1. **Title of the module**

BIOS3080 (BI308) - Skills for Bioscientists

1. **School or partner institution which will be responsible for management of the module**

Biosciences

1. **The level of the module (Level 4, Level 5, Level 6 or Level 7)**

Level 4

1. **The number of credits and the ECTS value which the module represents**

15 credits (7.5 ECTS)

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

Autumn and Spring

1. **Prerequisite and co-requisite modules**

None

1. **The programmes of study to which the module contributes**

Biomedical Science and related programmes

Biochemistry and related programmes

Biology and related programmes

Biomedical Engineering

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

8.1 Demonstrate skills in the analysis and presentation of information relevant to biosciences.

8.2 Demonstrate an understanding of fundamental scientific concepts of use in biosciences, both theoretically and practically.

8.3 Demonstrate an understanding and application of the principles of concentration and molarity, pH, spectroscopy, reaction kinetics and statistics.

8.4 Demonstrate competency in the operation of some essential laboratory equipment (pipettes, pH-meter and spectrophotometer)

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

9.1 Extract and interpret information on a basic level.

9.2 Perform data analysis and evaluation.

9.3 Use basic computing skills in data analysis, spreadsheet work and data retrieval.

9.4 Demonstrate essential practical skills and the competent use of some essential laboratory equipment

1. **A synopsis of the curriculum**

Subject-based and communication skills are relevant to all the bioscience courses. This module allows you to become familiar with practical skills, the analysis and presentation of biological data and introduces some basic mathematical and statistical skills as applied to biological problems. It also introduces you to the computer network and its applications and covers essential skills such as note-taking and essay writing.

1. **Reading list (Indicative list, current at time of publication. Reading lists will be published annually)**

* Practical Skills in Biomolecular Science, Paperback 5th ed (2016) by Reed, Weyers, Jones, Pearson, ISBN-10: 1292100737

1. **Learning and teaching methods**

Total contact hours: 50

Private study hours: 100

Total study hours: 150

1. **Assessment methods**
   1. Main assessment methods

Practical (20%)

In class problem solving test, 45 minutes (15%)

15 online MCQ tests (15%)

Examination, 2 hr (50%)

13.2 Reassessment methods

Reassessment Instrument: like for like

1. **Map of module learning outcomes (sections 8 & 9) to learning and teaching methods (section12) and methods of assessment (section 13)**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Module learning outcome** | *8.1* | *8.2* | *8.3* | *8.4* | *9.1* | *9.2* | *9.3* | *9.4* |
| **Learning/ teaching method** |  |  |  |  |  |  |  |  |
| Lectures | **X** | **X** | **X** |  | **X** | **X** | **X** |  |
| Workshops | **X** | **X** | **X** |  | **X** | **X** | **X** |  |
| Practicals | **X** | **X** | **X** | **X** | **X** | **X** |  | **X** |
| Self-study |  |  |  |  |  |  |  |  |
| Revision, reading, self-assessments | **X** | **X** | **X** |  | **X** | **X** | **X** |  |
| **Assessment method** |  |  |  |  |  |  |  |  |
| Assignment 1: in class test test | **X** | **X** | **X** |  | **X** | **X** |  |  |
| Assignment 2: 15 MCQ tests | **X** | **X** | **X** |  | **X** | **X** | **X** |  |
| Practical | **X** | **X** | **X** | **X** | **X** | **X** |  | **X** |
| Examination | **X** | **X** | **X** |  | **X** | **X** |  |  |

1. **Inclusive module design**

The School 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

1. **Campus(es) or centre(s) where module will be delivered**

Canterbury

1. **Internationalisation**

Biosciences is an international discipline. This module presents subject-specific knowledge, research approaches and techniques, generated, developed and refined by scientists around the world. Mastery of the learning outcomes will equip students to apply the theories and techniques of the module in a wide range of international contexts. In compiling the reading list, consideration has been given to the range of texts that are available internationally and a selection has been identified to complement the delivery of the material. The School of Biosciences is an international community of students and staff. Group activities e.g. in practicals, tutorials, workshops and self-study will naturally draw on the international make-up of the student body; the module teaching team includes members with international experience of teaching and research collaboration.

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

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| --- | --- | --- | --- | --- |
| Date approved | Major/minor revision | Start date of the delivery of revised version | Section revised | Impacts PLOs (Q6&7 cover sheet) |
| 20/01/20 | Minor | Sep 2020 | 13 | No |
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