

how do you solve this  
multi-step equation?

$$x - 5(x + 2) = -40$$

$$x - 5x$$



# Math

**Mathematics is not  
about numbers,  
equations,  
computations,  
or algorithms: it is  
about *understanding*.**

**— WILLIAM PAUL  
THURSTON**

Yuma Union High School District #70 does not require students to pay for a required program of instruction. The opportunity to attend school, complete required course work, or earn required course credit during the regular school day is not contingent upon payment of any optional fee/material charge. However, students who choose to take any course that requires the use of expendable materials will be charged a fee to cover the cost of materials. The administration may waive the assessment of all or part of the fee upon request if it creates an economic hardship. Requests can be made to the administration during registration or throughout the school year.

# Math Courses

## GRADUATION REQUIREMENT: 4 Credits

The Mathematics courses outlined in this section provide students with a comprehensive and rigorous study of mathematical concepts and skills. These courses are designed to fulfill the four-credit high school graduation requirement for Mathematics and satisfy the admission criteria for Arizona universities.

Certain courses may not be available on all campuses.  
Dual credit courses are subject to community college tuition.

COURSE NAME	Weight	Credit	Graduation Requirement	NCAA	Dual Credit	Course Fees
IGCSE Mathematics I		0.5	Mathematics	Y		
IGCSE Mathematics II		0.5	Mathematics	Y		
Intermediate Algebra		0.5	Mathematics	N	Y	AWC
Algebra III/IV		0.5	Mathematics	Y		
College Algebra: Standard		0.5	Mathematics	Y	Y	AWC
Discrete Math		0.5	Mathematics	Y		
Financial Algebra		0.5	Mathematics	Y		
Statistical Reasoning in Sports		0.5	Mathematics	Y		
Math Analysis		0.5	Mathematics	Y		
Pre-Calculus (MAT320)		0.5	Mathematics	Y		
Calculus		0.5	Mathematics	Y		
AP Precalculus	Y	0.5	Mathematics	Y		\$20.00
AP Calculus AB	Y	0.5	Mathematics	Y		\$20.00
AP Calculus BC	Y	0.5	Mathematics	Y		\$20.00
AP Statistics	Y	0.5	Mathematics	Y		\$20.00
College Algebra with Review		1	Mathematics	Y	Y	AWC
Plane Trigonometry		0.5	Mathematics	Y	Y	AWC
Pre-Calculus (SC200)	Y	1	Mathematics	Y	Y	AWC
College Calculus II	Y	0.5	Mathematics	Y	Y	AWC
College Calculus III	Y	0.5	Mathematics	Y	Y	AWC
Foundations of Math		0.5	Mathematics	N		

**MAT  
100****IGCSE MATHEMATICS I****Graduation Requirement:****MATH**

Prerequisite	ABOR	Fee Semester	Grades
NONE	LEVEL 1	NONE	9
Semester(s)	Course Credit Semester	Weighted	
2	0.5	NO	

This course strengthens students' understanding of fundamental algebraic concepts, emphasizing problem-solving, clear solution presentation, and result interpretation. Students will develop skills in identifying relevant factors and selecting appropriate mathematical methods, focusing on precision and accuracy. Building on previous mathematical knowledge, the course deepens students' ability to apply algebraic principles. Topics covered include number sense, function transformations, algebraic expressions, equations and inequalities, polynomial operations, coordinate geometry, and basic principles of statistics, geometry, and probability. Students will explore various function types, including linear, quadratic, exponential, and radical functions, enhancing their overall mathematical proficiency.

**MAT  
201****IGCSE MATHEMATICS II****Graduation Requirement:****MATH**

Prerequisite	ABOR	Fee Semester	Grades
NONE	LEVEL 2	NONE	9,10
Semester(s)	Course Credit Semester	Weighted	
2	0.5	NO	

This course strengthens students' understanding of fundamental algebraic and geometric concepts, emphasizing their practical application to real-world situations. Students will develop skills in performing calculations, solving problems, and interpreting results with precision and accuracy, while learning to identify relevant factors and choose appropriate mathematical methods. The curriculum covers a wide range of topics, including basic geometry, coordinate geometry, geometric transformations, measurement, triangle theorems, trigonometry, and circle theorems, building upon previously developed mathematical skills and preparing students for advanced mathematical challenges.

