



High School Program of Studies

2017-2018 School Year



www.inpsabudhabi.com



[inps.abudhabi](https://www.instagram.com/inps.abudhabi)

TABLE OF CONTENT

VISION	2
MISSION	2
CURRICULUM	2
GRADE LEVEL PLACEMENT	2
CREDIT HOURS	3
COURSE CHANGE	3
PRE-REQUISITES	4
ATTENDANCE	4
COURSE REPETITION	4
GRADE CONVENTION	4
EDUCATIONAL PROGRAMS	5
GRADUATES OF 2017-2019	5
GRADUATE OF 2020 AND ONWARD	5
GRADUATION REQUIREMENTS	6
MY 4-YEAR PLAN	6
SAMPLE HIGH SCHOOL 4-YEAR PLAN	8
LIBERAL ART STREAM	8
BUSINESS STREAM	9
ENGINEERING STREAM	10
MEDICAL SCIENCE STREAM	11
COURSES DESCRIPTION	12
ENGLISH DEPARTMENT	12
MATH DEPARTMENT	15
SCIENCE DEPARTMENT	17
SOCIAL STUDIES DEPARTMENT	20
INFORMATION TECHNOLOGY DEPARTMENT	22
VISUAL AND PERFORMING ARTS DEPARTMENT	24
WORLD LANGUAGE DEPARTMENT -ARABIC	26
ISLAMIC STUDIES DEPARTMENT	28
PHYSICAL EDUCATION & HEALTH SCIENCE	30
BUSINESS STUDIES DEPARTMENT	31

High School Program of Studies

Dear High School Students and Parents,

Welcome to Al Ittihad National Private School – Abu Dhabi (INPS-AD). This 2017-2018 High School Program of Studies designed for students and parents to develop understanding of the courses offered at the INPS-AD in grades 9 through 12. We encourage students to use this as a guide towards understanding the overall INPS-AD High School program.

Vision

“A generation of heritage guardians and global thinkers”

Mission

We at “INPS-AD” are committed to the intellectual and personal development of our students by providing programs that inspire and empower them to become active national and global citizens.

Curriculum

The curriculum at Al Ittihad Private School comprises a required program of studies that prepare students for college entrance. Electives are designed to allow students the flexibility to nurture their abilities and interests. The school academic year consists of two semesters, approximately 16 weeks in each. Graduation requirements are based on the number of successful units of credit earned in grade 9 through grade 12. As students move into Grades 9-12, the INPS-AD offers them courses that will help them streamline their academic choices to support their university course of study and career options.

Grade Level Placement

The following terms are used for each class:

Grade 9	Freshman
Grade 10	Sophomore
Grade 11	Junior
Grade 12	Senior

Credit Hours

Credits are the units by which academic progress is measured. Twenty- Six credits are required for graduation from INPS- AD. Every student is required to carry a minimum of (6.5) credits per year. Credit will be given only for courses taken while students are enrolled at ninth through twelfth grade. Below is the comparison between the credit hour in INPS-AD and California State credit hours. The school strongly encourage students to go beyond the minimum requirements of the credits. Accordingly, the following credits have been created by the school.

Subjects	INPS-AD	California State Credits	Comments
Islamic	2		Mandatory for Muslim students. <i>These units replace a combination of credits from the elective and world language components.</i>
Arabic	4		Mandatory for Arab Nationals. <i>These units replace a combination of credits from the elective and world language components.</i>
English	4	4	
World Language	--	2	<i>These units replaced by Arabic Language</i>
Mathematics	4	3	
Science	3	3	
Social Studies	2	2	
Physical Education	2	2	
Creative Art	0.5	0.5	
Elective Courses	4.5	7.5	
Total	26	24	

The Difference between INPS-AD & California State credits

Course Change

The schedule is created after students' choices and interests. Accordingly, courses change is highly discouraged after course selections. Two weeks change period is applicable to any new classes after starting the academic year. Student-initiated requests for course changes take place within the first two weeks of the scheduled course. Attendance in the students' original class is required until the change has been confirmed by the school administration. Consultation with the student must occur before allowing student to change their schedule. Student is responsible to finish and complete any work missed in their new course.

The teacher may recommend that a student be changed to another course if the student does not meet the minimum course expectations.

Below the steps that need to be followed when requesting a course change after the initial two-week

period:

1. Student obtains petition form from counselor for the course change.
2. Parent, current teacher, or receiving teacher recommends the change.
3. Counselor makes a recommendation.
4. A final decision will be made by the Guidance Committee, taking all recommendations into account.

The Guidance Committee consists of the Director, Deputy Director, Academic Advisor, High School Principals and Guidance Counselor)

Pre-requisites

Pre-requisites are required for some courses. Pre-requisites are listed in course descriptions, and students should be aware of them when making course selections. Students are required to read the description of each course selected in order to avoid changing courses.

Attendance

Regular attendance and punctuality are emphasized at INPS-AD. Because performance in class through collaborative activities is an essential element of student learning and assessment, students must be present and absent must be minimized. To receive course credit, students may not accumulate more than unexcused 6 classes per course per semester. Students exceeding this absence limit will receive the grade on their final transcript but will not be granted credit. Four tardiness are equal to one unexcused absence.

Course Repetition

Students receiving a 'E' or an 'F' grade in a course may be recommended to either repeat the course during the following school year or retake the course during the summer to prepare to take a placement test upon their return to school in order to be promoted to the next level.

