## **GEMS**

## American Academy Qatar

# Upper School Program of Studies

2021-2022



WELCOME TO GEMS AMERICAN ACADEMY QATAR





## 2021 - 2022 Program of Studies

GEMS American Academy - Qatar (GAAQ) provides an American college preparatory curriculum to an international community. The Upper School creates the right environment for a comprehensive academic program and unique learning opportunities to educate the entire child and instill GAAQ's five core values of tenacity, respect, innovation, purpose, and leadership.

GAAQ offers rigorous Advanced Placement courses for 9th, 10th, 11th and 12th grade students, as well as a course catalogue that boasts internship and community service opportunities, diverse electives in the arts and sciences, and independent study experiences.

The GAAQ school day operates from 7:30 a.m - 2:15 p.m., excluding Thursdays, when classes end at 1:30 p.m.

Any course in this document is subject to change based on teacher availability and student interest.

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## Middle School Course Catalogue

#### English Language Arts

#### Grade 6 English:

This course emphasizes the fundamental language skills of reading, writing, speaking, listening, thinking, viewing and presenting. The development of critical reading and writing skills is a major emphasis of the course with an emphasis on vocabulary and composition skills. The course includes studies of various literary works: short stories, poetry, novels, dramas, and non-fictional texts that focus on the journey of personal discovery. Titles include *Hatchet*, *The Boy Who Harnessed the Wind*, and *Tuck Everlasting*.

#### Grade 7 English:

This course emphasizes the fundamental language skills of reading, writing, speaking, listening, thinking, viewing and presenting. The development of critical reading and writing skills is a major emphasis of the course with an emphasis on vocabulary and composition skills. The course includes studies of various literary works: short stories, poetry, novels, dramas, and non-fictional texts that focus on society's impact on personal autonomy. Titles include:, The *Giver*, and *Chasing Lincoln's Killer*.

#### Grade 8 English:

This course emphasizes the fundamental language skills of reading, writing, speaking, listening, thinking, viewing and presenting. The development of critical reading and writing skills is a major emphasis of the course with an emphasis on vocabulary and composition skills. The course includes studies of various literary works: short stories, poetry, novels, dramas, and non-fictional texts that focus on morals, values, and principles. Titles include *Outsiders*, .

#### **Mathematics**

#### **Grade 6 Mathematics:**

In Grade 6 Math instructional time will focus on six critical areas: (1) connecting ratio and rate to whole number multiplication and division and using concepts of ratio and rate to solve problems; (2) completing understanding of division of fractions and extending the notion of number to the system of rational numbers, which includes negative numbers; (3) writing, interpreting, and using expressions and equations; (4) developing understanding of statistical thinking; (5) developing understanding of and applying proportional relationships; and (6) developing understanding of operations with rational numbers and working with expressions and linear equations.

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#### **Grade 7 Mathematics:**

In grade 7, instructional time is focused on four critical areas: (1) developing understanding of and applying proportional relationships; (2) developing understanding of operations with rational numbers and working with expressions and linear equations; (3) solving problems involving scale drawings and informal geometric constructions, and working with two- and three- dimensional shapes to solve problems involving area, surface area, and volume; and (4) drawing inferences about populations based on samples.

#### **Grade 8 Mathematics:**

In grade 8, instructional time is focused on three critical areas: (1) formulating and reasoning about expressions and equations, including modeling an association in bivariate data with a linear equation, and solving linear equations and systems of linear equations; (2) grasping the concept of a function and using functions to describe quantitative relationships; (3) analyzing two- and three-dimensional space and figures using distance, angle, similarity, and congruence, and understanding and applying the Pythagorean theorem.

#### Grade 8 Mathematics - Algebra I (High School Credit):

The main purpose of Algebra I is to develop students' fluency with linear, quadratic, and exponential functions. The critical areas of instructions involve deepening and extending students' understanding of linear, and exponential relationships by comparing and contrasting those relationships and by applying linear models to data that exhibit a linear trend. In addition, students engage in methods of analyzing, solving, and using exponential and quadratic functions. Some of the overarching elements of the Algebra 1 course include the notion of *function*, solving equations, rates of change and growth patterns, graphs as representations of functions, and modeling. *Prerequisite: Teacher Recommendation and sufficient MAP Math Scores* 

#### Science

#### **Grade 6 Science:**

The integration of Earth and space, life, and physical sciences with technology/engineering gives grade 6 students relevant and engaging opportunities with natural phenomena and design problems that highlight the relationship of structure and function in the world around them. Students relate structure and function through analyzing the macro- and microscopic world, such as Earth features and processes, the role of cells and anatomy in supporting living organisms, and properties of materials and waves. Students use models and provide evidence to make claims and explanations about structure-function relationships in different STE domains.

#### **Grade 7 Science:**

Students in grade 7 focus on systems and cycles using their understanding of structures and functions, connections and relationships in systems, and flow of matter and energy developed in

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earlier grades. A focus on systems requires students to apply concepts and skills across disciplines, since most natural and designed systems and cycles are complex and interactive. They gain experience with plate tectonics, interactions of humans and Earth processes, organism systems to support and propagate life, ecosystem dynamics, motion and energy systems, and key technological systems used by society. Through grade 7, students begin a process of moving from a more concrete to an abstract perspective, since many of the systems and cycles studied are not directly observable or experienced. This also creates a foundation for exploring cause and effect relationships in more depth in grade 8.

