

|              | Chemistry  |
|--------------|--|
| Exam Board   | OCR  |
| Course Entry | 7 in Chemistry   |
| Criteria     | 7 - 7 in Combined Science GCSE, although separate science GCSEs would be an advantage.                       |
| Essential    | Chemists requires good analytical, practical and problem solving skills. You will need the ability to        |
| skills       | communicate scientific ideas and concepts, as well as being able to be logical, analyse and interpret        |
|              | data.  |
| Year 12      | The course content and assessment are shown below:   |
|              | Module 1 – Development of Practical Skills in Chemistry  |
|              | Practical skills assessed in a written examination and in the practical endorsement                          |
|              | Module 2 – Foundations in Chemistry  |
|              | Atoms, compounds, molecules and equations. Amount of substance. Acid-base and redox reactions                |
|              | Electrons, bonding and structure   |
|              | Module 3 – Periodic Table and Energy   |
|              | The periodic table and periodicity. Group 2 and the halogens. Qualitative analysis. Enthalpy changes.        |
|              | Reaction rates and equilibrium (qualitative)   |
|              | Module 4 – Core Organic Chemistry Basic concepts, Hydrocarbons, Alcohols and Haloalkanes. Organic synthesis. |
|              | Analytical techniques (IR and MS)  |
|              | End of Year Examinations in the summer term  |
|              | The examination papers will consist of multiple choice, structured questions and extended response           |
|              | questions.   |
| Year 13      | The course content and assessment are shown below:   |
| 1 641 13     | Module 1 – Development of Practical Skills in Chemistry  |
|              | Practical skills assessed in a written examination and in the practical endorsement                          |
|              | <b>Module 5</b> – Physical Chemistry and Transition Elements   |
|              | Practical skills assessed in a written examination and in the practical endorsement                          |
|              | <b>Module 6</b> – Foundations in Chemistry   |
|              | Advanced Organic Chemistry and Instrumental Analyses.  |
|              | There are 3 papers for the examination:  |
|              | <b>Paper 1:</b> This is assessed by a 2 hours 15 minutes written examination in June. It is out of 100 UMS   |
|              | and makes up 37% of the A level. The students will be assessed by multiple choice questions (15)             |
|              | and structured questions covering theory and practical skills (85). Topics from modules 1, 2, 3 and 5        |
|              | will be assessed. They are Development of Practical Skills, Foundations in Chemistry, Periodic Table         |
|              | and Energy, Physical Chemistry and Transition Elements.  |
|              | <b>Paper 2:</b> This is assessed by a 2 hours 15 minutes written examination in June. It is out of 100 UMS   |
|              | and makes up 37% of the A level. The students will be assessed is by Multiple Choice questions (15)          |
|              | and Structured questions covering theory and practical skills (85). Topics from modules 1, 2, 4 and          |
|              | 6 will be assessed.  |
|              | <b>Paper 3:</b> This is assessed by a 1 hour and 30 minutes examination in June. It is out of 70 UMS and     |
|              | makes up 26% of the A level. The students will be assessed by structured questions and extended              |
|              | response questions covering theory and practical skills. Topics from modules 1-6 (all modules) will          |
|              | be assessed.   |
| University   | Oxbridge A*A A   |
| requirements | Russell Group A A A  |
|              | Non-Russell Group A B B-B C C  |
| Related      | Analytical Sciences, Pharmacy, Medicine, Dentistry, Chemical Engineering, Biochemistry,                      |
| courses and  | Veterinary, Finance  |
| careers      | Please go to www.rsc.org/careers for more information.   |