prerequisites	Course #
Intermediate Art	10-12	1	#6010	6020
<p>This course is for students who have passed Beginning Art. Intermediate Art offers and instruction-through a combination of pen and ink, charcoal/pastels, watercolor and acrylic paint. This class introduces exploration of color in Art. Through the use of these creative mediums, students gain and understanding of how to use the elements of art and principles of design in a manner that shows them to express themselves artistically. Students are responsible for keeping a sketchbook and supplying their own materials.</p>				

Course	Grades	Credits	Prerequisites	Course #
Advanced Studio Art	11-12	1	#6012 or #6020	6030
<p>This course is for advanced students who have earned two previous art credits in high school. This class primarily focuses on concept rather than technique. It is assumed that students entering this class will have the strong foundations in technique that it takes to produce conceptually original art works of the highest caliber. This course serves as a gateway to Advanced Placement Studio Art. Students are responsible for supplying a sketchbook along with any other supplementary materials beyond what the school can provide.</p>				

Course	Grades	Credits	Prerequisites	Course #
AP Studio Art	12	1	#6030	6035
<p>The AP Studio Art program is intended for highly motivated students who are seriously interested in studio art and have completed Advanced Art or have instructor approval in order to achieve AP Studio Art credit students must complete additional work outside class in order to complete a portfolio. The completed portfolio will contain a minimum of 29 works of art. This work can stem from Beginning Art through AP Art. The student's final evaluation is based not upon a written exam, but rather on this portfolio. Each piece will be digitally photographed and then evaluated by the College Board. A score of 3 or better can lead to college credits and will be recognized nationally.</p>				

## Physical Education Courses

Course	Grades	Credits	Prerequisites	Course #
Boys PE Girls PE	9-10	1	None	7010 7011
<p>This class provides boys/girls with an understanding and appreciation for physical activity and overall fitness. Activities include proper stretching techniques, cardiovascular fitness, and an introduction to basic skills in a variety of team and individual sports including tennis, basketball, soccer, volleyball, badminton, football, circuit training and dance. Included are weekly lesson in character development and personal safety.</p>				

Course	Grades	Credits	Prerequisites	Course #
Body Conditioning	10-12	1	#7010, #7011, or Approval of varsity coach	7040
This course is designed to improve total physical fitness. The weight room will be utilized to increase strength and flexibility and to tone and shape muscles. Aerobic conditioning, i.e. plyometric and running, will be included to improve cardiovascular fitness. Proper nutrition and health is emphasized. This course may be repeated for credit with instructor approval.				

Course	Grades	Credits	Prerequisites	Course #
Sports Performance	10-12	1	#7010, #7011, or Approval of varsity coach	7050
Sports Performance is designed for athletes who are playing sports at Mingus Union High School. This course provides a supervised and physiologically sound weight program which aids in the prevention of athletic injury, increases athletic performance, and promotes self-confidence and self-esteem. This course may be repeated for credit with instructor approval.				

## Career and Technical Education Courses

### Advance Manufacturing

Course	Grades	Credits	Prerequisites	Course #
Advance Manufacturing 1 & 2  (Full School Year Course)	11-12	3	VACTE Application and approval	?????
CNC 101 CNC Machine Operator		2 YC Credits		
IPT 110 Industrial Shop Practices		3 YC Credits		
CNC 102 CNC Machine Set Up		2 YC Credits		
ELT 101 AC/DC		4 YC Credits		
Do you enjoy taking things apart and fixing them? Do you like to build things? Does the idea of creating things intrigue you? Advanced Manufacturing may be your field. This CTE education program trains and certifies students in Computer Numerical Controls (CNC) machine operations and tool setting, operating milling machines, precision welding and Computer Aided Design (CAD) software skills. Students operate CNC six-axis lathes and milling equipment. Students will gain insight on the select tools and materials needed to make durable goods, read blueprints, comprehend CNC theory and procedures, utilize machine shop math, etc. Upon completion of this course, students will have the opportunity to earn 22				

Yavapai College Credits which will count towards a Yavapai College AAS in Advanced Manufacturing. Also, the student will have the opportunity to test for the following industry certification in HAAS CNC Operator, HAAS CNC Tool Setter, IS CET ESA-1, CSWA. Courses are held off campus at VACTE in Cottonwood. Course Times: Monday-Thursday, 7am-9:45am or 1:35pm-4:20 pm plus approximately 8 Saturdays. Students must provide their own transportation.