#### **Grade 8 Science:**

Grade 8 students use more robust abstract thinking skills to explain causes of complex phenomena and systems. Many causes are not immediately or physically visible to students. An understanding of cause and effect of key natural phenomena and designed processes allows students to explain patterns and make predictions about future events. In grade 8 these include, for example, causes of seasons and tides; causes of plate tectonics and weather or climate; the role of genetics in reproduction, heredity, and artificial selection; and how atoms and molecules interact to explain the substances that make up the world and how materials change. Being able to analyze phenomena for evidence of causes and processes that often cannot be seen, and being able to conceptualize and describe those, is a significant outcome for grade 8 students.

#### Social Studies

#### **Grade 6 Social Studies:**

In 6th grade social studies, students will be introduced to the various disciplines that make up the Social Studies Program at GAAQ: history, geography, civics, and economics. It is important that students have a good foundation of these domains, as they are integral to understanding the content of more advanced courses in the program. The course is not focused on any particular region or time period, and students will explore these concepts through a variety of topics and activities and demonstrate their knowledge in creative ways. In addition to the content knowledge learned, students will hone their reading and writing skills, which are transferable skills they can apply to their efforts in other classes as well.

#### **Grade 7 Social Studies:**

In 7th grade social studies, students will study the people and civilizations of the ancient world. Students will study early human societies during the Stone Ages, and learn how agriculture played a key part in the development of societies. They will explore ancient civilizations in Mesopotamia, Egypt, India, China, and finish with Greece and Rome at the end of the school year. Students' knowledge of the ancient world will serve as the foundation for their studies of medieval societies in 8th grade social studies.

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#### **Grade 8 Social Studies:**

In 8th grade social studies, students will study early American history. They will begin by examining the people and cultures of the Americas before the arrival of Europeans in the early modern period. Students will then learn about the preeminent attempts at settlement in the Americas by European nations (Spain, Portugal, England, France, and the Netherlands), and evaluate the extent to which those efforts were successes or failures. They will then study colonial America and the revolutionary war, before examining the U.S. constitution and the structure of American government. Students will learn about westward expansion in the U.S., weighing the benefits of expansion against the costs. After this, they will finish the year by exploring the United states leading up to the civil war, and how the war played out.

#### **Electives**

#### **Arabic (Required for all Arab Nationalities):**

This course aims to foster the students' native language and culture through the development of communicative skills, with heavy emphasis on interpersonal speaking. Speaking, listening, reading, and writing are all addressed in this course. Grammar is introduced as an aid to understand language structure. By the end of this course, students should be able to carry on conversations, read Arabic texts, and write compositions about themselves and aspects of their life.

#### Art (Optional):

In GAAQ we teach art through TAB-Choice. Teaching for Artistic Behavior (TAB) is a teaching philosophy for providing learners with personally meaningful, authentic art education. By asking (and answering) the question "what do artists do?" students explore art and the art world through the eyes, hands, hearts and minds of artists. In our studio-classroom, students are introduced to the tools, materials, techniques and styles of artists, through brief, whole-group lessons. Later, lessons are targeted to the observed needs and interests of students and provide differentiated learning opportunities for our diverse student body. Lessons are kept short to maximize studio-time and allow students to delve deeply into their artwork. Time is set aside for evaluation and assessment through a variety of formats including; group sharing times, written artist statements, self and peer evaluation, and the selection and preparation of artwork for display.

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#### **Applied Music (Optional):**

In middle school applied music, students will learn music theory according to their pre-existing musical knowledge. A variety of musical styles and genres will be explored, with emphasis on their history, instrumentation, and impact on world music.

#### **Band (Optional):**

Middle School Band is the entry level class to the High School Instrumental Music Program. Our program includes woodwinds, brass, and percussion. The course objectives include: connecting students with an instrument that best fits their interest and ability, establishing a strong tone, reading notes and rhythms, learning preparation, team building skills, and performance in a concert ensemble setting. Students will also develop listening skills that support growth beyond a music setting.

#### **Drama/Theatre (Optional):**

Students learn about the basic components that make up a dramatic production, such as acting, stagecraft, playwriting, directing, makeup and costume design. Readings of plays from various genres and of the history of theatre are included in the course.

#### **Information Technology (Optional):**

This course is designed to provide students with a working knowledge of computer concepts and essential skills necessary for work and communication in today's society. Students will learn safety, security, and ethical issues in computing and social networking.

#### Islamic Studies (Required for all Muslim Students):

This course is designed to build upon students' knowledge and understanding of Islam, its principles, practices and rites, the Prophets of Allah and their messages, and the practical application of such material. The Holy Quran and Hadith (sayings of the prophets and apostles) are an integral part of learning.

#### Library and Research Skills (Optional):

Students in the library have the opportunity to explore reading that is of interest to them. Students will discover and explore all genres of literature while gaining knowledge of where to find information both in physical format and electronically. Activities include completing a reading program, creating graphic novels, writing stories, aiding classroom assignments and understanding the Dewey Decimal system of library management. By doing so students will learn about Library management, Informational Knowledge and its access, and also how to find the appropriate information for a research paper.

