1. KentVision Code and title of the module

BIOS5050 – Inflection and Immunity

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

Division of Natural Sciences (Biosciences)

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

Level 5

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

15 Credits (7.5 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

Prerequisite: BIOS3070 (Human Physiology and Disease I)

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

Compulsory for the following courses:

BSc (Hons) Biology (and all related variants)

BSc (Hons) Biochemistry (and all related variants)

BSc (Hons) Biomedical Science (and all elated variants)

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 critical understanding of the major immune system functions and components, how cell-cell communication controls immune responsiveness to infectious agents and immunopathology.

8.2 Demonstrate detailed knowledge of microorganisms of medical importance and the diseases they cause.

8.3 Demonstrate thorough understanding of how the spread of disease occurs in the human population.

8.4 Demonstrate critical understanding of experimental procedures in handling and identifying bacteria in samples provided to the students during the practical class.

8.5 Demonstrate detailed knowledge of microbiological and immunological techniques used to identify pathogens and immune cells.

8.6 Demonstrate knowledge of the main methods of data acquisition analysis and presentation as evidenced by the practical report assessment.

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

9.1 Demonstrate confident interpretation and retrieval of relevant information.

9.2 Demonstrate accurate analysis and evaluation of data.

9.3 Demonstrate effective communication skills.

## A synopsis of the curriculum

This module will consider the anatomy and function of the immune system and immunopathology and then consider the diseases and microorganisms that affect the different organs and tissues of the human body. Indicative topics will include inflammation, innate and adaptive immunity to pathogens, immune defence mechanisms against bacterial, viral and parasitic infections, antibody classes and functions, antigen processing and presentation, complement, the generation of antibody diversity, cell communication and immunopathology, including autoimmunity, hypersensitivity and transplant rejection. In the medical microbiology section of the module, indicative topics will include epidemiology, virology, parasitology, fungal infections, skin infections, GI tract infections, CNS infections, respiratory tract infections, UTI and STD infections.

## 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: 124

Contact Hours: 26

Total: 150

## Assessment methods

13.1 Main assessment methods

* Laboratory Practical Report – 45%
* Examination (2 hours) – 55%

13.2 Reassessment methods

* Like-for-like

## 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 | 8.4 | 8.5 | 8.6 | 9.1 | 9.2 | 9.3 |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Private Study | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** |
| Lectures | **x** | **x** | **x** | **x** | **x** |  | **x** |  |  |
| Laboratory Practical |  |  |  | **x** | **x** |  |  | **x** |  |

**Module learning outcomes against assessment methods:**

| **Module learning outcome** | 8.1 | 8.2 | 8.3 | 8.4 | 8.5 | 8.6 | 9.1 | 9.2 | 9.3 |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Lab Practical Report |  | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** |
| Examination | **x** | **x** | **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) |
| --- | --- | --- | --- | --- |
| 20 Jan 2020 | Minor | Sep 2020 | 11, 13 | No |
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| Revised FSO Feb 2020 |