**DCMAT  
121****INTERMEDIATE ALGEBRA****Graduation Requirement:****MATH**

Prerequisite	ABOR	Fee Semester	Grades
NONE	YES	AWC	9
Semester(s)	Course Credit Semester	Weighted	
1	0.5	NO	

Logical development of the laws of algebra, factoring linear equations, simultaneous equations, functions and graphs, exponents and radicals, quadratic equations.

**MAT  
305****ALGEBRA III/IV****Graduation Requirement:****MATH**

Prerequisite	ABOR	Fee Semester	Grades
NONE	LEVEL 4	NONE	10,11
Semester(s)	Course Credit Semester	Weighted	
2	0.5	NO	

This course integrates advanced algebra, trigonometry, and statistics concepts. Students will develop proficiency in solving complex equations and inequalities, graphing and transforming functions, and applying trigonometric principles to various triangle problems. The course also covers essential statistical and probability concepts, including data analysis and probability calculations. Through this curriculum, students will enhance their problem-solving skills, learn to interpret mathematical results, and apply these concepts to real-world scenarios, preparing them for higher-level mathematical studies and practical applications.

**DCMAT  
151**

**COLLEGE ALGEBRA:  
STANDARD**

**Graduation Requirement  
MATH**

Prerequisite		ABOR	
NONE		YES	
Fee Semester		Grades	
AWC		9	
Semester(s)	Course Credit Semester	Weighted	
1	0.5	NO	

Extension and further development of algebra, with an emphasis on functions - including linear, quadratic, rational, radical, exponential and logarithmic. Other topics include function transformations, regression analysis, inequalities, absolute values, systems of equations, matrices, sequences, and series.



**DISCRETE MATH**

**MAT 083**

**Graduation Requirement  
MATH**

**MAT 084**

**MATH**

Prerequisite		ABOR	
NONE		LEVEL 4	
Fee Semester		Grades	
NONE		11,12	
Semester(s)	Course Credit Semester	Weighted	
2	0.5	NO	

This course explores finite mathematical structures, focusing on discrete mathematics and its applications in today's technology-driven world. Students will strengthen their logical reasoning, pattern recognition, and algorithmic thinking skills through creative problem-solving using various technologies and concepts. The curriculum covers essential topics such as set theory, combinatorics, probability theory, logic, programming, sequences and series, recursion, fractal geometry, graph theory, and algorithms. By emphasizing discrete mathematical structures, this course provides a unique and relevant foundation for areas like computer science, data analysis, and machine learning, distinguishing itself from traditional math courses that focus on continuous structures and equation solving.

**MAT  
085**

**FINANCIAL ALGEBRA**

**Graduation Requirement:  
MATH**

Prerequisite	ABOR	Fee Semester	Grades
MAT201	LEVEL 3	NONE	10,11,12
Semester(s)	Course Credit Semester	Weighted	
2	0.5	NO	

This course strengthens students' understanding of fundamental algebraic concepts, geometry, statistics, and probability, with a focus on their application in business environments. Students will develop skills in performing calculations, solving problems, and interpreting results related to accounting, banking, finance, marketing, and management. The curriculum covers essential topics such as gross and net pay, independent living, loans, banking services, budgeting, credit cards, and investing. By building on previously developed mathematical skills, this course enhances students' ability to apply these concepts effectively in business and skilled trade areas.

**MAT  
315****STATISTICAL REASONING  
IN SPORTS****Graduation Requirement  
MATH**

Prerequisite		ABOR
NONE		LEVEL 4
Fee Semester		Grades
NONE		11,12
Semester(s)	Course Credit Semester	Weighted
2	0.5	NO

Statistical Reasoning in Sports is an innovative course that introduces fundamental statistical concepts through the lens of sports performance and outcomes. Students will develop skills in data analysis, probability interpretation, and statistical inference, applying these tools to real-world sports scenarios. The curriculum covers key topics such as data visualization, hypothesis testing, correlation, regression, and simulation, with a focus on assessing player performance, team dynamics, and streaks. Through case studies from various sports, this course equips students with the analytical skills necessary for data-driven decision-making, deepening their understanding of statistics within the context of athletics.

