



الإعتراف بالماضي. الإعداد للمستقبل.  
Honoring the past. Educating for the future.

Grade 12 Unit 4 Description  
Term 2 2018

<p>English</p> <p>Unit description: Non-Fiction and Media with the theme of 'Leadership'. Students to study a variety of published articles and information on this theme, exploring audience, purpose, form and language. They will use the online programme Achieve 3000 (which is differentiated for each student using their own skills/answers) to facilitate comprehension and develop their reading skills.</p>		
Teacher	Interim Assessment date	Summative Assessment
Miss Loretta Miss Jill Miss Jess	Vocabulary/spelling tests (set and taken every week) Unit reading progress as measured on Achieve 3000 by 4/3/2018	Blue: Multiple Choice Test Students will be asked to read a non-fiction/media text and answer the multiple choice questions. On Tues 6/3/2018

<p>Math</p> <p>Unit description: Business Maths In this unit pupils will learn to calculate the markdown and reduced price of merchandises that may have become soiled or damaged. They will be able to determine the break-even point and operating loss of a business. G12 Pre Cal</p> <p><b>Unit 4: Trigonometric Functions</b></p> <ul style="list-style-type: none"> <li>· Lesson 4.1 – Sine Graphs</li> <li>· Lesson 4.2 – Cosine Graphs</li> <li>Lesson 4.3 – Graphs of Other Trig Functions</li> </ul>		
Teacher	Interim Assessment date	Summative assessment date
Miss Karen (Business Maths) Miss Maha (G12 Pre Cal)	22/2/18	7/3/18

<p>Calculus</p> <p>Unit description: In Unit 4 we begin Differentiation Part II, where we look at the specific differentiation rules. We will study differentiability and its relationship with continuity, basic differentiation rules, the product and quotient rules, and the chain rule. Applications of the derivative include finding the slope of a tangent line to a graph at a point, analyzing the graph of a function (for example, determining whether a function is increasing or decreasing and finding concavity and extreme values), and solving problems involving rectilinear motion.</p>		
Teacher	Interim Assessment date	Summative assessment date
Miss Tara	22/2/18	7/3/18



الاعتزاز بالماضي. الإعداد للمستقبل.  
Honoring the past. Educating for the future.

## AP Calculus

## Unit description:

In Unit 4: Applications of derivatives, students will use the derivatives in different applications to include finding the slope of a tangent line to a graph at a point, analyzing the graph of a function (for example, determining whether a function is increasing or decreasing and finding concavity and extreme values), and solving problems involving rectilinear motion. Students will be familiar with a variety of real-world applications, including related rates, optimization, and growth and decay models.

Teacher	Interim Assessment date	Summative assessment date
Miss Catherine	22/2/18	7/3/18

## Arabic

## Unit description: الوحدة الرابعة

تشتمل الوحدة الرابعة على دروس تعمل على تقوية المهارات اللغوية للمتعلّمة، وهي دروس من الشعر الأندلسي "نثر الجو على الأرض البرد" بالإضافة إلى قصيدة " إلى أمي" لمحمود درويش من الشعر الحديث، وقصة قصيرة " طفل و كلب" ورواية قلم زينب، ونص معلوماتي "الغرافين في المستقبل" و"الموسيقا والعلم" بالإضافة إلى الاستماع وموضوعه "الإعلانات التلفزيونية" أما المحادثة فستكون عن شعراء العصر الحديث وتقديم عروض عن موضوعات ورد ذكرها في درس "الموسيقا في العلم"، أما الكتابة فستكون استجابة لنص أدبي للشاعرين محمود درويش، وإبراهيم محمد إبراهيم. أما دروس النحو كما وردت في كتاب التطبيقات النحوية فهي: "المفاعيل والمنصوبات والجر والإضافة والتوابع". وستكون الأنشطة التعليمية متنوعة وذلك عن طريق استخدام التكنولوجيا، ومهارات القرن الواحد والعشرين، ومنها مهارات حل المشكلات، والتحليل والتركيب والقدرة على التطبيق، بالإضافة إلى المشاريع التي تخدم المادة وتنمي الإبداع والابتكار عند المتعلّمت. سيتم تقييم الطالبات من خلال الاختبارات الشفوية والكتابية، واستمارات التقييم التي توضح قياس معايير مهارات القراءة الجهرية والاستماع والتحدّث والمهارة الكتابية ومهارة حفظ النصوص، وجميعها تخدم العملية التعليمية وتقوي هذه المهارات لدى المتعلّمة.

