



Module Descriptor

| | | | |
|--|---|--|-----------|
| Title | Principles of Infection and Disease Control | | |
| Session | 2024/25 | Status | Published |
| Code | BIOL11022 | SCQF Level | 11 |
| Credit Points | 20 | ECTS (European Credit Transfer Scheme) | 10 |
| School | Health and Life Sciences | | |
| Module Co-ordinator | William Gordon Mackay | | |
| Summary of Module This module will provide students with the opportunity to gain critical analytical skills in Infection and Disease Control. It aims to provide underpinning specialised knowledge of routes of infection and standard infection control precautions, including a detailed analysis of vaccination programmes, how vaccination works and its limitations and its impact. Discussions will emerge on topics such as tropical diseases (eg. Malaria, Ebola, Zika), seasonal epidemics (flu, norovirus) and antimicrobial resistance, and also on Public Health success stories, such as the eradication of smallpox, and how these have been influenced by health inequalities. Students will be invited to carry out an independent case study after specific timetabled tutorials on ‘how to write a case study’ on topics of their choice. | | | |

| | | | | | | | |
|-------------------------------------|---|--------------------------|--|-------------------------------------|---|--------------------------|---|
| Module Delivery Method | On-Campus¹ <input checked="" type="checkbox"/> | | Hybrid² <input type="checkbox"/> | | Online³ <input type="checkbox"/> | | Work -Based Learning⁴ <input type="checkbox"/> |
| Campuses for Module Delivery | <input type="checkbox"/> Ayr <input type="checkbox"/> Dumfries | | <input checked="" type="checkbox"/> Lanarkshire <input type="checkbox"/> London <input type="checkbox"/> Paisley | | <input type="checkbox"/> Online / Distance Learning <input type="checkbox"/> Other (specify) | | |
| Terms for Module Delivery | Term 1 | <input type="checkbox"/> | Term 2 | <input checked="" type="checkbox"/> | Term 3 | <input type="checkbox"/> | |

¹ Where contact hours are synchronous/ live and take place fully on campus. Campus-based learning is focused on providing an interactive learning experience supported by a range of digitally-enabled asynchronous learning opportunities including learning materials, resources, and opportunities provided via the virtual learning environment. On-campus contact hours will be clearly articulated to students.

² The module includes a combination of synchronous/ live on-campus and online learning events. These will be supported by a range of digitally-enabled asynchronous learning opportunities including learning materials, resources, and opportunities provided via the virtual learning environment. On-campus and online contact hours will be clearly articulated to students.

³ Where all learning is solely delivered by web-based or internet-based technologies and the participants can engage in all learning activities through these means. All required contact hours will be clearly articulated to students.

⁴ Learning activities where the main location for the learning experience is in the workplace. All required contact hours, whether online or on campus, will be clearly articulated to students

| | | | | | | |
|---|------------------------|--------------------------|------------------------|--------------------------|------------------------|--------------------------|
| Long-thin Delivery over more than one Term | Term 1 – Term 2 | <input type="checkbox"/> | Term 2 – Term 3 | <input type="checkbox"/> | Term 3 – Term 1 | <input type="checkbox"/> |
|---|------------------------|--------------------------|------------------------|--------------------------|------------------------|--------------------------|

| Learning Outcomes | |
|--------------------------|---|
| L1 | Investigate the principles of the infection control process using the current literature in public health. |
| L2 | Critically evaluate historical case studies of infection control and management. |
| L3 | Apply the principles of vaccination to different types of infection (bacterial, viral, parasitic). |
| L4 | Critically evaluate vaccination programmes and how they have been used effectively to prevent and manage infections, and their limitations. |
| L5 | |

| Employability Skills and Personal Development Planning (PDP) Skills | |
|--|--|
| SCQF Headings | During completion of this module, there will be an opportunity to achieve core skills in: |
| Knowledge and Understanding (K and U) | Please select SCQF Level 11 |
| Practice: Applied Knowledge and Understanding | Please select SCQF Level 11 |
| Generic Cognitive skills | Please select SCQF Level 11 |
| Communication, ICT and Numeracy Skills | Please select SCQF Level 11 |
| Autonomy, Accountability and Working with Others | Please select SCQF Level 11 |

| | | |
|----------------------|--------------------|---------------------|
| Prerequisites | Module Code | Module Title |
| | Other | |
| Co-requisites | Module Code | Module Title |

| Learning and Teaching |
|--|
| <p>In line with current learning and teaching principles, a 20-credit module includes 200 learning hours, normally including a minimum of 36 contact hours and maximum of 48 contact hours.</p> <p>This module is a collaborative endeavour. It consists of blend lectures, aimed at setting the scene, tutorials and self-directed study, where students are responsible for the planning and implementation of the case study work (in consultation with staff members). Students will write their own case study using examples from the literature (for example the peer-reviewed literature, WHO, CDC, ECDC etc). The case study will be presented in a written report in the</p> |

format of a WHO case study, and students will present their vaccine work as a poster presentation.