Grade Convention

Percentage Grade	Letter Grade	GPA	Percentage Grade	Letter Grade	GPA
97-100	A+	4	73-76	C	2
93-96	A	4	70-72	C-	1.7
90-92	A-	3.7	67-69	D+	1.3
87-89	B+	3.3	65-66	D	1
83-86	B	3	Below 65	D-	1
80-82	B-	2.7	Below 60	E/F	0
77-79	C+	2.3			

Educational Programs

Graduates of 2017-2019

For graduates of 2017/2018 and 2018/2019, some course work is mandatory in Grades 11 and 12, such as Islamic, Arabic, English, and Math other courses are offered on options basis to give our students strong background and foundations in sciences as well as in business streams. At the end of Grade 10, students need to choose their preferences and commit to these choices for the next 2 academic years (Grades 11 and 12). A grace period of **two weeks** is given at the commencement of the academic year of Grade 11 for students to adjust choices; however, after that grace period, changing options is not recommended nor supported. Below are the options available.

Available Choices	
Math Advanced	Math
Physics	Economics
Chemistry	History
Biology	Accounting
PE	Art
ICT	Business

Graduate of 2020 and onward

For graduates of 2019/2020 onwards, some course work is mandatory in Grades 9 - 12, such as Islamic, Arabic, English, Math, Biology (Gr. 9), Chemistry (Gr. 10), History (Gr. 10) Physics (Gr. 11), and Economics (Grades 11&12), other courses are offered on option basis to give our students strong background and foundation in liberal art, medical science, engineering as well as in business streams. At the end of Grade 8, students need to choose their preferences and commit to these choices for the next 4 academic years (Grades 9-12). A grace period of **two weeks** is given at the commencement of each academic year for students to adjust choices; however, after that grace period, changing options is not recommended nor supported.

Graduation Requirements

- Student must finish 12 years of schooling Grades 1-12
- Student must achieve minimum of 60% overall average in grade 12
- Community Service/ Internship a minimum of 30 hours in Grade 11/12
- All high school students (those studying in grades 9, 10, 11 and 12) **must** take recognized standardized/Aptitude tests as appropriate to their needs and grade level. Choices must also be linked to university and national equivalency requirement.

Below is a list of all the tests associated with the US curriculum expectation (not all are compulsory)

Acronym	Description	Grade Level	Note
PSAT	Preliminary Scholastic Assessment Test	9	Optional
Personality and Aptitude Test	Aptitude, Interest & Personality Tests	10	Compulsory
SAT I	Scholastic Assessment Test	11 &12	Compulsory
SAT II/AP	Subject Test	12	Optional
IELTS/TOEFL	International English Language Testing	11 & 12	Compulsory
EMSAT- MOE	English, Math & Arabic	12	Compulsory

Any student seeking UAE equivalency status for his/ her High School Diploma must sit for SAT I component (minimum score of 400 for Mathematics) and TOEFL minimum score of 61 Internet based or IELTS minimum score of 5.5

My 4-Year Plan

The INPS-AD offers a robust and challenging high school curriculum, within which students have a wide opportunity to:

- Select courses that help them achieve their dreams. Our guidance counselor work with students to create a personalized 4-year academic plan so that they can think about, set, and achieve their academic goals.
- Creating a 4-Year plan is an important activity that allows students to personalize their high school course selection so it aligns with their passions and interests while also safely meeting high school graduation and minimum post-secondary entrance requirements.

The Guidance Counselors provide guidance on this student-driven activity, though a 4-Year plan is understood to be a tentative plan at the time of creation that can change over time if a student's interests or goals change.

All students are to achieve the 26 credit expectations, spread over the four years of the high school phase (Grades 9, 10, 11 and 12).

My 4-Year Plan

Credit Required	Core Subject	Grade 9	Grade 10	Grade 11	Grade 12
4	English	ELA 1 credit	ELA 1 credit	ELA 1 credit	ELA 1 credit
4	Mathematics	Integrated Mathematics 1 credit	Integrated Mathematics 1 credit	Integrated Mathematics /Adv. Mathematics 1 credit	Integrated mathematics / Adv. mathematics 1 credit
2	Social Studies / Science	Social Studies 0.5 credit	History 0.5 credit	Economics 0.5 credit	Advanced Economics 0.5 credit
3	Science	Biology 1 credit	Chemistry 1 credit	Physics 1 credit	
4	Foreign Language- Arabic Language Art	ALA 1 credit	ALA 1 credit	ALA 1 credit	ALA 1 credit
2	Islamic Studies	Islamic St. 0.5 credit	Islamic St. 0.5 credit	Islamic St. 0.5 credit	Islamic St. 0.5 credit
0.5	Visual & Performing Art	Art 0.5 credit			
2	Physical Education & Health	Physical Education & Health 0.5 credit	Physical Education & Health 0.5 credit	Physical Education & Health 0.5 credit	Physical Education & Health 0.5 credit
Total Core Subject Credits		6	5.5	5.5	4.5
Electives		0.5 Credit	1 Credits	1 Credit	2 Credits
		Introduction to Programming through Video Game Design and Building iOS Apps / English Writer's Lab	Public Speaking*/ Graphic Design Business / Human Anatomy	Accounting / Environment Sc. Engineering Design/ Creative Writing	Adv. Physics / Advance Accounting Health & Nutrition/ Video Production Adv. Chemistry /Adv. Business Advanced Biology / Drama

* Will be offered in 2018/2019

Sample High School 4-Year Plan

Liberal Art Stream

Liberal Art Stream prepares students to pursue their various careers in the Art professions (Historian, Geologist, Sociologist, Teachers, Writer, Journalist, Customer Service Representative, as well as political science, law ..etc.

The following table is a suggested plan for the students who are interested in pursuing the Liberal Art Stream.

