1. KentVision Code and title of the module

NATS0004 – Scientific Methods and Academic Skills Development

## 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)

Spring

## 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 appreciation for, and explain how scientific research leads to knowledge.

8.2 Demonstrate understanding of how core, foundation-level principles in different natural science subjects can be used to address global problems.

8.3 Demonstrate understanding, at a foundation level, the application of cutting-edge technology in scientific investigation.

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

9.1 Work with others as part of a team.

9.2 Apply knowledge to solve problems at foundation level.

9.3 Use evidence to support arguments at foundation level

9.4 Use foundation-level mathematics to support data interpretation.

## A synopsis of the curriculum

This module draws together different strands of biological, chemical, physiological and human sciences to explore how scientific investigations can address major global challenges. Practical experimental work involving equipment used in research investigations, creative and critical thinking workshops, and guided group work will explore the role of the natural sciences in addressing some of the UN Sustainable Development Goals. The module will provide insight into the degree pathways available after completion of the foundation year.

## 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: 158

Contact Hours: 42

Total: 200

## Assessment methods

13.1 Main assessment methods

* Group Presentation (20 minutes) – 25%
* Scientific Report (1,500 words) – 25%
* Weekly Online Discussion Forum (approx. 200 words each) – 25%
* Essay (1,000 words) – 25%

13.2 Reassessment methods

* 100% Coursework

## Map of module learning outcomes (sections 8 & 9) to learning and teaching methods (section 12) and methods of assessment (section 13)

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

| **Module learning outcome** | 8.1 | 8.2 | 8.3 | 9.1 | 9.2 | 9.3 | 9.4 |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Private Study | **x** | **x** | **x** |  | **x** | **x** | **x** |
| Experimental Work | **x** |  | **x** | **x** | **x** | **x** | **x** |
| Workshops | **x** | **x** | **x** | **x** | **x** | **x** | **x** |

**Module learning outcomes against assessment methods:**

| **Module learning outcome** | 8.1 | 8.2 | 8.3 | 9.1 | 9.2 | 9.3 | 9.4 |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Group Work | **x** | **x** | **x** | **x** | **x** | **x** | **x** |
| Scientific Report | **x** |  | **x** | **x** | **x** | **x** | **x** |
| Discussion Forum | **x** | **x** | **x** |  | **x** | **x** |  |
| Essay | **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) |
| --- | --- | --- | --- | --- |
|  |  |  |  |  |
|  |  |  |  |  |