## Agricultural Science

Course	Grades	Credits	Prerequisites	Course #
Agricultural Science 1	9-12	1	None	9010

This course is the introductory class in the Agricultural Program. Classroom instruction includes plant science, small animal production, greenhouse production plus leadership and team building. Students in this class enjoy a hands-on experience. Skills are tested in the many contests the FFA National Organization has to offer. Students will plant, maintain, and market a large selection of fresh vegetables. Students are required to have an individual project related to agriculture to promote work ethic and enhance workplace skills. Examples of these projects are raising animals for sale, developing gardens, raising fish, agriculturally related science experiments, etc. Participation in FFA and SAE is mandatory and is a part of the state required curriculum.

Course	Grades	Credits	Prerequisites	Course #
Agricultural Science 2 DE (Dual Enrollment)	10-12	1	#9010	9020
AGS 120 Introduction to Animal Industry		4 YC Credits		

This course covers the biological world as explored through hands-on labs. In this class students will explore an introduction to horses as they relate to humans including history and development, adaptation, basic anatomy, types and classes, breeds, and horsemanship in the fall semester. During the spring we will explore classification of agricultural animals, the reproductive process, behavior, basic genetics, growth and development, basic nutrition, welfare and consumer concerns. Units covered in this class include beef, sheep, swine, poultry, horses, fish and alternative agricultural animals. Outside-of-class projects called SAE (Supervised Agricultural Experience) are required in order for students to extend their learning and develop their work ethic and workplace skills. State Biology Standards are taught through a full year of Applied Biological Systems. Participation in FFA and SAE is mandatory and is a part of the state required curriculum. **Students completing a full year of Agriscience 2 will earn the equivalent to a Biology credit accepted at all Arizona Universities.** This course is a Dual Enrollment class through Yavapai College and will allow students to earn 8 credits. If students complete two additional YC courses after completion of AG 2-4 either after or during the completion of all four years of the high school program, they will earn the Yavapai College Animal Care and Management Certificate if they pass all DE courses.

Course	Grades	Credits	Prerequisites	Course #
Agricultural Science 3 DE (Dual Enrollment)	11-12	1	#9020	9030
AGS 261 Aquaculture Science		4 YC Credits		

This course covers the advanced study and practices of aquaculture production and management. Students will also participate in trips to Bubbling Ponds and Page Springs fish hatcheries to apply principles learned in class. Technical

information demonstrations and hands-on practicum will be presented in the above subject areas. Students are required to select an individual project related to agriculture to promote work ethic and enhance workplace skills. This course also includes an introduction to the aquaculture and fisheries industry and the related career opportunities. Topics include basic fish culturing environments, species identification of fresh and saltwater fish, fish biology, disease prevention and treatments and fish feeds and feeding techniques. Participation in FFA and SAE is mandatory and is a part of the state required curriculum. This course is a Dual Enrollment class through Yavapai College and will allow students to earn 8 credits. If students complete two additional YC courses after completion of AG 2-4 either after or during the completion of all four years of the high school program, they will earn the Yavapai College Animal Care and Management Certificate if they pass all DE courses.

Course	Grades	Credits	Prerequisites	Course #
Agricultural Science 4 DE (Dual Enrollment)	12	1	#9030	9040
AGS 120 Introduction to Animal Industry		4 YC Credits		

This course is an advanced level course and a continuation of the Agriscience curriculum. Students will participate in hands-on projects that focus on career and college readiness as well as agricultural mechanics. Students are required to select an individual project related to agriculture to promote work ethic and enhance workplace skills. Also covered is the world of zoo and animal care and behavior. Emphasis is on the zoo and domestic animal care. Fall includes safety issues, zoo orientation, animal observation skills, sanitation, housing, feeding, capture and restraint equipment, animal transport, animal measurements, abnormal behavior and injuries. Spring includes assessment of animal behavior in a variety of species including domestic and exotic animals. Includes internal and external factors influencing animal behavior, social organization, genetics, communication, conflict, mating systems, and biological rhythms. Participation in FFA and SAE is mandatory and is part of the state required curriculum. **Students that complete Agriscience 4 will earn a science credit that is accepted by Arizona Universities.** This course is a Dual Enrollment class through Yavapai College and will allow students to earn 8 credits. If students complete two additional YC courses after completion of AG 2-4 either after or during the completion of all four years of the high school program, they will earn the Yavapai College Animal Care and Management Certificate if they pass all DE courses.

