

SY 2021: UMA High School Course Descriptions Math

Course Title	State Course Code	Low Grade	High Grade	Sem or Year	Foundation, Supplemental, Applied or Advanced
Description					
Secondary Math 1	708000090	9	12	Year	Foundation
<p>Cadets in Secondary Mathematics I will deepen and extend understanding of linear relationships, in part by contrasting them with exponential phenomenon, and in part by applying linear models to data that exhibit a linear trend. Cadets will use properties and theorems involving congruent figures to deepen and extend understanding of geometric knowledge. Algebraic and geometric ideas are tied together. Cadets will experience mathematics as a coherent, useful, and logical subject that makes use of their ability to make sense of problem situations.</p>					
Secondary Math 1 H	708000095	9	12	Year	Foundation
<p>Cadets in Secondary Mathematics I will deepen and extend understanding of linear relationships, in part by contrasting them with exponential phenomenon, and in part by applying linear models to data that exhibit a linear trend. Cadets will use properties and theorems involving congruent figures to deepen and extend understanding of geometric knowledge. Algebraic and geometric ideas are tied together. Cadets will experience mathematics as a coherent, useful, and logical subject that makes use of their ability to make sense of problem situations. This course will explore topics more in depth and move at a faster pace.</p>					
Secondary Math 1.5	707000010	9	12	Year	Elective
<p>Cadets in Secondary Math 1.5 will review secondary math 1 topics in order to prepare for Math 2. This course does not count toward state graduation requirements, but fulfills UMA's 4th year math requirement.</p>					
Secondary Math 2	708000100	9	12	Year	Foundation
<p>Cadets in Secondary Mathematics II will focus on quadratic expressions, equations, and functions, extend the set of rational numbers to the set of complex numbers, link probability and data through conditional probability and counting methods, study similarity and right triangle trigonometry, and study circles with their quadratic algebraic representations.</p>					
Secondary Math 2 H	708000105	9	12	Year	Foundation
<p>Cadets in Secondary Mathematics II will focus on quadratic expressions, equations, and functions, extend the set of rational numbers to the set of complex numbers, link probability and data through conditional probability and counting methods, study similarity and right triangle trigonometry, and study circles with their quadratic algebraic representations. This course will explore topics more in depth and move at a faster pace.</p>					
Secondary Math 3	708000110	9	12	Year	Foundation
<p>Cadets in Secondary Mathematics III will pull together and apply the accumulation of learning they have from previous courses. They will apply methods from probability and statistics to draw inferences and conclusions from data, expand their repertoire of functions to include polynomial, rational, and radical functions, expand their study of trigonometry to include general triangles, and use functions and geometry to create models and solve contextual problems.</p>					
Math of Personal Finance	707000020	11	12	Year	Applied
<p>For Juniors or Seniors only. Cadets must have two years of high school math credit as a prerequisite for this course. Includes ideas, concepts, knowledge, skills that will enable Cadets to implement the mathematical skills they need to become wise consumers, savers, investors, credit users, money managers, citizens, and part of a global workforce.</p>					

PreCalculus	7040000020	10	12	Year	Advanced
<p>Cadets gain a deep understanding of the fundamental concepts of functions, including trigonometric functions. Precalculus is highly recommended preparation for Cadets planning to continue their formal education beyond high school.</p>					

AP Calculus (AB)	7040000001	10	12	Year	Advanced
<p>Calculus AB is designed to be taught over a full high school academic year. Most of the year will be devoted to topics in differential and integral calculus. Must follow College Board guidelines. Cadets must qualify to take AP Calculus by passing Precalculus with a C or above, or with teacher recommendation. Cadets may receive college credit with a score of 3 or higher on</p>					

AP Calculus (BC)	0704000002	11	12	Year	Advanced
<p>Calculus BC is designed to be taught over a full high school academic year. This course will cover the first two semesters of College Calculus. Must follow College Board guidelines. Cadets must qualify to take AP Calculus by passing Calculus or AP Calculus AB with a C or above, or with teacher recommendation. Cadets may receive college credit with a score of 3 or higher on the AP exam.</p>					

Foundations of Math	7070000015	9	10	Year	Elective
<p>For Cadets who need additional support in math prior to taking Secondary Math I. This course will identify and fill gaps in the Cadet's math abilities, preparing them to take higher level math. This class will not count as a math credit toward state graduation, but will count as UMA's 4th year math.</p>					

