Faculty of Science and Technology
Department of Life and Environmental Sciences

FRAMEWORK / PROGRAMME SPECIFICATION

Life and Environmental Sciences Framework
BSc (Hons) Biological Sciences
BSc (Hons) Ecology and Wildlife Conservation
BSc (Hons) Environmental Science
BSc (Hons) Geography
BSc (Hons) Marine Ecology & Conservation (Top up)
MSc Biodiversity Conservation
MSc Green Economy

MSc Marine and Freshwater Management (closed November 2019)
Bournemouth University undertakes to encourage the recognition, protection and exploitation of intellectual property rights generated by participants in this programme, to the benefit, as appropriate, of students, staff, industrial/other third parties/partners and the university.
CONTENTS

BASIC FRAMEWORK / PROGRAMME DATA  4
AIMS OF THE DOCUMENT         6
PROGRESSION ROUTES          6
ACADEMIC AND PROFESSIONAL CONTEXTS     6
AIMS OF THE FRAMEWORK / PROGRAMME(S)  6
BSc Biological Sciences     6
Programme Aims             7
Programme Intended Learning Outcomes 7
Programme Skills Matrix   13
BSc Ecology and Wildlife Conservation 14
Programme Aims             14
Programme Intended Learning Outcomes 14
Programme Skills Matrix   20
BSc Environmental Science 22
Programme Aims             22
Programme Intended Learning Outcomes 22
Programme Skills Matrix   27
BSc Geography              29
Programme Aims             29
Programme Intended Learning Outcomes 29
Programme Skills Matrix   35
BSc Marine Ecology and Conservation 37
Programme Aims             37
Programme Intended Learning Outcomes 37
Programme Skills Matrix   38
MSc Biodiversity Conservation 39
Programme Intended Learning Outcomes 39
Programme Skills Matrix   41
MSc Green Economy          43
Programme Aims             43
Programme Intended Learning Outcomes 43
Programme Skills Matrix   45
MSc Marine Freshwater Management 47
Programme Aims             47
Programme Intended Learning Outcomes 47
Programme Skills Matrix   49
WORK-BASED LEARNING (WBL)/PLACEMENTS ELEMENTS 50
ADMISSIONS REGULATIONS      51
ASSESSMENT REGULATIONS      51
PROGRAMME PROFILES          52
PROGRAMME DIAGRAMS          65
<table>
<thead>
<tr>
<th>BASIC FRAMEWORK / PROGRAMME DATA</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Originating institution(s)</strong></td>
</tr>
</tbody>
</table>
| **Award(s) and title(s)** | BSc (Hons) Biological Sciences  
DipHE Biological Sciences  
CertHE Biological Sciences  
BSc (Hons) Ecology and Wildlife Conservation  
DipHE Ecology and Wildlife Conservation  
CertHE Ecology and Wildlife Conservation  
BSc (Hons) Environmental Science  
DipHE Environmental Science  
CertHE Environmental Science  
BSc (Hons) Geography  
DipHE Geography  
CertHE Geography  
BSc (Hons) Marine Ecology & Conservation (Top up)  
MSc Biodiversity Conservation  
PGDip Biodiversity Conservation  
PGCert Biodiversity Conservation  
MSc Green Economy  
PGDip Green Economy  
PGCert Green Economy  
MSc Marine and Freshwater Management  
PGDip Marine and Freshwater Management  
PGCert Marine and Freshwater Management |
| **UCAS Programme Code(s) (where applicable and if known)** | Biological Sciences C100  
Ecology and Wildlife Conservation CD14  
Environmental Science D449  
Geography F800 |
| **HESA JACS (Joint Academic Coding System) Code(s) per programme/pathway** | Biological Sciences C100,  
Ecology and Wildlife Conservation C150,C184  
Maine Ecology and Conservation C161, C184  
Geography C800, C810, L700  
Environmental Sciences C800, F750, F751  
Biodiversity Conservation C150, C184  
Marine and Freshwater Management C160, C184, C800,  
Green Economy C184, C800, L700, D448 |
| **External reference points(s)** | • The UK Quality Code for Higher Education;  
• Part A: Setting and maintaining academic standards;  
• Chapter A1: UK and European reference points for academic standards (October 2013) - incorporates Framework for Higher Education Qualifications, Foundation Degree qualification benchmarks and subject benchmark statements;  
• Benchmark statements for Bioscience (2007), Geography (2014), Earth sciences, environmental sciences and environmental studies (2014) |
| **Professional, Statutory and Regulatory Body (PSRB) links** | BSc Environmental Sciences is accredited by the Institute of Environmental Sciences (IES) |
| **Place(s) of delivery** | Bournemouth University – All Programmes  
Kingston Maurward College – BSc Marine Ecology and Conservation – Top Up |
| **Mode(s) of delivery** | All courses (except MSc Green Economy) Full Time or Part Time.  
MSc Green Economy Full time e-learning or part time e-learning.  
All 20 credit level 7 units available as CPD  
Please note, not all option units may run each year |
| **Credit structure** | Level 4 120 credits (60 ECTS)  
Level 5 120 credits (60 ECTS)  
Level 6 120 credits (60 ECTS)  
Level 7 180 credits (90 ECTS)  
Level 7 CPD 20 credits (10 ECTS) |
| Duration                          | BSc Courses Typically 3 years full time, 6 years part time  
BSc Top-up Typically 1 year full time, 2 years part time  
MSc Typically 1 year (12 months) full time, 2 years (24 months)part time  
CPD Typically 1 semester  |
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Date of original approval(s)</td>
<td>April 2015</td>
</tr>
<tr>
<td>Date of first intake</td>
<td>Sept 2015 and Freshwater Management – Sept 2016</td>
</tr>
<tr>
<td>Student numbers</td>
<td></td>
</tr>
</tbody>
</table>
|                                  | BSc Biological Sciences Min - 20, Max – 65, Optimum – 45  
BSc Environmental Sciences Min – 10, Max – 50, Optimum – 30  
BSc Geography Min - 20, Max - 65, Optimum – 40  
BSc Marine Ecology and Conservation – TopUp. Min - 5, Max – 30,  
MSc Biodiversity Conservation. Min 5, Max 30, Optimum 15  
MSc Marine and Freshwater Management. Min 5, Max 30, Optimum 15  
MSc Green Economy: Min 5, Max 35, Optimum 20  |
| Expected start dates             | All currently September only except Green Economy which has Sept and  
January  |
| Placements                       |                                                            |
|                                  | EWC – 5 Week placement (level 5) and either 5 week placement (level 6)  
or minimum 30-week placement (level P)  
Environmental Sciences – 5 Week placement (level 5) and either 5 week  
placement (level 6) or minimum 30-week placement (level P)  
Geography – 5 Week placement (level 5) and either 5 week placement  
(level 6) or minimum 30-week placement (level P)  
Biodiversity Conservation – 6 week placement  
Biological Sciences – option for minimum 30-week level P placement |
| Partner(s) and model(s)          |                                                            |
|                                  | BSc Marine Ecology and Conservation Top-up. 40 credits delivered at  
Kingston Maurward College using shared delivery model |
| Date and version number of this  |                                                            |
| Framework/Programme Specification| v1.14-0919  
Applies to intake from Sept 2019  |

