



## Module Descriptor

|                            |                          |   |           |
|----------------------------|--------------------------|---|-----------|
| <b>Title</b>               | Diversity of Life        |   |           |
| <b>Session</b>             | 2025/26                  | <b>Status</b>                                 | Published |
| <b>Code</b>                | BIOL07020                | <b>SCQF Level</b>                             | 7         |
| <b>Credit Points</b>       | 40                       | <b>ECTS (European Credit Transfer Scheme)</b> | 20        |
| <b>School</b>              | Health and Life Sciences |   |           |
| <b>Module Co-ordinator</b> | Richard Thacker          |   |           |

### Summary of Module

This module begins with a consideration of the diversity of life that exists on our planet. An introduction to the taxonomy and classification of life on earth is provided along with an examination of the processes by which life evolves. The module starts with a consideration of prokaryotic species before moving on through the eukaryotic kingdoms. A systems approach to the study of biodiversity is taken and students on the module will study the following: support and movement in plants and animals, nutrition in plants and animals, gas exchange in plants and animals, circulation in animals and animal nervous systems. The impact of human activities on biodiversity is also evaluated. The module concludes with a consideration of biological processes at the population and community level, including an introduction to animal behaviour, along with a description of the major terrestrial and aquatic environments that exist on earth. The module is taught using a blend of lectures, tutorials and practical studies.

This module will work to develop a number of the key “I am UWS” Graduate Attributes to make those who complete the module (e.g.) Universal Work Ready Successful. these will include students who complete the module being; Analytical, Inquiring, Digitally literate, Autonomous, Problem-solver, Research-minded, effective communicator, Collaborative, Resilient and Driven.

| Module Delivery Method | On-Campus <sup>1</sup>              | Hybrid <sup>2</sup>      | Online <sup>3</sup>      | Work -Based Learning <sup>4</sup> |
|------------------------|-------------------------------------|--------------------------|--------------------------|-----------------------------------|
|                        | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>          |

<sup>1</sup> 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.

<sup>2</sup> 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.

<sup>3</sup> 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.

<sup>4</sup> 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

|                                     |   |                          |   |                                     |   |                          |
|-------------------------------------|---|--------------------------|---|-------------------------------------|---|--------------------------|
| <b>Campuses for Module Delivery</b> | <input type="checkbox"/> Ayr                      |                          | <input checked="" type="checkbox"/> Lanarkshire |                                     | <input type="checkbox"/> Online / Distance Learning |                          |
|                                     | <input type="checkbox"/> Dumfries                 |                          | <input type="checkbox"/> London                 |                                     | <input type="checkbox"/> Other (specify)            |                          |
| <b>Terms for Module Delivery</b>    | Term 1  | <input type="checkbox"/> | Term 2  | <input checked="" type="checkbox"/> | Term 3  | <input type="checkbox"/> |
|                                     | <b>Long-thin Delivery over more than one Term</b> | Term 1 – Term 2          | <input type="checkbox"/>                        | Term 2 – Term 3                     | <input type="checkbox"/>                            | Term 3 – Term 1          |
|                                     |   |                          |   |                                     |   |                          |

| Learning Outcomes |   |
|-------------------|---|
| <b>L1</b>         | Describe the diversity of life that exists on earth, the processes by which life has evolved and the scientific systems used to classify living organisms.                          |
| <b>L2</b>         | Describe the major life processes (feeding, movement, respiration, communication) that exist in Plants  |
| <b>L3</b>         | Describe the major life processes (feeding, movement, respiration, communication) that exist in Animals   |
| <b>L4</b>         | Outline threats to biodiversity and ecological resources from anthropogenic factors such as habitat destruction and fragmentation, pollution, over-harvesting, alien introductions. |
| <b>L5</b>         | Demonstrate competency in a range of technical laboratory skills  |

| Employability Skills and Personal Development Planning (PDP) Skills |  |
|---|--|
| <b>SCQF Headings</b>  | <b>During completion of this module, there will be an opportunity to achieve core skills in:</b>   |
| <b>Knowledge and Understanding (K and U)</b>                        | <b>SCQF 7</b><br>A broad knowledge of the biodiversity that exists on earth<br>Understanding of interrelationships that exist within and between species   |
| <b>Practice: Applied Knowledge and Understanding</b>                | <b>SCQF 7</b><br>Use of basic practical techniques in the biosciences as they relate to biodiversity<br>Identification of biodiversity   |
| <b>Generic Cognitive skills</b>                                     | <b>SCQF 7</b><br>Evaluate and interpret evidence-based information in the biosciences<br>Collate and use information on biodiversity from a variety of sources   |
| <b>Communication, ICT and Numeracy Skills</b>                       | <b>SCQF 7</b><br>Communicating information on biodiversity particularly on relation to the production of practical reports<br>Use basic numerical and graphical skills to convey biological information<br>Use of computers for basic statistical analysis of data |
| <b>Autonomy, Accountability</b>                                     | <b>SCQF 7</b>  |

|                                |   |
|--------------------------------|---|
| <b>and Working with Others</b> | Working effectively in groups particularly in practical work in the biosciences<br><br>Development of initiative and independence in relation to studies in the biosciences |
|--------------------------------|---|

|                      |                    |                     |
|----------------------|--------------------|---------------------|
| <b>Prerequisites</b> | <b>Module Code</b> | <b>Module Title</b> |
|                      | <b>Other</b>       |                     |
| <b>Co-requisites</b> | <b>Module Code</b> | <b>Module Title</b> |