SY 2021: UMA High School Course Descriptions Language Arts

Course Title	State Course Code	Low Grade	High Grade	Sem or Year	Foundation, Supplemental, Applied or Advanced
Description					
Language Arts 9	602000040	9	9	Year	Foundation
A grade level appropriate exploration of reading, writing, and inquiry					
Language Arts 10	602000050	10	10	Year	Foundation
A grade level appropriate exploration of reading, writing, and inquiry					
Language Arts 11	602000060	11	11	Year	Foundation
A grade level appropriate exploration of reading, writing, and inquiry					
Language Arts 12	602000070	12	12	Year	Foundation
A grade level appropriate exploration of reading, writing, and inquiry					
CE English 1010	6010000115	11	12	Sem	Advanced/Foundation Substitute
This course will teach Cadets to find, evaluate, and understand sources while emphasizing that sources exist as part of an ongoing conversation. This course is divided into three related sections: reading and summarizing professional texts, synthesizing the information learned, and producing two formal literature reviews. Cadets must have an ACT score of at least 18 in English and 18 in Reading. A grade of C or above in this course may be used for University credit and Language Arts 11 or 12 credit.					
CE English 2010	6010000115	11	12	Sem	Advanced/Foundation Substitute
This course will teach Cadets to find, evaluate, and understand sources while emphasizing that sources exist as part of an ongoing conversation. This course is divided into three related sections: reading and summarizing professional texts, synthesizing the information learned, and producing two formal literature reviews. Cadets must have earned a grade of C or higher in CE English 1010. A grade of C or above in this course may be used for University credit and Language Arts 11 or 12 credit.					
Beginning Speech and Debate	6010000050	9	12	Sem	Elective
A semester course that teaches the skills and strategies of good public speaking. Cadets will be learning the values of good argumentation and skillful debate practices.					
Advanced Speech and Debate	6010000051	9	12	Year	Advanced

A full year course of the English Department offers instruction in the fundamentals of effective oral delivery, including body control, use of voice and diction, and analysis of audience. Instruction stresses organization, selection, and arrangement of material and use of transitions and rhetorical effects in making speeches to inform, persuade, or entertain. Supporting material, methods of research, critical thinking, logical argumentation, and effective language are applied in learning discussion and debate techniques. This is a competition class; therefore, Cadets are required to compete. This course may be used for Language Arts 12 credit.

Creative Writing 1	6010000120	9	12	Sem	Applied
Teaches the skills and strategies necessary to write creatively. This course may be used for Language Arts 12 credit.					

Creative Writing 2	6010000121	11	12	Sem	Advanced
Teaches the skills and strategies necessary to write creatively. This course may be used for Language Arts 12 credit.					

Poetry	6010000121	11	12	Sem	Applied/Advanced
Teaches the skills and strategies necessary to write creatively through Poetry. This course may be used for Language Arts 12 credit.					

ESL 9-12	6020024040	9	12	Year	
This course teaches Cadets the basic structures and vocabulary of English, to advance their reading, speaking, and pronunciation skills. Does not count as an English credit toward graduation.					

SY 2021: UMA High School Course Descriptions Science

Course Title	State Course Code	Low Grade	High Grade	Sem or Year	Foundation, Supplemental, Applied or Advanced
Description					

Earth Science	804000010	9	12	Year	Foundation
<p>This is the recommended core science course for Grade 9. The theme for Earth Science is systems as an organizing concept to understand life on Earth, geological change, and the interaction of atmosphere, hydrosphere, and biosphere. Earth's place in the universe, internal structure, atmospheric processes, and natural resources are explored to help Cadets understand how Earth science interacts with society.</p>					

Biology	802000010	9	12	Year	Foundation
<p>This is the recommended core science course for Grade 10. This course includes the topics of ecosystems, cells, heredity, diversity, organ systems and evolution. Cadets will explain biological ideas and concepts in their own words and relate them to other topics and apply them in new contexts.</p>					

Chemistry	803000010	10	12	Year	Foundation
<p>This is the recommended core science course for Grade 11 or 12. This course includes the topics of atoms, energy, chemical bonds, chemical reactions and solutions. Cadets will develop an understanding of chemical concepts and determine the relevance of chemistry in their lives.</p>					

Physics	806000020	10	12	Year	Foundation
<p>This is the recommended core science course for Grade 11 or 12. The three topics covered in physics are matter, motion and energy. Everything is part of a system, whether it is book on a table, a cog in a machine, a satellite in orbit or a complex electrical circuit. Physics topics will be developed around systems and the nature of science.</p>					

AP Biology	802000001	10	12	Year	Advanced Foundation Substitute
<p>This course provides indepth coverage of the biological concepts taught in first year university biology courses and prepares Cadets for the national AP Biology exam. Must follow College Board guidelines. Cadets may receive college credit if they score 3 or higher on AP exam. Biology is strongly recommended as a prerequisite. Must have teacher recommendation.</p>					

Anatomy and Physiology 1	802000065	11	12	Sem	Applied
<p>The Anatomy and Physiology 1 course will study the shape, structure, and function of the human body and its parts. Content includes: basic anatomy and directional terminology, structure and function of body systems and special senses, fundamental concepts and principles of body organization, histology, and hematology.</p>					

