

Mingus Union High School Course Catalog 2022-2023

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

Advanced Placement Courses

AP courses are college-level classes in a wide variety of subjects that you can take while still in high school. They offer you challenging course work and a taste of what college classes are like.

- AP courses offer the opportunity to study a subject in-depth at the college level. This better prepares a student for college work.
- If you receive a high enough score on an AP Exam, you may be eligible for credit, advanced placement or both at most colleges in the United States.
- Students are eligible for a weighted grade on their transcript when they complete the AP Exam at the end of the course.
- AP Course Cost is \$15 for test prep book and College Board Test Fee (approximately \$100) Students who qualify for Free and Reduced Lunch have financial assistance available.

Dual Enrollment Courses

Dual Enrollment (DE) Courses allow students to earn both high school and college credits at the same time. The DE courses are taught at the high school by high school teachers who have the credentials to teach for the college. Upon satisfactory completion of the class, students will have an official college transcript to use for transfer credits or for Yavapai College degree and certification programs.

To be eligible for Dual Enrollment (DE), students must complete additional steps which include:

- Yavapai College Admissions
- Completion of the Accuplacer exam
 - Some courses require students to have a certain score on the Accuplacer to be eligible to take the course.
- Wishlisting the course in the YC Early College System (during Course Selection)
- Enrollment in the YC Course (Fall semester)

Dual Enrollment courses cost \$10 per credit hour paid during the MUHS Registration process. Scholarships are available.

For information on transferring classes to Arizona Public Universities, visit: www.aztransfer.com

VACTE (Valley Academy for Career and Technology Education) Central Campus Programs

Valley Academy for Career and Technology Education is a joint technological education district serving high schools in central Arizona including Mingus Union High School. VACTE offers numerous Central Campus Programs available for Mingus Union High School students.

To be eligible for VACTE Central Campus Programs, students must complete additional steps which include:

- VACTE Student Application (available during course selection)
- Yavapai College Admissions (if the course is Dual Enrollment through Yavapai College)
 - Completion of the Accuplacer exam - Some courses require students to have a certain score on the Accuplacer to be eligible to take the course.
 - Wishlisting the course in the YC Early College System (during Course Selection)
 - Enrollment in the YC Course (Fall semester)

If a student drops the VACTE Central Campus Course once the semester has started they will be charged the full cost for attendance in that course (this can be up to \$1000).

NCAA

Before an athlete can play a sport or receive an athletic scholarship at a Division I or Division II college, he/she must meet the specific academic criteria as set forth by the NCAA. Students must have a 2.0 GPA (based on a 4.0 scale) in 16 core courses. A student must also achieve a minimum score on the ACT and/or SAT, depending on the student's GPA. For additional information on GPA and test scores look at the Initial Eligibility Index on the NCAA website – ncaa.org

Students must take specific courses in order to meet NCAA eligibility requirements. These include a certain number of college preparatory English, science, social studies, math courses with at least one year of algebra and geometry. It is very important that athletes meet with their school counselor to obtain information on all the NCAA requirements and talk with their high school coaches as well. Athletes also need to complete an NCAA Clearinghouse Students Release form after their junior year in order to initiate the eligibility process. This is done through the NCAA Eligibility Center website.

English Courses

Track	9 th Grade	10 th Grade	11 th Grade	12 th 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 – English 9 or 2015 – Honors English 9	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 – Honors English 9 or teacher recommendation	2025
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. <i>The 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.				

Course	Grades	Credits	Prerequisites	Course #
English 11	11	1	2020 – English 10 or 2025 – Honors English 10	2030
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. Students are required to complete a minimum of six extended writing assignments (three per semester) in order to receive credit for the class. 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> .				

Course	Grades	Credits	Prerequisites	Course #
AP Language and Composition	11	1	2025 – Honors English 10 or C or higher in English 10 or teacher recommendation	2035
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. Students are required to complete a minimum of six extended writing assignments (three per semester) in order to receive credit for the class.				

Course	Grades	Credits	Prerequisites	Course #
English 12	12	1	2030 – English 11 or 2035 – AP Lang/Comp	2040
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 th century. Required texts include <i>Hamlet</i> , <i>Frankenstein</i> , and <i>The Metamorphosis</i> . By the end of 12 th 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. Students are required to compete a minimum of six extended writing assignments (three per semester) in order to receive credit for this class.				