ART STREAM – SAMPLE 4-YEAR PLAN					
Credits Required	Subjects & Requirements	Grade 9	Grade 10	Grade 11	Grade 12
4	English Language Art	ELA	ELA	ELA	ELA
4	Mathematics	Mathematics	Mathematics	Mathematics	Mathematics
3	Science	Biology	Chemistry	Physics	-
2	Social Studies	MOE Social Studies	Modern World History	Economics	Advanced Economics
2	Islamic	Islamic	Islamic	Islamic	Islamic
4	World Language Arabic	Arabic	Arabic	Arabic	Arabic
0.5	Art	Art	-	-	-
2	Physical Education	Physical Education	Physical Education	Physical Education	Physical Education
4.5	Electives	English Writer's Lab or Game Design and Building iOS Apps	Business Graphic Design or Public Speaking	Accounting Creative Writing	Advance Accounting Video Production Advance Business Creative Writing / Drama

ELA: English Language Art

MOE: Ministry of Education

Graphic Design is a core subject (not an elective) for 2017/2018

Business Stream

Business Stream prepares students to pursue their various careers in the business professions (Market Research Analyst, Accountant, Financial Advisor, Economist, Marketing, etc.). This enables students to gain personalized business information as well as accounting principles and foundation

The following table is a suggested plan for the students who are interested in pursuing the Business Stream.

BUSINESS STREAM – SAMPLE 4-YEAR PLAN					
Credits Required	Subjects & Requirements	Grade 9	Grade 10	Grade 11	Grade 12
4	English Language Art	ELA	ELA	ELA	ELA
4	Mathematics	Mathematics	Mathematics	Mathematics	Mathematics
3	Science	Biology	Chemistry	Physics	
2	Social Studies	MOE Social Studies	Modern World History	Economics	Advanced Economics
2	Islamic	Islamic	Islamic	Islamic	Islamic
4	World Language - Arabic	Arabic	Arabic	Arabic	Arabic
0.5	Art	Art		-	-
2	Physical Education	Physical Education	Physical Education	Physical Education	Physical Education
4.5	Electives	English Writing Lab or Game Design	Public Speaking Graphic Design*	Accounting Business	Advanced Accounting Video Production Advanced Business Creative Writing or Drama

English Language Art

MOE: Ministry of Education

Design is a core subject (not an elective) for 2017/2018

Engineering Stream

Engineering Stream prepares students to pursue their various careers in the engineering professions (Industrial, Aerospace, Oil & Gas, Medical Equipment, Automotive, Mechanical, Electrical, Civil, Architecture, etc.). This enables students to gain personalized Engineering information to facilitate the learning process.

The following table is a suggested plan for the students who are interested in pursuing the Engineering Stream.

ENGINEERING STREAM – SAMPLE 4-YEAR PLAN					
Credits Require	Subjects & Requirements	Grade 9	Grade 10	Grade 11	Grade 12
4	English Language Art	ELA	ELA	ELA	ELA
4	Mathematics	Math	Math	Advanced Math	Advanced Math
3	Science	Biology	Chemistry	Physics	-
2	Social Studies	MOE Social Studies	Modern World History	Economics	Advanced Economics
2	Islamic	Islamic	Islamic	Islamic	Islamic
4	World Language Arabic	Arabic	Arabic	Arabic	Arabic
0.5	Art	Art	-	-	-
2	Physical Education	Physical Education	Physical Education	Physical Education	Physical Education
4.5	Electives	English Writer's Lab or Introduction to Programming through Video Game Design and Building iOS Apps	Public Speaking or Graphic Design Human Anatomy	Environment Science Engineering Design	Advanced Physics Health & Nutrition or Video Production Advanced Chemistry Creative Writing or Drama

ELA: English Language Art

MOE: Ministry of Education

Graphic Design is a core subject (not an elective) for 2017/2018

Medical Science Stream

Medical Science Stream prepares students to pursue their various careers in the medical professions (Medicine, Dentistry, Pharmacy, Health, etc.). This enables students to gain personalized health information, as well as medical and technical terminology to facilitate the learning process.

The following table is a suggested plan for the students who are interested in pursuing the Medical Science Stream.

MEDICAL SCIENCE STREAM – SAMPLE 4-YEAR PLAN					
Credits Required	Subjects & Requirements	Grade 9	Grade 10	Grade 11	Grade 12
4	English Language Art	ELA	ELA	ELA	ELA
4	Mathematics	Math	Math	Advanced Math	Advanced Math
3	Science	Biology	Chemistry	Physics	-
2	Social Studies	MOE Social Studies	Modern World History	Economics	Advanced Economics
2	Islamic	Islamic	Islamic	Islamic	Islamic
4	World Language Arabic	Arabic	Arabic	Arabic	Arabic
0.5	Art	Art	-	-	-
2	Physical Education	Physical Education	Physical Education	Physical Education	Physical Education
4.5	Electives	English Writing Lab or Introduction to Programming through Video Game Design and Building iOS Apps	Public Speaking or Graphic Design Human Anatomy	Environment Science Engineering Design	Advanced Physics Nutrition Advanced Chemistry Advanced Biology Creative Writing or Drama

ELA: English Language Art

MOE: Ministry of Education

Graphic Design is a core subject (not an elective) for 2017/2018

Courses Description

English Department

Title: English 9

Length & Credit: 1 year / 1.0 Credit

Grade: 9

Prerequisite: None

English 9 broadens the students' literary experiences by introducing them to several classics and establishes a foundation for the advanced study of various genres. Units will include short stories, poetry, fiction, and non-fiction. In addition to reading and analyzing texts, the course emphasizes the development of writing, research, speaking, listening, viewing, grammar, and vocabulary skills. Independent reading is required in addition to the regular course work.