**MAT  
310****MATH ANALYSIS****Graduation Requirement  
MATH**

Prerequisite		ABOR
NONE		LEVEL 4
Fee Semester		Grades
NONE		10,11,12
Semester(s)	Course Credit Semester	Weighted
2	0.5	NO

This course deepens students' understanding of algebraic concepts, focusing on a variety of functions including linear, rational, absolute value, quadratic, radical, exponential, and logarithmic. Students will develop proficiency in solving equations and inequalities, factoring polynomials, performing operations with complex numbers, and graphing functions using transformations. The curriculum emphasizes the application of these concepts to real-world scenarios, enhancing students' algebraic reasoning and problem-solving skills. This comprehensive course prepares students for advanced mathematical studies and practical applications in diverse fields.

**MAT  
320****PRE-CALCULUS****Graduation Requirement:  
MATH**

Prerequisite	ABOR	Fee Semester	Grades
MAT310	LEVEL 4	NONE	11,12
Semester(s)	Course Credit Semester	Weighted	
2	0.5	NO	

This course integrates concepts from trigonometry, analytic geometry, and advanced algebra to enhance students' mathematical modeling, reasoning, and problem-solving skills. The curriculum covers a wide range of topics, including complex functions, matrices, conic sections, trigonometric identities, and polar coordinates, providing a strong foundation for Calculus and STEM-related fields. While primarily designed as a bridge to Calculus, this course offers extended mathematical concepts valuable for all fourth-year math students, regardless of their future academic or career paths. By emphasizing coherence across various mathematical strands, the course promotes a deeper understanding of mathematical concepts and cultivates advanced problem-solving skills applicable to real-world scenarios.

**MAT  
330****CALCULUS****Graduation Requirement:  
MATH**

Prerequisite	ABOR	Fee Semester	Grades
MAT310 or 320	LEVEL 4	NONE	12
Semester(s)	Course Credit Semester	Weighted	
2	0.5	NO	

This course provides a comprehensive exploration of fundamental concepts, beginning with a review of functions and analytical geometry. Students will delve into the properties of limits, basic derivatives and their applications, as well as basic integration techniques and the use of definite integrals. Throughout the course, graphing calculators are utilized to enhance understanding and solve complex problems, preparing students for advanced mathematical analysis and real-world applications.



**ADVANCED  
PLACEMENT**  
MIGHT BE RIGHT FOR YOU

Courses range from physics to history to psychology and many others in between.

YUHSD offers a range of Advanced Placement courses to help build skills & confidence, earn college credit while in high school, stand out during the college admission process, & much more.

Talk to your counselor & find out what AP courses are available on your campus to see if it's the right path for you!

**MAT  
520****AP PRE-CALCULUS****Graduation Requirement:**  
MATH

Prerequisite		ABOR
MAT310		LEVEL 4
Fee Semester		Grades
\$20.00		ALL
Semester(s)	Course Credit Semester	Weighted
2	0.5	YES

This college-level course is designed to prepare students for advanced mathematics by exploring a wide range of function types and their applications. The curriculum covers polynomial, rational, exponential, logarithmic, trigonometric, polar, parametric, vector-valued, and matrix functions. Students will develop strong mathematical practices, including procedural and symbolic fluency, multiple representations, and communication and reasoning skills. Through the lenses of modeling and covariation, students will engage with each function type using graphical, numerical, analytical, and verbal representations. This comprehensive course provides a solid foundation for calculus and other advanced mathematics courses, emphasizing the practical applications of precalculus concepts in real-world scenarios.

**MAT  
500****AP CALCULUS AB****Graduation Requirement**  
MATH

Prerequisite		ABOR
MAT310 or MAT320		LEVEL 4
Fee Semester		Grades
\$20.00		ALL
Semester(s)	Course Credit Semester	Weighted
2	0.5	YES

This rigorous, college-level course, introduces students to fundamental calculus concepts. The curriculum covers essential topics including limits, differentiation techniques, applications of derivatives, the Fundamental Theorem of Calculus, integration techniques, and their applications. Students will develop strong problem-solving skills and learn to apply calculus principles to real-world scenarios. Utilizing graphing calculators, students will visualize complex functions and perform advanced calculations. This course prepares students for the AP Calculus AB exam, which can potentially earn college credit, and provides a solid foundation for further studies in mathematics, science, and engineering.