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| <b>Learning and Teaching</b>   |   |
| 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.<br><br>During completion of this module, the learning activities undertaken to achieve the module learning outcomes will include formal lectures, structured tutorials, laboratory classes and independent study. VLE-based support materials will be available through the textbook. |   |
| <b>Learning Activities</b><br><br>During completion of this module, the learning activities undertaken to achieve the module learning outcomes are stated below:   | <b>Student Learning Hours</b><br><br>(Note: Learning hours include both contact hours and hours spent on other learning activities) |
| Lecture / Core Content Delivery  | 24  |
| Laboratory / Practical Demonstration / Workshop  | 40  |
| Tutorial / Synchronous Support Activity  | 32  |
| Independent Study  | 304   |
| n/a  |   |
| n/a  |   |
| <b>TOTAL</b>   | <b>400</b>  |

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| <b>Indicative Resources</b>  |
| <b>The following materials form essential underpinning for the module content and ultimately for the learning outcomes:</b><br><br>TBiology (Openstax - Free online textbook) ( <a href="https://openstax.org/details/books/biology">https://openstax.org/details/books/biology</a> ). |
| <b>(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)</b>  |

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| <b>Attendance and Engagement Requirements</b>   |
| In line with the <a href="#">Student Attendance and Engagement Procedure</a> , 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.<br><br>For the purposes of this module, academic engagement equates to the following: |

Attendance on-campus at all classes

## 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

|   |   |
|---|---|
| <b>Divisional Programme Board</b>       | <b>Biological Sciences Health</b>   |
| <b>Overall Assessment Results</b>       | <input type="checkbox"/> Pass / Fail <input checked="" type="checkbox"/> Graded   |
| <b>Module Eligible for Compensation</b> | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No<br><b>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.</b> |
| <b>School Assessment Board</b>          | Biology   |
| <b>Moderator</b>                        | Gary Boyd   |
| <b>External Examiner</b>                | J Spicer  |
| <b>Accreditation Details</b>            |   |
| <b>Module Appears in CPD catalogue</b>  | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No   |
| <b>Changes / Version Number</b>         | 1.06  |

## Assessment (also refer to Assessment Outcomes Grids below)

### Assessment 1

Lab Book Submission and Quizzes

### Assessment 2

Essay & Presentation

### Assessment 3

Observation of practical skills. This is a Pass/Fail component which must be passed

(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.)

| <b>Component 1</b>                         |                                     |                                     |                                     |                                     |                                     |  |                                 |
|--|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|--|---------------------------------|
| <b>Assessment Type</b>                     | <b>LO1</b>                          | <b>LO2</b>                          | <b>LO3</b>                          | <b>LO4</b>                          | <b>LO5</b>                          | <b>Weighting of Assessment Element (%)</b> | <b>Timetabled Contact Hours</b> |
| Laboratory/<br>Clinical/ Field<br>notebook | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | 35   | 3                               |

| <b>Component 2</b>             |                                     |                                     |                                     |                                     |                                     |  |                                 |
|--------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|--|---------------------------------|
| <b>Assessment Type</b>         | <b>LO1</b>                          | <b>LO2</b>                          | <b>LO3</b>                          | <b>LO4</b>                          | <b>LO5</b>                          | <b>Weighting of Assessment Element (%)</b> | <b>Timetabled Contact Hours</b> |
| Portfolio of<br>practical work | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | 65   | 5                               |

| <b>Component 3</b>   |                          |                          |                          |                          |                                     |  |                                 |
|--|--------------------------|--------------------------|--------------------------|--------------------------|-------------------------------------|--|---------------------------------|
| <b>Assessment Type</b>   | <b>LO1</b>               | <b>LO2</b>               | <b>LO3</b>               | <b>LO4</b>               | <b>LO5</b>                          | <b>Weighting of Assessment Element (%)</b> | <b>Timetabled Contact Hours</b> |
| Workbook/<br>Laboratory<br>notebook/ Diary/<br>Training log/<br>Learning log | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | 0  | 1                               |
| <b>Combined total for all components</b>                                     |                          |                          |                          |                          |                                     | 100%                                       | 9 hours                         |

### Change Control

| <b>What</b>                      | <b>When</b> | <b>Who</b> |
|----------------------------------|-------------|------------|
| Updated Indicative Resource List | July 2025   | F Menzies  |
|                                  |             |            |
|                                  |             |            |
|                                  |             |            |
|                                  |             |            |