Title: English 10

Length & Credit: 1 year / 1.0 Credit

Grade: 10

Prerequisite: Completion of English 9

This course is intended to expose students to a variety of literature genres within the realm of American Literature. Students continue with building an extensive vocabulary base, through structured compositions, and grammar skills. In addition to reading and analyzing texts, the course emphasizes the development of writing, research, speaking, listening, viewing, grammar, and vocabulary skills.

Title: English 11

Length & Credit: 1 year / 1.0 Credit

Grade: 11

Prerequisite: Completion of English 10

As students enter a pivotal year for SAT and IELTS testing, this course focuses on the study of American literature revolving around current topics relevant to social, cultural, and political forces both regionally and globally. Topics of study may include education, political movements, ideological and cultural conflicts, and humans' relationship with nature. The texts will include a wide range of fiction and nonfiction in a variety of genres and media. In addition to the development of critical reading and analysis of texts, the course emphasizes writing, research, speaking, listening, viewing and developing grammar and vocabulary. There is also a major focus placed on the use of literary and rhetorical strategies in both writing and speaking.

Title: English 12

Length & Credit: 1 year / 1.0 Credit

Grade: 12

Prerequisite: Completion of English 11

This course devoted to the study of literature from the standpoint of the development of the English language. Students will study fiction and non-fiction texts and media from a wide range of eras, genres and global regions in order to acquire an understanding of language as a purposeful, communicative medium. There is a major focus on the use of literary and rhetorical strategies in both written and spoken expression. In addition to the critical reading and analysis of texts, the course emphasizes writing, speaking, researching, listening, viewing and developing grammar and vocabulary.

Title: Writer's Lab

Length & Credit: 1 year / 0.5 Credit

Grade: 9

Prerequisite: Recommendation from the current English Teacher

Writer's Lab is an elective course focuses on improving students' writing skills. Students will have the opportunity to explore different styles of writing to identify the key traits of effective writing. Students will practice writing for a variety of purposes and audiences to develop a strong authentic voice. Writing activities give students practice in organizing and developing narrative, cause and effect, and compare and contrast compositions, literary reviews and research papers. Mastery of the writing process is expected. In addition, students study short stories, novels and poetry. Any student may select to take this course. Alternatively, students may be recommended for the course by a middle school teacher.

Title: Public Speaking

Length & Credit: 1 year / 0.5 Credit

Grade: 9, **10**, 11, 12

Prerequisite: None

In order for students to be effective speakers, communication, verbal, nonverbal, and written must be consistent. Master of the skills used in public speaking will greatly enhance the chances of being understood. An effective presentation includes good content, organization, delivery, audience, and analysis. These are the tools that will be evaluated on during the course. In addition, the information students will learn will assist them in becoming a more critical consumer of information.

Title: Creative Writing

Length & Credit: 1 year / 0.5 Credit

Grade: 10, 11, **12**

Prerequisite: None

Creative Writing is an elective course to provide students the opportunity to read, analyze and critique a variety of rigorous text(s) in order to find their own voice, style and story. Students will read and create writing pieces which model masters of various genres, as well as establish their own personal writing style. Genres to be explored through both reading and writing include: poetry, fiction, drama, non-fiction, essay, biography, screenplay, letters, visuals, song and graphic novels. Students will be afforded ample experiences revising, reflecting, presenting and showcasing their own writing with peers and the instructor. Peer review, collaboration, and deep engagement in the writing process is a key component of the course.

Math Department

[Title: Math I](#)

Length & Credit: 1 year / 1.0 Credit

Grade: 9

Prerequisite: None

The fundamental purpose of the Mathematics I course is to formalize and extend the mathematics that students learned in the Middle School. This course includes standards from the conceptual categories of Number and Quantity, Algebra, Functions, Geometry, and Statistics and Probability.

[Title: Math II](#)

Length & Credit: 1 year / 1.0 Credit

Grade: 10

Prerequisite: Completion of Math I

The focus of the Mathematics II course is on quadratic expressions, equations, and functions; comparing their characteristics and behavior to those of linear and exponential relationships from Mathematics I.

[Title: Math III -11 General](#)

Length & Credit: 1 year / 1.0 Credit

Grade: 10

Prerequisite: Completion of Math II

In Mathematics III - 11 General course students integrate and apply the mathematics they have learned from their earlier courses. This course includes standards from the conceptual categories of Number and Quantity, Algebra, Functions and Geometry. Some standards are repeated in multiple higher mathematics courses Standards that were limited in Mathematics I and Mathematics II no longer have those restrictions in Mathematics III.

[Title: Math 11 Advanced \(Pre-calculus\)](#)

Length & Credit: 1 year / 1.0 Credit

Grade: 11

Prerequisite: Completion of Math II and recommendations from the Math teacher

Pre-calculus course is designed to cover topics in Algebra ranging from polynomial, rational, and exponential functions to conic sections. Trigonometry concepts such as Law of Sines and Cosines will be introduced. Students will then begin analytic geometry and calculus concepts such as limits, derivatives, and integrals.

[Title: Math III -12 General](#)

Length & Credit: 1 year / 1.0 Credit

Grade: 12

Prerequisite: Completion of III - 11 General

In Mathematics III -12 General course students integrate and apply the mathematics they have learned from their earlier courses. This course includes standards from the conceptual categories of Functions, Geometry and Statistics and Probability.

[Title: Math 12 Advanced \(Calculus\)](#)

Length & Credit: 1 year / 1.0 Credit

Grade: 11

Prerequisite: Completion of Math 11 Advanced (Pre-calculus) and recommendations from the current Math teacher

Calculus is presented with the same level of depth as an entry-level college and university calculus courses. It includes limits, differentiation, and integration.