**MAT  
501****AP CALCULUS BC****Graduation Requirement**  
MATH

Prerequisite		ABOR
MAT310 or MAT320		LEVEL 4
Fee Semester		Grades
\$20.00		ALL
Semester(s)	Course Credit Semester	Weighted
2	0.5	YES

AP Calculus BC is an advanced course equivalent to first and second semester college calculus, building upon the foundation of AP Calculus AB. This comprehensive course emphasizes a multi-representational approach, exploring calculus concepts through graphical, numerical, analytical, and verbal methods. Students will delve into advanced topics such as limits, derivatives, integration techniques, differential equations, series and sequences, and calculus applications in vector, polar, and parametric contexts. The curriculum is designed to deepen students' understanding of calculus principles while developing their problem-solving skills across various mathematical representations. This rigorous course prepares students for the AP Calculus BC exam and provides a strong foundation for future studies in mathematics, science, and engineering.

**MAT  
515****AP STATISTICS****Graduation Requirement****MATH**

Prerequisite		ABOR
MAT305		LEVEL 4
Fee Semester		Grades
AWC		ALL
Semester(s)	Course Credit Semester	Weighted
2	0.5	YES

This AP Statistics course equips students with essential tools for collecting, analyzing, and interpreting data. The curriculum is structured around four key themes: Exploring Data, Sampling and Experimentation, Anticipating Patterns, and Statistical Inference. Students will engage with topics including exploratory data analysis, linear regression, sampling methods, experimental design, probability, and various statistical inference techniques. Through hands-on experience with real-world data and statistical software, students will develop critical thinking skills and prepare for the AP Statistics exam. This course provides a solid foundation for future studies in statistics, data science, and related fields.

**PSE  
210****COLLEGE ALGEBRA W/  
REVIEW (AWC MAT150)****Graduation Requirement****MATH**

Prerequisite		ABOR
MAT201		LEVEL 4
Fee Semester		Grades
AWC		ALL
Semester(s)	Course Credit Semester	Weighted
1	1.0	NO

This course builds upon foundational algebraic concepts, focusing on the study of various functions including linear, quadratic, absolute value, rational, radical, exponential, and logarithmic functions. Students will develop advanced skills in solving equations and inequalities, graphing, factoring polynomials, and working with complex numbers. The curriculum emphasizes practical applications, incorporating real-world scenarios to enhance understanding of quadratic, exponential, and logarithmic functions. By exploring function operations, transformations, and inverses, students will strengthen their algebraic reasoning and problem-solving abilities, preparing them for advanced mathematical studies and real-world applications.

**PSE  
217****PLANE TRIGONOMETRY  
(AWC MAT183)****Graduation Requirement:****MATH**

Prerequisite		ABOR
PSE210		LEVEL 4
Fee Semester		Grades
AWC		NONE
Semester(s)	Course Credit Semester	Weighted
1	0.5	NO

This course provides a comprehensive study of trigonometric concepts and their applications. Students will explore trigonometric functions, equations, and identities, as well as their inverse functions. The curriculum includes an in-depth examination of both right and oblique triangles, focusing on problem-solving techniques and practical applications. This course builds a strong foundation in trigonometry, preparing students for advanced mathematics and related fields.

**SC  
200****PRE-CALCULUS  
(AWC MAT187)****Graduation Requirement:  
MATH**

Prerequisite		ABOR
NONE		LEVEL 4
Fee Semester		Grades
AWC		11,12
Semester(s)	Course Credit Semester	Weighted
1	1.0	YES

Development of algebra with a concentration on functions and a study of exponentials, logarithms, sequences, and series. It also includes a study of trigonometric functions and identities.