## Automotive Technology

Course	Grades	Credits	Prerequisites	Course #
Auto Technology 1 DE (Dual Enrollment)	9-12	1	None	9310
AUT 100 Automotive/Diesel Preventative Maintenance		2 YC Credits		

This course provides students with a foundation of automotive theory to progress into more advanced sections of auto such as in Auto 2 and Auto 3. This course begins with safety in the shop environment and careers in the industry then progresses into a basic understanding of the complete automobile. Content includes: maintenance, tools, fasteners, tires, brakes, alignment, steering, suspension, basic electricity and engines. This course is a prerequisite for Auto 2. Students in Auto 1 are required to actively participate in our Auto Club/ Skills USA at MUHS. Participation in Yavapai College Dual Enrollment is mandatory for participation in this class starting at the beginning of second semester.

Course	Grades	Credits	Prerequisites	Course #
Auto Technology 2 DE (Dual Enrollment)	10-12	1	#9310	9320
AUT 123 Automotive Brakes		4 YC Credits		
AUT 126 Auto/Diesel Steering and Suspension		4 YC Credits		

After gaining a strong foundation for the automobile in Auto 1, students will have the opportunity to apply their knowledge and understanding the operation and repair of steering, suspension, brakes and alignment. This course is a prerequisite for Auto 3. Passing Auto 1 with C's or better in both semesters is a pre requisite for Auto 2. Students in Auto 2 are required to actively participate in our Auto Club/Skills USA at MUHS. Participation in Yavapai College Dual Enrollment is mandatory for participation in this class.

Course	Grades	Credits	Prerequisites	Course #
Auto Technology 3 DE (Dual Enrollment)	11-12	1	#9320	9330
AUT 109 Auto/Diesel Electrical Systems		4 YC Credits		
AUT 153 Auto Engine Repair		4 YC Credits		

In Auto 3, students use their skills acquired in previous courses to understand advanced technology used in modern automobiles, students who are in Auto 3 are provided the opportunity to attend competitions to test their skill in automotive knowledge and leadership. Instruction includes: engine rebuilding and repair, electric systems diagnostics. Students who successfully pass all their courses are considered completers in automotive technology and will receive a certificate in basic automotive technology through Yavapai College. Passing Auto 2 with C's or better in both semesters is a pre requisite for Auto 3. Students in Auto 3 are required to actively participate in our Auto Club/Skills USA at MUHS. Participation in Yavapai College Dual Enrollment is mandatory for participation in this class.

## Business Operations Support and Assistant Services

Course	Grades	Credits	Prerequisites	Course #
Business Management	9-12	1	None	9100

This introductory business course is designed to provide a fundamental understanding of Business Management through “hands-on” exercises in Word Processing and Excel Spreadsheet. Students will be exposed to many facets of business including accounting, personal finance, budgeting, ethics, management, employability skills and marketing. Students will also explore career opportunities, and learn to apply problem solving and decision-making skills to various business related situations. Business concepts such as checking accounts, saving and investing, personal finance are integrated throughout the course in order to help students prepare for the economic roles of consumer, worker, and citizen. Students enrolled in this course can join Future Business Leaders of America (FBLA), which is the career and technical student organization associated with the Business program. FBLA opportunities include leadership development, field trips, travel and competition.

Course	Grades	Credits	Prerequisites	Course #
Advanced Business	10-12	1	#9010	9110

Students enrolled in this course will develop advanced knowledge and skills in desktop publishing, office procedures, transcription, public relations, records management and customer service while integrating the skills attained in the Introduction to Business course. We may add an Internship in the third year that will allow students to engage in learning through participation in a structured work experience that will be either paid or unpaid.

## Construction Technology

Course	Grades	Credits	Prerequisites	Course #
Construction Technology 1 & 2  (Full School Year Course)  CBT 100 Basic Carpentry I  CBT 110 Basic Carpentry II	10-12	3  8 YC Credits  8 YC Credits	VACTE Application and approval	9200

This course will introduce and train students in the basic skills necessary to pursue a career in construction. This course covers foundations, flooring, framing, plumbing, electrical, sheet rock, windows, doors, cabinetry, blue print reading, use of hand tools, surveying and construction math. Models to full-sized partitions are constructed in the shop. Projects at actual job sites are included with possible paid internship. Upon completion of this course, students will have the opportunity to earn 16 dual enrolled credits from Yavapai College and a Yavapai College certification in Construction Technology. The student will test for certification in Forklift and Heavy Equipment Operations, OSHA-10, First Aid/CPR/AED certification and Certification by the National Center for Construction Education and Research (NCCER) Core and Level 1 Construction Skills Industry Certification. Courses are held off campus at VACTE in Cottonwood. Course Times: Monday-Thursday, 7am-9:45am or 1:35pm-4:20 pm plus approximately 8 Saturdays. Students must provide their own transportation.

