

Queen Margaret College
Year 12 Physics Programme 2019
International Baccalaureate Diploma Programme

Course Component	Percentage of final grade		Internal / External	Proposed assessment date
	SL	HL		
Paper 1 – Multiple Choice	20	20	External	November 2019
Paper 2 – Short-answer and extended-response questions on	40	36	External	November 2019
Paper 3 – Section A: one data- based question and several short-	20	24	External	November 2019
Internal Assessment	20	20	Internal	Term 4 2019

Course details

The core topics comprising the Physics course this year include the study of measurement and the errors and uncertainties involved. Mechanics is the science of motion, momentum, forces and energy. In Thermal Physics, we explore the thermal processes resulting in energy transfer between objects. The Oscillations and Waves topic covers periodic motion, including wave behaviour, the electromagnetic spectrum, harmonic motion, travelling and standing waves. In Electricity and Magnetism, we study the phenomenon of electricity, considering the three effects of the flow of electrical charge. In Circular Motion and Gravitation, we examine centripetal force, orbits and Newton's law of gravitation. Atomic, Nuclear and Particle Physics looks at the composition of atoms, including discrete energy and radioactivity, nuclear reactions and the structure of matter. Lastly, the Energy Production topic covers sources of primary and secondary energy, the transfer of thermal energy and the energy balance of the Earth.

Course Information

- Students are issued with a textbook for the duration of the 2 year course
- Students are also issued with a study guide which will be charged to their accounts
- 2019 teacher is Mr Paul Wilson

Homework expectations

Your daughter should be learning at home for a total of at least 15 hours per week, across all subjects.

To achieve at a high level in this subject, students are expected to complete some homework during the week. Homework might include:

- Completing any unfinished classwork.
- Completing workbook/worksheet exercises.
- Going over classwork to identify any gaps in understanding which should be raised with the teacher in the following lesson.