#### Spanish (Optional):

In middle school, language courses focus on four key areas: listening, speaking, writing and

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speaking. The course consists of new vocabulary themes and grammar concepts, reading and listening. By the end of the middle school language program students will be able to participate in basic conversations in the language of study and write simple sentences.

#### French (Optional):

In middle school, language courses focus on four key areas: listening, speaking, writing and speaking. The course consists of new vocabulary themes and grammar concepts, reading and listening. By the end of the middle school language program students will be able to participate in basic conversations in the language of study and write simple sentences.

#### **Physical Education (Required):**

The P.E. program in middle school is designed to promote components of physical fitness. Students will have the opportunity to participate in a variety of sports including: soccer, basketball, volleyball and hockey. Students will also learn sportsmanship cooperation through team building exercises.

#### **Qatar History (Required):**

GAAQ applies the curriculum of the Supreme Education Council (SEC) relating to the history of the State of Qatar. GAAQ seeks to nurture a generation that is intellectually open and receptive to others and empathizes with them, but it is keen to strengthen the students' respect and adherence to their customs and traditions in the belief that attachment to the land and the family gives them self-confidence, and steadfastness. Teaching Qatar History is an opportunity for the (SEC) to shed light on a history of achievement, giving students of the new generation the lesson and motivation to continue their careers and align themselves with Qatar to rank among countries.





## **High School Program of Studies**

#### **Graduation Requirements**

Credits are units earned by students that measure their progress at the end of a course. Core courses (English, Math, Science and Social Studies) are weighted at 1.0 credit per course. Weighting for elective courses vary and may count for 0.5-1.0 credit per course. Students enroll in courses according to graduation requirements, abilities and interests, and previous educational experience. Students earn credit for the successful completion of courses. Twenty-four (24) credits are required for graduation.

It would be in the student's best interest to research universities to determine the number of credits needed for admission to that university. If assistance is required to obtain program requirements at universities, students may ask for assistance from their guidance counselor, principal, assistant principal or Dean of Academics. Students are required to complete the following minimum requirements to achieve a High School Diploma at GAAQ:

Course	Requirements
English	4 Credits
Math	4 Credits
Social Studies	4 Credits
Science	4 Credits
Global Language*	2 Credits
Physical Education/Health	2 Credits
Fine Arts	2 Credits
Student choice	2 Credits

<sup>\*</sup> Two consecutive years in the same Global language

- All Arabic nationality passport holders are required to take Arabic each year.
- All students registered as Muslim must take Islamic Education each year.
- All students will take Qatar History in the 9th grade as an additional elective.

#### **The Advanced Placement Program**

The Advanced Placement Program (AP) gives students the opportunity to complete college level work while in high school. Admission into AP courses will depend on student achievement as well as teacher recommendation. Listing AP courses on a student's transcript, earning a GPA boost and receiving potential university credit and contingent upon taking the AP examination for any course in which the student is enrolled.

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## **High School Course Catalogue**

#### English Language Arts

#### English Language Arts I:

This course continues to emphasize composition skills and literary analysis through a focus on community's impact on the individual. Titles include *To Kill a Mockingbird*, *Romeo and Juliet*, *I am Malala*, and *Animal Farm*. Application of the fundamental language skills of reading, writing, speaking, listening, thinking, viewing and presenting equip students with the tools to read analytically and write critically throughout this course.

Prerequisite: Grade 8 English

Credit: 1.0

#### English Language Arts II:

This course continues to emphasize composition skills and literary analysis through a focus on identity development. Titles include *The Great Gatsby*, *Romeo and Juliet*, *Death of a Salesman*, and *The World as I See It*. Application of the fundamental language skills of reading, writing, speaking, listening, thinking, viewing and presenting equip students with the tools to read analytically and write critically throughout this course.

Prerequisite: English Language Arts I

Credit: 1.0

#### **English Language Arts III:**

This course continues to emphasize composition skills and literary analysis through a focus on the individual's impact on society. Titles include *The Autobiography of Malcolm X*, *Fahrenheit 451*, *Hamlet*, and *Huckleberry Finn*. Application of the fundamental language skills of reading, writing, speaking, listening, thinking, viewing and presenting equip students with the tools to read analytically and write critically throughout this course.

Prerequisite: English Language Arts II

Credit: 1.0

#### **English Language Arts IV:**

This course incorporates college preparatory composition skills and literary analysis through a focus on the power of transformation. Titles include *Othello*, *Frankenstein*, *Great Expectations*, and *Cry the Beloved Country*. Application of the fundamental language skills of reading, writing, speaking, listening, thinking, viewing and presenting equip students with the tools to read analytically and write critically throughout this course. In addition, collaborative discussions promote analysis of both literary and informational works, strengthening critical thinking skills.

Prerequisite: English Language Arts III

Credit: 1.0

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#### **AP English Language and Composition:**

AP English Language and Composition is an introductory college-level composition course. Students cultivate their understanding of writing and rhetorical arguments through reading, analyzing, and writing texts as they explore topics like rhetorical situations, claims and evidence, reasoning and organization, and style.