Anatomy and Physiology 2	8020000065	11	12	Sem	Applied
<p>The Anatomy and Physiology 1 course will study the shape, structure, and function of the human body and its parts. Content includes: basic anatomy and directional terminology, structure and function of body systems and special senses, fundamental concepts and principles of body organization, histology, and hematology.</p>					
Astronomy	8060000010	11	12	Sem	Applied
<p>The underlying principles of life, earth, and physical science are integrated in this study of the universe. Historical astronomy, the solar system, comets, constellations, extraterrestrial life, and the evolution of stars are the major topics of study.</p>					
Environmental Science	8040000020	11	12	Sem	Applied
<p>This course is a study of the human impacts on nature. We will focus on the following topics: Environmental problems, causes and solutions; Ecological principles, cycles and systems; Population growth and dynamics; Pollution of water, soil and air; Energy.</p>					
Meteorology	8040000050	11	12	Year	Applied
<p>This course focuses on introducing the cadett to basic concepts involved in the analysis of weather phenomena.</p>					
CE Geology	8040013003	11	12	Year	Applied
<p>Concurrent Enrollment class through Weber State/ Basic concepts of geology will be studied. Formation of rocks, erosion and landscape evolution, plate tectonics, and interpretation of earth processes from geological data are the foundation of this course.</p>					
AP Chemistry	8030000001	11	12	Year	Advanced
<p>This course provides indepth coverage of the chemistry concepts taught in first year university chemistry courses and prepares Cadets for the national AP Chemistry exam. Must follow College Board guidelines. Cadets may receive college credit if they score 3 or higher on AP exam. Cadets must pass Chemistry with a minimum grade of C as a prerequisite. Must have teacher recommendation.</p>					

SY 2021: UMA High School Course Descriptions Social Studies

Course Title	State Course Code	Low Grade	High Grade	Sem or Year	Foundation, Supplemental, Applied or Advanced
Description					

World Geography	904000030	9	12	Year	Foundation
Core course. Fulfills the requirements for Social Studies secondary Cadets. The course will include map skills with physical and human geography essentials. As a yearlong course it will also cover the required LEA elective credit for social studies.					

World History	905000090	9	12	Sem	Foundation
Core class for 10th grade Cadets. It is designed as a survey class, describing the relationships that have developed over time among major regions of the world: East Asia, South Asia, Southwest Asia (Middle East), Africa, Europe, North America and Latin America.					

US History 2	905000050	9	12	Year	Foundation
A survey of the military, social, political, economic, cultural, and intellectual history of the United States from the Civil War/Reconstruction era to the present. United States History II examines industrialization, immigration, world wars, the Great Depression, Cold War and postCold War eras. Themes that may be addressed in United States History II include: American culture, religion, civil and human rights, technological change, economic change, immigration and migration, urbanization and suburbanization, the expansion of the federal government, and the study of U.S. foreign policy.					

US Government and Citizenship	906000020	10	12	Sem	Foundation
Core class that is required for graduation. This course will present the major ideas, protections, privileges, structures, and economic systems that affect the life of a citizen in the United States political system. the major ideas, protections, privileges, structures, and economic systems that affect the life of a citizen in the United States political system.					

Psychology	907000010	11	12	Sem	Elective
Psychology studies the thought processes and behavior of humans and their interaction with the environment.					

SY 2021: UMA High School Course Descriptions Fine Arts

Course Title	State Course Code	Low Grade	High Grade	Sem or Year	Foundation, Supplemental, Applied or Advanced
Description					

Drawing 1	2010000045	9	12	Sem	Foundation
This entry level High School course is centered on the development of observational skills needed in rendering the illusion of 3D forms on a flat surface.					

Drawing 2	2010000046	9	12	Sem	Advanced
Prerequisite: Drawing or Foundations I. This intermediate course is designed to provide a more technical visual art skill experience using 2D art related materials and concepts. Should emphasize studio production in exposing Cadets to complex structural drawing, color schemes, compositional devices and design principles. The goal of the course is to create pieces for exhibition or portfolio purposes.					

Painting 1	2010000100	9	12	Sem	Advanced
Prerequisite: Drawing 1. As a production oriented class, Cadets will have a chance to explore a few painting mediums, such as watercolor and acrylic. Cadets will use a variety of techniques to explore realistic and abstract applications of these mediums. Grades will be based on participation, production and work ethic.					

Sculpture 1	2010000130	9	12	Sem	Advanced
A beginning course designed to introduce Cadets to the art of sculpture. Cadets will explore various methods for creating sculptures all of which are based on the elements and principles of art, critical thinking, decision making, and innovative problem solving.					

