1. KentVision Code and title of the module

BIOS3050 – Fundamental Human Biology

## 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 4

## 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)

Autumn

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

None

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

Optional for the following courses:

International Foundation Programme

Also 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 how cells divide and differentiate.

8.2 Demonstrate knowledge and understanding of the major physiological systems of the body, including musculoskeletal, immune, digestive, excretory, nervous, and endocrine.

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

9.1 Demonstrate communication skills.

9.2 Recall and synthesise information under time constraints.

## A synopsis of the curriculum

This module will cover the following:

Cell structure and function: cell organelles; cytoskeleton; DNA/RNA structure; introduction to transcription and translation; introduction to disorders of cells and tissues.

Cell division: mitosis; meiosis; mechanisms of creating genetic variation.

Cell differentiation and body tissues: tissue types; extracellular matrix; cell junctions.

Organ systems of the body including:

* Musculoskeletal system: muscle types; mechanism of skeletal muscle contraction; structure, development and maintenance of bone; types of joints.
* Circulatory system: overview of circulation; composition of blood; cells of blood.
* Immune system: infectious agents; lymphatic system; innate and acquired defences.
* Digestive system: digestive tract and accessory organs; types of nutrients; major digestive enzymes; absorption and assimilation.
* Urinary system and excretion: kidney and urinary tract; urine formation; functions in waste removal, homeostasis.
* Endocrine and Nervous systems: concept of homeostatic loops; endocrine glands and hormones; organisation of nervous system; generation and conduction of a nerve impulse; synapses and neurotransmitters; comparison of neural and hormonal signalling.

## 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: 129

Contact Hours: 21

Total: 150

## Assessment methods

13.1 Main assessment methods

* In-Course Test 1 (45 minutes) – 20%
* In-Course Test 2 (45 minutes) – 20%
* Examination (2 hours) – 60%

13.2 Reassessment methods

* 100% Examination

## 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 | 9.1 | 9.2 |
| --- | --- | --- | --- | --- |
| Private Study | **x** | **x** | **x** | **x** |
| Lecture | **x** | **x** |  |  |

**Module learning outcomes against assessment methods:**

| **Module learning outcome** | 8.1 | 8.2 | 9.1 | 9.2 |
| --- | --- | --- | --- | --- |
| ICT | **x** | **x** | **x** | **x** |
| Examination | **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) |
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| Revised FSO Jan 2018 |