Prerequisite: English Language Arts II

Credit: 1.0

#### Mathematics

#### Algebra I:

The main purpose of Algebra I is to develop students' fluency with linear, quadratic, and exponential functions. The critical areas of instructions involve deepening and extending students' understanding of linear, and exponential relationships by comparing and contrasting those relationships and by applying linear models to data that exhibit a linear trend. In addition, students engage in methods of analyzing, solving, and using exponential and quadratic functions. Some of the overarching elements of the Algebra 1 course include the notion of *function*, solving equations, rates of change and growth patterns, graphs as representations of functions, and modeling.

Prerequisite: Grade 8 Mathematics

Credit: 1.0

#### Algebra II:

Building on their work with linear, quadratic, and exponential functions, students extend their repertoire of functions to include logarithmic, polynomial, rational, and radical functions in the Algebra II course. This course includes standards from the conceptual categories of Number and Quantity, Algebra, Functions, Geometry, and Statistics and Probability. Students work closely with the expressions that define functions, competently manipulate algebraic expressions, and continue to expand and hone their abilities to model situations and to solve equations, including solving quadratic equations over the set of complex numbers and solving exponential equations using the properties of logarithms.

Prerequisite: Geometry and Algebra 1

Credit: 1.0

#### **AP Calculus AB:**

AP Calculus AB is an introductory college-level calculus course. Students cultivate their understanding of differential and integral calculus through engaging with real-world problems represented graphically, numerically, analytically, and verbally and using definitions and theorems to build arguments and justify conclusions as they explore concepts like change, limits, and the analysis of functions.

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Prerequisite: Pre-Calculus

Credit: 1.0

#### **AP Calculus BC:**

AP Calculus AB is an introductory college-level calculus course. Students explore the concepts, methods, and applications of differential and integral calculus, including topics such as parametric, polar, and vector functions, and series. You'll perform experiments and investigations and solve problems by applying your knowledge and skills.

Prerequisite: AP Calculus AB

Credit: 1.0

#### Calculus:

Building enduring mathematical understanding requires understanding the why and how of mathematics in addition to mastering the necessary procedures and skills. To foster this deeper level of learning, Calculus is designed to develop mathematical knowledge conceptually, guiding you to connect topics and representations throughout the course and to apply strategies and techniques to accurately solve diverse types of problems.

Prerequisite: Pre-Calculus

Credit: 1.0

#### **Geometry:**

The fundamental purpose of the Geometry course is to formalize and extend students' geometric experiences from the middle grades. This course includes standards from the conceptual categories of Geometry, and Statistics and Probability. In this Geometry Course, students explore more complex geometric situations and deepen their explanations of geometric relationships, presenting and hearing formal mathematical arguments.

Prerequisite: Algebra I

Credit: 1.0

#### **Pre-Calculus:**

Pre-calculus combines topics of trigonometry, geometry and algebra that are needed to prepare students for the study of calculus. This course strengthens students' understanding of problems and mathematical reasoning in solving problems. Facility with these topics is especially important for students who intend to study calculus, physics, other sciences, and engineering in college. The main topics in the Precalculus course are complex numbers, rational functions, inverse functions, vectors and matrices, and parametric and polar curves.

Prerequisite: Algebra II

Credit: 1.0

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#### Science

#### **AP Environmental Science:**

The AP Environmental Science course helps students cultivate their understanding of the interrelationships of the natural world through inquiry-based lab investigations and field work as they explore concepts like the four Big Ideas; energy transfer, interactions between earth systems, interactions between different species and the environment, and sustainability.

Prerequisite: 2.0 High School Science Credits

Credit: 1.0

#### **Environmental Science:**

The Environmental Science course is to provide students with the scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world, to identify and analyze environmental problems both natural and human-made, to evaluate the risks associated with these problems, and to examine alternative solutions for resolving and/or preventing them.

Prerequisite: 2.0 High School Science Credits

Credit: 1.0

#### AP Biology:

AP Biology is an introductory college-level biology course. Students cultivate their understanding of biology through inquiry-based investigations as they explore topics like evolution, energetics, information storage and transfer, and system interactions.

Prerequisites: Biology and Chemistry

Credit: 1.0

#### **Biology:**

Biology includes a study of living organisms and vital processes. Themes that will be covered in this course include scientific skills, ecology, biochemistry, cellular processes, genetics, evolution and classification of organisms. The course includes laboratory experiments designed to reinforce course content.

Prerequisite: Grade 8 Science or Integrated Science

Credit: 1.0

#### **AP Chemistry:**

The purpose of this AP Chemistry course is to provide a freshman-level college course to ensure that the student is prepared to succeed in college chemistry. This is accomplished by teaching all the topics detailed in the AP Chemistry Course and Exam Description. The course is organized around the four big ideas and is aligned with the six science practices. Laboratory experiments are conducted to complement the material being learned. Emphasis in this class is placed on

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application of chemical concepts with real-world applications. Each of the topics within the nine units are covered in depth, and the students will be assessed after the completion of each topic unit.