Studio Art	2010000047	9	12	Year	Advanced
This course is by invitation for Cadets to build their art portfolios.					

Band 1 Beginning Band	2040100001	9	12	Year	Foundation
Provides opportunities for Cadets to develop their musical potential and aesthetic understanding through learning to play a woodwind, brass, or percussion instrument in a large ensemble band setting.					

Percussion	2040100014	9	12	Year	Advanced
Secondary Instrumental Music Level 2. Prerequisite: Band I equivalent or audition. Further develops and refines core. For Percussionists only.					

Band 2 Intermediate Band	2040100010	9	12	Year	Advanced
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Prerequisite: Band I equivalent or audition. Further develops and refines core concepts and fundamentals introduced in Beginning Band. Cadets participate in a large ensemble band.

Band 3 Advanced Band	2040100020	9	12	Year	Advanced
Prerequisite: Audition. Provides opportunities to foster and refine musical expression through instrumental performance, analytical/evaluative skills, and aesthetic judgment. Cadets participate in a large ensemble band.					

Band 3 Jazz Band	2040100023	9	12	Year	Advanced
Prerequisite: Audition. Provides opportunities to foster and refine musical expression through instrumental performance, analytical/evaluative skills, and aesthetic judgment. Cadets participate in a small ensemble band.					

Chorus 1 Beginning Choir	2040200001	9	12	Sem	Foundation
This course provides opportunities for Cadets to develop their musical potential and aesthetic understanding through singing in a choral mixed ensemble.					

Chorus 2 Intermediate Choir	2040200015	9	12	Sem	Foundation
Prerequisite: Choir I equivalent or audition. Provides opportunities for Cadets to develop their musical potential and aesthetic understanding through singing in a choral ensemble.					

Chorus 3 Chamber Choir	2040200010	9	12	Year	Foundation
Prerequisite: Choir I equivalent or audition. Provides opportunities for Cadets to develop their musical potential and aesthetic understanding through singing in a choral mixed ensemble.					

SY 2021: UMA High School Course Descriptions JROTC

Course Title	State Course Code	Low Grade	High Grade	Sem or Year	Foundation, Supplemental, Applied or Advanced
Description					

AS100 Science of Flight	1500000060	9	12	Year	Foundation
<p>Core JROTC Course for Grade 9. The Science of Flight: A Gateway to New Horizons is an introductory course and customized textbook that focuses on how airplanes fly, how weather conditions affect flight, flight and the human body, and flight navigation. The course is designed to complement materials taught in math, physics, and other science related courses and is aligned with the National Science Education Standards, the Math Standards and Expectations, and ISTE National Educational Technology Standards for Cadets.</p> <p>LE100 Traditions, Wellness, and Foundations of Citizenship</p>					

AS200 Exploring Space	1500000060	10	12	Year	Foundation
<p>Core JROTC Course for Grade 10. Exploring Space: The High Frontier course begins with the study of the space environment from the earliest days of interest in astronomy and early ideas of the heavens, through the Renaissance, and on into modern astronomy. It provides an indepth study of the Earth, Sun, stars, Moon, and Solar System, including the terrestrial and the outer planets. It discusses issues critical to travel in the upper atmosphere—such as orbits and trajectories—unmanned satellites, and space probes. It investigates the importance of entering space and discusses manned and unmanned missions, focusing on concepts surrounding spaceflight, space vehicles, launch systems, and safety.</p> <p>LE200 Communication, Awareness, and Leadership</p>					

AS300 Aerospace Science	1500000060	11	12	Year	Foundation
<p>Core JROTC course for Grade 11. Aerospace Science: A Journey Into Aviation History is a course about aviation history, focusing on the development of flight throughout the centuries. It starts with ancient civilizations, then progresses through time to modern days. It emphasizes civilian and military contributions to aviation, the development and modernization of the United States Air Force, and a brief history of astronomy and space exploration.</p> <p>LE300 Life Skills and Career Opportunities</p>					

AS400 Global Awareness	1500000060	12	12	Year	Foundation
<p>Core JROTC Course for Grade 12. Cultural Studies: An Introduction to Global Awareness is a customized course about the world's cultures. The course is specifically created for the US Army, Marine Corps, Navy, and Air Force Junior ROTC programs. It is designed to introduce Cadets to the study of world affairs, regional studies, and cultural awareness. It delves into history, geography, religions, languages, culture, political systems, economics, social issues, environmental concerns, and human rights. It looks at major events and significant figures that have shaped each region.</p> <p>LE400 Principles of Management</p>					

JROTC Staff	1500000060	11	12	Year	Elective
<p>Cadet Leadership Course. Must be selected by JROTC staff to register.</p>					

