1. KentVision Code and title of the module

NATS0002 – Foundation Chemistry

## Division and School/Department or partner institution which will be responsible for management of the module

Division of Natural Sciences

## The level of the module (Level 4, Level 5, Level 6 or Level 7)

Level 3

## The number of credits and the ECTS value which the module represents

20 Credits (10 ECTS)

## Which term(s) the module is to be taught in (or other teaching pattern)

Autumn

## Prerequisite and co-requisite modules and/or any module restrictions

None

## The course(s) of study to which the module contributes

Compulsory for the following courses:

BSc (Hons) Biochemistry with a Foundation Year;

BSc (Hons) Biology with a Foundation Year;

BSc (Hons) Biomedical Science with a Foundation Year;

BSc (Hons) Chemistry with a Foundation Year;

BSc (Hons) Forensic Science with a Foundation Year;

BSc (Hons) Sport and Exercise Science with a Foundation Year;

BSc (Hons) Sport and Exercise for Health with a Foundation Year;

BSc (Hons) Sports Therapy and Rehabilitation with a Foundation Year.

Not available as an elective module

## The intended subject specific learning outcomes. On successfully completing the module students will be able to:

8.1 Demonstrate knowledge and understanding of fundamental concepts of atoms, molecules, and states of matter;

8.2 Demonstrate knowledge of understanding of basic valences, bonding and molecular interactions;

8.3 Demonstrate elementary knowledge and understanding of organic compounds, shapes and basic isomerism and reactivity;

8.4 Understand, write and balance chemical equations.

## The intended generic learning outcomes. On successfully completing the module students will be able to:

9.1 Source, retrieve and use relevant information at a foundational level;

9.2 Organise and manage their own time effectively with appropriate guidance.

## A synopsis of the curriculum

This module will cover chemical concepts and principles. Through lectures and workshops, student will learn about atoms and states of matter, valence and bonding, basic chemical reactions, molecular shapes and isomerism, writing chemical equations and thermodynamics. The application of these principles in chemistry, forensic science, biological and exercise science will be explored in workshops, illustrating their fundamental importance in the natural sciences.

## Reading list

## The University is committed to ensuring that core reading materials are in accessible electronic format in line with the Kent Inclusive Practices.

## The most up to date reading list for each module can be found on the university's [reading list pages](https://kent.rl.talis.com/index.html).

## Contact Hours

Private Study: 164

Contact Hours: 36

Total: 200

## Assessment methods

* 1. Main assessment methods
* Moodle Quiz 1 (20 Questions) – 10%
* Moodle Quiz 2 (20 Questions) – 10%
* Moodle Quiz 3 (20 Questions) – 10%
* Moodle Quiz 4 (20 Questions) – 10%
* Problem Solving and Data Analysis – 10%
* Examination (2 Hours) – 50%

14.2 Reassessment methods

* 100% Examination

## Map of module learning outcomes (sections 9 & 10) to learning and teaching methods (section 13) and methods of assessment (section 14)

**Module learning outcomes against learning and teaching methods:**

| **Module learning outcome** | 8.1 | 8.2 | 8.3 | 8.4 | 9.1 | 9.2 |
| --- | --- | --- | --- | --- | --- | --- |
| Private Study | **x** | **x** | **x** | **x** | **x** | **x** |
| Lecture | **x** | **x** | **x** |  |  | **x** |
| Seminar/Workshop | **x** | **x** | **x** | **x** | **x** | **x** |

**Module learning outcomes against assessment methods:**

| **Module learning outcome** | 8.1 | 8.2 | 8.3 | 8.4 | 9.1 | 9.2 |
| --- | --- | --- | --- | --- | --- | --- |
| Moodle Quizzes | **x** | **x** | **x** | **x** | **x** |  |
| Problem Solving | **x** | **x** | **x** |  | **x** | **x** |
| Examination | **x** | **x** | **x** | **x** |  | **x** |

## Inclusive module design

The Division recognises and has embedded the expectations of current equality legislation, by ensuring that the module is as accessible as possible by design. Additional alternative arrangements for students with Inclusive Learning Plans (ILPs)/declared disabilities will be made on an individual basis, in consultation with the relevant policies and support services.

The inclusive practices in the guidance (see Annex B Appendix A) have been considered in order to support all students in the following areas:

a) Accessible resources and curriculum

b) Learning, teaching and assessment methods

## Campus(es) or centre(s) where module will be delivered

Canterbury

## Internationalisation

Science is an international discipline with widely applicable international resonance. This module presents subject-specific knowledge generated, developed, and refined by scientists around the world. Mastery of the learning outcomes will equip students to apply the knowledge in a wide range of international contexts and these will be addressed in making the content relevant to current global issues. The Division of Natural Sciences is an international community of students and staff and group activities and teaching will provide a platform for internationally-focussed discussion.

**DIVISIONAL USE ONLY**

**Module record – all revisions must be recorded in the grid and full details of the change retained in the appropriate committee records.**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Date approved | New/Major/minor revision | Start date of delivery of (revised) version | Section revised  (if applicable) | Impacts PLOs (Q6&7 cover sheet) |
|  |  |  |  |  |