THE WORTHGATE SCHOOL CANTERBURY

COURSE DESCRIPTOR

INTERNATIONAL BACCALAUREATE

HIGHER LEVEL AND STANDARD LEVEL PHYSICS

SUBJECT OVERVIEW

Physics is a fundamental Science subject that seeks to explain the universe itself from the very smallest particles to the vast distances between galaxies. The IB Physics course is well respected by top universities around the world, and covers traditional areas of Physics such as Mechanics, Waves, Electricity and Magnetism and Nuclear and Quantum Physics. You will also develop your practical skills, including the knowledge and understanding required to design your own experiments. Theory of Knowledge applied to Physics topics gives opportunities for philosophical discussion.

PRIOR LEARNING REQUIRED

There is no formal requirement for prior knowledge of Physics to study IBDP HL or SL Physics. Your interest and curiosity in the fascinating realm of Physics are essential for a successful journey through this subject. GCSE or equivalent knowledge of Physics or Combined Science is recommended. A good understanding of Mathematics at GCSE or equivalent.
Language: IELTS 5.5 or equivalent

EXAM BOARD

International Baccalaureate

COURSE CONTENT

Year 1	Year 2
A. Space, time and motion B. The particulate nature of matter	D. Fields E. Nuclear and quantum physics

C. Wave behaviour	

ASSESSMENT

Assessments take place each half-term, and End of Year exams take place in May of the first year.
Grades are determined by final IB external examinations, which take place in May at the end of the two-year course, and the IB internal assessment (IA) which involves planning and carrying out a scientific investigation.

Paper	Length of paper	Weighting
Paper 1 Paper 1A—Multiple-choice questions Paper 1B—Data-based questions	Total 45 marks 1 hour and 30 minutes	36% of final grade
Paper 2 Short-answer and extended-response questions on standard level material only.	Total 55 marks 1 hour and 30 minutes	44% of final grade
Internal assessment	10 hours	20% of final grade

TEXTBOOKS/REVISION GUIDES

Title	ISBN	Author

PART OF CATS GLOBAL SCHOOLS

Course Book: Physics Course Companion (Oxford Resources for IB DP Physics)	978-1382016599	David Homer, William Heathcote, Maciej Pietka
Study Guide (Oxford Resources for IB DP Physics)	978-1382016698	Tim Kirk

HIGHER EDUCATION PATHWAYS

Physics opens a large range of career options as, together with other Sciences, it is important for technology, research, engineering, Medicine and allied professions, as well as a range of other occupations.

Previous students have studied:

University of Sheffield – Theoretical Physics

University of Warwick – Computer Systems Engineering

University of Manchester – Mechanical Engineering

COMPLEMENTARY SUBJECTS OF STUDY

Maths, Chemistry, Biology, Computer Science

CURRICULUM DIRECTOR

Ms. Emma Lock