JROTC Competitive Drill	1500000060	10	12	Year	Elective
<p>The competitive drill class prepares Cadets to compete at local, regional, and national drill competitions. Cadets will learn basic and advanced drill sequences in order to compete. Enrollment in the competitive drill class does not ensure a cadet will compete in drill competitions. All primary and alternate positions are determined by the drill team captains and AFJROTC Cadre. This course also requires a fee and cost for competition trips.</p>					

JROTC Marksmanship	1500000060	10	12	Sem	Elective
<p>The course covers how to organize a JROTC marksmanship program, how to safely and properly conduct air rifle live firing, and teaches basic marksmanship skills that are the foundation for threeposition air rifle qualification and competition. Cadet's may participate on the school's air rifle marksmanship team through course participation.</p>					

JROTC Archery	1500000060	10	12	Sem	Elective
<p>The course covers how to organize a JROTC Archery program, how to safely and properly conduct firing, and teaches basic archery skills that are the foundation for archery qualification and competition. Cadet's may participate on the school's archery team through course participation.</p>					

JROTC Survival	1500000060	11	12	Sem	Elective
<p>Introduces cadets to the physical and mental needs individuals must possess to survive in austere situations or environments. Teaches the physiological aspects of survival, required personal protection measures, and where to find necessities required to maintain life.</p>					

JROTC Pilot Ground School	1500000060	9	12	Sem	Elective
<p>The course, taught by a FAA certified Ground School Instructor, is the foundation for Cadets interested in receiving a private pilot's license. This challenging course is a college level class. The material covered is an advanced, more indepth study of aerospace topics to include; aerodynamics, weather, human physiology, FAA rules and regulations, aircraft flight procedures and maneuvers, airfield operations, navigation, and aircraft weight and balance. When the course is completed Cadets should be prepared to take and pass the Federal Aviation Administration (FAA) written examination per requirement of the Federal Aviation Regulations FAR 6105 Section 61.3.</p>					

JROTC Rangers	1500000060	10	12	Sem	Elective
<p>The Rangers course consists of a variety of physically demanding challenges including a 5k rucksack march/run with a 20/30lb loaded rucksack. All team members must maintain their pace and cross the finish line together. Additionally there is a timed "ropebridge" crossing, knot tying and other physical challenges. The course consists of cadets who display extreme dedication to their academics, physical and mental conditioning. Cadets signed up for the course are highly encouraged to participate the Rangers competitive team. This course also requires a fee and cost for competition trips.</p>					

SY 2021: UMA High School Course Descriptions CTE

Course Title	State Course Code	Low Grade	High Grade	Sem or Year	Foundation, Supplemental, Applied or Advanced
Description					
General Financial Literacy	1000000100	9	12	Sem	Foundation
0.5 units of credit is required for graduation. Designed to prepare Cadets for the choices and challenges of today's financial markets and develop a better understanding of personal finance. Topics include income, money management, spending and credit, saving and investment, consumer protection, and risk management.					
Business Office Specialist Self Paced Mastery	32020000216	9	12	Sem	Foundation
This course applies advanced concepts and principles using word processing, spreadsheets, databases, and electronic presentation software. Cadets will integrate applications learned. This course builds on skills included in Computer Technology.					
Exploring Computer Science	35020000007	9	12	Sem	Foundation
Exploring Computer Science is an 1 semester course designed to introduce students to the breadth of the field of computer science through an exploration of engaging and accessible topics. Rather than focusing the entire course on learning particular software.					
Computer Programming 1 Self Paced Mastery	35020000030	9	12	Sem	Foundation
An introductory course in computer programming/software engineering and applications. The course introduces Cadets to the fundamentals of computer programming. Cadets will learn to design, code, and test their own programs while applying mathematical concepts. Teachers introduce concepts and problem solving skills to beginning Cadets through a programming language such as C++, C#, Java, Python, or JavaScript.					
Computer Programming 2 Self Paced Mastery	35020000032	9	12	Sem	Elective
An introductory course in computer programming/software engineering and applications. The course introduces Cadets to the fundamentals of computer programming. Cadets will learn to design, code, and test their own programs while applying mathematical concepts. Teachers introduce concepts and problem solving skills to beginning Cadets through a programming language such as C++, C#, Java, Python, or JavaScript.					
Intro Digital Graphic Arts SelfPaced Mastery	32020000190	9	12	Sem	Fine Arts or Elective
This onesemester course provides skill development in the electronic procedures of producing and editing publications. Cadets will create, format, illustrate, design, edit/revise, and print publications. Improved productivity of electronically produced newsletters, flyers, brochures, reports, advertising materials, and other publications are emphasized. Proofreading, document composition, and communication competencies are also included.					
Web Development 1 SelfPaced Mastery	32020000280	9	12	Sem	Foundation
This semester course provides Cadets with an introduction to the Internet. Cadets will demonstrate a basic knowledge of the Internet and its tools through the use of email, search engines and browsers. HTML and Web publishing software will be used to create, format, illustrate, design, edit, and publish Web pages. Emphasis will be placed on the application of the Internet in business.					
Web Development 2 SelfPaced Mastery	32020000290	9	12	Sem	Elective