Teacher	Assessment date
Najah Aanabtawi	28/2/2018
Rabab Obeidat	29/2/2018

## Arabic for Non-Arab

## Unit description:

الوحدة الرابعة تتمكن من خلالها الطالبة من التعرف على تاريخ رحلات الفضاء وعن مدى تمكن العيش على كوكب أخري في المستقبل وستقوم الطالبة بعمل عروض تقديمية وفيديوهات توضح من خلالها كيف توصل الانسان الي اكتشاف العديد من الكواكب وما هي الحلول البديلة المستقبلية عند استحالة العيش على كوكب الارض في المستقبل.بالاضافة الى مشاريع ابداعية تخدم الطالبة كما تناقش الطالبة نصوص قرآنية يتمثل فيها الحوار لاستخدامه بطريقة ابداعية لمناقشة النعم التي انعم الله بها علي الانسان في القواعد الاسماء الخمسة في حالات الرفع والنصب والجر والأفعال الخمسة في حالات الرفع والنصب والجر

Teacher	Assessment date
Raeda Hassan	الاختبار التشخيصي 2018-1-16 التقويم الاول 2018-1-30 التقويم الثاني 2018-2-28



الإعتراف بالماضي. الإعداد للمستقبل.  
Honoring the past. Educating for the future.

Islamic Unit description: الوحدة الرابعة: نتناول الوحدة آيات من سورة النور حيث سيتم حفظ الآيات غيباً وتسميعها ودراسة وتحليل الآيات وتوضيح الدلالات الواردة فيها. تبيين مفهوم العولمة وإيجابياتها وسلبياتها. وتوضيح أهمية ترتيب الأعمال حسب مقاصدها وستكون الأنشطة التعليمية متنوعة وذلك عن طريق استخدام التكنولوجيا ومهارات حل المشكلات والمشاريع التي تخدم المادة وتنمي الإبداع والإبتكار لدى الطالبات. سيتم تقييم الطالبات من خلال اختبارات كتابية وشفوية.	
Teacher	Assessment date
خلود عبد الرزاق	تسميع الحديث من 25 فبراير - 1 مارس اختبار التلاوة من 4-8 مارس

Islamic for Non-Arab Unit description: New version books Part two books were not received yet.	
Teacher	Assessment date
Majida Lutfi	Assessment : 19 Feb 18 reciting Hadith: 25 Feb 18 project : 1 Mar 18 rules of recitation : 7 Mar 18

PE Unit description: This 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 behaviours; and engage in physical activity for enjoyment and self-expression. Students will also be required to develop their mental capacity as well as their physical fitness throughout a variety of chosen sports.		
Teacher	Interim Assessment date	Summative assessment date
Miss Una Miss Shauna		12KA,12CK &12NA 12th March



الإعزاز بالماضي. الإعداد للمستقبل.  
Honoring the past. Educating for the future.

<p>Computer Science</p> <p>Unit description:</p> <p>AP: in this unit students will learn about writing programs using Python programming languages to solve real life problems. The program produced will be part of the “AP Create Task” in which they have to write and edit code to perform a certain task. Many applications will be used such as “trinket.io”.</p> <p>non-AP: in this unit students will finish working on their created apps in Unit 3. They have to produce a demo pitch video. After they review the demo pitch, they have to submit the final pitch video to Technovation Challenge website in addition to the other requirements such as the code, business plan, and survey results.</p>		
Teacher	Interim Assessment date	Summative assessment date
Miss Rana (AP CS)	AP: AP Programming Reference Sheet Exam, Feb 21	AP: Explore Task Written Response Mar 7
Miss Joanne (non-AP)	Non-AP: tbd	Non-Ap: tbd

<p>Drama-</p> <p>Unit description: <i>Devising</i></p> <p>This Drama unit will continue to master the basic theatre standards of acting, directing and writing- and combines these techniques with the common core standards of creating, performing and responding. In this unit, students will practice the skill of devising- whereby they will be responsible for the entire creation of a play. Students will create, write, rehearse, direct, produce and perform their own play- in which they have devised from the beginning, from an initial stimulus.</p>		
Teacher	Interim Assessment date	Summative assessment date
Miss Kelly	27th February 13th March	20th March