Course	Grades	Credits	Prerequisites	Course #
English 12 DE (Dual Enrollment)	12	1	Must meet YC Accuplacer Score Requirement	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. A grade of C or better will earn English 101/102 credit at Yavapai Community College which is transferable to most colleges and universities.</p>				

Math Courses

Track	9 th Grade	10 th Grade	11 th Grade	12 th 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- DE Calculus
AP	Honors Geometry	Honors Algebra 2	DE Pre-Calculus	DE Calculus

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 #
Algebra 1	8 or 9	1	None	3010
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.				

Course	Grades	Credits	Prerequisites	Course #
Geometry	9 or 10	1	3010 – Algebra 1	3020
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.				

Course	Grades	Credits	Prerequisites	Course #
Honors Geometry	9 or 10	1	3010- Algebra 1 with a B or higher or Teacher approval	3025
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.				

Course	Grades	Credits	Prerequisites	Course #
Algebra 2	10-11	1	3010 – Algebra 1	3030
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.				

Course	Grades	Credits	Prerequisites	Course #
Honors Algebra 2	10-11	1	3010 – Algebra 1 with final grade of B or teacher approval	3035
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.				

Course	Grades	Credits	Prerequisites	Course #
Integrated Math	11-12	1	Approved Personal Math Curriculum	3028
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.				

Course	Grades	Credits	Prerequisites	Course #
Discrete Mathematics/Modeling	12	1	3030 – Algebra 2 or PMC	3040
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.				

Course	Grades	Credits	Prerequisites	Course #
College Math DE (Dual Enrollment) MAT 142 College Mathematics	11 or 12	.5 3 YC credits	3030 – Algebra 2 and Meet YC Accuplacer Score Requirement	3152
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) MAT 167 Elementary Statistics	11 or 12	.5 credits 3 YC credits	3152 – College Math DE	3153
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) MAT 187 Pre-Calculus	11 or 12	1 credits 5 YC credits	3030 – Algebra 2 YC Accuplacer Score or grades of “B” or higher in Algebra, Geometry, and Algebra 2, and reading proficiency	3050

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). **This class is Dual Enrollment with Yavapai College.**

Course	Grades	Credits	Prerequisites	Course #
Calculus 1 DE (Dual Enrollment) MAT 220 Calculus and Analytic Geometry I	11 or 12	.5 credit 5 YC credits	3050 – Pre- Calculus DE with a minimum grade of C-	3061

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).

Course	Grades	Credits	Prerequisites	Course #
Calculus 2 DE (Dual Enrollment) MAT 230 Calculus and Analytic Geometry II	11 or 12	.5 credit 5 YC credits	3061 – Calculus 1 DE	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

Track	9 th Grade	10 th Grade	11 th Grade	12 th Grade
Standard	Physical Science	Biology	Living Systems -OR- Chemistry -OR- Physics	
Agricultural Science Track	Agriscience 1	Agriscience 2	Agriscience 3 -AND- Chemistry –OR- Physics	Agriscience 4
University 3-4 Science credits recommended	Physical Science	Biology –OR- Honors Biology	Living Systems -OR- Chemistry -OR- Honors Chemistry -OR- Physics	Additional Elective Science Course of Choice
Advanced Placement (AP)	Physical Science	Honors Biology	Honors Chemistry -OR- Physics	AP Chemistry -OR- AP Biology

Honors and AP Note: Science Honors and AP courses are intended for highly motivated students for whom science 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 science teacher
3. Parent/Counselor meeting with instructor

Course	Grades	Credits	Prerequisites	Course #
Physical Science	9	1	None	5015
<p>Physical Science is designed to familiarize students within the physical world in which they live. This includes 4 primary focus areas of: 1- Scientific inquiry, including the scientific method, measurements, graphing and dimensional analysis. 2- Chemistry, including atomic structure, bonding, inorganic nomenclature, and electromagnetic radiation. 3- Physics, including laws of motion, force, velocity, mass vs weight. 4- Earth and Space science, including an exploration of our solar system and beyond, as well as an in depth look at the Earth as a dynamic sphere is studied through the investigation of earthquakes, volcanoes, continental drifting, chemical/physical weathering and erosions. 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	10	1	5015 Physical Science	5020
<p>This course is designed to help students become aware of the major concepts of Biology including foundations of life, chemistry of life, cell structure and function, cellular energy, cell division, heredity, genetics, evolution, and ecology. Laboratory experience leads to many open-minded investigations and class discussions. The curricular focus will be on mastery of content associated with the objectives from the Arizona State Science Standards. This course meets the college preparatory science requirement for entrance to an Arizona university.</p>				

