



الاعتزاز بالماضي. الإعداد للمستقبل.
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Grade 12 Unit 5 Description
Term 3 2018

English (non AP)

Grade 12 will be studying the Shakespeare play 'Macbeth', exploring the central themes and the language of 'The Bard.' The standards will focus on literary analysis, building on the work already done with our novels and poems.

Math

Business Math Unit 5- Mathematics of Finance

In this unit pupils will be able to calculate simple and compound interest. The aim for this unit is to give students exposure into how businesses use interests for loans.

Calculus

Students will now combine the skills that they have learned about limits and differentiation in Unit 5: Integration. We will learn new tools so that we can now calculate the area under a curve, and learn the properties of definite integrals. Next, we will gain an understanding of antiderivatives and learn to calculate indefinite integrals. From there, students will learn to calculate Riemann Sums and definite integrals. Finally, we will be introduced to The Fundamental Theorem of Calculus.

AP Calculus

Unit 5 - Applications of the Integral

In this unit students will use their knowledge of Integration to compute quantities that are represented by integrals, including volume, average value, work, total mass, population, and fluid flow.

Math

Unit 5-Pre cal Math

Introducing trigonometric identities that the students will use more extensively in their continued studies in Calculus. Next, we will look at mathematical proofs of trigonometric identities. Finally, we will study the sum and difference formulas for sine, cosine, and tangent.

The skills that we will learn in this unit include verifying and using trigonometric identities, proving trigonometric identities, and using sum and difference formulas to evaluate and simplify trigonometric expressions and to solve trigonometric equations.



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Arabic

الوحدة الخامسة:

تشتمل الوحدة الخامسة على مجموعة من الدروس التي تعمل على تطوير المهارات اللغوية للمتعلمة، وهي دروس من الشعر الحديث، ورواية الأمير الصغير، وبعض النصوص المعلوماتية مثل نص الجرافين، ودروس مهارة الاستماع مثل الإعلانات التلفزيونية، أما التحدث الذي تلتزم فيه المتعلمة اللغة العربية الفصحى السليمة، فسيكون عن شعراء العصر الحديث، أما الكتابة فستكون عن كتابة استجابة لنص أدبي- محمود درويش، أما دروس النحو فتشتمل على (المفاعيل: المفعول به والمفعول المطلق والمفعول لأجله والمفعول فيه) وجميعها تخدم مهارة الكتابة حتى تكون حسنة الصياغة والضبط.

وستكون الأنشطة التعليمية متنوعة، وذلك عن طريق استخدام التكنولوجيا، ومهارات حل المشكلات، والتحليل والتركيب والتطبيق، والمشاريع التي تخدم المادة، وتنمي الإبداع والابتكار عند المتعلمات.

سيتم تقييم الطالبات من خلال اختبارات شفوية وكتابية، واستمارات التقييم التي توضح قياس معايير مهارات القراءة الجهرية والاستماع والتحدث والمهارة الكتابية ومهارة حفظ النصوص، وجميعها تخدم العملية التعليمية، وتقوي هذه المهارات لدى المتعلمة.

Arabic for Non-Arab

ستدرس الطالبة في هذه الوحدة عن الطاقة البديلة ومصادر هذه الطاقة وطرق المحافظة عليها

كما ستدرس عن اسم الفاعل واسم المفعول في المهارات النحوية.

وفي الإملاء الألف اللينة في آخر الأفعال الثلاثية وفوق الثلاثية.

وفي الخط ستدرس الطالبة خط الرقعة وطريقة كتابته، و حروف العين والغين والفاء والقاف في بداية الكلمة ونهايتها وفي الوسط.

Islamic

ستتعلم الطالبة في الوحدة الخامسة على المعنى الإجمالي للآيات (35-57) من سورة النور وتفسر مفردات الآيات وتوضح مكانة المساجد في الإسلام ودلائل قدرة الله تعالى في خلقه وموقف المؤمن والمنافق تجاه أوامر الله تعالى ورسوله صلى الله عليه وسلم، وتبين أن الاختلاف بين البشر سنة إلهية حتمية وتتعرف على مظاهر التسامح مع المخالفين في العقيدة وأهمية تقبل الآخرين والتعايش معهم بروح التسامح، وتقرن بين الأحلام والرؤى، وتبين المقصود بالنظام الاقتصادي في الإسلام وأأسسه.

PE

This course helps students to develop the skills, knowledge and attitudes that lead to a healthy lifestyle and to successfully participate in a variety of fitness based activities that will deepen their understanding of health related fitness. Students will also develop an understanding of the benefits of healthy eating and setting up a fitness plan.