Course	Grades	Credits	Prerequisites	Course #
Construction Technology 3 & 4  (Full School Year Course)	11-12	3	Construction Technology 1	9201

This course will teach advanced skills necessary to pursue a career in construction. This course covers foundations, flooring, framing, plumbing, electrical, sheet rock, windows, doors, cabinetry, blue print reading, use of hand tools, surveying and construction math. Models to full-sized partitions are constructed in the shop. Projects at actual job sites are included. An internship (possible paid) in construction with a local construction contractor will be made available. Upon completion of this course, students will have the opportunity to test for certification in Forklift and Heavy Equipment Operation, OSHA-10, First Aid/Adult CPR certification, and Certification by the National Center for Construction Education and Research (NCCER) Level 1 & 2 Construction Skills. The opportunity to earn 8 dual enrollment credits from Yavapai College in Electrical and Plumbing. Classes are held off campus at the VACTE campus in Cottonwood. Course Times: Monday-Thursday, 7am-9:45am or 1:35pm-4:20pm plus approximately 8 Friday or Saturdays. Students must provide their own transportation.

## Culinary Arts

Course	Grades	Credits	Prerequisites	Course #
Culinary Arts 1 & 2  (Full School Year Course)	11-12	3	VACTE Application and approval	9900
CUL 101 Culinary Principles		4 YC Credits		
CUL 102 Culinary Fundamentals: Hot Foods		4 YC Credits		
CUL 103 Culinary Fund: Breakfast and Garde Manage		4 YC Credits		
CUL 104 Culinary Fund: Baking and Pastry		4 YC Credits		

This course will introduce students to the fundamental skills needed for employment in the restaurant industry. Students will be introduced to culinary concepts and terminology, kitchen safety and sanitation, equipment usage, food costing and theory, production of culinary projects and various cooking techniques. Students will receive up to 16 credits through Yavapai College. Successful completion of these 16 credits will earn the students a Culinary Arts Fundamentals Certificate from Yavapai College. Upon completion of this course, students will have the opportunity to test for certification for ServSafe Manager. Classes are held off campus at the Yavapai College Sedona Campus. Course Times: Monday-Thursday, 7am-9:45am or 1:30pm-4:15pm. Students must provide their own transportation.

## Digital Filmmaking

Course	Grades	Credits	Prerequisites	Course #
Digital Filmmaking 1	9-12	1	None	9810
Digital Filmmaking 1 is an introduction to narrative and documentary video production. Students will learn the basics of the production process, including script writing, planning for a short video shoot, the use of audio and visual equipment, non-linear video editing and distribution to DVD.				

Course	Grades	Credits	Prerequisites	Course #
Digital Filmmaking 2	10-12	1	#9810	9820
Digital Filmmaking 2 will reinforce the skills learned in Digital Filmmaking 1 and provide advanced level instruction for more complex productions. Students will have access to professional grade audio and video equipment and will learn how to work on a professional crew.				

Course	Grades	Credits	Prerequisites	Course #
Digital Filmmaking 3	11-12	1	#9820	9830
Students will work toward independent narrative and/or documentary film projects under the guidance of the instructor.				

Course	Grades	Credits	Prerequisites	Course #
Digital Filmmaking 4	12	1	#9830	9840
Students work to create independent audio and video projects. The goal is to create professional level projects for businesses and organizations in the community, short films of the student's creation, and projects for national competitions. A professional portfolio will be expected by the end of this course.				

## Drafting and Design Technology

Course	Grades	Credits	Prerequisites	Course #
CADD 1	9-12	1	Algebra 1 preferred	9410
This course will provide you with an introduction to drafting knowledge and skill. You will learn about the various employment opportunities in the CADD field. Two-dimensional style drawing techniques will be used to create single and multi-view drawings. International mechanical drawing standards are emphasized. AutoCAD2010 is the software used. This course is required if you want to take CADD 2 or CADD 3. Enrollment in CADD 1 allows for participation in Skills USA.				