Prerequisite: Chemistry & Algebra II

Credit; 1.0

#### **Chemistry:**

The high school chemistry standards are built from middle school physical sciences standards. Middle school includes an important transition from macroscopic phenomena to molecular level models that are used to explain and predict energy transformations in phase changes and conservation of matter in chemical changes, including the use of a basic particle model to visualize and represent physical changes of matter. In high school, students consider how structure and composition at sub-atomic scales explain structure-property relationships in chemistry and influence energy transformations and dissipation of energy during chemical and physical changes.

Prerequisite: 1.0 High School Science Credits

Credit: 1.0

#### AP Physics 1:

AP Physics 1 is an algebra-based, introductory college-level physics course. Students cultivate their understanding of physics through classroom study, in-class activity, and hands-on, inquiry-based laboratory work as they explore concepts like systems, fields, force interactions, change, conservation, and waves.

Prerequisite: Physics and Algebra II

Credit: 1.0

#### Physics:

In this course, students will utilize scientific practices to discover knowledge and overarching concepts related to physical science. Students will recognize unifying themes that integrate the major topics of physical science including the physics of energy, motion, and waves. The curriculum integrates critical thinking and laboratory skills that stress the development of experimental design, measuring and recording, data analysis and interpretation, and using models.

Prerequisite: 2.0 High School Science Credits

Credit: 1.0

#### Social Studies

#### **AP European History:**

In AP European History, students investigate significant events, individuals, developments, and processes from approximately 1450 to the present. Students develop and use the same skills, practices, and methods employed by historians: analyzing primary and secondary sources; developing historical arguments; making historical connections; and utilizing reasoning about

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comparison, causation, and continuity and change over time. The course also provides seven themes that students explore throughout the course in order to make connections among historical developments in different times and places: interaction of Europe and the world, economic and commercial development, cultural and intellectual development, states and other institutions of power, social organization and development, national and European identity, and technological and scientific innovations.

Prerequisite: 2.0 High School Social Studies Credits

Credit: 1.0

#### **European History:**

In European History, students will learn about important historical developments between the Late Middle Ages and the present day. Some of these topics include the Black Death, the Renaissance, the Protestant Reformation, Discovery and Exploration, Colonization, the Scientific Revolution, the Enlightenment, the French Revolution, the Agricultural Revolution, the Concert of Europe, the Industrial Revolution, the Age of "Isms", Imperialism and New Imperialism, World War I, the Interwar Years, World War II, the Cold War, Decolonization, the Collapse of the Soviet Union, and the various challenges that present-day European society is faced with. While the course focuses primarily on Europe, the interactions between Europe and the rest of the world increased after the 15<sup>th</sup> century, and students will be able to tap into their prior knowledge of world history to make meaningful connections with the course content.

Prerequisite: 2.0 High School Social Studies Credits

Credit: 1.0

#### AP Human Geography:

The AP Human Geography course is equivalent to an introductory college-level course in human geography. The course introduces students to the systematic study of patterns and processes that have shaped human understanding, use, and alteration of Earth's surface. Students employ spatial concepts and landscape analysis to examine socio-economic organization and its environmental consequences. They also learn about the methods and tools geographers use in their research and applications.

Prerequisite: Grade 8 Social Studies

Credit: 1.0

#### Geography:

Geography is an interpretative subject that brings a variety of perspectives, both social and physical, to the study of people, places, and environments around the world. Knowing where physical, social, or processes occur helps students gain a spatial perspective on them. Historic and economic perspectives help students understand the relationship between people and their environments, as well as interactions that occur among groups of people. Studying geography, students receive practical guidance for decision making and problem solving in geographic planning, economic

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development, and environmental and resource management.

Prerequisite: Grade 8 Social Studies

Credit: 1.0

#### **Modern World History:**

Students will study the history of the modern world from around 1450 C.E. through the present. The course will cover revolutionary movements, social interactions, political ideologies, economic developments, interactions between Western and non-Western peoples, and more. Students will focus on critical events, people, and turning points during these centuries including, but not limited to, the Age of Discovery and Exploration, Colonization and Decolonization, the French Revolution, the World Wars, the Cold War, and several other topics as well. They will need to be prepared to think critically about issues pertaining to civics, economics, geography, and history throughout this course, and be able to utilize their reading and writing skills.

Prerequisite: 2.0 High School Social Studies Credits

Credit: 1.0

#### **Qatar History (Required):**

GAAQ applies the curriculum of the Supreme Education Council (SEC) relating to the history of the State of Qatar. GAAQ seeks to nurture a generation that is intellectually open and receptive to others and empathizes with them, but it is keen to strengthen the students' respect and adherence to their customs and traditions in the belief that attachment to the land and the family gives them self-confidence, and steadfastness. Teaching Qatar History is an opportunity for the (SEC) to shed light on a history of achievement, giving students of the new generation the lesson and motivation to continue their careers and align themselves with Qatar to rank among countries.

Prerequisite: None

Credit: 1.0

#### **US History:**

U.S. History investigates significant events, individuals, developments, and processes from the end of the Civil War to the present. Students develop and use the same skills, practices, and methods employed by historians: analyzing primary and secondary sources; developing historical arguments; making historical comparisons; and utilizing reasoning about contextualization, causation, and continuity and change over time. Students will examine various topics through the perspectives of civics, economics, geography and history. Topics in this course include the Reconstruction era, industrialism and reform, America's emergence as a world power, the Great Depression and the New Deal, World War II and the early Cold War, decades of social change, the end of the Cold War, and contemporary America.