Course	Grades	Credits	Prerequisites	Course #
Living Systems	11-12	1	5020 - Biology	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. Each Kingdom of Life involves experiences, some of which includes comparative anatomy through dissections. 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. This course meets the college preparatory science requirement for entrance to an Arizona university.</p>				

Course	Grades	Credits	Prerequisites	Course #
Honors Biology	10	1	C or higher in 5010 - Physical Science	5030
<p>This course is designed for the accelerated student to become aware of major concepts in Biology, including foundations of life, chemistry of life, cell structure and function, cellular energy, cell division heredity, genetics, evolution, ecology, and kingdoms of life. Laboratory experience leads to many open-minded investigations and class discussions. This course covers content from both Biology and Living Systems and thus pacing is for the advanced students only. The curricular focus will be on mastery of content associated with the 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	5020 Biology or 5030 Honors Biology <u>AND</u> 5050 Chemistry or 5054 Honors Chemistry	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. This course meets the college preparatory science requirement for entrance to an Arizona university.</p>				

Course	Grades	Credits	Prerequisites	Course #
Chemistry	11-12	1	5020 - Biology or 5030 – Honors Biology Algebra 2 (can be concurrent)	5050

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 and a copper penny turns to gold. Chemistry contributes to other natural sciences, including biology, geology, and physics, overlapping with agriculture, medicine, and manufacturing. The main curricular focus will be on mastery of content associated with the performance objectives from the Arizona State Science Standards. These include stoichiometry, nomenclature, prediction of reaction products, thermochemistry, nuclear chemistry, chemical kinetics, equilibrium and other tenets of physical chemistry. This course meets a college preparatory lab science requirements for entrance to an Arizona university and is a required prerequisite for AP Chemistry.

Course	Grades	Credits	Prerequisites	Course #
Honors Chemistry	11-12	1	5020 - Biology or 5030 – Honors Biology Algebra 2 (can be concurrent)	5054

Chemistry course; presentation of general chemistry material is accelerated and more detailed to prepare students for the rigor of college-level coursework. Additional quantum theory, thermodynamics, kinetics, and equilibrium problem-solving, etc. are covered for enrichment and preparation for AP Chemistry.

This course meets the college preparatory science requirement for entrance to an Arizona university.

Course	Grades	Credits	Prerequisites	Course #
AP Chemistry	11-12	1	5050- Chemistry AND Instructor approval or 5054 – Honors Chemistry	5055

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 ability and 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 of each year and obtain college credit. As many as eight or nine credit hours in chemistry at each of the state universities may be earned through the AP exam if a score of 5 is achieved. Similar benefits are to be found at nearly 2000 universities in the U.S. 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 chemistry/honors chemistry course.

Course	Grades	Credits	Prerequisites	Course #
Physics: Mechanics/Motion	11-12	1	2 credits of college prep science Algebra 2 (can be concurrent)	5060

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. 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. **This course meets the college preparatory science requirement for entrance to an Arizona university.**

Social Studies Courses

Track	9 th Grade	10 th Grade	11 th Grade	12 th 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	10– 12	1	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 course includes reference to the development of Arizona</p>				

Course	Grades	Credits	Prerequisites	Course #
AP US History	11	1	Teacher Recommendation	4025
<p>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.</p>				

Course	Grades	Credits	Prerequisites	Course #
Government	12	.5	None	4030
Economics	12	.5		4035
<p>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.</p> <p>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.</p>				

Course	Grades	Credits	Prerequisites	Course #
AP Psychology	11-12	1 – Elective	2020 – English 10 with C or higher 2025 – Honors English 10 with C or higher	4070
<p>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.</p>				

World Language Courses

Course	Grades	Credits	Prerequisites	Course #
Spanish 1	10-12	1	None	7510
<p>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.</p>				

Course	Grades	Credits	Prerequisites	Course #
Spanish 2	10-12	1	7510 – Spanish 1	7520
<p>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.</p>				

Course	Grades	Credits	Prerequisites	Course #
German 2	11-12	1	7710 – German 1	7720
<p>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</p>				

