

## Grade 12 Unit 1

### 1. Arabic

#### الوحدة الأولى:

ستتعلم الطالبة في الوحدة الأولى كيفية شرح الآيات الكريمة من سورة البقرة " الله ولي الذين آمنوا" ملتفتة إلى خصائص النص القرآني، وتحليل معنى الحديث الشريف "الله أشد فرحاً بتوبة عبده المؤمن"، ملتفتة إلى خصائص المثل في البلاغة النبوية، كما تبين المتعلمة المعنى الإجمالي للنصوص الشعرية من قصيدة "على قدر أهل العزم" للمتنبى المنتمي للشعر العباسي، موضحة علاقة الأفكار ببعضها، مفسرة مفرداتها من خلال السياق مستنتجة الدلالات الإيحائية للكلمات، كما تتعرف المتعلمة على بعض الظواهر النحوية مثل أفعال المقاربة والرجاء والشروع وإن وأخواتها. وستقوم المتعلمة بكتابة ورقة بحثية.

### Islamic

#### الوحدة الأولى:

ستتعلم الطالبة في هذه الوحدة المعنى الإجمالي لسورة النور وتفسر المفردات الصعبة وتبين الآثار المترتبة على جريمة الزنا وتستنتج معنى اللعان والحكمة منه. وتوضح المقصود بمناهج المفسرين وتقتدي بالعلماء في منهجية العلمية في حياتهم. وتتعرف على المقصود من التطرف وتحدد أسبابه وآثاره. وتستنتج أنواع الفراق بين الزوجين وتوضح آداب الإسلام وأحكامه في الطلاق وتعلل مشروعية الخلع والتفريق بأمر القضاء. وتستدل بأحداث من السيرة على حرص الرسول عليه الصلاة والسلام على بناء مجتمع متماسك وتبين الإستراتيجيات التي استخدمها الرسول عليه الصلاة والسلام لتقوية العلاقات الاجتماعية.

### Islamic Studies AAL

In this unit students will learn about the following topics:

Protecting Society against Moral Crimes

Exegetical Methods

Extremism

Separation of Spouses

Allah's Messenger, peace be upon him, and social life

### English

Students will be developing Research Skills and Non-Fiction Writing Skills. They will study for and write a research paper on a culturally responsive topic for a smaller research paper. This, in turn, will lead to a larger project connecting local issues/culture to the global environment for a formal research paper. Students will also complete an oral presentation on the research topic.

**AP Literature and Composition: Elements of Fiction and Context**

Students will begin the year with rigorous study of the elements of fiction and strategies for reading literature through an academic lens. Students will understand the social and societal contexts surrounding literary works and will be able to analyze their effects on both the writing and interpretation of the piece. Students will apply skills to the analysis of selected short fiction and novel studies through writing and class discussion.

Math

**Business Math**

Basics of Mathematics Part I: In Unit 1 the students will review the fundamental operations of addition, subtraction, multiplication, and division on integers, and the order of operations. They will solve problems with percentages, weighted averages and fractional algebraic expressions.

**Pre-Calculus**

Functions and Graphs: In Unit 1 the students will determine whether relations between two variables are functions, and use function notation, find the domains of functions, use functions to model and solve real-life problems as well as evaluate difference quotients.

**Calculus**

Limits and Their Properties Part 1: In Unit 1 the students will estimate a limit using a numerical or graphical approach, learn different ways that a limit can fail to exist. They will evaluate limits analytically: dividing out technique, rationalizing technique, and using the Squeeze Theorem.

AP Calculus

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Physics

**Force and Motion**

This unit introduces students to the concepts of motion in relation to distance and position. They will begin by learning to differentiate between distance and displacement. Students will also calculate average speed, average velocity and acceleration and be able to interpret the motion of an object based on the data in a position-time graph. In addition, students will learn about the fundamental forces and the difference between mass, weight and gravity.

PE

**Physical Unit Description:**

This Basketball Module helps to achieve the standards set out by SHAPE America, as it will help the students to demonstrate fundamental movement skills in a variety of contexts; cooperate with and encourage classmates; accept individual differences and demonstrate inclusive behaviors; and engage in physical activity for enjoyment and self-expression. The focus will be on developing the skills required to play Basketball, passing, catching, dribbling, shooting, attacking and defending. Students will also be required to develop their mental capacity as they demonstrate their ability to both understand and implement tactics in a game situation, and to adapt easily from offence to defense in a game situation.

Elective Classes

Art

Unit one is designed to establish the student as a reflective practitioner. They will be allocated a sketch book which will double as their reflective journal. Considering **reflective practice** as the ability to reflect on one's actions so as to engage in a process of continuous learning, students will be encouraged to reflect on decisions made and assess how might they improve on such decisions going forward. Problem solving, self-evaluation and critical thinking will be explored.