Computer Science AP

in this unit "Big Data and Privacy" students will be learning about the different ways to protect private information on the internet by using different encryption and decryption methods such as private and public keys. They will learn about cybercrimes and the ethical values behind it. In this unit they will complete the AP Create Program performance task in which they have to write code for a certain program to solve a problem, write an essay to describe what the program does, and create a video that shows how to use the program and its important features.



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Drama

Unit- *Devising*

The students will learn the background and integrity of devising, and the power that creating from nothing can bring to them as young performers. They will have the creative freedom to create their own play, incorporating writing, acting, directing and producing into a full length production. They will walk away from the unit with a newfound sense of creative individualism, within one ensemble of actors. The learners will be required to practice and apply the process of improvisation and characterization to all elements of this unit, embodying and continuing the art of playing a character with truth and creativity. The learners will have gained practice in various mediums of performance, from script writing, rehearsing, performing, directing and producing.

Advanced Chemistry

Unit 5 - The Mole

This unit will include a quick recap of the types of chemical reactions and will then go on to cover the topic of the mole and how it is used to indirectly count the number of particles of matter, as well as calculating the molar mass of a compound, and its percent composition.

French

Unit 5 compares school life in France and Africa to school life here in the UAE. Students are able to discuss their life at school and talk about their future plans. They will create a brochure that describes their perfect school.

Economics

Unit 5 will enable students to distinguish between developed and developing countries and analyse such economies. Students will consider the difference between developing economies and the barriers they have to becoming developed.

Biology; Physiology/Anatomy

Unit 5: The Endocrine System

In this unit, students will distinguish the types of intercellular communication, their importance, mechanisms, and effects. They will explore and identify the major organs and tissues of the endocrine system and their location in the body.

Art

In this project students will develop their understanding and creation of portraiture. They will engage in a series of experiments in different techniques and approaches, ranging from hyper realistic to abstract. Students will investigate and practice use of chosen techniques and research a chosen artist.

After that students will refine use of 2 selected techniques. For final piece students will create a series of portraits of Emirati people of interest.

Psychology I (**Abnormal Psychology**)

Students will define abnormal behavior. They will learn how psychological treatments have changed over time and among cultures. They will discuss the impact of psychological disorders on the individual, family, and society. They will research the symptoms and causes of major categories of psychological disorders (including



schizophrenic, mood, anxiety and personality disorders). Finally, they will match methods of treatment to psychological perspectives.

Psychology II (Personality)

Students will describe Freud's Theory of personality (id, ego and superego) with specific attention to the role of the unconscious, wish-fulfillment, ego ideal, and defense mechanisms and identify how personality develops through the stages. They will also compare and contrast Freud's psychodynamic theories to the theories of the other Neo Freudians (Jung and the collective unconscious, Adler and the inferiority complex, Horney and anxiety). Then, they will compare and contrast the Humanistic personalities theories to those of the psychoanalytic theorists with specific attention to Roger's self-actualizing tendency and unconditional positive regard and Maslow's self-actualization. They will also compare and contrast the psychoanalytic, humanistic and Cognitive-Social Learning Theory with specific attention to Bandura's expectations, performance standards, self-efficacy, locus of control, and learned helplessness. Finally, they will describe the trait theory of personality with specific attention to the Big Five traits of openness, conscientiousness, extraversion, agreeableness, and neuroticism. They will take aspects of what they have learned about personality to do a self analysis of their own personality.

Advanced Biology

Students will explore the effects humans have on the ecological stability of not only individual ecosystems, but the planet as a whole. They will cover such topics like sustainable development, the importance of land, land as a renewable resource, composition of soil, human impact on soil, erosion, desertification, good land management, forest resources, air quality, smog, the burning of fossil fuels, acid rain, freshwater resources, ozone depletion, rising levels of carbon dioxide, population growth, the role of carbon in the carbon cycle, the addition of too much carbon dioxide to the atmosphere, the danger of rising carbon dioxide levels, human population growth, biodiversity, biological magnification and the threat of invasive species.

Advanced Physics

Physics 12 students study properties of waves, such as frequency, amplitude, wavelength, and types of waves. They examine how the pitch of a sound depends on the vibrating object's length, thickness and tightness. Student explorations include the use of a slinky to study longitudinal waves and the application of their knowledge to how sound travels through matter. Other explorations allow the student to observe how the pitch of different objects change, when set into vibration.