Fine Arts Courses – Performing and Visual

Course	Grades	Credits	Prerequisites	Course #
Chorale/Concert Choir	9-12	1	None	6200
<p>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 as 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.</p>				

Course	Grades	Credits	Prerequisites	Course #
Music Theory	9-12	1	None	6300
<p>This course will teach students how to develop the ability to recognize, understand and describe the basic materials and processes of music that are heard or presented in a score. Students will develop their skills in aural recognition, sight-singing, composition, and analysis. Skills developed in this course can give students the ability to test out of beginning level theory prerequisite college courses.</p>				

Course	Grades	Credits	Prerequisites	Course #
Performance Choir	10-12	1	6200 – Choir	6205
<p>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.</p>				

Course	Grades	Credits	Prerequisites	Course #
Band	9-12	1	None	6120
<p>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.</p>				

Course	Grades	Credits	Prerequisites	Course #
Jazz Band	9-12	1	6120 - Band or Director Approval	6140
<p>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.</p>				

Course	Grades	Credits	Prerequisites	Course #
Rock Band	9-12	1	Director Approval	6117
<p>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.</p>				

Course	Grades	Credits	Prerequisites	Course #
Rock Band 2	10-12	1	6117 – Rock Band or Director Approval	6118
<p>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.</p>				

Course	Grades	Credits	Prerequisites	Course #
Theatre Arts 1	9-12	1	None	6210
<p>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.</p>				

Course	Grades	Credits	Prerequisites	Course #
Theatre Arts 2	10-12	1	6210 – Theater Arts 1	6220
<p>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.</p>				

Course	Grades	Credits	Prerequisites	Course #
Theatre Arts 3	11-12	1	6220 – Theater Arts 2	6240
<p>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!</p>				

Course	Grades	Credits	Prerequisites	Course #
Beginning Art	9-12	1	None	6010
<p>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.</p>				

Course	Grades	Credits	Prerequisites	Course #
Photography	10-12	1	6010 – Beginning Art	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 – Beginning Art	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 – Beginning Art or 6020 – Intermediate Art	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 – Advanced Studio Art	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/Health Girls PE/Health	9	1	None	7010 7011
<p>This course is designed to educate individuals on the importance of physical education and health concepts used in everyday life. Physical education will include activities such as proper stretching techniques, cardiovascular endurance and an introduction to basic skills in a variety of team and individual sports. Health education will focus on concepts such as; nutrition, human body systems, drug education and other health aspects. Health education will also help students learn specific lifestyle skills they can use beyond the classroom.</p>				

Course	Grades	Credits	Prerequisites	Course #
Sports Performance	10-12	1	7010 or 7011	7050
<p>Sports Performance is designed for athletes who are playing sports at Mingus Union High School. This course provides a supervised and physiological sound weight program which aids in the prevention of athletic injury, increases athletic performance, and promotes self-confidence and self-esteem. This course also provides the opportunity for athletes to learn about healthy living, as well as practice speed, agility, and conditioning skills in an outside setting. This course can be repeated for credit with instructor approval.</p>				

Career and Technical Education Courses

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, environmental studies, 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 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. Outside-of-class projects are called SAE's (Supervised Agricultural Experiences) are required in order for students to extend their learning and develop their work ethic and workplace skills. Participation in FFA 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 – Agricultural Science 1	9020
AGE 100 Introduction to Equine Science		4 YC Credits		
AGS 120 Introduction to Animal Industry		4 YC Credits		

This course covers the biological world as explored through hands-on labs. This course covers the advanced study and practices of livestock which include horses, swine, cattle, sheep and poultry. Units covered in this class include equine science, ecology, plant and animal genetics, and livestock production. 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 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.**

Course	Grades	Credits	Prerequisites	Course #
Agricultural Science 3 DE (Dual Enrollment) AGS 261 Aquaculture Science	11-12	1 4 YC Credits	9020 – Agricultural Science 2	9030

Technical information demonstrations and hands-on practicum will be presented in the above course subject areas. Students are required to select an individual project related to agriculture to promote work ethic and enhance workplace skills (SAE). This course also includes an introduction to the aquaculture and fisheries industry and the related career opportunities. Topics include ecology, basic fish culturing environments, species identification of fresh and saltwater fish, fish biology, disease prevention and treatments and fish feeds and feeding techniques. DE students will visit Bubbling Ponds in Page Springs to harvest endangered species for reintroduction in native waterways and participate in Trout in the Classroom. Participation in FFA is mandatory and is a part of the state required curriculum.

