

# Physics (HL)12 (2016-2017)

**Time: 8 x 35 minutes per week**

**Course Description:**

*The IB Diploma Programme physics course is aimed at building a deeper knowledge and understanding of physics. It allows students to develop traditional practical skills and techniques and to increase the use of mathematics in solving physics related problems. It also allows students to develop interpersonal skills and information and communication technology skills, which are essential in modern scientific endeavour and are important life-enhancing, transferable skills in their own right. Students at standard level (SL) and higher level (HL) undertake a common core syllabus, a common internal assessment (IA) scheme and have some overlapping elements in the options studied. Students at HL are required to study some topics in greater depth, to study additional topics and extension material of a more demanding nature in the common options.*

**Resources:**

**Chris Hamper (2014), Higher Level Physics, Pearson.**

**Main Topics Covered:**

**Semester 1**

- Atomic and nuclear physics
- Waves
- Wave Phenomena
- Electricity & Magnetism
- Atomic, Nuclear & Particle Physics
- Energy production

**Semester 2**

- Quantum and Nuclear Physics
- Exam preparation and practice

## Assessment

Internal Assessment	Weighting
Semester 1:	
• Continual Assessment 1 (CA1) including:	
- Topic Tests and Assignments	20
• Continual Assessment 2 (CA2) including:	
- Topic Tests and Assignments	10
• Semester 1 Examination (SA1)	70
	<b>100</b>
Semester 2:	
• Continual Assessment 3 (CA3) including:	
- Topic Tests and Assignments	25
• Mock Examinations (SA2)	75
	<b>100</b>
NB. Three reports are distributed during the year. The first comprises CA1, the second CA2 and SA1 and the third CA3 and SA2.	