Course	Grades	Credits	Prerequisites	Course #
CADD 2	10-12	1	#9410	9420
CADD 2 will give you the opportunity to develop three-dimensional drawing skills through the production of full-color solid				

models and advanced 2-dimensional drawing. These solid objects will then be physically produced with the 3-dimensional printer. Solid Works 2018 solid modeling software is used. Enrollment in CADD 2 allows for participation in Skills USA.

Course	Grades	Credits	Prerequisites	Course #
CADD 3	11-12	1	#9420	9430
You will learn advanced applications of computer-aided drafting with special emphasis placed upon Architectural Design. You will design and draw a complete set of house plans. AutoCAD 2011 is the software used. A state end-of-course examination is required.				

Course	Grades	Credits	Prerequisites	Course #
CADD 4	12	1	#9430	9440
You will learn advanced applications of computer-aided drafting with special emphasis placed upon Advanced Solid Modeling. Solid Works 2010 is the software used. You will further your solid modeling skills through advanced projects with an emphasis on motion and functionality of design. Participation in Skills USA is encouraged. A state end of course examination is required. A national Solid Works certification examination is available upon request. An examination fee is required.				

## Education Professions (Teacher Training)

Course	Grades	Credits	Prerequisites	Course #
Teacher Training 1 & 2  (Full School Year Course)	11-12	3	VACTE Application and approval  Pass the Reading Proficiency for YC	9210
EDU 200 Intro. To Education		3 YC Credits		
EDU 210 Cultural Diversity in Education		3 YC Credits		
EDU222 Intro. To Exceptional Learner		3 YC Credits		
This course is designed to introduce students to the knowledge and skills necessary to be successful in the exciting world of teaching. Students will explore learning styles, multiple intelligences, stages of development, creative projects and education of students of all ages. Creation, design and implementation of lessons will be realized by teaching at various educational institutes of student interest. Students will be immersed in a teaching experience of the grade levels the student desires during the practicum portion of the course. Upon completion of the program the student will have the opportunity to earn up to 15 dual enrolled credits from Yavapai College in education which will transfer to the University teacher training programs. The students will have the opportunity to earn Para-professional in Education Certification (Praxis), Level 1 State Fingerprint Certification, and CPR/First Aid/AED Certification. Classes are held off campus at the VACTE campus in Cottonwood. Course Times: Monday-Thursday, 7am-9:45am. Students must provide their own transportation.				

## Fire Science

Course	Grades	Credits	Prerequisites	Course #
Firefighter Certification Academy 1 & 2  (Full School Year Course)  FSC 104 Hazardous Materials  FSC 105 Firefighter Certification Academy  FSC 155 Basic Wildland Firefighting	12	3  3 YC credits  12 YC credits  3 YC Credits	VACTE Application and approval	9920
<p>Firefighter Certification Academy – Students will be introduced to the essentials of firefighting including fire department operations, firefighting equipment and safety with an emphasis on the chemistry of fire, techniques of firefighting and utilization of equipment in fire suppression. Upon completion of this course, students will have the opportunity to test for Hazardous Materials Certification, State Fire Fighter I &amp; II Certification, S130 and S190 Forest Service Wildland Certification, IS100 FEMA Incident Command and CPR/First Aid/AED Certification. This course is Dual Enrolled through Yavapai College and will allow students to earn 18 college credits. This course is held off campus at the Verde Valley Fire Center in Cottonwood. Course Times: Monday-Thursday, 1:35pm-4:20pm. Students must provide their own transportation.</p>				

## Health Services

Course	Grades	Credits	Prerequisites	Course #
Sports Medicine 1	10-12	1	None	9451
<p>Sports Medicine 1 is recommended for students who are considering going specifically into sports medicine or into any health care or medical related field. Emphasis will be placed on athletic training and orthopedic medicine. The purpose of this course is to provide students with an anatomical and physiological understanding of the major systems of the human body: skeletal, muscular, respiratory, circulatory systems, anatomical disorders and exercise physiology. The prevention, cause/effect, treatment, and rehabilitation of athletic injury, standard first aid, athletic training procedure, and CPR will be taught.</p>				

Course	Grades	Credits	Prerequisites	Course #
Sports Medicine 2	11-12	1	#9451	9452
<p>Sports Medicine 2 is recommended for students who are considering going specifically into sports medicine or into any health care or medical related field. The student must have taken and completed Sports Medicine 1. Emphasis will be</p>				

placed on expanding the knowledge and skills attained in Sports Medicine 1.