Science Department

Title: Biology

Length & Credit: 1 year / 1.0 Credit

Grade: 9

Prerequisite: None

Biology means the study of life. In this course students will study all of the systems that affect living things on the earth. This includes studying scientific processes, matter and energy in organisms and ecosystems, interdependent relationships in ecosystems, natural selection and evolution, biological diversity, taxonomy, and ecology and an introduction to body systems.

Students will develop understanding of key concepts that help them make sense of life science. The ideas are building upon students' science understanding of disciplinary core ideas, science and engineering practices, and crosscutting concepts from earlier grades.

Title: Chemistry

Length & Credit: 1 year / 1.0 Credit

Grade: 10

Prerequisite: None

This course is a standards-based study of fundamental chemical concepts, such as atomic theory and its relation to chemical behavior, chemical bonding, the mole and topics include, but are not limited to: measurement, atomic structure, electron configuration, the periodic table, bonding and formulas, chemical equations and reactions, properties of liquids and solids and stoichiometry.

Students will use the scientific method in investigations, and make informed decisions using critical thinking and scientific problem solving skills. This course provides students with a conceptual framework, factual knowledge, and analytical and scientific skills. The student will conduct practical, virtual and laboratory investigations using safe, environmentally appropriate practices.

Title: Physics

Length & Credit: 1 year / 1.0 Credit

Grade: 11

Prerequisite: None

This functional Physics course includes discussions of the basic concepts, applications, and problems solving techniques on a variety of topics such as: motion, forces, universal gravitation, momentum, mechanical energy and work and fluid mechanics.

Students will use the scientific method in investigations, and make informed decisions using critical thinking and scientific problem solving skills. This course provides students with a conceptual framework, factual knowledge, and analytical and scientific skills. The student will conduct practical and virtual and laboratory investigations using safe, environmentally appropriate practices.

Title: Human Anatomy

Length & Credit: 1 year / 0.5 Credit

Grade: 10, 11

Prerequisite: Completion of Biology 9

In this course students will investigate the structure and function of the human body. Topics covered will include the basic organization of the body; biochemical composition; and major body systems along with the impact of diseases on certain systems. Students will engage in many topics and competencies related to truly understanding the structure and function of the human body.

Demonstrations, lab activities, videos and dissections will be used to supplement classroom lecture and discussion.

Title: Advanced Chemistry

Length & Credit: 1 year / 0.5 Credit

Grade: 11, 12

Prerequisite: Completion of Chemistry 10 and recommendations from the Chemistry teacher

This course provides the fundamental concepts and principles of chemistry with an emphasis on inquiry and critical thinking skills including: problem solving, mathematical reasoning, and experimental investigations. Topics included are stoichiometry, molecular kinetics, energy relationships, oxidation-reduction, solution dynamics, acids-bases, equilibrium, organic and biological chemistry, and nuclear interactions

Title: [Advanced Physics](#)

Length & Credit: 1 year / 0.5 Credit

Grade: 12

Prerequisite: Completion of Physics and Advanced Math in Grade 11 and recommendations from the Physics teacher.

Students will develop a deep understanding of physics principles and the ability to reason about physical phenomena using important science process skills such as explaining causal relationships, applying and justifying the use of mathematical routines, analyzing data.

Topics included are: Thermodynamics, electricity, electric circuits, magnetism, waves, light and sound, and the basic elements of quantum physics.

Title: [Environmental Science](#)

Length & Credit: 1 year / 0.5 Credit

Grade: 11, 12

Prerequisite: Two science credits

This course will provide students with the scientific principles and concepts required to understand the interrelationships of the natural world, to identify and analyze environmental problems, to evaluate the risks associated with these problems, and to investigate alternative solutions for resolving or preventing them. Students develop an understanding of how scientific methods are used to construct ecological knowledge. The following topics are included in this course: Earth systems and resources; Ecology; Populations; Land and water use; Energy resources and consumption; Pollution, local and global climate issues.

Social Studies Department

Title: MOE Social Studies

Length & Credit: 1 year / 0.5 Credit

Grade: 9

Prerequisite: None

يتناول المنهاج وثائق مهمة عن شخصية سمو الشيخة فاطمة بنت مبارك (أم الامارات) حفظها الله المفعمة بالمبادئ الإنسانية السامية التي استطاعت تحقيق تحولات وإنجازات أساسية خاصة في مجال تمكين المرأة ، والارتقاء بمكانتها ، و هو يركز على تجسيد مبادئ سموها الإنسانية الرامية إلى تحقيق السلم والإخاء بين شعوب العالم ، كما أنه يستقرى جوانب عطاء أم الإمارات التي تتسم بسعة مبادراتها ، مع استعراض الدور الريادي لسموها في العمل النسائي و الإنساني ، و قد صُممت أنشطة الكتاب وفق ثلاثة محاور تمثلت في التعلم والعمل النسائي في فكر أم الإمارات ، الأمومة والطفولة والرعاية الاجتماعية و الدور الفاعل للمرأة في دولة الإمارات العربية المتحدة

Title: Modern History

Length & Credit: 1 year / 0.5 Credit

Grade: 10,11,12

Prerequisite: None

Studying the Modern History course enables students to become critical thinkers and helps inform their judgements and actions in a rapidly changing world. Students are exposed to a variety of historical sources, including government papers, extracts from newspapers, letters, diaries, photographs, cartoons, paintings, graphs and secondary sources, in order to determine the cause and effect, and the motives and forces influencing people and events. Through the process of historical inquiry, students are encouraged to question and evaluate historical sources; identify various representations and versions of history; use evidence to formulate and support their own interpretations; and communicate their findings in a variety of ways.

