مدرسة عين الخليج
Ain Al Khaleej School

AAKPS American Course Manual

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Contents

Ain Al Khaleej American Cycle 3 Curriculum Course Catalog Manual 2026-2027

Curriculum Pathway Design – Grades 9 to 12:

As part of the AAKPS Core and Elective Curriculum, students from Grades 9 to 12 are offered the opportunity to construct personalized academic pathways in ***Science, Business, or Information Technology***. These pathways are tailored to individual interests and aptitudes, fostering student agency and supporting long-term planning for higher education and career readiness.

To ensure foundational scientific literacy, all students are required to earn a minimum of one Science credit in each of Grades 9 through 12. Students may opt to pursue a specialized ***'Science Pathway'***—with a focus on Medical or Engineering disciplines —by selecting courses marked in **blue** within the AAKPS curriculum mapping guide below.

Elective courses carry a credit value of 0.50 unless otherwise specified. In Grades 11 and 12, students may select up to four electives, totalling a maximum of 2 credits. Select elective options from Grade 10 may also be included, subject to academic advisement and pathway alignment.

Credit Requirements:

AAKPS ensures that students in Grades 9-12 accrue a minimum of 6.0-7.0 credits every year to maintain steady progress toward graduation, for a minimum of 24-28 credits in total across the four years. The minimum credit requirements are outlined in Table 1. Credit Requirements for American Curriculum Schools below.

Table 1:

	Subject	Minimum Credits	Additional MoE Subjects Credits
AAKPS	English	4.0	
	Science	4.0	
	Mathematics	4.0	
	World Language	2.0	2.0 for Arabic

Course Requirements:

AAKPS ensures that students move through increasingly complex levels of content and skills across grade levels, particularly in core subjects such as English, Mathematics, and Science. This supports the vertical alignment expectations and ensures coherence between course offerings, prerequisites, credit allocation, and graduation requirements.

a. AAKPS has:

1) Ensure the following sequence of courses for mathematics (in order of increasing complexity):

a) Algebra I or Integrated Mathematics I
b) Geometry or Integrated Mathematics II
c) Algebra II or Integrated Mathematics III
d) Pre-Calculus, Calculus, AP Calculus, or Statistics

2) Ensure completion of subject-specific or integrated Biology, Chemistry, and Physics courses.

b. **AAKPS offers:**

a) advanced science courses and starting the 2026-2027 academic year AAKPS will also including Pré-AP/AP Sciences, in Grade 11 and/or 12.

Core-Related Electives:

AAKPS:

a. offers core-related electives to fulfil elective credit requirements outside of the core subject areas.

b. aligns core-related electives to students' university and career aspirations by including explicit references to course sequencing across Cycle 3 to strengthen pathways and enhance post-secondary readiness planning.

Transcript Requirements:

AAKPS issues annual transcripts for all students in Grades 9-12 that include:

a. Academic Records

1) Courses taken by year and term.
2) Grades received in percentage, as per the *ADEK School Assessment Policy*.
3) Credits earned.
4) Grade Point Average (GPA), both weighted and unweighted, where applicable, as per the *AAKPS Student Assessment Policy (page 5)*.

b. Graduation Progress Summary

1) Completion status of subject-area requirements.
2) Total credits required versus earned.

Transfer Credit Review

AAKPS ensures that staff (e.g., administrators, Career and University Guidance Counsellors) follow a standardized process to evaluate and document credit transfers for students entering Grades 9-12:

a. Collection and Verification

1) Maintain official transcripts/report cards from Grade 8 onwards.
2) Verify authenticity and course details (i.e., time allocation and timetables).

b. Documentation

1) Maintain official records of transferred credits.
2) Apply minimum credit hours per grade for placement (students with lower accumulated credit counts shall participate in credit recovery).

c. Stakeholder Communication

1) Communicate with students and families about transfer decisions and graduation impact.
2) Engage teachers and staff to support transition.

d. Resolution of Discrepancies

1) Follow up on unclear or disputed records through official channels.

e. Graduation Planning

1) Develop an Individual Career and Academic Plan (ICAP) for each student to ensure completion of required credits for diploma eligibility.