Grade 12 will partake in a numeracy task of gridding and enlarging a portrait of an influential figure. They will also be required to research and artistically present a support studies page detailing why they have chosen this particular figure.

Drama

**Improvisation**

This unit will provide the the foundations for their developing Drama exploration, and will inspire the learners in the power of their imaginations. During this unit, they will expand and develop their confidence, creativity and communication skills. The students will understand that improvisation is at the basis of all acting experiences, and that the ability to think creatively, quickly and use the skills of acting in this context is transferable to not only other areas of acting, *but their everyday lives, real time problems and curriculum of life.*

French

This course enables students to develop their communication skills in French and to gain an understanding of the culture of France and other French speaking countries. The course aims to develop students listening, speaking, reading and writing skills in French with an emphasis on communication.

**Unit 1 - Je me présente! - I introduce myself!**

Language content:

- Students will be able to greet each other in French and ask 'how are you'
- Students will be able to introduce themselves to other people - say/ask their name, age, where they live, birthday, etc.
- Students will be able to understand and follow instructions in French
- Students will be able to use the numbers upto 20

Grammar:

- Students will get introduced to French grammar - masculine and feminine, verbs, personal pronouns, etc

Cultural aspect:

- Students become aware of similarity and differences in Arabic and French cultures

Psychology I

**Perspectives on Psychological Science**

This unit examines different theoretical perspectives to understanding why people think and behave as they do, and how these perspectives have guided psychological research. Throughout the history of psychological science, psychologists have organized their ideas in a variety of ways, and the field continues to become increasingly specialized. However, today we recognize several broad viewpoints or perspectives from which psychological scientists survey the field and conduct their work. These perspectives are commonly identified as Behavioral, Behavioral Genetics, Cognitive, Evolutionary, Neuroscience, Psychodynamic, Humanistic-Existential, and Sociocultural.

Psychology II

**Social Psychology**

This unit examines the effects of social contacts on the development of attitudes, stereotypes, discrimination, group dynamics, conformity, social cognition and influence, self-concept, persuasion, interpersonal perception and attraction, cognitive dissonance, and human relationships.

Economics

**Introduction to Economics**

The purpose of Unit 1 is to lay out basic economic principles that will serve as building blocks for the rest of the year. Students will learn why scarcity is the basic economic problem that faces every society and why scarcity requires us to make choices. Students will gain an understanding of how consumers and producers confront the condition of scarcity. Key economic terms relating to decision making will be explored such as opportunity cost and trade-offs. Students will also learn how to construct and interpret a production possibilities frontier curve to explain the concepts of choice, scarcity, opportunity cost and trade-offs.

Advanced Biology

**Bacteria/Viruses**

Students will take an in depth look into the world of viruses and bacteria and how they can both harm and benefit living organisms. We will start by comparing the structure of different types of bacteria and viruses, their methods of replication, their survival methods, benefits they serve to humans and our environment and how to treat and cure organisms who have been afflicted by them. The students will gain a better understanding on prevention, protection and treatment of infections and diseases caused by both bacteria and viruses. They will tie this knowledge into their genetic engineering unit which will take place in Unit 3.

Advanced Chemistry

**Chemical Reactions and Stoichiometry**

There are over 200 billion stars in our galaxy. But the number of molecules in a single drop of water is about ten billion times larger.

When dealing with such large numbers, how does a chemist even begin to precisely measure the ingredients in a chemical reaction? To quantify chemical reactions chemists use Stoichiometry. In this unit, students will learn that balancing equations, calculating molecular masses, and figuring out which ingredients will run out first (limiting reagents), are all important tools in the science of stoichiometry. Students will understand that using stoichiometry to quantify chemical reactions is essential in any problem you are trying to tackle from creating renewable energy sources to developing chemicals made from sustainable materials.

Students will begin this unit by reiterating their knowledge on the types of chemical reactions, how to write and balance equations as well as net ionic equations and predict the production of precipitate in single and double displacement reactions. Students will then move on to Stoichiometric chemistry.

AP Computer Science:

**Course Overview & Introduction into Macs**

In this unit the students will understand what is this course about and will master the following skills that represent the foundation skills need throughout this course. Students will become familiar how to login into the computer (private username and password), join Edmodo to access course materials, understand the parts of a mac system, organize files into folders, use some Mac apps such as Keynote to create presentations, and Pages app to create reports, and poster. They will also learn how to save, delete, and rename files and folders. In addition to the above, they will review the safety rules applied in ICT class and the student and school policy regarding usage of ICT tools. Students will also understand the impact of computers and computer science on our lives. They will learn about the ethical use of computers and effect of computing innovations on culture, society and economy.