Title: Economics

Length & Credit: 1 year / 0.5 Credit

Grade: 11 ,12

Prerequisite: None

Economics: Concepts and Choices uses a concept-driven and interactive approach to develop economic literacy. It uses real-world examples, frequent concept application, and continuous updating to ensure that students and teachers stay abreast of the very latest economics news and information. A variety of print and technology resources are integrated into this comprehensive program providing teachers and students with the tools needed for success, from easy-to-use teaching tools to assessment tools that inform instruction.

Economics takes a unique approach to the material. For every concept within the narrative, Economics follows a consistent Concept-Example-Application approach, offering students a chance to make sure they fully understand the material before moving on. Because economics builds on itself, almost like math or a world language, this helps keep students on pace.

Students are introduced to the basics of economic principles, and learn how to think like economists. They explore different economic systems, including the American free enterprise system, analyze and interpret data, and consider economic applications in today's world. From economics in the world of business, money, banking, and finance, students see how economics is applied both domestically and globally. The main focus will be on:

Scarcity: The Basic Economic Problem, Economic Systems, Demand, Supply, Market Structures and Types of Business Organizations

Title: Advanced Economics

Length & Credit: 1 year / 0.5 Credit

Grade: 12

Prerequisite: Completion of Economics

In Advance Economics course the main focus will be on:

- The Role of Labor
- Money & Banking
- Financial Markets
- Economic Indicators and Measurements
- Facing Economic Challenges
- International Trade

Information Technology Department

Title: Introduction to Programming through Video Game Design and building iOS Apps

Length & Credit: 1 year / 0.5 Credit

Grade: 9,10,11,12

Prerequisite: None

Introduction to Programming through Video Game Design is recommended for anyone considering studying engineering or computer science in college. Through the designing of

video games, students will be introduced to the fundamentals of computer programming. In programming the games, students will cover core-programming topics such as classes, objects, methods, variables, decision statements and control structures. Students will design and program their own animated, interactive game as the final programming project. The manipulation of graphical and sound files will be included. This course, Mobile App Development or Robotics are a prerequisite for students interested in the computer science Python programming course entitled Computer Programming I.

Title: Engineering Design

Length & Credit: 1 year / 0.5 Credit

Grade: 9, 10,11,12

Prerequisite: None

Students will study Design Engineering, which includes Robotics (Level 2) and Arduino module.

Robotics is a project-based curriculum that is motivating and engaging for many students. It draws on, and develops, learning related to the disciplines of science, technology, engineering and mathematics (STEM). At this stage, students will explore the processes of design and programming, and develop solutions of real-life problems, using EV3 LEGO robots.

Arduino curriculum is a project-based course, where students explore aspects of electronics, circuitry, programming and processes of design. Students learn about these aspects through researching, designing circuitry, and utilizing and programming electronics using Arduino module and LittleBits. Students will apply what they learn by designing a final product.

Title: Video Production

Length & Credit: 1 year / 0.5 Credit

Grade: 9, 10,11,12

Prerequisite: None

The focus of Video Production is for students to develop the skills and techniques required for editing and producing different types of multimedia video projects. Students learn how to use the video editing programs, Adobe After Effects. Adobe After Effects is a digital visual effect, motion graphics, and compositing application used in the post-production process of filmmaking and television production. Student projects focus on producing short films, which could include product commercials and advertisements, public service announcements, or highlights of events such as news and sports, movie trailers, or summary of upcoming programs.

Visual and Performing Arts Department

Title: General Art

Length & Credit: 1 year / 0.5 Credit

Grade: **9-12**

Prerequisite: None

This is a general art course that encompasses a broad spectrum of artistic experiences and information. There are no prerequisites to enter this class; however, General Art is a prerequisite for both Painting and Drawing classes. The General Art class focuses on developing an understanding and appreciation of the many forms and techniques used to develop art. The class is primarily project-based; however, there will be times when students are responsible for research and written elements within the assignments. Projects include both 2-D and 3-D assignments and will cover a wide range of media, which may include pencil, paint, metal, printmaking, paper mache, colored pencils, charcoal, etc. This basic High School studio art course may be taken for one additional semester at a higher level. A sketchbook is required.

Title: Drawing & Painting

Length & Credit: 1 year / 0.5 Credit

Grade: **9,10,11,12**

Prerequisite: Completion of General Art

This one-semester course is designed to strengthen and refine the drawing skills of each student. Assignments will be 2-dimensional in nature with a strong focus on development of the hand-eye coordination that is necessary to do fine detailed drawings. Development of skill will be strongly pushed during the beginning of the semester and focus will gradually become more creative in nature as students learn to expand from realism into the imaginary with their creations. Students will learn how to create realistic drawings that appear 3-dimensional by developing a deep understanding of light and shadow and the parts they play in composition. The course will incorporate the use of pencil, charcoal, colored pencil, ink and other 2-dimensional tools to more strongly develop student skill levels and increase the range of their portfolio. Sketchbook is required.

This course is designed to introduce the art of painting in many of its different aspects. Beginning with simple ideas and concepts, the class will lay a foundation for student development in several different media including watercolor, colored pencil, ink, acrylic and some tempera. Students take a semester of Drawing prior to taking Painting class so that students feel comfortable with the elements of art that were introduced and taught in Drawing. In Painting, these same drawing skills will be used in liquid based media and expanded from paper into both canvas and mixed media pieces. Students will be encouraged to bring depth and emotion to their work, using it to express their inner feelings. Students will learn how to incorporate different media, textures and techniques to create finished works of art. Painting may be repeated once at a higher level for credit. Sketchbook is required

Title: **Graphic Design**

Length & Credit: 1 year / 0.5 Credit

Grade: 9,**10**,11,12

Prerequisite: None

Students will study Graphics Design using Adobe Photoshop, Illustrator and InDesign. Graphics Design, also known as communication design, is the art and practice of planning and projecting ideas and experiences with visual and textual content. The form of the communication can be physical or virtual, and may include images, words, or graphic forms.