This semester course is a continuation of skill developed in Internet I. This course provides skill development in the electronic procedures of producing, editing, publishing, and maintaining documents on the Internet. Web publishing software and HTML are used to develop the competencies of creating, formatting, illustrating, designing, editing/revising, and publishing documents on the World Wide Web. Proofreading, document composition, and communication competencies are included.

Digital Marketing SelfPaced Mastery	3701000001	9	12	Sem	Elective
<p>This course provides the Cadet with an understanding of basic marketing principles and training for entrylevel job positions in the exciting, constantly changing service fields of advertising and display. Competing successfully as a specialist requires competency in human relations, communication, selling, management, mathematics, and budgeting. One should also understand the appropriate and productive use of display space, television, radio, newspaper, and other media. Specific training helps the Cadet create, product, and accurately evaluate the efficiency of the various props, exhibits, and advertising strategies.</p>					

Digital Business Applications SelfPaced Mastery	32020000150	9	12	Sem	Foundation
<p>The business world is progressively more reliant on digital technologies. The Digital Business Applications course is designed to prepare Cadets with the knowledge and skills to be an asset to the collaborative, global, and innovative business world of today and tomorrow. Concepts include the overall digital experience, digital communications with audio and video, and the exploration of career choices. This course also provides an understanding of business concepts and professional development in today's global office.</p>					

HTML5 App Development SelfPaced Mastery	35020000055	9	12	Sem	Elective
<p>This course will provide Cadets with core HTML5 client application development skills that will run on today's touchenabled devices (PCs, tablets, and phones). Although HTML is often thought of as a web technology that is rendered in a browser to produce a UI, this course focuses on using HTML5, CSS3, and JavaScript to develop client applications.</p>					

Game Development Fund 1 SelfPaced Mastery	35020000045	9	12	Sem	Elective
<p>This course is designed to provide Cadets with knowledge and project based experience of fundamental gaming development concepts relating to STEM. These concepts include game design, scripting, creation of digital assets, graphic resources, animations, understanding hardware, problem solving, critical thinking, collaboration, and project management.</p>					

Video Production	40010000030	9	12	Sem	Elective
<p>This course is designed to provide Cadets with the basic knowledge and skills related to the television production industry. Instruction includes handson assignments in the following areas: camera operation, recording audio, lighting systems, preprod, and other areas.</p>					

Game Development Fund 2 SelfPaced Mastery	35020000046	9	12	Sem	Elective
<p>This course follows Game Development Fundamentals 1 and expands on the lessons learned there. There is a more comprehensive focus on scripting, project management, and animation. This course should only be attempted by Cadets who have passed Game Development Fundamentals 1.</p>					

Network Fundamentals CertificationBased	35010000030	10	12	Year	Elective
<p>Utah's Network Fundamentals are based on CompTIA 2011 Network+ Objectives. The CompTIA Network+ certification is an internationally recognized validation of the technical knowledge required of foundationlevel IT network practitioners.</p>					

Cyber Security: Ethical Hacking	35010000036	10	12	Year	Elective
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This course will provide Cadets with information on network security including industry wide topics on communication security, infrastructure security, cryptography, access control, authentication, external attack and operational and organization security. This course will also prepare Cadets for the MTA Security Fundamentals and the CompTIA Security+ IT industry certification exams.

Linux Fundamentals	35010000025	10	12	Year	Elective
This course will provide students with a broad awareness of Linux operating systems and prepare them for the CompTIA Linux+ IT industry certification. The Linux+ certification validates technical competency and is a new standard of competency for technical training.					

A+ Computer Maintenance & Repair CertificationBased	3501000040	10	12	Year	Elective
Cadets will learn necessary competencies for an entrylevel IT professional including installing, building, upgrading, repairing, configuring, troubleshooting, optimizing, diagnosing, and performing preventive maintenance of basic personal computer hardware and operating systems.					

CS1030 Foundations of Computer Science Weber State Concurrent Enrollment	35020013035	11	12	Sem	Elective
This course will give Cadets an overview of computer science and is recommended for those Cadets who plan on completing a degree in the field. Understanding how computers work at the Journeyman level is an important step toward working with them professionally. This class provides that critical first step. The course includes topics such as: History; Tools; Architecture; Data Representation; Operating System; Networks; Internet; Database; Data Structures; File Structures; Programming; Software Engineering; Security & Ethics; and Emerging Technology.					