Credit Recovery

AAKPS developed and implemented a **credit recovery program** in line with the requirements of any ADEK publications (e.g., guides, circulars) regarding credit recovery:

a. Ensure that students who earn a final mark below 60% and/or miss any of the required graduation credits recover their credits through the school's credit recovery program.

b. Implement a structured, standards-aligned credit recovery program to support students who have not earned the necessary credits.

c. Ensure that the maximum number of missing credits from core courses does not exceed 2.0-3.0 credits in a given academic year.

d. Establish a comprehensive learning support system designed to assist students to address credit deficits by completing required coursework.

e. Deliver credit recovery programs exclusively on school premises by a qualified teacher/facilitator. The use of accredited online courseware is authorized as per the parameters set by the ADEK credit recovery requirements.

f. Communicate credit recovery program roles and responsibilities to staff, students, and parents.

Course Mapping:

AAKPS publishes an annual course mapping that specifies all courses offered in Cycle 3 in alignment with the ADEK-approved courses on eSiS, in the AAKPS Student Handbook. ***(Refer to the AAKPS Course Mapping Below for further details)***

Course Syllabus:

AAKPS ensures that each course includes a detailed course syllabus with a course description and learning objectives/outcomes aligned with the curricular standards. ***(Refer to AAKPS Course Syllabus below for further details)***

Credit to Period Correlation

.50= 2 periods at 50 minutes each
.75 = 3 periods at 50 minutes each
1.0 = 4 periods at 50 minutes each
1.25 = 5 periods at 50 minutes each

NOTE: Courses will only run if there is sufficient interest and school staffing can support offering the elective course. The elective curriculum is reviewed annually to ensure that students' needs are best met; the core curriculum is amended on receipt of updated regulations from the relevant authorities.

Core & Elective Curriculum Courses	Credits	Grade level	Prerequisites
Islamic Education			
Islamic Education	1	Grades 9-12	None
Islamic Education (Non-Arabs)	1	Grades 9-12	None
Arabic			

Arabic	1	Grades 9-12	None
Arabic (non-Arabs)	1	Grades 9-12	None
Social Studies			
UAE Social Studies and Civics	1	Grade 9	None
UAE Social Studies and Civics (Non-Arab)	1	Grade 9	None
Moral Education (Arabs)	1	Grade 9 -12	None
Moral, Social & Cultural (Non-Arab)	1	Grades 9-12	None
English			
English 1	1	Grade 9	None
English 2	1	Grade 10	English 1
English 3	1	Grade 11	English 2
English 4	1	Grade 12	English 3
Mathematics			
Algebra I and Geometry	1.1	Grade 9	None
Algebra II and Geometry	1.1	Grade 10	Algebra **I** and Geometry
Pre-Calculus	1	Grade 11	None
Advanced Calculus	1	Grade 12	Pre-Calculus
***AP Calculus**	1	Grade 12	Pre-Calculus
***Geometry and Statistic**	1	Grade 10	Algebra I and Geometry
***Statistic I**	1	Grade11	none
***Statistic II**	1	Grade 12	Statistic I

Core & Elective Curriculum Courses	Credits	Grade level	Prerequisites
Science			
Biology 1	.75	Grade 9	None
Biology 2	.75	Grade 10	Biology 1
Biology 3	.50	Grade 11	Biology 2
Biology 4	.50	Grade 12	Biology 3
Forensic Science	.50	Grade 10	Biology 1 and Chemistry 1
Anatomy	.50	Grade 12	None
Pre-AP Biology	.75	Grade 11	Biology 2
AP Biology	.75	Grade 12	Pre-AP Biology
Chemistry 1	.75	Grade 9	None
Chemistry 2	.75	Grade 10	Chemistry 1
Chemistry 3	.50	Grade 11	Algebra II and Chemistry 2
Chemistry 4	.50	Grade 12	Chemistry 3
Organic Chemistry I & II	.50	Grade 11	Chemistry 1
Pre- AP Chemistry	.75	Grade 11	Chemistry 2
AP Chemistry	.75	Grade 12	Pre- AP Chemistry and Algebra II
Physics 1	.75	Grade 9	None
Physics 2	.75	Grade 10	Physics 1
Physics 3	.50	Grade 11	Physics 2
Physics 4	.50	Grade 12	Physics 3
Astronomy	.50	Grade 12	None
Pre-AP Physics	1	Grade 11	Physics 2
AP Physics	1	Grade 12	Pre-AP Physics and Algebra II