<p>Advanced Chemistry</p> <p>Unit description: The Covalent Bond</p> <p>Students will be able to:</p> <ul style="list-style-type: none"> <li>• Apply the octet rule to atoms that form covalent bonds.</li> <li>• Describe the formation of single, double, and triple covalent bonds.</li> <li>• Contrast sigma and pi bonds.</li> <li>• Relate the strength of a covalent bond to its bond length and bond dissociation energy.</li> <li>• Translate molecular formulas into binary molecular compound names.</li> <li>• Name acidic solutions.</li> <li>• Explain why resonance occurs, and identify resonance structures.</li> <li>• Identify three exceptions to the octet rule, and name molecules in which these exceptions occur.</li> <li>• Summarize the VSEPR bonding theory.</li> <li>• Predict the shape of, and the bond angles in, a molecule.</li> <li>• Define hybridization.</li> </ul> <p>Assessment methods: Written assessment/ test</p>		
Teacher	Interim Assessment date	Summative assessment date
Miss Leen	Feb. 19	March 5



الإعزاز بالماضي. الإعداد للمستقبل.  
Honoring the past. Educating for the future.

French		
Unit description: Qu'est-ce que tu fais? Students can talk about their hobbies and how they spend their free time. Students will focus on real-life situations including shopping, weather, sports, and family activities.		
Teacher	Interim Assessment date	Summative assessment date
Miss Veronica	February 22 (Oral) March 1 (Written)	March (Listening and Reading) Final exam week of March 13-22

Economics		
Unit description: Unit 4 will have students understanding the difference between developing and developed countries and understanding the different context of developing economies. students will study inequality and poverty, population growth and effects and the key problems of development. students will apply their knowledge and demonstrate an understanding of these topics through class tasks.		
Teacher	Interim Assessment date	Summative assessment date
Miss Lisa	19th February 2018	8th March 2018

Biology; Physiology/Anatomy		
Unit description: The Muscular System  This chapter is divided into three main sections: muscle basics, cellular components, and naming of the muscles. Students will be able to label the muscles of the human body, describe the three types of muscles, explain how muscles contract, describe the filaments of muscles, and explain how exercise affects our muscles.		
Teacher	Interim Assessment date	Summative assessment date
Miss Lindsay	February 20th (test)	March 6th (project)

Art		
Unit description: Students will learn how to document and categorize artwork to prepare a digital and physical art portfolios.  Students will collate their previous work and create other pieces in chosen medium in order to create a portfolio ready to be presented to universities. Students will also utilize their technology skills by documenting and presenting their work in digital format.		
Teacher	Interim Assessment date	Summative assessment date
Kasia	Art Elective - 22.3.18	Art Elective - 4.3.18

Psychology I ( <b>Sleep and Dreams</b> )		
Unit Description: Students will describe the circadian rhythm and its relation to sleep; describe the sleep cycle; and describe the types of sleep disorders.		
Teacher	Interim Assessment date	Summative assessment date
Ashley Johnson	February 18, 2018 (Written)	This project will take two days to complete: February 27th and March 1, 2018 (Research Project )



الاعتزاز بالماضي. الإعداد للمستقبل.  
Honoring the past. Educating for the future.

### Psychology II (Individual Differences and Intelligence Testing)

Unit Description:

**Individual Differences** - Students will define intelligence, list characteristics psychologists include in their definition, and discuss how culture influences the definition of intelligence. They will also compare and contrast historic and contemporary theories of intelligence with specific attention to general intelligence, triarchic theory, crystallized/fluid intelligence, multiple intelligences, emotional intelligence.

**Intelligence Testing** - Students will explain how psychologists design tests, including standardization strategies and other techniques to establish reliability and validity and interpret the meaning of scores in terms of the normal curve. Students will also debate the appropriate testing practices, particularly in relation to the Stanford-Binet test, the WISC, the WAIS and culture-fair test uses.

Teacher	Interim Assessment date	Summative assessment date
Arisa Robinson	February 18th, 2018 (Debate: What determines intelligence)	March 1st, 2018 (Project: Mock Intelligence Test and Analysis)

### Advanced Biology

Unit description:

Students will explore the various genetic disorders caused by chromosomal and non-chromosomal mutations in humans and their physical and mental limitations.

Teacher	Interim Assessment date	Summative assessment date
Miss Lilla	Quiz on types chromosomal disorders. Feb 27.	Research project on assigned genetic disorder due on March 6.

### Advanced Physics

Unit description:

Students will study simple harmonic motion. Topics to include Hook's Law, pendulums, resonance, mechanical waves, problem solving involving waves, superposition waves in two dimension and wave behaviors

Teacher	Interim Assessment date	Summative assessment date
Miss Cindy	27/02	06/03