

## Diagnostic Microbiology

|                |                                     |
|----------------|-------------------------------------|
| Module Code:   | BIS6022-B                           |
| Academic Year: | 2018-19                             |
| Credit Rating: | 20                                  |
| School:        | School of Chemistry and Biosciences |
| Subject Area:  | Biomedical Science                  |
| FHEQ Level:    | FHEQ Level 6                        |
| Module Leader: | Ms Kara Thornton                    |

Additional Tutors:

Pre-requisites:

Co-requisites:

### Contact Hours

| Type           | Hours |
|----------------|-------|
| Lectures       | 24    |
| Tutorials      | 12    |
| Laboratory     | 6     |
| Directed Study | 158   |

### Availability Periods

| Occurrence | Location/Period                                 |
|------------|-------------------------------------------------|
| BDA        | University of Bradford / Semester 1 (Sep - Jan) |

### Module Aims

To enable the student to understand and gain experience of the application and delivery of a range of core and specialised methods and techniques from across the infection sciences. Also to allow students to understand strategies to prevent and investigate bacterial infections.

## Outline Syllabus

Present and analyse data in simple terms in both oral and written formats.

Conduct a suitable range of diagnostic, investigative or monitoring procedures and address quality control/assurance requirements. Apply the principles of scientific enquiry, including the evaluation of treatment efficacy and the research process.

Effectively manage your workload, resources and work successfully to a deadline.

Demonstrate personal responsibility for self-directed learning and time management.

## Module Learning Outcomes

*On successful completion of this module, students will be able to...*

- 1 Understand common bacterial infections and the methods used in their investigation.
  - 10 Apply the principles of scientific enquiry, including the evaluation of treatment efficacy and the research process.
  - 11 Effectively manage your workload, resources and work successfully to a deadline. Demonstrate personal responsibility for self-directed learning and time management.
- HCPC competencies covered by this module include: 1.2, 3.3, 4.2, 4.3, 4.4, 4.5, 5.1, 9.1, 10.3, 13.1, 13.8, 13.9, 13.10, 14.9, 14.19, 14.28
- 2 Evaluate different microbiological methods and techniques for the investigation of infection in the community and hospital setting.
  - 3 Understand the mechanism of bacterial infection & investigation of patients suspected of having bacterial infection
  - 4 Critically evaluate the tests used for commonly encountered aerobic & anaerobic bacterial infections of the skin, respiratory tract, digestive tract & reproductive tract.
  - 5 Analyse laboratory investigations of infectious disease in the community & guidelines for the optimum treatment of community based infection.
  - 6 Understand the sources and routes of transmission, the diagnosis of and strategies to reduce hospital-acquired infections (HAI)
  - 7 Discuss anti-microbial therapy.
  - 8 Present and analyse data in simple terms in both oral and written formats.
  - 9 Conduct a suitable range of diagnostic, investigative or monitoring procedures and address quality control/assurance requirements.

## Learning, Teaching and Assessment Strategy

Learning will be facilitated by a series of lectures, seminars and workshops as well as practical work. Lectures will be supported by case studies that aim to develop the students' abilities to apply their knowledge to microbial infection problems. Here the students will

work in groups under the guidance of facilitators to solve problems and interpret data. Finally the practical class will develop written communication and data presentation skills.

### Mode of Assessment

| Type      | Method                       | Description                                             | Length     | Weighting | Final Assess' |
|-----------|------------------------------|---------------------------------------------------------|------------|-----------|---------------|
| Summative | Presentation                 | Oral Presentation                                       | 30 minutes | 20%       | No            |
| Summative | Examination<br>- closed book | Examination comprising two from a choice of five essays | 2 hours    | 60%       | No            |
| Summative | Coursework                   | Short answer questions and data analysis                | 1 hour     | 20%       | Yes           |

### Legacy Code (if applicable)

BM-6136D

### Reading List

To view Reading List, please go to [rebus:list](#).