Core & Elective Curriculum Courses	Credits	Grade level	Prerequisites
Commerce			
Micro-Economics	.75	Grade 9	None
Macro- Economics	.75	Grade 10	Micro-Economics
Business	.75	Grade 11	None
Accounting	.75	Grade 12	None
Marketing	.75	Grade 12	None
Technology			
Information Technology 1	.50	Grades 9	None
Information Technology 2	.50	Grade 10	None
Computer Science - Programming	.50	Grade 11	None
Computer Science - Python	.50	Grade 12	None
Health and Physical Education (HPE)			
Health and Physical Education (HPE) 1	.50	Grades 9	None
Health and Physical Education (HPE) 2	.50	Grade 10	None
Health and Physical Education (HPE) 3	.50	Grade 11	None
Health and Physical Education (HPE) 4	.50	Grade 12	None
Visual Arts			
Art or Drama	.50	Grade 9	None

AAKPS HIGH SCHOOL CURRICULUM MAPPING

Grades 9 to 12 Course Mapping (Core and Elective Streams)				
Notes	**Black – Both streams will be required to take the course** **Green – Business/IT stream will be required to take the course** **Blue – Medical/Englineering Stream will be required to take the course** **Red (With *) – will start Sept. 2026/2027**			
Course	**G9**	**G10**	**G11**	**G12**
Islamic Studies (Arabs/Non-Arabs)	**Islamic Education 1**	**Islamic Education 2**	**Islamic Education 3**	**Islamic Education 4**
	Islamic Studies 1 (Non- Arabs)	**Islamic Studies 2 (Non- Arabs)**	**Islamic Studies 3 (Non- Arabs)**	**Islamic Studies 4 (Non- Arabs)**
Course	**G9**	**G10**	**G11**	**G12**
Arabic (Arabs/Non-Arabs)	**Arabic 1**	**Arabic 2**	**Arabic 3**	**Arabic 4**
	Arabic 1 (non-Arabs)	**Arabic 2 (non-Arabs)**	**Arabic 3 (non-Arabs)**	**Arabic 4 (non-Arabs)**
Course	**G9**	**G10**	**G11**	**G12**
UAE Social Studies and Civics (Arabs/Non-Arabs)	**UAE Social Studies and Civics**	N/A	N/A	N/A
	UAE Social Studies and Civics (Non-Arabs)			
Course	**G9**	**G10**	**G11**	**G12**
Moral Education (Arabs/Non-Arabs)	**Moral Education 1 (Arabs)**	**Moral Education 2 (Arabs)**	**Moral Education 3 (Arabs)**	**Moral Education 4 (Arabs)**
	Moral, Social & Cultural 1 (Non-Arab)	**Moral, Social & Cultural 2 (Non-Arab)**	**Moral, Social & Cultural 3 (Non-Arab)**	**Moral, Social & Cultural 4 (Non-Arab)**
Course	**G9**	**G10**	**G11**	**G12**
English	**English 1**	**English 2**	**English 3**	**English 4**
Course	**G9**	**G10**	**G11**	**G12**
Math	**Algebra I and Geometry**	***Geometry and Statistic (Business/IT Pathway)**	***Statistic I (Business/IT Pathway)**	***Statistic II (Business/IT Pathway)**
		Algebra II and Geometry	**Pre Calculus**	***AP Calculus (Science Pathway) / Advanced Calculus**
Course	**G9**	**G10**	**G11**	**G12**
	Biology 1	**Biology 2**	**Biology 3**	**Biology 4**

Science		Forensic Science	*Pre-AP Biology (Science Pathway)	Anatomy
				*AP Biology (Science Pathway)
	Chemistry 1	Chemistry 2	Chemistry 3	Chemistry 4
			Organic Chemistry	*AP Chemistry (Science Pathway)
			*Pre- AP Chemistry (Science Pathway)	
	Physics 1	Physics 2	Physics 3	Physics 4
			*Pre-AP Physics (Science Pathway)	Astronomy
				*AP Physics (Science Pathway)
Course	**G9**	**G10**	**G11**	**G12**
Commerce	Micro-Economics	Macro-Economics	Business	Accounting
				Marketing
Course	**G9**	**G10**	**G11**	**G12**
Technology	Information Technology 1	Information Technology 2	Computer Science - Programming	Computer Science - Python
Course	**G9**	**G10**	**G11**	**G12**
Physical Education	Health and Physical Education (PE) 1	Health and Physical Education (PE) 2	Health and Physical Education (PE) 3	Health and Physical Education (PE) 4
Course	**G9**	**G10**	**G11**	**G12**
Visual Arts	Art or Drama	N/A	N/A	N/A

AAKPS Course Syllabus

Core & Elective Curriculum Courses	Descriptors
Islamic Education	
Islamic Education 1	AAKPS adheres to the Ministry of Education (MOE) curriculum framework in terms of instructional periods, prescribed content using MOE textbooks, and assessment protocols.
Islamic Education 2	AAKPS adheres to the Ministry of Education (MOE) curriculum framework in terms of instructional periods, prescribed content using MOE textbooks, and assessment protocols.