Title: **Drama**

Length & Credit: 1 year / 0.5 Credit

Grade: 9,10,11,**12**

Prerequisite: None

This course emphasizes the active exploration of dramatic forms and techniques, using materials from a wide range of authors, genres, and cultures. Students will construct, discuss, perform, and analyze drama. They will often reflect on the experiences to help develop an understanding of themselves, the art form, and the world around them. In drama, most learning is experiential and group-oriented.

World Language Department -Arabic

Title: Arabic 9

Length & Credit: 1 year / 1.0 Credit

Grade: 9

Prerequisite: None

وُضع منهج التاسع للطلاب ليستفيد منه ، ويستمتع بقراءته ويشتمل على مهارات القراءة ، الاستماع ، المحادثة ، الكتابة ، النحو ، البلاغة .

أما نصوص القراءة فقد تنوعت ما بين القرآن الكريم والحديث الشريف ، والنصوص الأدبية ، ونصوص الرأي ، والنصوص المعلوماتية .

إن الأفكار والأسئلة الواردة في المنهج هي للطلاب، فهي ليست مفصولة عن عالم الأدب؛ فالأدب يناقش قضايا الإنسان الكبرى، فعلى الطالب أن يكون قارئاً ماهراً يقرأ السطور وما بين السطور، ويبحث الكتاب الطالب على أن يخصص جزءاً من وقته للكتاب والمطالعة لأهميتها.

Title: Arabic 10

Length & Credit: 1 year / 1.0 Credit

Grade: 10

Prerequisite: Completion of Arabic 9

يهدف المنهج إلى تطوير مهارات الطالب اللغوية، من خلال التفاعل الواعي مع مضامين النصوص وأفكارها، وركز على ستة محاور هي: القراءة، الاستماع، المحادثة، الكتابة، النحو والبلاغة. وقسمت نصوص القراءة إلى أقسام: القرآن الكريم، الحديث الشريف، النصوص الأدبية، ونصوص الرأي، والنصوص المعلوماتية.

وقد ركز المنهج على جعل الطالب شريكاً فاعلاً في عملية التعليم والتعلم، وقدم المنهج روافد للطلاب " نصوص رديفة " في كتاب النصوص؛ لتكون رافداً مهماً لمن أراد أن يبدأ رحلة القراءة والتثقيف والمعرفة.

Title: Arabic 11

Length & Credit: 1 year / 1.0 Credit

Grade: 11

Prerequisite: Completion of Arabic 10

اعتمد المنهج في بنائه على مدخل الوحدات، حيث تضمنت كل وحدة موضوعات متنوعة، تمثل مجالات ومحاور المنهج بصورة متكاملة من الوحي الإلهي والعقيدة وقيم الإسلام وآدابه وأحكامه والسيرة النبوية والشخصيات والهوية والقضايا المعاصر

وحرص المنهج على ترجمة معايير المنهج إلى محتويات شاملة، وحدد نواتج التعلم في بداية كل درس، وألحق ذلك بأنشطة الطالب التي ركزت على ثلاثة أنواع من المحاور، وهي الأنشطة العامة لجميع الطلاب، والأنشطة الإثرائية والأنشطة التطبيقية

Title: Arabic 12

Length & Credit: 1 year / 1.0 Credit

Grade: 12

Prerequisite: Completion of Arabic 11

اعتمد المنهج في بنائه على مدخل الوحدات، حيث تضمنت كل وحدة موضوعات متنوعة، تمثل مجالات ومحاور المنهج بصورة متكاملة من الوحي الإلهي والعقيدة، وقيم الإسلام وآدابه وأحكامه، والسيرة النبوية والشخصيات والهوية الوطنية والقضايا المعاصرة.

كما استهدف تحقيق سمات الطالب الإماراتي، وتعزيز ولائه، وانتمائه إلى وطنه، وتحصينه من أفكار التطرف والإرهاب، وحرص كذلك على تنمية مهارات القرن الحادي والعشرين، ومهارات التفكير الإبداعي، والابتكاري، وحل المشكلات، وصفل قدرات الطلاب وتوعيتهم باستثمار الإمكانيات المادية والبشرية، والمحافظة على ثروات الوطن، مع التركيز على المعارف والمفاهيم الدينية التي يحتاج إليها الطلاب، مع ربطها بحياتهم المعاصرة وفق تعاليم الإسلام

Islamic Studies Department

Title: Islamic 9

Length & Credit: 1 year / 0.5 Credit

Grade: 9

Prerequisite: None

استهدف المنهاج تحقيق سمات الطالب الإماراتي ، وتعزيز ولائه لوطنه بالاعتدال والتوسط والتسامح ، واهتم بتنمية المهارات الأدائية الخاصة بالتربية الإسلامية ، واعتنى بالقيم الإسلامية لبناء شخصيات واعية ، تتمسك بدينها ، وتعزز بثرائها ، وتسهم في بناء وطنها

Title: Islamic 10

Length & Credit: 1 year / 0.5 Credit

Grade: 10

Prerequisite: Completion of Islamic 9

قد وازن المنهاج بين المعرفة الدينية والأنشطة التعليمية ، حيث قدم المعارف والمفاهيم الدينية اللازمة للطلاب، وفتح لهم مجال الاستزادة والإثراء عبر الأنشطة التعليمية الصفية في الوقت نفسه .
وهدف إلى تحقيق سمات الطالب الإماراتي وتعزيز ولائه وانتمائه إلى وطنه ، وتحصينه من أفكار التطرف والإرهاب ، وتنمية مهارات القرن الواحد والعشرين ، ومهارات التفكير ، وتحقيق متطلبات التنمية المستدامة .