Prerequisite: 1.0 High School Social Studies Credit

Credit: 1.0

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#### AP Psychology:

AP Psychology is an introductory college-level psychology course that introduces students to the systematic and scientific study of human behavior and mental processes. While considering the psychologists and studies that have shaped the field, students explore and apply psychological theories, key concepts, and phenomena associated with such topics as the biological bases of behavior, sensation and perception, learning and cognition, motivation, developmental psychology, testing and individual differences, treatments of psychological disorders, and social psychology. Throughout the course, students employ psychological research methods, including ethical considerations, as they use the scientific method, evaluate claims and evidence, and effectively communicate ideas.

Prerequisite: Teacher Recommendation

Credit: 1.0

#### **Psychology:**

In this psychology course, students will explore the basic concepts, language, and methods of psychology. This course will introduce students to the fundamental principles of psychology and to the major subjects of psychological inquiry. It will provide students with the tools necessary for the study of psychology and present them with a sampling of the major areas of psychology research. The course begins with a short overview of how psychology developed as an academic discipline and an introduction to a number of the principal methodologies most commonly deployed in its study. The subsequent units are arranged around broad areas of research. Students will focus on well-substantiated research and current trends in various categories. Students will gain a basic understanding of psychological research, perspectives, and disorders, as well as a basic understanding of the brain, perception, states of consciousness, learning and abnormal behavior.

Prerequisite: None

Credit: 1.0

#### **AP Seminar:**

In AP Seminar students will learn how to engage in university level academic research and conversation. Through the theme of Global Society students will read, view, listen to, and discuss a variety of sources from multiple perspectives. Students will learn how to craft quality written arguments, as well as, quality presentations that demonstrate a nuanced understanding of how globalization has impacted culture, the environment, and the media landscape. Additionally students will engage in both collaborative and independent research on topics of their own choice.

Prerequisite: Teacher Recommendation

Credit: 1.0

#### AP Research:

AP Research, the second course in the AP Capstone experience, allows students to deeply explore an academic topic, problem, issue, or idea of individual interest. Students design, plan, and implement a yearlong investigation to address a research question. Through this inquiry, they further

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the skills they acquired in the AP Seminar course by learning research methodology, employing ethical research practices, and accessing, analyzing, and synthesizing information. Students reflect on their skill development, document their processes, and curate the artifacts of their scholarly work through a process and reflection portfolio. The course culminates in an academic paper of 4,000–5,000 words (accompanied by a performance, exhibit, or product where applicable) and a presentation with an oral defense.

Prerequisite: AP Seminar

Credit: 1.0

#### Student Choice and Fine Arts

#### **AP Drawing:**

Develop your skills in drawing as you explore different media and approaches. You'll create artwork that reflects your own ideas and skills and what you've learned.

Prerequisite: Art I and Art II

Credit: 1.0

#### AP 2D Art and Design:

Develop your skills in a two-dimensional medium such as graphic design, photography, collage, printmaking, and others as you learn the principles of 2-D design. You'll create artwork that reflects your own ideas and skills and what you've learned.

Prerequisite: Art I and Art II

Credit: 1.0

#### AP 3D Art and Design:

Develop your skills in a three-dimensional medium such as sculpture, architectural models, metal work, ceramics, glass work, and others as you learn the principles of 3-D design. You'll create artwork that reflects your own ideas and skills and what you've learned.

Prerequisite: Art I and Art II

Credit: 1.0

#### Art I:

This introductory course provides students with a foundation in various artistic behaviors. Employing the TAB-choice philosophy, this course will introduce students to various media, methods, techniques and provide them with idea generation skills to apply their own interpretation or response to a brief. The art program allows students to work as artists to develop their individual artistic voice. Students will be working on project based assignments most times, but may also be responsible for research and written components within an assignment. This program not only values outcome but places emphasis on process in art. This course may be taken for an additional semester at a higher level.

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Prerequisite: None

Credit: 1.0

#### Art II:

This course will build on the foundation of artistic behaviors established in Introduction to Studio Arts. Students will be required to complete a portfolio of various artworks, using multiple techniques and methods based on self-expression and creating an individual artistic voice. Advanced Studio Arts is for the more serious art student who wants to continue to create art for personal expression and gain further experience in a variety of techniques and materials. Students will continue to use design terms, prepare nature/skeletal studies, draw figures, portraits and landscapes, research artists, photograph artwork and create mixed media and sculpture projects; based on famous artists. Students also have the opportunity to build an art portfolio for acceptance to an art college or university if they choose to.

Prerequisite: Art I

Credit: 1.0

#### **Applied Music I:**

This program teaches the basics of music theory with an emphasis on its application through guitar, piano, or voice. Students practice their individual instrumental skills in class and learn music theory through classroom exercises and homework.

Prerequisite: None

Credit: 1:0

#### **Applied Music II:**

This program builds on the music theory knowledge gained through Applied Music I. Again, students will study music theory with an emphasis on its application through guitar, piano, or voice. Students practice their individual instrumental skills in class and learn music theory through classroom exercises and homework.