Islamic Education 3	AAKPS adheres to the Ministry of Education (MOE) curriculum framework in terms of instructional periods, prescribed content using MOE textbooks, and assessment protocols.
Islamic Education 4	AAKPS adheres to the Ministry of Education (MOE) curriculum framework in terms of instructional periods, prescribed content using MOE textbooks, and assessment protocols.
Islamic Education (Non-Arabs)	AAKPS adheres to the Ministry of Education (MOE) curriculum framework in terms of instructional periods, prescribed content using MOE textbooks, and assessment protocols.
Arabic	
Arabic 1	AAKPS adheres to the Ministry of Education (MOE) curriculum framework in terms of instructional periods, prescribed content using MOE textbooks, and assessment protocols.
Arabic 2	AAKPS adheres to the Ministry of Education (MOE) curriculum framework in terms of instructional periods, prescribed content using MOE textbooks, and assessment protocols.
Arabic 3	AAKPS adheres to the Ministry of Education (MOE) curriculum framework in terms of instructional periods, prescribed content using MOE textbooks, and assessment protocols.
Arabic 4	AAKPS adheres to the Ministry of Education (MOE) curriculum framework in terms of instructional periods, prescribed content using MOE textbooks, and assessment protocols.
Arabic (non-Arabs)	AAKPS adheres to the Ministry of Education (MOE) curriculum framework in terms of instructional periods, prescribed content using MOE textbooks, and assessment protocols.
Social Studies	
UAE Social Studies and Civics	AAKPS adheres to the Ministry of Education (MOE) curriculum framework in terms of instructional periods, prescribed content using MOE textbooks, and assessment protocols.
UAE Social Studies and Civics (Non-Arabs)	AAKPS adheres to the Ministry of Education (MOE) curriculum framework in terms of instructional periods, prescribed content using MOE textbooks, and assessment protocols.
Moral Education 1 (Arabs)	AAKPS adheres to the Ministry of Education (MOE) curriculum framework in terms of instructional periods, prescribed content using MOE textbooks, and assessment protocols.
Moral Education 2 (Arabs)	AAKPS adheres to the Ministry of Education (MOE) curriculum framework in terms of instructional periods,

	prescribed content using MOE textbooks, and assessment protocols.
Moral Education 3 (Arabs)	AAKPS adheres to the Ministry of Education (MOE) curriculum framework in terms of instructional periods, prescribed content using MOE textbooks, and assessment protocols.
Moral Education 4 (Arabs)	AAKPS adheres to the Ministry of Education (MOE) curriculum framework in terms of instructional periods, prescribed content using MOE textbooks, and assessment protocols.
Moral, Social & Cultural (Non-Arab)	AAKPS adheres to the Ministry of Education (MOE) curriculum framework in terms of instructional periods, prescribed content using MOE textbooks, and assessment protocols.

Core & Elective Curriculum Courses	Descriptors
English	
English 1	The English Grade 9 course description focuses on developing critical reading, writing, and analytical skills through a combination of literary and non-fiction texts. Students will study various genres, including short stories, poetry, drama, and modern novels, while also focusing on higher order thinking skills like argumentation, analysis, and research. Foundational skills like grammar, vocabulary, and conventions of standard English are also a key part of the course.
English 2	The Grade 10 English course description focuses on developing college and career readiness by having students read complex literary and informational texts, write arguments, and produce clear and coherent writing. Key skills include analysing how complex characters develop and advance the plot, evaluating texts for specific purposes, and demonstrating a strong command of English conventions in writing and speaking. The curriculum is designed to build knowledge and critical thinking through sustained engagement with a wide range of high-quality texts.
English 3	The Grade 11 English course description is not a single document, but the curriculum typically focuses on students analysing increasingly complex literary and informational texts, developing their skills in reading, writing, speaking, listening, and viewing. Students will learn to use precise literary terminology to discuss texts and to understand how elements like structure, tone, and imagery contribute to meaning. They will be expected to engage with a variety of texts to understand different perspectives and to communicate their ideas effectively through both independent and collaborative work.
English 4	The Grade 12 English course focuses on developing college and career readiness skills in **reading, writing, speaking and listening, and language**. The goal is to ensure students

	can independently and proficiently analyse complex texts, communicate effectively for various purposes, and conduct research.

