



YEAR 11 PHYSICS WORK PLAN: Semester 1, 2017 – Mr. Telleman

UNIT	TERM 1 TOPICS	ASSESSMENT	DUE DATE
1.1	<p>Fundamentals of Physics (1 week) Within a practical context (eg. Pendulums) a development of general scientific skills and calculations involving: Scientific Method, Collecting data, Measurement and units, Scientific notation, Graphical representation and analysis, Unit conversion, Error Analysis,</p>		
1.2	<p>Waves of Energy (5 weeks) Through a study of waves found in the local waterways, beaches students will study concepts including: wave motion, wavelength, frequency, period, amplitude, speed, wave equation, superposition, nodes & antinodes, reflection, refraction, diffraction, interference.</p>	<p>Extended Research Task: Wave Phenomena Investigation: Photographic Collection & Written Report Handed Out : Week 4 Monitoring: Week 6</p> <p>Supervised Assessment (SA) Written Exam (90 mins)</p>	<p>Week 8 Monday 13th March</p> <p>Week 10 Tuesday 28th March Lesson 5 and 6</p>
UNIT	TERM 2 TOPICS	ASSESSMENT	DUE DATE
1.3	<p>People on the Move (5 weeks) Scalar vs. vector quantities: displacement vs. distance - velocity vs. speed - acceleration Addition and subtraction of vectors. Use of technology to collect real time data related to the kinematics; Graphical representation and interpretation data for displacement, velocity and acceleration vs. time; Constant acceleration equations and the analysis of linear motion. Types of forces: contact vs. non-contact; gravitational / magnetic /electrostatic / frictional. Newton's Laws - include applications and analysis; Vertical motion under gravity Momentum and Inertia. Conservation of Momentum; Impulse; Kinetic Energy and Work. Potential Energy.</p> <p>Extended Experimental Investigation (5 weeks) Questioning and Predicting; Planning and Conducting Investigation; Using technology to facilitate the analysis of data; Discussion of patterns/trends and relationships; Evaluation of hypotheses</p>	<p>Written Task (Exam) – Combination of assessment techniques which will include a selection from: - Multiple choice. - Short and extended answer items. - Stimulus Response</p> <p>EE(5 weeks) Based on concepts studied this semester. Student's Individual Topics to be discussed and approved by teacher. Use of data logging devices/software e.g. video analysis will be required for this task. Handed Out: Week 7</p>	<p>Week 7 Thursday 1st June Lesson 1 and 2</p> <p>Week 8 Topic Approved Methods Defined Week 9 Trials Completed Week 10 Extension Developed Draft Due Term 3 Week 1 Friday 14th Due Week 2 Friday 21st July</p>

This work plan was last updated on Wednesday, 1 February 2017. The contents are subject to change – students will be advised in advance of any changes - regularly check for updates.