**SC  
211****COLLEGE CALCULUS II  
(AWC MAT230)****Graduation Requirement  
MATH**

Prerequisite		ABOR
AWC MAT220		LEVEL 4
Fee Semester		Grades
AWC		ALL
Semester(s)	Course Credit Semester	Weighted
1	1.0	YES

This advanced calculus course explores the applications of integrals and various integration techniques, extending to parametric and polar forms. Students will study the convergence of series, including Taylor and Maclaurin series, developing a deep understanding of integral calculus, differential equations, and series. The curriculum aims to cultivate a high level of proficiency in these advanced mathematical concepts, preparing students for further studies in mathematics and related fields.

**SC  
212****COLLEGE CALCULUS III  
(AWC MAT241)****Graduation Requirement  
MATH**

Prerequisite		ABOR
SC211		LEVEL 4
Fee Semester		Grades
AWC		ALL
Semester(s)	Course Credit Semester	Weighted
1	0.5	YES

This multivariable calculus course explores advanced mathematical concepts, including parametric curves, partial differentiation, and multiple integration, culminating in an introduction to vector calculus. Students will develop a high level of proficiency in differential and integral calculus involving multiple variables, while also being exposed to logical and abstract thought processes. The curriculum aims to enhance students' mathematical reasoning and problem-solving skills, preparing them for advanced studies in mathematics, physics, and engineering.

**MAT  
900X****FOUNDATIONS OF MATH****Graduation Requirement:  
MATH**

Prerequisite		ABOR
Based on IEP Recommendations		NONE
Fee Semester		Grades
NONE		ALL
Semester(s)	Course Credit Semester	Weighted
2	0.5	NO

This course is aligned with the Arizona Standards in Math, covering essential mathematical concepts and skills. Students will explore number sense and operations, data analysis, probability, discrete mathematics, patterns, basic algebra, functions, geometry, measurement, structure, and logic. Through practical applications and problem-solving activities, participants will develop a strong foundation in mathematics. This course may be repeated for credit to reinforce understanding and skills across various mathematical domains.



# SCIENCE

# Science

**The *important* thing  
is not to stop questioning.  
*Curiosity* has its own  
reason for existing.**

**— ALBERT EINSTEIN**

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# Science Courses

## GRADUATION REQUIREMENT: 3 Credits

The Science courses presented in this section offer students a rigorous and engaging study of scientific principles through inquiry-based methodologies and hands-on laboratory experiences. These courses are designed to fulfill the three-credit laboratory science requirement for high school graduation and meet the admission criteria for Arizona universities.

Certain courses may not be available on all campuses.  
Dual credit courses are subject to community college tuition.

COURSE NAME	Weight	Credit	Graduation Requirement	NCAA	Dual Credit	Course Fees
IGCSE Biology		0.5	Science	Y		
IGCSE Chemistry		0.5	Science	Y		
Intro to Animal Kingdom		0.5	Science	Y		
Biology 900		0.5	Science	N		
Animal Kingdom 900		0.5	Science	N		
AS Environmental Science		0.5	Science	Y		
Anatomy and Physiology		0.5	Science	Y		
IGCSE Physics		0.5	Science	Y		
Earth Science - Astronomy		0.5	Science	Y		
Science Research		0.5	Science	Y		
Introduction to Genetics		0.5	Science	Y		
Forensic Science		0.5	Science	Y		
Engineering Science & Technology Lab		0.5	Science	Y		
Intro to Human Anatomy & Physiology		0.5	Science	Y	Y	AWC
Biology Concepts		0.5	Science	Y	Y	AWC
AP Environmental Science	Y	0.5	Science	Y		\$20.00
AP Biology	Y	0.5	Science	Y		\$20.00
AP Chemistry	Y	0.5	Science	Y		\$20.00
AP Physics 1: Algebra-Based	Y	0.5	Science	Y		\$20.00
Fundamentals of Science		0.5	Science	N		

**SCI  
100****IGCSE BIOLOGY****Graduation Requirement  
SCIENCE**

Prerequisite		ABOR
NONE		LBIO
Fee Semester		Grades
NONE		9
Semester(s)	Course Credit Semester	Weighted
2	0.5	NO

This course offers hands-on experiences in biological sciences, focusing on key concepts, terminology, and safety practices. Students will explore biological phenomena through laboratory work and real-life applications, developing skills in data analysis, problem-solving, and effective communication. Emphasis is placed on planning investigations, interpreting results, and understanding the social, economic, and environmental implications of scientific advancements.