Core & Elective Curriculum Courses	Descriptors
Mathematics	
Algebra I and Geometry	**The Grade 9 Algebra 1** and **Geometry** course focuses on developing mathematical reasoning, fluency, and the application of concepts to real-world problems. The primary goal of the CCSS Algebra 1 course is to formalize and extend the mathematics students learned in middle school, focusing on linear, quadratic, and exponential functions
Algebra II and Geometry	**The Grade 10 Algebra 11** and **Geometry** course covers advanced algebraic concepts like functions (polynomial, exponential, logarithmic), complex numbers, and matrices, alongside geometric principles including proofs, properties of shapes, and analytical geometry. These courses build upon Algebra 1 and Geometry foundations, emphasizing symbolic reasoning and application in areas like sequences, series, probability, and trigonometry.
Pre-Calculus	The Grade 11 Pre-Calculus course emphasizes **functions, trigonometry, and the development of conceptual understanding and problem-solving skills** necessary for success in calculus. The main goal of the course is to solidify students' foundational knowledge and bridge the gap between high school algebra/geometry and the rigorous demands of college-level calculus.
AP Calculus	The Grade 12 AP Calculus is a college-level course focuses on the concepts of differential and integral calculus, emphasizing a multi-representational approach to problem-solving. Students explore topics like limits, derivatives, and integrals, and use these concepts to model and solve real-world problems. The course requires students to build and justify arguments, and to express concepts and solutions graphically, numerically, analytically, and verbally.
Advanced Calculus	**The Grade 12 Advanced Calculus is a rigorous, college-level mathematics courses** that delve deeper into the theoretical foundations and extensions of elementary calculus (differentiation and integration of single-variable functions).
Geometry and Statistic	The Grade 10 Geometry and Statistics course combine key concepts from high school geometry with fundamental topics in statistics and probability, often as part of a sequential, integrated mathematics pathway. The course emphasizes conceptual understanding, real-world application, mathematical modelling, and logical reasoning.
Statistic I	The Grade 11 Statistics I course is a comprehensive **examination of statistical theory and methods used in data collection, analysis, interpretation, and presentation across various disciplines, including business, science,**

	and the social sciences. Students utilize technology (such as graphing calculators or statistical software) for data analysis and interpretation of results. This course aims to develop students' ability to think statistically, become critical consumers of statistically based information, and apply statistical methods to solve real-world problems.
Statistic II	The Grade 12 Statistics II course is an advanced high school or early college-level course that delves into inferential statistics, building upon the foundations of descriptive statistics covered in a prior course. The primary goal is to equip students with the tools and understanding to make informed conclusions and predictions about populations based on sample data. This course emphasizes problem-solving skills, quantitative reasoning, and the ability to apply mathematical knowledge to real-world scenarios.

Core & Elective Curriculum Courses	Descriptors
Science	
Biology 1	The Grade 9 Biology course covers fundamental principles of life science, including **cell biology, genetics, and evolution**, along with **ecology and human development**. The curriculum emphasizes the **scientific method, laboratory investigations, and data analysis** to understand the complexities of living organisms and their interactions with the environment. Courses also apply biological concepts to real-world issues, develop problem-solving skills, and often include math and computational skills.
Biology 2	The Grade 10 Biology course covers foundational life science concepts, including **cell structure and function**, **molecular biology**, **genetics**, **evolution**, and **ecology**. Students learn about the diversity of life, human biological systems, and the processes that sustain life, with an emphasis on laboratory investigations, scientific writing, and problem-solving.
Biology 3	The Grade 11 Biology course covers foundational topics like **cell structure and function, biological diversity, plant and animal physiology, and genetics**. Curricula will vary depending on state or country, often emphasizing inquiry-based learning and the application of critical thinking skills.
Biology 4	The Grade 12 Biology course emphasizes a hands-on, inquiry-based approach where students use laboratory equipment, data analysis skills, and critical thinking to understand life processes and environmental literacy.
Forensic Science	The Forensic Science courses offered in high schools and universities that align with CCSS for ELA often incorporate **the development of strong literacy, critical thinking, and communication skills through the analysis of case studies, research papers, and lab reports**.

