THE WORTHGATE SCHOOL
CANTERBURY

COURSE DESCRIPTOR

INTERNATIONAL BACCALAUREATE

CHEMISTRY

SUBJECT OVERVIEW

As well as being a fascinating subject to study with a stimulating balance of theoretical knowledge and practical skills, Chemistry also fosters the development of a range of abilities in students which are highly prized at university and by potential employers. To be a successful Chemist a student needs to be able to analyse problems, think critically, apply mathematical skills, pay attention to detail, and be able to work with apparatus in an experimental setting. A good knowledge of Chemistry is also vital to the study of Biology and Physics, and Chemistry is often called “the central science”.
Chemistry opens the door to an interesting career in many fields such as Medicine, Pharmacy, and Chemical Engineering, and in other careers such as Law where the rigorous nature of the subject is appreciated.

PRIOR LEARNING REQUIRED

An interest in, and a desire to study, Chemistry is essential. Students who are willing to spend time studying on their own will do very well and will enjoy the course. We aim to instill a deep interest in the subject, which can be maintained in further education and beyond.
GCSE or equivalent
IELTS 5.5 or equivalent

EXAM BOARD

International Baccalaureate

COURSE CONTENT

Year 1	Year 2
Particulate nature of matter	Equilibria
Atomic Structure	Rates of Reaction
Stoichiometry	Redox
Periodicity	Acids and bases
Bonding	
Energetics	
Organic Chemistry	

ASSESSMENT

Formal internal assessments take place regularly about once every half term and homework is set on a regular basis.
Grades are determined by final examinations, which take place in May/June at the end of the 2-year course.
Practical work is assessed in the internal assessment project which makes up 20% of the final grade.
An end of year exam must be passed for entry to year 2 and a mock exam must be passed for entry into the public exams.

Paper	Length of paper	Weighting
1 Multiple Choice And data-based questions	SL 1hr 30 mins HL 2 hours	36%
2 Short answer and extended response	SL 1hr 30 mins HL 2hr 30 mins	44%
The internal assessment investigation.	Practical investigation of 10 hours.	20%

TEXTBOOKS/REVISION GUIDES

Title	ISBN	Author
Chemistry Course Companion (Oxford Resources for Chemistry IB diploma).	**978-1382016468**	Sergey Bylikin
Chemistry Study Guide (Oxford Resources for Chemistry IB diploma).	**978-1382016565**	Geoffrey Neuss

Summaries of each unit, your notes and past examination papers will be your major source of revision. ice.

HIGHER EDUCATION PATHWAYS

Chemistry is a pivotal science relating well to both Biology and Physics. It is required for many university courses including those in Chemistry, Biochemistry, Molecular Biology, Medicine, Veterinary Medicine and Dentistry, as well as being an advantage when applying for other Science-related courses such as Engineering. It opens the door to a large range of career options, as it is important in industry, commerce, manufacturing, pharmacology and Medicine-related professions, as well as many other occupations.

Previous students have studied:

University of Manchester – Materials Science and Engineering

TEDI University of London – Global Engineering Design

Newcastle University – Chemistry

COMPLEMENTARY SUBJECTS OF STUDY

Biology, Psychology, Maths, Physics.

CURRICULUM DIRECTOR

Ms. Emma Lock