Prerequisite: Applied Music I

Credit: 1:0

#### **Modern Music Ensemble:**

This program is designed for students with existing musical skills. Students will learn individual parts to a song on their own and concentrate on performing that song as a group during class time. This is a performance based class with several performance opportunities throughout the school year, both in and out of the school.

Prerequisite: Audition and recommendation of Music or Band teacher.

Credit: 1:0

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#### **AP Music Theory:**

Learn to recognize, understand, and describe the basic materials and processes of music. You'll develop skills by listening to, reading, writing, and performing a wide variety of music.

Prerequisite: Applied Music II or Band II

Credit: 1.0

#### Drama/Theatre I, II, III:

Students learn about the basic components that make up a dramatic production, such as acting, stagecraft, playwriting, directing, makeup and costume design. Readings of plays from various genres and of the history of theatre are included in the course. The course progression is Drama I, Drama II and Drama III.

Prerequisite: None

Credit: 1.0

#### Band I:

Band I is the beginning level concert ensemble in our high school instrumental program. Our program includes woodwinds, brass, percussion, and keyboard instruments. Students will demonstrate technical skills on an instrument, including competence in rhythm, pitch, tone production, and musical phrasing by individual and group performances. Students will also develop team and leadership skills that support growth beyond a music setting.

Prerequisite: Middle School Band (Grades 6, 7, or 8)

Credit: 1.0

#### Band II:

Band II is the intermediate level concert ensemble in our high school instrumental program. Our program includes woodwinds, brass, percussion, and keyboard instruments. Students will develop their technical skills on their instruments established in Band I, including competence in complex rhythms, pitch, tone production, and musical phrasing by individual and group performances. Students will also develop team and leadership skills that support growth beyond a music setting. *Prerequisite: Band 1* 

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Credit: 1.0

#### Band III:

Band III is the intermediate level concert ensemble in our high school instrumental program. Our program includes woodwinds, brass, percussion, and keyboard instruments. Students will continue to develop their technical skills on their instruments established in Band I & II, including mastery in complex rhythms, pitch, tone production, and musical phrasing by individual and group performances. Students will also establish team and leadership positions that support growth beyond a music setting.

Prerequisite: Band II

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Credit: 1.0

#### **Band IV:**

Band IV is the advanced level concert ensemble in our high school instrumental program. Our program includes woodwinds, brass, percussion, and keyboard instruments. Students will maintain their technical skills on their instruments established in Band I, II, and III, including mastery in complex rhythms, pitch, tone production, and musical phrasing by individual and group performances. Students will perform advanced level music both in the concert and small group settings. Students will establish team and leadership positions that support growth beyond a music setting.

Prerequisite: Band III

Credit: 1.0

#### **AP Computer Science Principles:**

AP Computer Science Principles is an introductory college-level computing course. Students cultivate their understanding of computer science through working with data, collaborating to solve problems, and developing computer programs as they explore concepts like creativity, abstraction, data and information, algorithms, programming, the internet, and the global impact of computing.

Prerequisite: None

Credit: 1.0

#### **AP Computer Science A:**

AP Computer Science A is an introductory college-level computer science course. Students cultivate their understanding of coding through analyzing, writing, and testing code as they explore concepts like modularity, variables, and control structures. Students also dive into more complex computer science topics such as classes, and Object Oriented Programming.

Prerequisite: Information Technology II or AP Computer Science Principles

Credit: 1.0

#### Information Technology I:

This course is designed to provide students with a working knowledge of computer concepts and essential skills necessary for work and communication in today's society. Students will learn safety, security, and ethical issues in computing and social networking.

Prerequisite: None

Credit: 1.0

#### Information Technology II:

This course is designed as an introduction to computer programming. Students learn the basics of the Python programming language through writing programs ranging from simple console interactions, to more involved programs using basic data and control structures. This course can

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serve as a pathway into AP Computer Science courses.

Prerequisite: Information Technology I

Credit: 1.0

#### Islamic Studies (Required for all Muslim Students):

This course is designed to build upon students' knowledge and understanding of Islam, its principles, practices and rites, the Prophets of Allah and their messages, and the practical application of such material. The Holy Quran and Hadith (sayings of the prophets and apostles) are an integral part of learning.

Prerequisite: None

Credit: 1.0

#### Physical Education

#### **Physical Education:**

High School P.E. is designed to introduce students to fitness and a variety of dual and individual sports. The course emphasizes team building and team strategies as well as techniques to develop fine motor skills. Physical Education also consists of a health component where students will learn how to manage their lives in a healthy and responsible manner.

Prerequisite: None

Credit: 1.0

#### Coaching:

This course provides students with the knowledge and tools necessary to provide sports coaching to other students. The primary goal of the course is to develop and enhance students' knowledge and understanding of concepts and techniques of coaching and their application when working with athletes. The course will therefore be a mixture of theory-based and practical classes, as well as a unit focused on basic first aid.

Prerequisite: Teacher Recommendation

Credit: 1.0

#### Global Languages

#### Spanish I:

This course introduces students to the Spanish language and to the culture of the Spanish-speaking countries.. Students acquire knowledge and skills in the topics of greetings and introductions, school life, pastimes, travel and shopping. Special attention is placed on language-learning strategies, and making connections across languages. The class is conducted in Spanish to the greatest degree possible to develop competency in the target language.