**SCI  
200****IGCSE CHEMISTRY****Graduation Requirement  
SCIENCE**

Prerequisite		ABOR
NONE		LCHM
Fee Semester		Grades
NONE		10
Semester(s)	Course Credit Semester	Weighted
2	0.5	NO

This course combines theory with practical applications, covering fundamental concepts from atomic structure to organic chemistry. Through laboratory work and real-world examples, students will develop skills in scientific inquiry, data analysis, and problem-solving. The course emphasizes safety, proper use of equipment, and the societal implications of chemical advancements. Key topics include stoichiometry, chemical reactions, periodicity, and environmental chemistry.

**SCI  
210****INTRODUCTION TO  
ANIMAL KINGDOM****Graduation Requirement  
SCIENCE**

Prerequisite		ABOR
NONE		LINT/LADV
Fee Semester		Grades
NONE		ALL
Semester(s)	Course Credit Semester	Weighted
2	0.5	NO

This course explores the animal kingdom, covering taxonomy, classification, and the study of various phyla. Students will investigate life requirements, habitats, and anatomical structures of both invertebrates and vertebrates. The course utilizes computer technology for virtual dissections and may include some preserved specimens for hands-on investigation. It fulfills lab science credit requirements for graduation.

**SCI  
901****BIOLOGY 900****Graduation Requirement:**  
SCIENCE

<b>Prerequisite</b>		<b>ABOR</b>
Based on IEP recommendations		NO
<b>Fee Semester</b>		<b>Grades</b>
NONE		ALL
<b>Semester(s)</b>	<b>Course Credit Semester</b>	<b>Weighted</b>
2	0.5	NO

This science course is designed specifically for students with diverse learning needs, aligning with Arizona State Standards. The course provides an engaging and accessible introduction to the fundamental concepts of biology tailored for students in special education. Through hands-on activities, interactive lessons, and sensory-based learning approaches, students will explore living organisms, ecosystems, cell structures, genetics, and other core biological principles.

**ALWAYS STAY CURIOUS**

*Dive deeper into topics that excite you, whether it's space, biology, or environmental science, to make learning more enjoyable.*

**SCI  
902****ANIMAL KINGDOM 900****Graduation Requirement**  
SCIENCE

<b>Prerequisite</b>		<b>ABOR</b>
Based on IEP recommendations		NO
<b>Fee Semester</b>		<b>Grades</b>
NONE		ALL
<b>Semester(s)</b>	<b>Course Credit Semester</b>	<b>Weighted</b>
2	0.5	NO

This science course is designed specifically for students with diverse learning needs, aligning with Arizona State Standards. The course provides an engaging and accessible introduction to the study of animals tailored for students in special education. Through hands-on activities, interactive lessons, and sensory-based learning approaches, students will explore animal classification, anatomy, behavior, habitats, and adaptations, developing an understanding of the diversity and characteristics of the animal kingdom.

**SCI  
320****AS ENVIRONMENTAL  
SCIENCE****Graduation Requirement**  
SCIENCE

<b>Prerequisite</b>		<b>ABOR</b>
NONE		LINT/LADV
<b>Fee Semester</b>		<b>Grades</b>
NONE		10,11,12
<b>Semester(s)</b>	<b>Course Credit Semester</b>	<b>Weighted</b>
2	0.5	NO

This course blends natural and social sciences to explore environmental resources, processes, and their interconnections. Students will study key environmental laws, sustainability principles, and scientific concepts, with a focus on the local desert ecosystem. Through hands-on laboratory work and research activities, students will gain practical experience in environmental monitoring techniques for water, soil, air, and populations, using real-world case studies to apply their knowledge.

**SCI  
330****ANATOMY & PHYSIOLOGY****Graduation Requirement:**  
SCIENCE

Prerequisite		ABOR
SCI100		LBIO/LADV
Fee Semester		Grades
NONE		11,12
Semester(s)	Course Credit Semester	Weighted
2	0.5	NO

This course provides a comprehensive study of human anatomy and physiology, focusing on various body systems. Students will apply the scientific method through experiments and hands-on activities, including dissections. The course is ideal for those interested in medical, health-related fields, or coaching professions.