	Course content is generally delivered through lectures, demonstrations, laboratory activities (including **mock crime scenes**), and case study analysis.
Anatomy	Anatomy course often aligned with such systems involves an in-depth study of the human body's structure and function from the cellular to the systems level. The Anatomy course is an engaging and in-depth exploration of the human body's intricate **structure (anatomy)** and its related **functions (physiology)**. It is designed to provide students with a strong foundation in biological and medical concepts, often serving as a prerequisite for careers in healthcare, nursing, and other life sciences.
Pre-AP Biology	**Pre-AP Biology** course is designed to provide a foundation in core biological concepts and scientific reasoning skills, preparing students for the rigors of advanced high school and college-level science courses, including AP Biology. The curriculum emphasizes analytical reading, evidence-based writing, strategic use of mathematics, and scientific modelling. The goal is to develop a strong foundation in core concepts and disciplinary reasoning, preparing students for success in future advanced science coursework.
AP Biology	The AP Biology course is an introductory, college-level course that explores the key principles of life, including evolution, cellular processes, energy and communication, genetic information transfer, and ecology. It emphasizes inquiry-based learning through hands-on laboratory investigations and the development of scientific skills like experimental design, data analysis, and scientific argumentation, rather than just memorization.
Chemistry 1	A Grade 9 chemistry course introduces fundamental concepts such as **atomic structure, the periodic table, and chemical bonding**, building on scientific inquiry and the nature of science. It covers topics like **states of matter, elements, compounds, and mixtures**, and the basics of **chemical formulas, equations, and calculations**. The goal is to develop analytical skills, a foundational understanding of the subject, and an appreciation for chemistry's role in the world.
Chemistry 2	The Grade 10 Chemistry course covers fundamental principles like **atomic structure, chemical bonding, and the periodic table, as well as chemical reactions and stoichiometry**. It often includes sections on acids, bases, and salts, metals and non-metals, and carbon compounds, and prepares students for more advanced studies. Many curricula emphasize inquiry-based learning, laboratory work, and real-world applications.
Chemistry 3	The Grade 11 Chemistry course covers fundamental principles like atomic structure, chemical bonding, and the periodic table, leading into more complex topics such as chemical reactions (stoichiometry), gases, solutions, and organic chemistry. A significant component involves laboratory experimentation to develop practical skills and

	apply theoretical knowledge to solve quantitative and qualitative problems. Mastery of algebra is essential for success in this course.
Chemistry 4	The Grade 12 Chemistry course, aligned with these broader standards, is a rigorous, in-depth exploration of advanced chemical principles, combining theoretical knowledge with extensive laboratory application. The course prepares students for further studies in science, engineering, medicine, and related fields.
Organic Chemistry I & II	This a one-year course sequence provides a fundamental and comprehensive study of carbon-containing compounds, emphasizing the principles that govern their structure, properties, and reactivity. The course is typically intended for students in science or pre-professional programs (e.g., chemistry, biochemistry, molecular biology, chemical engineering, pre-med).
Pre- AP Chemistry	The Pre-AP Chemistry course is a grade-level course designed to give all students the opportunity for growth and to prepare them for future advanced high school and college science courses, including AP Chemistry. It focuses on developing a deep conceptual understanding of matter and energy at the molecular level, while utilizing specific scientific reasoning skills.
AP Chemistry	The AP Chemistry course is a college-level introductory course that provides a comprehensive study of fundamental chemistry principles through inquiry-based investigations. Students explore topics such as atomic structure, chemical bonding, thermodynamics, kinetics, and equilibrium, while also completing a minimum of 16 hands-on laboratory investigations. The course is equivalent to a first-year college general chemistry course
Physics 1	The Grade 9 Physics course description covers fundamental concepts like motion, forces, energy, electricity, waves, and light, focusing on developing scientific inquiry and problem-solving skills through practical activities and data analysis. The curriculum aims to build a strong foundation in physics, emphasizing the application of scientific principles to real-world phenomena and the understanding of physics' role in the technological world.
Physics 2	The Grade 10 Physics course covers fundamental concepts like general physics, mechanics, and thermal physics. Topics include measurement, motion, forces, energy transfers, and the particle nature of matter, along with related skills like problem-solving and experimental design. Some syllabi also introduce electricity, magnetism, or wave phenomena like light and sound.
Physics 3	The Grade 11 Physics course covers fundamental concepts like mechanics (motion, forces, energy, and momentum), waves and sound, and electricity and magnetism. Students will study scientific laws, explore energy transformations, and develop skills in scientific investigation. Some curricula also include topics like kinematics, dynamics, thermodynamics, and societal connections to physics and technology.