Prerequisite: None

Credit: 1.0

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#### Spanish II:

Building on the skills acquired in Spanish I, this course introduces students to more complex sentence structures and idiomatic expressions. Through a variety of activities, students continue to develop proficiency in all four language skills: listening, reading, writing and speaking. Students are also expected to read and listen to authentic sources on the cultural aspects of the themes covered. The class is conducted in Spanish to the greatest degree possible to develop competency in the target language.

Prerequisite: Spanish I or Teacher Recommendation

Credit: 1.0

#### Spanish III:

This course builds on skills acquired in Spanish I and II. Students continue to develop and refine proficiency in all four language skills: listening, reading, writing and speaking, with emphasis on the ability to interpret, interact and present orally and in writing. The class is conducted in Spanish to the greatest degree possible to develop competency in the target language.

\*\*Prerequisite:\*
Spanish II or Teacher Recommendation\*

\*\*Credit: 1.0\*

#### Spanish IV:

This course is designed for students who would like to further their knowledge of Spanish. The goals of this course are to further develop proficiency across the full range of language skills, advance critical thinking ability, and enhance cultural and global awareness. Students are expected to communicate using more complex language structures and express themselves with reasonable fluency. This class is conducted primarily in Spanish.

Prerequisite: Spanish III or Teacher Recommendation

Credit: 1.0

#### **Spanish for Native Speakers and Heritage Speakers:**

Offered in each grade level, students will develop proficiency in all language areas: spelling, grammar, reading, writing, listening, culture, and literature. This course is based on the standards and curriculum of Spanish-Speaking countries. This class is conducted only in Spanish.

Prerequisite: Teacher Recommendation

Credit: 1.0

#### **AP Spanish Language and Culture:**

AP Spanish Language and Culture is equivalent to an intermediate level college course in Spanish. Students cultivate their understanding of Spanish language and culture by applying interpersonal, interpretive, and presentational modes of communication in real-life situations as they explore concepts related to family and communities, personal and public identities, beauty and aesthetics, science and technology, contemporary life, and global challenges.

Prerequisite: Teacher Recommendation

Credit: 1.0

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#### **AP Spanish Literature and Culture:**

AP Spanish Literature is equivalent to a college level introductory survey course of literature written in Spanish. Students continue to develop their interpretive, interpersonal, and presentational skills in Spanish language as well as critical reading and analytical writing as they explore short stories, novels, plays, essays, and poetry from Spain, Latin America, and U.S. Hispanic authors along with other non-required texts.

Prerequisite: Teacher Recommendation

Credit: 1.0

#### AP French:

The AP French Language and Culture course is designed as a college level course for high school students in their fourth year of study of French. It is designed to prepare students to communicate efficiently in French using the three modes of communication (Interpersonal, Interpretive and Presentational) defined in the Standards for Foreign Language Learning in the 21<sup>st</sup>. Century. Students will have the opportunities to demonstrate their proficiency in each of these three modes. The AP French Language and Culture course is conducted exclusively in French and students are also encouraged to use French outside the classroom.

Prerequisite: Teacher Recommendation

Credit: 1.0

#### French I:

This course is designed for students who have an adequate background in the language of study. The purpose of the course is to develop authentic use of language and communication skills. Students will participate in authentic assessments that will allow them to acquire comprehension skills as well as strengthen their grammar. Students will continue to learn about cultural norms of societies where their language of study is prevalent. At the end of this course, students will be able to read paragraphs, compose simple paragraphs on topics familiar to them.

Prerequisite: Middle School or Introductory French

Credit: 1.0

#### French II:

This course expands on each of the four skills of listening, speaking, reading and writing developed in French I to High School students with a continuing emphasis on using the language in interesting and meaningful ways. The second year continues the introduction to the essential grammatical structures and skills of French as well as the basic vocabulary. The reading program serves to reinforce these structures and vocabulary as well as to develop comprehension skills. The course also aims to familiarize students with aspects of French culture in France and other Francophone countries.

Prerequisite: French II or Teacher Recommendation

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Credit: 1.0

#### French III:

This course continues to expand on each of the four skills of listening, speaking, reading and writing developed in French II, with a continuing emphasis on using the language in interesting, meaningful ways. The third year course completes the introduction to the essential grammatical structures and tenses of French verbs as well as the basic vocabulary. The reading program serves to reinforce these structures to develop new comprehension skills. This course aims to familiarize students with aspects of French culture in France and other Francophone countries.

Prerequisite: French II or Teacher Recommendation

Credit: 1.0

#### **Arabic (Required for all Arab Nationalities):**

This course aims to foster the students' native language and culture through the development of communicative skills, with heavy emphasis on interpersonal speaking. Speaking, listening, reading, and writing are all addressed in this course. Grammar is introduced as an aid to understand language structure. By the end of this course, students should be able to carry on conversations, read Arabic texts, and write compositions about themselves and aspects of their life. Offered at every grade level the course progression is Arabic I, Arabic II, Arabic III and Arabic IV

Prerequisite: None

Credit: 1.0

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