1. **Title of the module**

BICC5280 (BI528) Principles of Microbiology

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

School of Biosciences/East Kent College Group

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

Level 5

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 & Spring & Summer

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

None

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

HND/C Applied Animal Science

1. **The intended subject specific learning outcomes.
On successfully completing the module students will be able to:**
2. Identify the main groups of microbes of importance to animal health
3. Define, describe and discuss the growth and control of microbes
4. Identify microbes of zoonotic significance and assess the consequences of microbes entering the human food chain
5. Investigate the principles of microbial biotechnology and explore the uses of genetically modified micro-organisms
6. **The intended generic learning outcomes.
On successfully completing the module students will be able to:**
7. Demonstrate critical thinking skills
8. Work with complex material
9. Analyse problems and identify appropriate solutions
10. Demonstrate communication and report writing skills
11. Scan and organise data, abstract meaning from information and share knowledge with others
12. Demonstrate effective self-management skills
13. **A synopsis of the curriculum**

This module encompasses the topics of bacteriology, virology and mycology and the role of these groups in infectious disease processes and in biotechnology. It also includes the study of protozoa important in animal health and newly discovered disease agents such as the prions.

The student will study the structure and morphology of the microbes of importance in animal health and critically investigate their growth requirements, reproduction and control. The importance of microbes in biotechnology and the use of genetically modified microbes will also be explored and evaluated in the module.

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

Ikram M and Hill E, *Microbiology for Veterinary Technicians* (1991), Mosby

Lowrie P and Weels S, *Microbiology and Biotechnology* (2000), Cambridge University Press

Martinko J and Madigan M T, *Brock Biology of Micro-organisms* (2005), Prentice Hall

Patrick, Murray et al, *Medical Microbiology* (2001) Mosby

1. **Learning and Teaching Methods, including nature and number of contact hours and total study hours which will be expected of students, and how**

**Learning and teaching methods**

Total contact hours: 60

Private study hours: 90

Total study hours: 150

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

Written assignment (3,000 words) - 50%

Written and practical assignment (3,000 words) - 50%

13.2 Reassessment methods

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* | *9.5* | *9.6* |
| **Learning/ teaching method** |  |  |  |  |  |  |  |  |  |  |
| **Private Study** | **x** | **x** | **x** | **x** | **x** | **x** | **x** |  | **x** | **x** |
| *Lectures* | **x** | **x** | **x** | **x** |  | **x** |  |  |  |  |
| *Seminars* |  | **x** |  |  | **x** | **x** | **x** |  |  |  |
| *Workshops* | **x** |  | **x** | **x** | **x** | **x** | **x** |  | **x** |  |
| **Assessment method** |  |  |  |  |  |  |  |  |  |  |
| *Assignment 1* | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** |
| *Assignment 2* | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** |

1. **Inclusive module design**

The Partner Institution 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 College

1. **Internationalisation**
2. Microbiology is practised globally in both the animal industry and human. Microbiology is vital to diagnose and protect animals and humans from harm. Students are encouraged to consider these issues in a range of international perspectives including welfare, ethics relating to different cultures, laws and religions.
3. **Partner College/Validated Institution**

East Kent College Group

1. **University School responsible for the programme**

School of Biosciences

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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) |
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Revised FSO Feb 2018