Course	Grades	Credits	Prerequisites	Course #
Sports Medicine 3	12	1	#9452 and Instructor Approval	9453

Sports Medicine 3 is recommended for students who have a strong career interest in the health care or medical related fields. Pursuing a certification as a clinical medical assistant is included. An emphasis on furthering career decisions and community based learning will take place as well.

## Nursing Services

Course	Grades	Credits	Prerequisites	Course #
Certified Nursing Assistant (Only one semester but recommend to sign up for Phlebotomy course so it is a full school year course)  AHS 114 - Nursing Assistant	11 or 12	1.5  5 YC credits	VACTE Application and approval  Pass the YC Reading Proficiency and Math Proficiency assessment	9050

This course is designed for students interested in the nursing field but also recommended for students considering going into any health or medical related field. This class includes classroom, lab practice and “hands-on” clinical instruction at a local hospital and nursing home. Focus will be on basic nursing assistant skills, resident/patient needs and rights, medical terminology, communication and ethical/legal aspects of care and emergency procedures. Students will also earn a Health Care Provider CPR card. Passing this course qualifies students to take the State Certified Nursing Assistant exam leading to state certification and will fulfill a prerequisite requirement for the nursing program at Yavapai College. CNA students meet on site at the Cottonwood Verde Valley Medical Center for training. Students are dual enrolled with Yavapai College and receive 5 college credits upon the successful completion of this course and a Yavapai College Nursing Assistant Certification. Highly recommended to take it with the Phlebotomy/Lab Assistant course the opposite semester. Course Times: Monday – Thursday, 7am-9:45am or 1:35pm-4:20pm plus approximately 4 Saturdays. Students must provide their own transportation.

## Phlebotomy & Lab Assistant

Course	Grades	Credits	Prerequisites	Course #
Phlebotomy and Lab	11 or 12	1.5	VACTE Application	9050

Assistant  (Only one semester but recommend to sign up for CNA so it is a full school year course)  AHS 100 – Fundamentals of Health Care  AHS 105 – Phlebotomy  PSY 101 – Introductory Psychology (Transferable for any degree)		3 YC credits  2 YC credits  3 YC credits	and approval  Pass the YC Reading Proficiency and Math Proficiency assessment	
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This course is designed for students interested in medical laboratory assistant/phlebotomy work and recommended for students considering going into any health or medical related field. Students are prepared to perform clinical procedures in a laboratory setting including performing phlebotomy skills, various laboratory tests, equipment operation and maintenance, sterilization and safety. Students are concurrently enrolled with Yavapai College and receive 6 college credits leading toward Phlebotomy Technician certification and AZ Caregiver certification. Highly recommended to take it with the Certified Nursing Assistant course the opposite semester. Classes are held at the Clarkdale Yavapai College campus Times: Monday – Thursday, 7am-9:45am or 1:35pm-4:20pm. Students must provide their own transportation.

## Pre-Engineering

Course	Grades	Credits	Prerequisites	Course #
Pre-Engineering 1 & 2  (Full School Year Course)  CNC 101 CNC Machine Operator  ELT 130 Intro. To Robotics  CNC 102 CNC Machine Set Up  ELT 183 Digital Circuits	11-12	3  2 YC Credits  3 YC Credits  2 YC Credits  3 YC Credits	VACTE Application and approval  Pre-Req. for Second Year is MAT 187 (Pre-Calculus) to take ERG 102	

Pre-Engineering is about solutions! Do you enjoy taking things apart and figuring out how they work? Does the idea of creating new ways of doing things intrigue you? Engineering may be your field. This CTE education program trains and certifies students in Computer Numerical Controls (CNC) and robotic programming and repair. Students operate CNC six-axis lathes and program FANUC industrial robots in laboratory sessions. Students will also be introduced to microprocessors, microcontrollers, and the theory and design of logic circuits. Upon completion of this course, student will have the opportunity to earn 24 Yavapai College Credits towards an Associate of Applied Science in Applied Pre-Engineering. Along with the college credits students will have the opportunity to test for certification HAAS CNC Operator, HAAS CNC Tool Setter, ISCET Digital Electronic, FANUC Programmer and Operator. Courses are held off campus at VACTE in Cottonwood. Course Times: Monday-Thursday, 7am-9:45am or 1:35pm-4:20 pm plus approximately 8 Saturdays. Students must provide their own transportation.