**SCI  
350****IGCSE PHYSICS****Graduation Requirement**  
SCIENCE

Prerequisite		ABOR
NONE		LPHY
Fee Semester		Grades
NONE		11,12
Semester(s)	Course Credit Semester	Weighted
2	0.5	NO

This course combines theoretical knowledge with practical applications through laboratory work and real-life scenarios. Students will explore general physics, thermal physics, waves, electricity and magnetism, and atomic physics. The course emphasizes scientific inquiry, data analysis, and problem-solving skills while developing proficiency in using scientific instruments and understanding safety protocols. Students will learn to communicate scientific information effectively, interpret experimental data, and evaluate the societal implications of scientific advancements.

**SCI  
105****EARTH SCIENCE -  
ASTRONOMY****Graduation Requirement**  
SCIENCE

Prerequisite		ABOR
NONE		LINT
Fee Semester		Grades
NONE		11,12
Semester(s)	Course Credit Semester	Weighted
2	0.5	NO

This course introduces fundamental concepts of the universe, combining observational techniques with theoretical knowledge. Students will explore celestial bodies, solar system mechanics, and key topics such as the history of astronomy, light and gravity, and phenomena like black holes. Hands-on activities, including stargazing and data analysis, enhance learning through lectures, laboratory work, and projects, fostering a deeper understanding of the cosmos.

**SCI  
110****SCIENCE RESEARCH****Graduation Requirement  
SCIENCE**

Prerequisite		ABOR
NONE		LINT
Fee Semester		Grades
NONE		10,11,12
Semester(s)	Course Credit Semester	Weighted
2	0.5	NO

This course, designed for students with a strong science background, explores genetics and evolution in depth. Prerequisites include two years of science, including Biology, with a minimum B grade. Topics cover Mendelian genetics, DNA, human heredity, genetic technology, evolutionary theory, primate evolution, and biodiversity. The course provides an advanced understanding of life's fundamental processes and diversity.

**SCI  
305****INTRODUCTION TO  
GENETICS****Graduation Requirement  
SCIENCE**

Prerequisite		ABOR
2 Prior years of Science		LBIO/LADV
Fee Semester		Grades
NONE		11,12
Semester(s)	Course Credit Semester	Weighted
2	0.5	NO

This course offers an in-depth exploration of genetics and evolution, designed for students who have successfully completed two years of science, including Biology, with a minimum grade of B. The genetics component covers Mendelian inheritance, DNA structure and function, human heredity patterns, genomics, and genetic technology. The evolution segment examines the history of life, evolutionary theory, primate evolution, and biodiversity classification. This advanced course provides a comprehensive foundation in these fundamental biological concepts.

**SCI  
310****FORENSIC SCIENCE****Graduation Requirement:  
SCIENCE**

Prerequisite		ABOR
NONE		LINT
Fee Semester		Grades
NONE		11, 12
Semester(s)	Course Credit Semester	Weighted
2	0.5	NO

This course explores the application of science in law enforcement and criminal investigations. Students will study various forensic techniques including crime scene analysis, fingerprinting, DNA analysis, and forensic anthropology. Through laboratory-based learning, the course prepares students for careers in forensic science, law enforcement, and related fields while aligning with Arizona's academic standards in science, mathematics, reading, and writing.

**SCI  
360****ENGINEERING SCIENCE &  
TECHNOLOGY LAB****Graduation Requirement:**  
SCIENCE

Prerequisite		ABOR
NONE		LPHY/LADV
Fee Semester		Grades
NONE		11, 12
Semester(s)	Course Credit Semester	Weighted
2	0.5	NO

This course develops engineering, science, and technology skills applicable to various disciplines. Students will design and conduct experiments in areas such as gravity, mass, wave propagation, and aerodynamics using wind tunnels. The course emphasizes data collection through PC-based instrumentation and video equipment, followed by computer-aided analysis and graphical representation of results.