| Learning Activities | Student Learning Hours |
|--|--|
| During completion of this module, the learning activities undertaken to achieve the module learning outcomes are stated below: | (Note: Learning hours include both contact hours and hours spent on other learning activities) |
| Lecture / Core Content Delivery | 15 |
| Tutorial / Synchronous Support Activity | 14 |
| Laboratory / Practical Demonstration / Workshop | 7 |
| Independent Study | 164 |
| Please select | |
| Please select | |
| TOTAL | 200 |

Indicative Resources

The following materials form essential underpinning for the module content and ultimately for the learning outcomes:

Heymann D (2014). Control of Communicable Diseases Manual. 20th edition. Alpha Press.

Halloran ME, Longini Jr IM, Struchiner CJ (2010). Design and analysis of vaccine studies. Springer.

Abbas AK, Lichtman AH, Pillai S (2012). Basic immunology: functions and disorders of the immune system. 4th edition. Saunders.

Access to library; peer-reviewed journals, WHO case studies, CDC and ECDC materials

(N.B. Although reading lists should include current publications, students are advised (particularly for material marked with an asterisk*) to wait until the start of session for confirmation of the most up-to-date material)

Attendance and Engagement Requirements

In line with the [Student Attendance and Engagement Procedure](#), Students are academically engaged if they are regularly attending and participating in timetabled on-campus and online teaching sessions, asynchronous online learning activities, course-related learning resources, and complete assessments and submit these on time.

For the purposes of this module, academic engagement equates to the following:

For the purposes of this module, academic engagement equates to the following:
Attendance at synchronous sessions: lectures, workshops, and tutorials, completion of asynchronous activities, and submission of assessments to meet the learning outcomes of the module.

Equality and Diversity

The University's Equality, Diversity and Human Rights Procedure can be accessed at the following link: [UWS Equality, Diversity and Human Rights Code](#).

In line with current legislation (Equality Act, 2010) and the UWS Equality, Diversity, and Human Rights Code, our modules are accessible and inclusive, with reasonable adjustment for different needs where appropriate. Module materials comply with University guidance on inclusive learning and teaching, and specialist assistive equipment, support provision and adjustment to assessment practice will be made in accordance with UWS policy and regulations. Where modules require practical and/or laboratory based learning or assessment required to meet accrediting body requirements the University will make reasonable adjustment such as adjustable height benches or assistance of a 'buddy' or helper.

(N.B. Every effort will be made by the University to accommodate any equality and diversity issues brought to the attention of the School)

Supplemental Information

| | |
|---|--|
| Divisional Programme Board | Biological Sciences Health |
| Overall Assessment Results | <input type="checkbox"/> Pass / Fail <input checked="" type="checkbox"/> Graded |
| Module Eligible for Compensation | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If this module is eligible for compensation, there may be cases where compensation is not permitted due to programme accreditation requirements. Please check the associated programme specification for details. |
| School Assessment Board | Biological Sciences and Health |
| Moderator | Fiona Menzies |
| External Examiner | Philip Anyanwu |
| Accreditation Details | |
| Module Appears in CPD catalogue | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| Changes / Version Number | 1.07 |

Assessment (also refer to Assessment Outcomes Grids below)

Assessment 1

Case study 60%

Assessment 2

Poster presentation 40%

Assessment 3

(N.B. (i) Assessment Outcomes Grids for the module (one for each component) can be found below which clearly demonstrate how the learning outcomes of the module will be assessed.

(ii) An indicative schedule listing approximate times within the academic calendar when assessment is likely to feature will be provided within the Student Module Handbook.)

Component 1

| Assessment Type | LO1 | LO2 | LO3 | LO4 | LO5 | Weighting of Assessment Element (%) | Timetabled Contact Hours |
|-----------------|-------------------------------------|-------------------------------------|--------------------------|--------------------------|--------------------------|-------------------------------------|--------------------------|
| Case study | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 60 | |

| Component 2 | | | | | | | |
|-----------------|--------------------------|--------------------------|-------------------------------------|-------------------------------------|--------------------------|-------------------------------------|--------------------------|
| Assessment Type | LO1 | LO2 | LO3 | LO4 | LO5 | Weighting of Assessment Element (%) | Timetabled Contact Hours |
| Presentation | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 40 | |

| Component 3 | | | | | | | |
|-----------------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|-------------------------------------|--------------------------|
| Assessment Type | LO1 | LO2 | LO3 | LO4 | LO5 | Weighting of Assessment Element (%) | Timetabled Contact Hours |
| | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | |
| Combined total for all components | | | | | | 100% | hours |

Change Control

| What | When | Who |
|------|------|-----|
| | | |
| | | |
| | | |
| | | |
| | | |