Title: Islamic 11

Length & Credit: 1 year / 0.5 Credit

Grade: 11

Prerequisite: Completion of Islamic 10

ركز المنهاج على المعارف و المفاهيم الدينية التي يحتاج إليها الطالب مع ربطها بحياتهم المعاصرة وفق تعاليم الإسلام المتسمة بالاعتدال و التوسط و التسامح ، كما اهتم بتنمية المهارات الأدائية الخاصة بالتربية الإسلامية ، و اعتنى بالقيم الإسلامية لبناء شخصيات واعية تتمسك بدينها ، و تعتز بتراثه

Title: Islamic 12

Length & Credit: 1 year / 0.5 Credit

Grade: 12

Prerequisite: Completion of Islamic 11

اعتمد المنهاج في بنائه على مدخل الوحدات ، حيث تضمنت كل وحدة موضوعات متنوعة ، تمثل مجالات و محاور المنهج بصورة متكاملة من الوحي الإلهي و العقيدة ، و قيم الإسلام و آدابه و أحكامه ، و السيرة النبوية و الشخصيات و الهوية الوطنية و القضايا المعاصرة .

كما استهدف تحقيق سمات الطالب الإماراتي ، و تعزيز و لائه ، و انتمائه إلى وطنه ، و تحصينه من أفكار التطرف و الإرهاب ، و حرص كذلك على تنمية مهارات القرن الحادي و العشرين ، و مهارات التفكير الإبداعي ، و الابتكاري ، و حل المشكلات ، و صقل قدرات الطلاب و توعيتهم باستثمار الإمكانيات المادية و البشرية ، و المحافظة على ثروات الوطن ، مع التركيز على المعارف و المفاهيم الدينية التي يحتاج إليها الطلاب ، مع ربطها بحياتهم المعاصرة وفق تعاليم الإسلام

Physical Education & Health Science

Title: Physical Education 9

Length & Credit: 1 year / 0.5 Credit

Grade: 9 -12

Prerequisite: Completion of PE 9.10. 11

The learner will demonstrate competency in two or more lifetime activities; describe key concepts associated with successful participation in physical activity; model responsible behavior while engaged in physical activity; and engage in physical activities that meet the need for self-expression, challenge, social interaction and enjoyment.

Students will acquire a broad range of fundamental skills and knowledge, related to movement and sport. Students will experience a variety of physical education activities. Skill development and game-play strategies related to activities such as volleyball, basketball, soccer, badminton, softball, track and field will be included.

Title: Health & Nutrition

Length & Credit: 1 year / 0.5 Credit

Grade: 9,10,11,**12**

Prerequisite: None

Nutrition and Health education is a continuum of learning experiences that enables students, as individuals and as members of society, to make informed decisions, modify behaviors, change social conditions in ways that are health enhancing and increase health literacy. Four characteristics are identified as essential to health literacy. Health-literate individuals are:

- Critical thinkers and problem solvers when confronting health problems and issues
- Self-directed learners who have the competence to use basic health information and services in health-enhancing ways
- Effective communicators who organize and convey beliefs, ideas, and information about health issues
- Responsible and productive citizens who help ensure that their community is kept healthy, safe, and secure.

Business Studies Department

Title: Business

Length & Credit: 1 year / 0.5 Credit

Grade: **10,11,12**

Prerequisite: None

Principles of Business focus on the theoretical and practical aspects of business activities. It provides a framework to assist in more informed decision-making by individuals in their role of producers or consumers.

An understanding of business principles in this course of study prepares students to become productive members of society. The syllabus provides opportunity for students to develop entrepreneurial and managerial skills necessary to survive and prosper in a local, regional and global dynamic business environment. The Principles of Business syllabus engages students in conducting research which helps to improve their communication and critical thinking skills and creates an awareness of business ethics and social and economic responsibilities.

The syllabus will not only provide a good foundation for further study of Business at pre-professional and professional levels, but will assist students in the development of the requisite skills, competencies, attitudes and values that are critical for success in today's business environment.

Title: Accounting

Length & Credit: 1 year / 0.5 Credit

Grade: **10,11,12**

Prerequisite: None

The prime objective of this course is to introduce students to the double-entry system of accounting for sole proprietorship, corporate, and partnership forms of business enterprises by using real-world applications and connections. It includes analyzing business transactions, journalizing, posting, and preparing worksheets and financial statements. Other important objectives include the following:

- To help students develop personal and professional skills for school and work.
- To help students understand the relationship between the manual system of accounting and a computerized system.
- To help students find success in accounting.

Title: Advanced Business

Length & Credit: 1 year / 0.5 Credit

Grade: **11,12**

Prerequisite: Completion of Business

This course provides a survey of the business world. Topics include the basic principles and practices of contemporary business. Upon completion, students should be able to demonstrate an understanding of business concepts as a foundation for studying other business subjects.

Understanding Business introduces the world of business through a survey of fundamental concepts and challenges – managing change, economics, ethics and social responsibility, management and leadership, marketing, human resources, entrepreneurship, accounting and finance, global trade, information technology, and operations and supply chain. This course is designed to give students a working knowledge of business, as well as assist them in determining an area or two of business in which they would like to concentrate throughout their studies.

Title: Advanced Accounting

Length & Credit: 1 year / 0.5 Credit

Grade: **11,12**

Prerequisite: Completion of Accounting

Accounting is the language of business, which is the process of recording, classifying, and summarizing financial information. Financial understanding of assets, liabilities, owner's equity, revenues, and expenses are covered for a service business and a merchandising business. Financial papers (journals, ledgers, balance sheets, income statements, worksheets, and trial balances) are covered for both types of businesses.

The ability to work on a continuous flow with the intentions of relating one area of concentration to another is needed.