**DCBIO  
160****INTRO TO HUMAN  
ANATOMY & PHYSIOLOGY****Graduation Requirement**  
SCIENCE

Prerequisite		ABOR
NONE		YES
Fee Semester		Grades
AWC		9
Semester(s)	Course Credit Semester	Weighted
1	0.5	NO

This course introduces the structure and function of the human body, providing a one-semester overview of anatomy and physiology. It is designed for students preparing for allied health fields such as medical transcription and paramedic training.

**DCBIO  
100****BIOLOGY CONCEPTS****Graduation Requirement**  
SCIENCE

Prerequisite		ABOR
NONE		YES
Fee Semester		Grades
AWC		9
Semester(s)	Course Credit Semester	Weighted
1	0.5	NO

This course provides an introduction to the fundamental principles and concepts of biology. Topics include the methods of scientific inquiry and the study of matter and energy in living systems. Emphasis is placed on building a foundation for understanding biological processes and their relevance to the natural world.

**SCI  
520****AP ENVIRONMENTAL  
SCIENCE****Graduation Requirement**  
SCIENCE

Prerequisite		ABOR
NONE		LINT/LADV
Fee Semester		Grades
\$20.00		ALL
Semester(s)	Course Credit Semester	Weighted
2	0.5	YES

This course explores the interrelationships within the natural world and examines human impacts on the environment. Students will learn to identify and analyze environmental issues, assess associated risks, and evaluate potential solutions. The interdisciplinary curriculum prepares students for the AP Environmental Science exam in the spring.

**SCI  
500****AP BIOLOGY****Graduation Requirement  
SCIENCE**

Prerequisite		ABOR
NONE		LBIO/LADV
Fee Semester		Grades
\$20.00		ALL
Semester(s)	Course Credit Semester	Weighted
2	0.5	YES

This course covers major biological concepts equivalent to a two-semester introductory biology course for science majors. Topics include molecules and cells, heredity and evolution, and organisms and populations. The course emphasizes key themes such as evolution, energy transfer, and the relationship between structure and function. Students will engage in advanced laboratory work and are expected to take the AP Biology exam in the spring.

**SCI  
510****AP CHEMISTRY****Graduation Requirement  
SCIENCE**

Prerequisite		ABOR
NONE		LCHM/LADV
Fee Semester		Grades
\$20.00		ALL
Semester(s)	Course Credit Semester	Weighted
2	0.5	YES

This course is equivalent to a first-year college general chemistry course. It covers structure and states of matter, reactions, and descriptive chemistry, with emphasis on problem-solving and laboratory work. Students will develop critical analysis skills and proficiency in handling data. The course prepares students for the AP Chemistry exam, which they are expected to take in the spring.

**SCI  
532****AP PHYSICS 1:  
ALGEBRA-BASED****Graduation Requirement  
SCIENCE**

Prerequisite		ABOR
NONE		LPHY/LADV
Fee Semester		Grades
\$20.00		ALL
Semester(s)	Course Credit Semester	Weighted
2	0.5	YES

This algebra-based physics course uses inquiry-based instruction and experimentation to develop students' conceptual understanding of physics principles. Following College Board's curricular requirements, the course prepares students for the AP Physics 1: Algebra-Based exam in the spring. For more information, visit the College Board website at [collegeboard.org](http://collegeboard.org)

**SCI  
900****FUNDAMENTALS OF  
SCIENCE****Graduation Requirement:  
SCIENCE**

<b>Prerequisite</b>		<b>ABOR</b>
Based on IEP Recommendations		NONE
<b>Fee Semester</b>		<b>Grades</b>
NONE		10,11,12
<b>Semester(s)</b>	<b>Course Credit Semester</b>	<b>Weighted</b>
2	0.5	NO

This Science course is designed specifically for students with diverse learning needs, aligning with Arizona State Standards. The course provides an engaging and accessible introduction to the fundamental concepts of science tailored for students in special education. Through hands-on activities, interactive lessons, and sensory-based learning approaches, students will explore basic principles in biology, chemistry, physics, and Earth science.

**EXPLORE BEYOND THE CURRICULUM**

*Read articles, watch documentaries, and do experiments that go beyond what you learn in class.*