Course	Grades	Credits	Prerequisites	Course #
Agricultural Science 4 DE (Dual Enrollment) AGS 120 Introduction to Animal Industry	12	1 4 YC Credits	9030 – Agricultural Science 3	9040

This course is an advanced level course and a continuation of the Agriscience curriculum. Students are required to select an individual project related to agriculture to promote work ethic and enhance workplace skills (SAE). Emphasis is on greenhouse production, sustainability, and college and career readiness. The course covers veterinary science with an emphasis on lab, surgical, and clinical practices. Proper use of veterinary medicine and calculations as well as anatomy of small and large animals. Participation in FFA 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.**

Automotive Technology

Course	Grades	Credits	Prerequisites	Course #
Auto Technology 1	9-12	1	None	9310

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.

Course	Grades	Credits	Prerequisites	Course #
Auto Technology 2	10-12	1	#9310	9320
<p>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.</p>				

Course	Grades	Credits	Prerequisites	Course #
Auto Technology 3	11-12	1	#9320	9330
<p>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. 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.</p>				

Business Management

Course	Grades	Credits	Prerequisites	Course #
Business Management	9-12	1	None	9100
<p>The Business Management instructional program prepares students to plan, organize, direct, and control the functions and processes of a firm or organization. Students in the introductory class will be exposed to many facets of starting a business. This will include accounting, personal finance, budgeting, ethics, management, marketing and employability skills. 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 role of consumer, worker, and citizen. Students enrolled in the course can join Future Business Leaders of American (FBLA), which is the career and technical student organization associated with the Business Management program. FBLA opportunities include leadership development, field trips, travel and competition.</p>				

Course	Grades	Credits	Prerequisites	Course #
Advanced Business	10-12	1	9100 – Business Management	9110
<p>This class will expand upon the knowledge learned in Business Management 1. Students will learn and demonstrate marketing concepts. Students will be able to explain the general management practices in use at the different levels of management with in a business, small or large. Students will learn Human Resource Management functions and how health, safety, and ethics play an important role in the productivity of the workplace. Students will learn project management functions and how to formulate a simple business plan. Students will learn addition details on how accounting information is used to provide financial analyses to make informed business decisions. Students will learn about the various forms of credit and what determines a credit history. Students will also learn about the risk and return of short term and long term investments. Students enrolled in this course can also participate in FBLA.</p>				

Digital Filmmaking

Course	Grades	Credits	Prerequisites	Course #
Digital Filmmaking 1	9-12	1	None	9810

Digital Media/Filmmaking 1 focuses on learning the different features of digital software, multi-media equipment, and basic video production which includes the production processes, including script writing, planning for a short video shoot, and the use of audio and visual equipment.

Course	Grades	Credits	Prerequisites	Course #
Digital Filmmaking 2	10-12	1	9810 – Digital Filmmaking 1	9820

Digital Media/Filmmaking 2 will reinforce the skills learned in Digital Media Filmmaking 1 and provide advanced level instruction for more complex productions/projects, photo editing through the Photoshop software as well as video creation and editing through Final Cut Pro and Adobe Premiere using high tech media equipment.

Course	Grades	Credits	Prerequisites	Course #
Digital Filmmaking 3	11-12	1	9820 – Digital Filmmaking 2	9830

Digital Media/Filmmaking 3 students will work independently and proficiently in Photoshop and Filmmaking by applying the skills of the principles of design. Students will animate graphics in 2D and 3D under the guidance of the instructor.

Course	Grades	Credits	Prerequisites	Course #
Digital Filmmaking 4	12	1	9830 – Digital Filmmaking 3	9840

Digital Media/Filmmaking 4 students will demonstrate proficiency in multimedia skills and filmmaking skills independently. The goal is to create professional level projects in the community, businesses and organizations, short films, and graphic design projects for various competitions.

Coding

Course	Grades	Credits	Prerequisites	Course #
Coding	9-12	1	None	9150

This course begins the progression of the Coding in Python sequence, introducing the early fundamentals of coding. It blends detailed technical knowledge with engaging coursework, allowing students free-range creativity without sacrificing academic rigor. The course emphasizes logical thinking and problem-solving, critical thinking, and real-world coding application. Students taking this course will receive the basic tools and building-blocks to code not only the assigned programs, but also to design and develop their own unique games and interactive experiences.

