



INCOMPATIBLE SUBJECTS		DEPENDENT SUBJECTS	
PRE-REQUISITE SUBJECTS		POTENTIAL QCE POINTS	
COURSE DURATION		CONTRIBUTES TO ATAR	
FINANCIAL COMMITMENT	REFER TO FEE SCHEDULE	DELIVERY PARTNERSHIP	
COURSE REQUIREMENTS	<p>Participation in the <b>STUDENT RESOURCE SCHEME</b> provides students access to microscopes, Science Text (to be advised) and materials for classroom activities and photocopied class notes.</p> <ul style="list-style-type: none"> <li>• Glassware – beakers, test-tubes, stirring rods, measuring cylinders, watch glasses</li> <li>• Bunsen burners, tripods, test racks, metal stands and clamps, spatulas, scalpels</li> <li>• Electrical equipment – power packs, wiring, light boxes, probes, dissecting boards, tweezers</li> <li>• Chemicals – copper sulphate, calcium carbonate, marble chips, hydrochloric acid, vinegar</li> <li>• Metals – aluminium, copper, iron</li> <li>• Geology materials – rock samples (igneous, metamorphic, sedimentary)</li> <li>• Safety equipment – aprons and safety goggles</li> </ul>		
<b>COURSE CONTENT</b>			
<b>UNIT 1</b>		<b>ASSESSMENT</b>	
<p><b>Physics – let’s get cracking</b> Students will collaboratively investigate how the forces of gravity and wind resistance affect the rate at which different objects fall. They will test a range of recycled materials and then design, create and test a parachute and protective container to allow an egg to be dropped from a second story balcony without cracking. They will use data loggers, apply fair testing and present a scientific report of their findings relating them to Newton’s Laws of motion.</p>		<p>Group task Individual Assignment Scientific Experiment and Report Multimodal presentation</p>	
<b>UNIT 2</b>		<b>ASSESSMENT</b>	
<p><b>Earth Science – making it on Mars</b> Students will investigate the interaction between and interdependence of organisms within biospheres. They will use their understanding of evolutionary theories to explain and justify selection pressures and survival of the fittest. Students will use Minecraft to create an alternative Martian like World and make it habitable. They will consider ethics, sustainability, basic and societal needs, and justify these choices in their responses.</p>		<p>Individual Assignment Short Response Spoken/Webcast ICT/Oral</p>	
<b>UNIT 3</b>		<b>SUMMATIVE ASSESSMENT</b>	
<p><b>Chemistry – becoming a lab rat</b> Students will collaboratively investigate the chemical properties of different elements and compounds through weekly practical experiments and explore how they react and what affects the reaction rate. They will use their understanding of the periodic table to make predictions and they will complete a scientific report of each experiment including the chemical equation for each reaction.</p>		<p>Portfolio of Experiments Scientific Report Written</p>	
<b>UNIT 4</b>		<b>SUMMATIVE ASSESSMENT</b>	
<p><b>Biology – surviving the surf</b> Students will investigate the flora, fauna and structure of a coastal region. They will choose a recreational activity and a marine creature and investigate the ways this activity impacts on the survival of this creature. Students will collaboratively create a brochure/ advertisement or documentary that outlines the wonders of this creature and its evolutionary history. They will explore how recreational activities can be conducted safely and sustainably to ensure both the success of the location as a recreational area and the survival of this creature.</p>		<p>Group Task – Individual Assignment Brochure/Advertisement Multi Modal – Video/Brochure</p>	
<b>CAREER PATHWAYS</b>			
<p>Engineer, Oceanographer, Electrician, Radio Technician, Architect, Environmental Health Officer, Hydrologist, Physicist, Lab Technician, Dentist, Optometrist, Doctor, Audiologist, Agricultural Scientist, Taxidermist, Science Teacher, Metallurgist, Chemist, Forensic Scientist, Forest Ranger, Pathologist, Radiographer Bacteriologist, Dietician, Zoologist, Veterinarian and Mineralogist.</p>			