

## Course **CHEMISTRY 4**

### 1. Content

Year 6:

electronic structure of the atom and the periodic table

chemical bonds

Intermolecular bonds

Ideal gas law

Energy In chemistry

Chemical kinetics and equilibria

Organic chemistry

Year 7:

Acid/base equilibria

REDOX equilibria

Organic chemistry

### 2. Methods / Activities / Format

Four 45 minute periods per week

The lessons will incorporate class discussions of the important fundamental concepts, ppt presentations, DVD presentations and problem-solving exercises, all supplemented by frequent practical laboratory sessions to help re-enforce the students' understanding of chemical concepts discussed in theoretical lessons.

### 3. Information on tests, exams or BAC

Homework is generally set at least once weekly.

An end of unit test will be set at the end of each major topic.

In year 6, two major examinations will be taken. The 1st at the end of the Xmas term; the 2<sup>nd</sup> at the end of the Summer term.

In year 7, a "pre-BAC" examination will be taken in late January/early February by all students, regardless of whether or not they have opted to sit the written exam at the end of the year. Both the pre-BAC and BAC examinations are of a 3 hour duration.

### 4. Initial level required / eventual tests (e.g. preliminary oral or written tests)

It is strongly advised that students who are considering to study Chemistry to BAC level:

- achieve an average minimum attainment of 8/10 in the year 5 examinations, and
- choose the Mathematics 5 period option in year 6. A high degree of mathematical aptitude is considered essential to allow the students to be successful at EB Chemistry