Physics 4	The Grade 12 physics course, often a culmination of secondary physical sciences, typically integrates classical and modern physics concepts, emphasizing analytical thinking, problem-solving, and hands-on investigation. The course aims to develop students' ability to apply mathematical models, interpret graphs, and use scientific reasoning to solve complex, real-world problems.
Astronomy	The Astronomy course follows the standards generally offers a scientific study of celestial objects and phenomena using the principles of physics, chemistry, and mathematics to understand events beyond Earth's atmosphere. The course aims to develop students' ability to think critically, apply the scientific method, and interpret data from observations.
Pre-AP Physics	The Pre-AP Physics course description includes a focus on preparing students for AP Physics by covering foundational concepts in mechanics and electricity & magnetism through mathematical problem-solving and hands-on laboratory work. The curriculum includes topics like kinematics, forces, energy, and circuits, with a strong emphasis on scientific inquiry, data analysis, and laboratory skills. **Course overview and goals** • **Preparation for AP Physics 1:** The primary goal is to provide a strong foundation for the AP Physics course, covering mathematical physics concepts in both mechanics and electricity/magnetism. • **Developing skills:** Students will develop mathematical, analytical, and laboratory skills needed for success in a college-level physics course. • **Inquiry-based learning:** A significant portion of the course involves laboratory work and inquiry-based activities to help students verify physical laws empirically.
AP Physics	The AP Physics course includes and algebra-base and a calculus-base. The courses are designed to develop students' understanding of foundational physics principles through inquiry-based learning and hands-on laboratory work.

Core & Elective Curriculum Courses	Descriptors
Commerce	
Micro-Economics	The Micro-Economics course examines how economic systems operate to allocate resources, distribute income, and organize production through the decisions of individual economic agents (e.g., households and firms). Students learn to use principles and models to describe economic situations, predict outcomes, and explain real-world scenarios using graphs, charts, and data. The primary focus is on the operation of a market economy and the efficiency with which resources are allocated through market prices. The primary objectives of the course include:

	• **Understanding basic principles:** Students learn fundamental microeconomic principles and apply them to the economic decisions of households and firms under various market conditions. • **Developing analytical skills:** The course aims to develop analytical skills using diagrams, graphs, and basic mathematical concepts to model and interpret economic situations. • **Analysing market outcomes:** Students learn to describe, predict, and appraise economic outcomes, including market inefficiencies and the effects of public policy or government intervention.
Macro- Economics	This Macro-Economics course provides a comprehensive introduction to the principles that apply to an economic system. It emphasizes the study of national income and price-level determination, and develops students' familiarity with economic performance measures, the financial sector, stabilization policies, economic growth, and international economic. Students will learn to use graphs, charts, and data to analyse, describe, and explain economic concepts, as well as apply these concepts to consumer, business, and government decisions.
Business	The Business Education which includes a focus on several subject areas: • **Principles of Business (POB):** Introduces students to the business world, covering topics like trade, distribution, and the role of consumers. • **Principles of Accounts (POA):** Provides an understanding of financial accounting, including source documents, ledgers, trial balances, and financial statements. • **Office Administration (OA):** Focuses on administrative principles, procedures, and policies necessary to function efficiently in a modern office environment (e.g., Human Resources, Accounts/Finance, Sales). • **Electronic Document Preparation Management (EDPM):** Assists in the development of skills related to the creation, storage, transmission, and management of electronic documents. • **Economics (Econ):** Covers fundamental economic principles relevant to business operations.
Accounting	The Accounting course introduce students to accounting as the "language of business" and cover the fundamental principles and processes involved in recording, classifying, analysing, and communicating financial information.
Marketing	The Marketing course covers marketing fundamentals and strategies, including price, promotion, product distribution, and economics. The curriculum often includes practical skills