CS 1023 Computer Programming Weber State Concurrent Enrollment	35020013030	11	12	Sem	Elective
Introduction and application of the most recent implementation of a selected programming language to the solution of technical and scientific problems. The language for a particular instance of this course will be based upon demand.					

AP Computer Science Principles	35020000034	11	12	Sem	Elective
AP Computer Science Principles introduces cadets to the breadth of the field of computer science. In this course, cadets will learn to design and evaluate solutions and to apply computer science to solve problems through the development of algorithms and programs. They will incorporate abstraction into programs and use data to discover new knowledge. cadets will also explain how computing innovations and computing systems, including the Internet, work, explore their potential impacts, and contribute to a computing culture that is collaborative and ethical. It is important to note that the AP Computer Science Principles course does not have a designated programming language. Teachers have the flexibility to choose a programming language(s) that is most appropriate for their cadets to use in the classroom.					

Accounting I	32020000010	9	12	Sem	Elective
Students will develop skill beginning with an understanding of the basic elements and concepts of double-entry accounting systems. Skills will include a knowledge of the accounting cycle, entering transactions in journals, posting to ledgers, and other skills.					

Law Enforcement	40060000000	10	12	Sem	Elective
A course that prepares individuals to perform the duties of police and public security officers, including patrol and investigative activities, traffic control, crowd control, public relations, witness interviewing, evidence collection and management, court procedures and the law in general. Basic crime prevention methods, weapon and equipment operation, equipment maintenance, and other routine law enforcement responsibilities are also included.					

PreEngineering	38010000075	9	12	Sem	Elective
Engineering scope, content, and professional practices are presented through practical applications. Cadets in engineering teams apply technology, science, and mathematics concepts and skills to solve engineering design problems and innovate designs. Cadets research, develop, test and analyze engineering designs using criteria such as design effectiveness, public safety, human factors, and ethics.					

Engineering I	38010000078	9	12	Sem	Elective
A course that helps Cadets understand the field of engineering/engineering technology. Exploring various technology systems and manufacturing processes help Cadets learn how engineers and technicians use math, science and technology in an engineering problem solving process to benefit people. The course also includes concerns about social and political consequences of technological change.					

Kit Car	38030000010	9	12	Sem	Elective
A course in which Cadets build and race a kit car using principles of engineering. Teacher recommendation required.					

Animation	35020000075	9	12	Sem	Elective
3D Animation is a half-year course. This course will focus on the animation of 3D models and scenes. cadets will produce 3D animation projects using 3D software.					

Basic Air Frame	40090000001	11	12	Sem	Elective
Program 1 of 2. A program with a sequence of courses that prepares individuals to inspect, repair, service, and rebuild all airplane parts, including engines, propellers, instruments, airframes, fuel and oil tanks, control cables, and hydraulic units. These courses are designed to meet Federal Aviation Administration (FAA) requirements for licensing as an airframe and power plant mechanic.					

Air Frame 2	40090000001	11	12	Sem	Elective
Program 2 of 3. Advanced program with a sequence of courses that prepares individuals to inspect, repair, service, and rebuild all airplane parts, including engines, propellers, instruments, airframes, fuel and oil tanks, control cables, and hydraulic units. These courses are designed to meet Federal Aviation Administration (FAA) requirements for licensing as an airframe and power plant mechanic.					

SY 2021: UMA High School Course Descriptions PE and Health

Course Title	State Course Code	Low Grade	High Grade	Sem or Year	Foundation, Supplemental, Applied or Advanced
Description					

Fit for Life	402000030	9	12	Sem	Foundation
Corerequired class that provides comprehensive instruction in nutrition, fitness activities, and selfassessment.					

Lifetime Activities	402000040	10	12	Sem	Foundation
Core course that provides instruction in up to three lifetime sports activities and physical fitness.					

Participation Skills & Techniques	402000060	9	12	Sem	Foundation
This semester class offers Cadets instruction in lifetime activities and fulfills one P.E. requirement for high school graduation. Individual, dual, and team sports activities are included, with the emphasis on activities offering lifelong participation.					

Beginning Weight Training	402000056	10	12	Sem	Elective
High School class taken for elective credit only after corerequired P.E. classes are completed.					

Military Fitness	402000010	9	12	Year	Elective
High School Class taken for <u>elective credit</u> (does not count as a PE credit). This course is for cadets interested in attending US Military Academies, or preparing for enlistment in a military branch.					

Advanced Military Fitness	402000056	10	12	Year	Elective
High School Class taken for <u>elective credit</u> (does not count as a PE credit). This course is for cadets interested in attending US Military Academies, or preparing for enlistment in a military branch. Prerequisite Course: Military Fitness					

Health Education 2	401000010	10	12	Sem	Foundation
Advanced required core curriculum course that builds on the concepts and principles developed in Health I.					