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 – CADD 1	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 – CADD 2	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 – CADD 3	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.				

Health Services

Course	Grades	Credits	Prerequisites	Course #
Sports Medicine 1	10-12	1	None	9451
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.				

Course	Grades	Credits	Prerequisites	Course #
Sports Medicine 2	11-12	1	9451 – Sports Medicine 1	9452
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 placed on expanding the knowledge and skills attained in Sports Medicine 1.				

Course	Grades	Credits	Prerequisites	Course #
Sports Medicine 3	12	1	9452 – Sports Medicine 2 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.				

Stagecraft

Course	Grades	Credits	Prerequisites	Course #
Stagecraft 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 #
Stagecraft 2	10-12	1	6230 – Stagecraft 1	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 #
Stagecraft 3	11-12	1	6231 – Stagecraft 2	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 #
Stagecraft 4	12	1	6233 – Stagecraft 3	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 – Welding 1	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 – Welding 2	9530
WLD 156 Blueprint Reading		4 YC Credits		

WLD 130 Oxyacetylene		4 YC Credits		
<p>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. Students can earn the Structural Welding Certificate.</p>				

Course	Grades	Credits	Prerequisites	Course #
Welding 4	12	1	9530 – Welding 3	9540
WLD 210 Gas Metal Arc Welding		4 YC Credits		
WLD 250 Welded Metal Fabrication		4 YC Credits		
<p>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. Students can earn the GMAW and GTAW Certificate.</p>				

VACTE Central Campus Career and Technical Education Manufacturing and CNC Operating

Course	Grades	Credits	Prerequisites	Course #
Advance Manufacturing 1 & 2 (Full School Year Course)	11-12	3 HS Credits	VACTE Application and approval	9711
CNC 101 CNC Machine Operator		2 YC Credits		
ELT 130 Intro to Robotics		3 YC Credits		
CNC 102 CNC Machine Set Up		2 YC Credits		
CNC 201 Computer Aided Programming		3 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 CNC Certification and credits towards the 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, ISCET ESA-1, CSWA. Courses are held off campus at Yavapai College Clarkdale Campus. Course Times: Monday-Thursday, 1:30 pm – 3:45 pm. Students must provide their own transportation.

Construction Technology

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

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, blueprint 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-9:35am or 1:20pm-3:50pm 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 HS Credits	Construction Technology 1	9201
CBT 115 Residential Electrician		3 YC Credits		
CBT 120 Residential Plumber		5 YC Credits		

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, blueprint 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-9:35am or 1:20pm-3:50pm plus approximately 8 Friday or Saturdays. Students must provide their own transportation.

Culinary Arts I

Course	Grades	Credits	Prerequisites	Course #
Culinary Arts 1 & 2 (Full School Year Course)	11-12	3 HS Credits	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		
<p>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 SERV Safe Manager. Classes are held off campus at the Yavapai College Sedona Campus. Course Times: Monday-Thursday, 7am-9:35am or 1:30pm-3:55pm. Students must provide their own transportation.</p>				

Education Professions (Teacher Training)

Course	Grades	Credits	Prerequisites	Course #
Teacher Training 1 & 2 (Full School Year Course)	11-12	3 HS Credits	VACTE Application and approval Pass the Reading Proficiency for YC	9211
EDU 200 Intro. To Education		3 YC Credits		
EDU 210 Cultural Diversity in Education		3 YC Credits		
PSY 101 – Introductory Psychology (Transferable for any BA or AA degree)		3 YC Credits		
<p>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-9:35am. Students must provide their own transportation.</p>				

Course	Grades	Credits	Prerequisites	Course #
Teacher Training 3	12	3 HS Credits	VACTE Application	9212

& 4 (Full School Year Course) 6 Additional Yavapai College Education Courses will be offered to the students		6 YC Credits	and approval Successful completion of Teacher Training 1 & 2	
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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 earned up to 15 dual enrolled credits from Yavapai College in education which will transfer to the University teacher training programs. Students can continue at Yavapai College and complete an Associates of Arts in Elementary Education. The students can then transfer to a state university to complete a bachelor's degree in Elementary Education and earn an AZ State Teaching Certificate. Students have a potential opportunity to enter a program for Teacher Certification that would allow for loan forgiveness with a commitment to 5 years of teaching in Arizona. Classes are held off campus at the VACTE campus in Cottonwood. Course Times: Monday-Thursday, 7am-9:35am. 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	12	3 HS Credits 3 YC credits	VACTE Application and approval	9920
FSC 105 Firefighter Certification Academy		12 YC credits		
FSC 155 Basic Wildland Firefighting		3 YC Credits		

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 & 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, 1:20pm-3:50pm plus approximately 8 Saturdays. Students must provide their own transportation.