## Law Enforcement and Dispatch

Course	Grades	Credits	Prerequisites	Course #
Law Enforcement-Dispatch 1 & 2  (Full School Year Course)	11 & 12	3	VACTE Application and approval	

This course will introduce and train students in the basic to advanced skills necessary to pursue a career in Law Enforcement and Emergency Telecommunications. This course covers instruction and hands on practice in law enforcement history and theory, operational command leadership, administration of public police organizations, labor relations, incident response strategies, legal and regulatory responsibilities, prison guard skills and dispatch skills in police and emergency management services. Practice on real life situations related to dispatch and law related situations. Upon completion of this course, students will have the opportunity to test for certification in APCO-Public Safety Telecommunication Dispatcher and Arizona Dept. of Public Safety-Security Guard Certification. Classes are held off campus at the VACTE campus in Cottonwood. Course Times: Monday-Thursday, 1:35pm-4:20pm. Students must provide their own transportation.

## Technical Theatre

Course	Grades	Credits	Prerequisites	Course #
Technical Theatre 1	9-12	1	None	6230

This course is an introduction of the behind the scenes activities of theatre. Students will learn the fundamental hierarchy, terminology, history, safety and basic skill sets that make a production happen. This is not an acting class. Content of this course will include scenery construction, scene painting, lighting, sound, and rigging. The curriculum of this class will be geared towards a “hands-on” experience in the production of our main stage shows.

Course	Grades	Credits	Prerequisites	Course #
Technical Theatre 2	10-12	1	#6230	6231

This course will be geared toward the in depth study of the technical theatre. The students will explore scenery, lighting, costumes and sound for theatre productions. Advanced construction scene painting and rigging techniques will be introduced and used in our main stage productions. Lighting, sound, and costuming are covered in this course through extensive practical application.

Course	Grades	Credits	Prerequisites	Course #
Technical Theatre 3	11-12	1	#6231	6233
This course is designed as an in depth training for those that have completed Technical Theatre 1 and 2. Special emphasis will be lighting, sound and scenery. Mechanics will be explored in the curriculum as it pertains to the moving of scenery. Students enrolled in Technical Theatre 3 will take on further responsibilities as it pertains to setting up the smaller shows that occur in the theatre and around campus.				

Course	Grades	Credits	Prerequisites	Course #
Technical Theatre 4	12	1	#6233	6235
This course is designed for students who have successfully completed Technical Theatre 1, 2, and 3. The emphasis of this course will be student management of mainstage production in the areas of scenery, lighting, technical direction and sound. Student technical direction and implementation of an entire production is the desired conclusion of this fourth level class.				

## Welding Technology

Course	Grades	Credits	Prerequisites	Course #
Welding 1 DE (Dual Enrollment)	9-12	1	None	9510
WLD 130 Oxyacetylene		4 YC Credits		
Students will be introduced to four main welding processes, SMAW, GMAW, FCAW, and GTAW. Students will also learn general shop safety, thermal cutting processes, weld symbols, print reading and measuring. Upon completion of this course, students will be able to perform general entry level structural welding for fabrication and machine shops. Welding 1 students will complete the Skills USA PDP Level 1.				

Course	Grades	Credits	Prerequisites	Course #
Welding 2 DE (Dual Enrollment)	10-12	1	#9510	9520
WLD 140 Arc I		4 YC Credits		
WLD 145 Arc II		4 YC Credits		
Students will be extending their knowledge of the four main welding processes, SMAW, GMAW, FCAW, and GTAW. Students will also learn general shop safety, thermal cutting processes, weld symbols, print reading, and measuring. Upon completion of this course students will be able perform general entry level structural welding for fabrication and machine shops. Welding 1 students will compete the SkillsUSA PDP Level 1.				

Course	Grades	Credits	Prerequisites	Course #
Welding 3 DE (Dual Enrollment)	11-12	1	#9520	9530
WLD 156 Blueprint Reading		4 YC Credits		

WLD 130 Oxyacetylene		4 YC Credits		
Students will improve their skills in the four main welding processes, SMAW, GMAW, FCAW, and GTAW. Students will also learn general shop safety, thermal cutting processes, weld symbols, print reading and measuring. Upon completion of this course, students will be able to perform general entry level welding for fabrication and machine shops. Welding 3 students will complete the SkillsUSA PDP Level 3.				

