

Module Details	
Module Title	Infectious Disease: Establishment, Treatment and Control
Module Code	BIS6021-B
Academic Year	2020/1
Credits	20
School	School of Chemistry and Biosciences
Subject Area	Biomedical Science
FHEQ Level	FHEQ Level 6
Pre-requisites	N/A
Co-requisites	N/A

Contact Hours	
Type	Hours
Lectures	16
Tutorials	8
Laboratories	2
Directed Study	174

Availability	
Occurrence	Location / Period
BDA	University of Bradford / Semester 1

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 and to understand their importance in the clinical investigation of patients with viral infections.

Outline Syllabus

Mechanism of viral infection and investigation of patients suspected of having viral infection. Tests for commonly encountered viral infections including: Influenza virus, Parainfluenza, Respiratory syncytial virus, Rhinovirus, Viral hepatitis, Rotavirus, Norovirus, Human syncytial virus, Adenovirus, Herpes simplex virus, Cytomegalovirus, Human immunodeficiency virus, Parvovirus B19, Enterovirus, Rubella, Measles, Varicella zoster, Human papilloma virus

. Laboratory investigation of STIs in different healthcare settings (eg hospital, specialised clinic, community). The multidisciplinary team approach to the management of STIs. Laboratory investigation of the immunocompromised patient. Infections that may compromise pregnancy. Antimicrobial therapy in pregnancy. Outline of infectious disease in children. Laboratory investigation of childhood infections.

Overview of anti-microbial therapy in acute, chronic and community medicine.

Method of action of commonly prescribed antibiotics and antiviral therapy and the role of the laboratory in optimising antibiotic or antiviral therapies. Overview of antibiotic resistance. Vaccine design and use. Current guidelines relating to antimicrobial agents.

Learning Outcomes

Outcome Number	Description
01	Analyse common viral infections and the methods used in their investigation.
10	Conduct a suitable range of diagnostic, investigative or monitoring procedures and address quality control/assurance requirements.
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, 4.3, 5.1, 6.0, 7.1, 9.1, 10.3, 13.1, 13.2, 13.8, 13.9, 13.10, 14.5, 14.28.
02	Critically evaluate the application of microbiological methods and techniques and for the investigation of infection in high risk patients.
03	Discuss the methods of action and clinical utility of commonly-prescribed antimicrobial agents.
04	Discuss the role of screening programmes, aetiology and laboratory investigations of common sexually transmitted infections (STIs).
05	Evaluate laboratory investigation of infections in the immunocompromised patient, in pregnancy (including antimicrobial therapy) and in children.
06	Understand the mechanism of viral infection and investigation of patients suspected of having viral infection.
07	Analyse the tests for commonly encountered viral infections of the respiratory system, major organs, reproductive system and immune system.
08	Critically review antibiotic resistance and understand the method of action of and optimisation of commonly prescribed antibiotics and antiviral therapies.
09	Present and analyse data in simple terms in both oral and written formats.

Learning, Teaching and Assessment Strategy

Information outlining the knowledge and understanding required for this module is delivered in lectures. This information is reinforced by practical and workshop sessions. In the workshops you will work in groups to research information, interpret data, solve problems and develop your understanding. The workshop exercises will require you to work under pressure, meet deadlines and develop communication skills. Teaching is enhanced by the use of visiting specialist lecturers from local Hospitals.

Mode of Assessment

Type	Method	Description	Length	Weighting
Summative	Presentation	Group presentation	30 mins	20%
Summative	Examination - Open Book	Online assessment comprising two from a choice of five essays	2 hour	60%
Summative	Coursework	1 individual data interpretation exercise	1 hour 30 mins	20%

Reading List

To access the reading list for this module, please visit <https://bradford.rl.talis.com/index.html>

Please note:

This module descriptor has been published in advance of the academic year to which it applies. Every effort has been made to ensure that the information is accurate at the time of publication, but minor changes may occur given the interval between publishing and commencement of teaching. Upon commencement of the module, students will receive a handbook with further detail about the module and any changes will be discussed and/or communicated at this point.