	like problem-solving, research, communication, and developing a comprehensive marketing plan.
Technology	
Information Technology 1	The Grade 9 Information Technology (IT) course focuses on developing fundamental ICT skills and understanding technology's role in society. Students will use common software like word processors and spreadsheets, manage files and folders, and understand basic computer and network concepts. The CCSS curriculum often includes digital citizenship, cyber security awareness, and principles of problem-solving through technology.
Information Technology 2	The Grade 10 Information Technology course covers core digital literacy skills like advanced documentation, spreadsheets, and databases, while also focusing on broader topics such as online safety, communication, and the social and environmental implications of technology. The curriculum aims to develop a blend of technical and employability skills, including critical thinking, problem-solving, and a foundational understanding of sustainable practices in computing.
Computer Science - Programming	The Computer Science - Programming course focuses on students learning to design, create, test, and debug computer programs to solve real-world problems, both individually and collaboratively, while considering ethical implications and security. Upon completion of the course, students will be able to: • Design and implement a program to solve a given problem using appropriate programming constructs. • Analyse a problem, decompose it into smaller, manageable components, and design algorithmic solutions. • Collaborate effectively with peers in a software development environment. • Apply testing and debugging practices to ensure program quality and functionality. • Discuss and apply professional and ethical conduct related to software development and computing technology.
Computer Science - Python	The Computer Science - Python course introduces the foundational principles of computer science and the art of programming using the Python language. Students learn to think computationally and write programs to solve problems across various fields, including business, science, and engineering. Key emphasis is placed on program design, development, testing, and documentation as part of a comprehensive software development lifecycle.
Physical Education	
Health and Physical Education (HPE) 1	The Grade 9 Health and Physical Education (HPE) course develops students' physical skills, knowledge, and lifelong healthy habits through a combination of physical activity and health-related learning. Students engage in various sports and fitness activities to improve motor skills and physical literacy, while the health component focuses on topics like

	nutrition, mental well-being, decision-making, and the effects of lifestyle choices.
Health and Physical Education (HPE) 2	The Grade 10 Health and Physical Education (HPE) course focuses on developing physical literacy and healthy habits through a combination of physical activities and health-related topics. Students will participate in diverse physical activities like strength training, yoga, and team sports, while also exploring health concepts such as mental well-being, nutrition, healthy relationships, and substance use. The curriculum aims to help students build skills, make informed choices, and develop a lifelong commitment to health and wellness.
Health and Physical Education (HPE) 3	The Grade 11 Health and Physical Education (PHE) course focuses on developing a healthy and active lifestyle through both physical activity and health knowledge. The curriculum includes modules on fitness management, mental and emotional health, substance use, and the social impact of sports, alongside practical participation in a variety of physical activities like sports and fitness training. Students are required to develop a personal fitness plan and may complete a fitness research project to analyse the benefits of physical activity.
Health and Physical Education (HPE) 4	The Grade 12 Health and Physical Education course focuses on developing leadership skills, applying strategies for competitive performance, and taking ownership of one's health and safety. The curriculum includes a teacher-directed component and a practical, physical activity component where students can experience a variety of activities with an emphasis on nutrition, teamwork, and sportsmanship.
Visual Arts	
Art or Drama	The Grade 9 **Art** Course explores various art media and techniques while developing visual literacy, design skills, and creative expression. Students are engaging with the elements and principles of design through hands-on projects in areas like drawing, painting, sculpture, and printmaking. The curriculum emphasizes connecting art to different cultures and times, developing critical reflection, and creating a portfolio of work. The Grade 9 **Drama** course focuses on building confidence, teamwork, and self-expression through practical activities like drama games, improvisation, and character development. Students work individually and in groups to explore ideas, communicate feelings, and develop expressive skills while learning about theatrical elements like voice, movement, and stage presence. The curriculum involves both practical performance work and some theoretical study of drama, with an emphasis on creating a supportive environment for risk-taking and constructive feedback.

AAKPS Services:

Building their Social Portfolio:

At Ain Al Khaleej School, we firmly believe that education extends far beyond the confines of the classroom. One of the most impactful avenues for holistic student development is through active participation in **volunteerism and community service.** These experiences not only enrich students' academic profiles but also cultivate empathy, leadership, and a deep sense of social responsibility.

While community service is not a formal requirement for university admissions in the UAE, it significantly enhances students' applications by highlighting their commitment to civic values and global citizenship. More importantly, volunteering nurtures character, strengthens interpersonal skills, and fosters a lifelong ethos of giving back.

We actively promote student involvement in a wide range of volunteer opportunities, both within and beyond the school environment:

Internal Opportunities

- **Big Sister/Big Brother Program** – Peer mentoring to support younger students
- **Sheikh Zayed Squad** – Promoting national values and cultural pride
- **Student Council** – Leadership in student representation and school initiatives
- **Model United Nations (MUN) Council** – Global awareness and diplomatic engagement
- **School Events Coordinators** – Leading environmental campaigns, cultural events, and student-led activities

External Opportunities

- **Red Crescent** – Humanitarian aid and relief efforts
- **UAE Volunteers (volunteers.ae)** – National platform for civic engagement
- **Dubai Cares** – Supporting global education and development initiatives

We encourage all parents, guardians, and community members to inspire and support our students in embracing these opportunities. Your guidance plays a pivotal role in shaping their understanding of service, responsibility, and the power of meaningful contribution.