Course	Grades	Credits	Prerequisites	Course #
Welding 4	12	1	#9530	9540
WLD 210 Gas Metal Arc Welding		4 YC Credits		
WLD 250 Welded Metal Fabrication		4 YC Credits		
Students will improve their skills in the four main welding processes, SMAW, GMAW, FCAW, and GTAW. Students will also learn general shop safety, thermal cutting processes, weld symbols, print reading and measuring. Upon completion of this course, students will be able to perform general entry level welding for fabrication and machine shops. Welding 4 students will complete the SkillsUSA PDP Level 4.				

## Electives

Course	Grades	Credits	Prerequisites	Course #
Yearbook	10-12	1	Application and Instructor Approval	9610
Yearbook is a demanding, full year, elective course that may be repeated for credit. Over the course of the year, the yearbook staff is responsible for the production of the entire MUHS yearbook. Students handle all phases of the yearbook publication except printing. Much of the work can be completed during school in the computer lab, but some must be done after school or at home. Students must commit to photo assignments of school activities such as sports, plays and other extracurricular events. Students must be committed to meeting deadlines, learning computer publication layout and writing a large number of headlines, body copy and captions. Strong writing skills are required for success in this course. Students who do not work to successfully meet deadlines will be asked to leave after the Fall semester. You must submit a Yearbook Application Form to the yearbook instructor.				

Course	Grades	Credits	Prerequisites	Course #
AVID Advancement Via Individual Determination	9-12	1	Application and Instructor Approval	9 <sup>th</sup> 0160 10 <sup>th</sup> 0161 11 <sup>th</sup> 0162 12 <sup>th</sup> 0163
The AVID (Advancement Via Individual Determination) course is an elective class for students who are college-bound. The				

AVID curriculum focuses on writing, inquiry, collaboration, reading and organization (WICOR) through the AVID High School Curriculum in both teacher and tutor-led activities. While concurrently enrolled in a college-prep course of study, students learn strategies to enhance success. Note-taking, outlining, writing, speaking, reading, test-taking strategies and self-awareness are stressed. In addition, the course includes college motivational activities and intensive preparation for ACT, SAT and AP courses.

Course	Grades	Credits	Prerequisites	Course #
Leadership	9-12	1	Instructor Approval	0400
<p>Leadership class is designed to prepare students to become school and community leaders.</p> <ul style="list-style-type: none"> <li>• Student Council elected officers required to be in the class (Student Body President, Senior Class President, Senior Class VP, Junior Class Pres., Junior Class VP, Spirit Leader, Secretary/Treasurer)</li> <li>• Application required for those wanting to be class representatives (current 9<sup>th</sup> – 11<sup>th</sup> graders)</li> <li>• Application required for 8<sup>th</sup> graders wishing to join in their 9<sup>th</sup> grade year</li> <li>• Current high school students wishing to run for student council office need a minimum 1 year of Leadership experience (either in the Leadership class or in another club/organization)</li> <li>• Please see Mrs. Thagard for information regarding running for Student Council Officer positions</li> </ul>				

Course	Grades	Credits	Prerequisites	Course #
Internship	12	1	Instructor Approval	0325
<p>The mission of the MUHS Internship Program is simple...College and Career Ready Students! This program is designed to give students real world experience in various career fields. We are looking for internships that allow students to see beyond entry level positions and experience the higher level inner workings of a business, school or community municipality. Our goal is to motivate students to continue with post-secondary education and perhaps return to our community as a prepared and educated workforce!</p>				

Course	Grades	Credits	Prerequisites	Course #
Work Experience	11-12	1	Local employment	0320
<p>This course focuses on the development of workplace skills. As a pre-requisite to enrolling in the Work Experience class, students must seek out and find their own job. These jobs must be paid positions for established local employers. Students must work 5 hours per week. A signed training agreement and student worker agreement must be completed. In addition to working a minimum of 180 hours, students must complete a 1-week training at the beginning of the year, assignments throughout the year and turn in all time sheets.</p>				

Course	Grades	Credits	Prerequisites	Course #
Student Aide	12	1	Application	0100
<p>Positions include Teacher Aide, Front Office Aide, Bookstore Aide, Special Services Peer Tutor, School Counseling Aide, and Library Aide</p> <p>Students who serve as aides are accountable to the assigned teacher or staff member a specific period of the day. Clerical skills are desirable. A maximum of 1 credit can be earned for graduation in the aide positions.</p>				