SY 2021: UMA High School Course Descriptions Foreign Languages

Course Title	State Course Code	Low Grade	High Grade	Sem or Year	Foundation, Supplemental, Applied or Advanced
Description					
Spanish 1	3070000011	9	12	Year	Foundation
<p>Emphasis placed on speaking skills through reading and writing are addressed. This course provides for the learning of dialogues, common words and expressions and basic language structure as well as oral practice of the language in skits, poetry, dialogues and readings.</p>					
Spanish 2	3070000021	9	12	Year	Advanced
<p>Prerequisite: Successful completion of Spanish 1 or placement test. This course continues the development of speaking, listening, reading and writing skills. Narratives and dialogues are used to teach structure and vocabulary. Culture and geography of the native country are taught through reading selections.</p>					
CE Spanish 1010 Weber State	03070013062	9	12	Year	Advanced
<p>Year Long This course stresses reading, writing and speaking skills as well as the use of more elaborate grammar structures. Aural comprehension, oral practice, culture and history of a country are emphasized as they relate to the reading program.</p>					
Spanish 3	3070000031	9	12	Year	Advanced
<p>Prerequisite: Successful completion of Spanish 2 or placement test. This course stresses reading, writing and speaking skills as well as the use of more elaborate grammar structures. Aural comprehension, oral practice, culture and history of a country are emphasized as they relate to the reading program.</p>					
CE Spanish 1020 Weber State	03070013063	9	12	Year	Advanced
<p>Year Long This course is similar to Spanish 3 but is more advanced. It includes reading literary excerpts, novels and plays; speaking by preparing talks and participating in class discussions with increased emphasis on conversational ability.</p>					
Spanish 4	3070000031	9	12	Year	Advanced
<p>This course is similar to Spanish 3 but is more advanced. It includes reading literary excerpts, novels and plays and speaking by preparing talks and participating in class discussions with increased emphasis on conversational ability.</p>					
CE Spanish 2010 Weber State	03070013064	9	12	Year	Advanced
<p>Year Long This course offers advanced studies and a continuation of Spanish 4 with emphasis on conversation, reading of the classics and cultural presentations. The course is intended to develop fluency and mastery of idiomatic expressions.</p>					
German 1	3040000011	9	12	Year	Foundation

Emphasis placed on speaking skills through reading and writing are addressed. This course provides for the learning of dialogues, common words and expressions and basic language structure as well as oral practice of the language.

German 2	304000021	9	12	Year	Advanced
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This course continues the development of speaking, listening, reading and writing skills. Narratives and dialogues are used to teach structure and vocabulary. Culture and geography of the native country are taught through reading selections.

ASL 1	301000011	9	12	Year	Advanced
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Emphasis placed on speaking skills through reading and writing are addressed. This course provides for the learning of dialogues, common words and expressions and basic language structure as well as oral practice of the language in skits, poetry, and dialogue.

ASL 2	301000021	10	12	Year	Advanced
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This course continues the development of speaking, listening, reading and writing skills. Narratives and dialogues are used to teach structure and vocabulary. Culture and geography of the native country are taught through reading selections.

SY 2021: UMA High School Course Descriptions Electives

Course Title	State Course Code	Low Grade	High Grade	Sem or Year	Foundation, Supplemental, Applied or Advanced
Description					

Teacher Assistant	25010000010	11	12	Year	Advanced
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Course used for Cadets serving as a Cadet aide/assistant. NOT available to Grades 9 and 10.

Office Aid	25010000010	11	12	Year	Advanced
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Course used for Cadets serving as a Cadet aide/assistant. NOT available to Grades 9 and 10.

Yearbook	6010000085	9	12	Year	Applied
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A full year class that produces a yearbook.

AVID Elective	25020000010	9	12		Elective
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(Advancement Via Individual Determination) is offered as an elective course that prepares students for entrance into four-year colleges. There is an emphasis on analytical writing, preparation for college entrance and placement exams, study skills and test taking, note-taking, and research.

Transtions	15000000045	9	12	Sem	Foundation for SPED
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Only available for Cadets with IEPs. This course provides opportunities for Cadets to develop their academic potential and understanding of commonly held academic strategies and practices through practice and mentorship.

English Supplemental		9	12	Year	Foundation for SPED
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Only available for Cadets with IEPs. This course pre teaches and reteaches the content of their core english course.

Math Supplemental		9	12	Year	Foundation for SPED
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Only available for Cadets with IEPs. This course pre teaches and reteaches the content of their core math course.

Science Supplemental		9	12	Year	Foundation for SPED
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Only available for Cadets with IEPs. This course pre teaches and reteaches the content of their core science course.