Nursing Services (CNA)

Course	Grades	Credits	Prerequisites	Course #
Certified Nursing Assistant (Only one semester but recommend registering for Phlebotomy so it is a full school year course) Student will be able to earn the CNA Completion Certificate which is a prerequisite for the RN program at YC.	11 or 12	1.5 HS 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 one of the prerequisite requirements for the Registered Nursing program at Yavapai College.** CNA students meet on site at the Cottonwood Verde Valley Medical Center for training. Highly recommended to take it with the Phlebotomy/Lab Assistant course the opposite semester. Course Times: Monday – Thursday, 7am-9:35am or 1:20pm-3:55pm plus approximately 4 Saturdays. Students must provide their own transportation.

Phlebotomy & Lab Assistant

Course	Grades	Credits	Prerequisites	Course #
Phlebotomy and Lab Assistant (Only one semester but recommend registering for CNA so it is a full school year course)	11 or 12	1.5 HS Credits	VACTE Application and approval Pass the YC Reading Proficiency and Math Proficiency assessment	9052
AHS 100 – Fundamentals of Health Care		3 YC credits		
AHS 105 – Phlebotomy		2 YC credits		
PSY 101 – Introductory		3 YC credits		

Psychology (Transferable for any BA or AA degree)				
<p>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. The PSY 101 course is transferable to all Universities and Community Colleges in Arizona and out of state. 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-9:35am or 1:30pm-3:55pm. Students must provide their own transportation.</p>				

Pre-Engineering I

Course	Grades	Credits	Prerequisites	Course #
Pre-Engineering 1 & 2 (Full School Year Course)	11-12	3 HS Credits	VACTE Application and approval	9940
CNC 101 CNC Machine Operator		2 YC Credits		
ELT 130 Intro. To Robotics		3 YC Credits		
CNC 102 CNC Machine Set Up		2 YC Credits		
CNC 201 Computer Aided Programming		3 YC Credits		
<p>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 will give the students 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 Yavapai College Clarkdale Campus. Course Times: Monday-Thursday, 1:30 pm – 3:50 pm. Students must provide their own transportation.</p>				

Law Enforcement and Dispatch

Course	Grades	Credits	Prerequisites	Course #
Law Enforcement-Dispatch 1 & 2 (Full School Year Course)	11 & 12	3 HS Credits	VACTE Application and approval	9650
AJS 170 Forensic Science		3 YC Credits		
AJS 270 Community Relations		3 YC Credits		

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, proper weapon techniques and skills, forensics science, investigation/detective skills, 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 with computer generated simulations. 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. Student will have the opportunity to earn 6 credits towards the Yavapai College criminal justice AA degree. Classes are held off campus at the VACTE campus in Cottonwood. Course Times: Monday-Thursday, 7am – 9:35am. Students must provide their own transportation.

Course	Grades	Credits	Prerequisites	Course #
Law Enforcement-Dispatch 3 & 4 (Full School Year Course)	12	3 HS Credits	VACTE Application and approval	9651
AJS Course to TBD		3 YC Credits	Successful completion of Law Enforcement 1 & 2	
AJS Course to TBD		3 YC Credits		

This course will add to the foundation of Law Enforcement provide in Law Enforcement 1 & 2. Students will participate in ride along with police officers in the Verde Valley. Also, they will be able to train and observe in a 911 call center. Practice on real life situations related to dispatch and law related situations with computer generated simulations in arrest and shooting practice skills. 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. Student will have the opportunity to earn a 6 additional credits towards the Yavapai College criminal justice AA degree. The classes are held off campus at the VACTE campus in Cottonwood. Course Times: Monday-Thursday, 7am – 9:35am. Students must provide their own transportation.

Heating Ventilation Air Conditioning (HVAC)

Course	Grades	Credits	Prerequisites	Course #
HVAC 1 & 2 (Full School Year Course)	11-12	3 HS Credits	VACTE Application and approval	9750
HVA 100: Introduction to HVAC 1		3 YC Credits		
ELT 111: Electrical I (DC)		3 YC Credits		
HVA 215: Refrigerant Technology		3 YC Credits		
HVA 225: Heating Technology 1		3 YC Credits		

HVAC is one of the highest in demand industrial construction careers in the Verde Valley and Arizona. The demand for skilled HVAC service technician is in high demand and the starting pay is averaging \$19 per hour in the Verde Valley, This CTE education program trains and certifies students in Heating, Ventilation and Ducting installation and Air Conditioning operations and maintenance. Upon completion of this course, student will have the opportunity to earn a 12 credit towards the Yavapai College HVAC Service Technician Certificate. Along with the college credits students will have the opportunity to test for four certifications from NCCER HVAC. Courses are held off campus at Yavapai College Clarkdale Campus in the Skilled Trade Center Building. Course Times: Monday-Thursday, 1:30pm – 3:55pm plus approximately 8 Saturdays. Students must provide their own transportation.

Emergency Medical Services (EMT)

Course	Grades	Credits	Prerequisites	Course #
Emergency Medical Services 1 & 2 (Full School Year Course)	12	3 HS Credits	VACTE Application and approval	9070
EMS 132 Emergency Medical Technician		10 YC credits		

Emergency Medical Services is a step for students into the medical field and fire science field. Students will be introduced to the essentials Emergency Medical Technician (EMT) and the Emergency Room operations, EMT and ambulance equipment and safety with an emphasis on the Emergency room procedures. The Emergency Medical Technician certificate provides fundamental knowledge about emergency medical procedures and techniques. These include artificial respiration, cardio-pulmonary resuscitation, control of bleeding, splinting, extrication and light rescue, and ten hours of hospital training and observation to give Emergency Medical Technicians improved clinical knowledge of the profession. Successful completion of EMS

132, with a grade of "C" or better, qualifies the student to take the National Registry of EMT Certification examination for EMT. This course will be Dual Enrolled through Yavapai College and will allow students to earn 10 college credits. This course is held off campus at the Yavapai College in Clarkdale. Course Times: Monday-Thursday, 7am – 9:35 am plus up to 8 Saturday of practicums. Students must provide their own transportation.

Electives

Course	Grades	Credits	Prerequisites	Course #
AP Computer Science	10-12	1	None	9620
<p>Students will learn to design and implement computer programs that solve problems relevant to today's society, including art, media, and engineering. AP Computer Science A teaches object-oriented programming using the Java language and is meant to be the equivalent of a first semester, college-level course in computer science. It will emphasize problem solving and algorithm development, and use hands-on experiences and examples so that students can apply programming tools and solve complex problems. Pre-requisite: Algebra I; Algebra II is recommended. This course will prepare students for the end-of-course AP Exam.</p>				

Course	Grades	Credits	Prerequisites	Course #
AP Computer Principles	10-12	1	None	9621
<p>AP Computer Science Principles is a complete, full-year course that focuses on the 5 "Big Ideas" in computer science using project-based approaches. The course introduces students to the creative aspects of programming, abstractions, algorithms, large data sets, the Internet, cybersecurity, and how computing impacts our world. Students will develop the computational thinking skills needed to fully exploit the power of digital technology and help build a strong foundation in core programming and problem-solving. Using project-based lessons and materials throughout, students will work to address real-world problems and design solutions to put computational thinking into practice. These culminate in a capstone Performance Task project where students can demonstrate what they've learned - to become creators, instead of merely consumers, of the technology all around them. This course will prepare students for the end-of-course AP Exam.</p>				

Course	Grades	Credits	Prerequisites	Course #
Yearbook	10-12	1	Application and Instructor Approval	9610
<p>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.</p>				

Course	Grades	Credits	Prerequisites	Course #
AVID Advancement Via Individual Determination	9-12	1	Application and Instructor Approval	9 th 0160 10 th 0161 11 th 0162

				12 th 0163
<p>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.</p>				

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"> • 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) • Application required for those wanting to be class representatives (current 9th – 11th graders) • Application required for 8th graders wishing to join in their 9th grade year • 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) • Please see Mrs. Thagard for information regarding running for Student Council Officer positions 				

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>				