**Unique reference number:**

HSS 1415 02 previously v1.0. Approved 13.5.15
BU1617 01, approved 24/02/2016. Previously v1.1-0917
FST 1718 02, approved 04/10/17. Previously v1.4-0917
FST 1718 05, approved 14/12/17. Previously v1.5-0917
FST 1718 06, approved 14/12/17. Previously v1.5-0917
FST 1718 08, approved 14/12/17. Previously v1.6-0918
FST 1718 17, approved 24/01/18. Previously v1.7-0918
FST 1718 20, approved 02/05/18. Previously v1.8-0918
FST 1819 04, approved 13/12/2018. Previously v1.9-0919
FST 1819 02, approved 14/11/2018. Previously v1.10-0919
BU 1819 01, approved 6/3/2019/. Previously v1.11-0919
FST 1819 14, approved 24/04/19, previously v1.12-0919
FST 1920 04, approved 20/11/19, previously v1.13-0919
FST 1920 05, approved by Chairs Action 13/12/19 and applied at same time as FST 1920 04
FST 1920 11 approved 20/2/20 previously v1.14-0919
EC 1920 29 approved 20/2/20
AIMS OF THE DOCUMENT

The aims of this document are to:

- Define the structure of the Life and Environmental Sciences Framework
- Specify the programme degree names and groupings within the Framework
- Identify programme and level learning outcomes
- Articulate the regulations governing the awards offered through this Framework

PROGRESSION ROUTES

This framework has one progression route. From FdSc Marine Ecology and Conservation (a BU validated programme at KMC) onto BSc (Hons) Marine Ecology and Conservation (Top-up), commencing in September 2016.

In order to take advantage of exciting new approaches to learning and teaching, as well as developments in industry, the current, approved Articulation/Recognition/Progression route(s) for this/these programme(s)/framework may be subject to change. Where this happens, students will be informed and supported by the School/Faculty as early as possible.

ACADEMIC AND PROFESSIONAL CONTEXTS

The academic context of these programmes has been developed with reference to the QAA guidelines, and specifically to the following subject benchmarks:

- Biosciences (2007) – Biological Sciences, EWC, Marine Ecology and Conservation Top-up
- Earth sciences, environmental sciences and environmental studies (2014) – Environmental Sciences, EWC, Marine Ecology can Conservation Top-up, MSc Biodiversity Conservation*, MSc Marine and Freshwater Management*, MSc Green Economy* 
- Geography (2014) - Geography

* Masters characteristics from QAA (2013) were used in conjunction with some of the key topics and benchmark statements from undergraduate degrees.

Changes to programmes have been made specifically to align with academic and professional need (for example NERC 2012 Most Wanted Skills, CIEEM accreditation for Ecological Programmes and placements for full accreditation by Society of Biology for Biological Sciences).

AIMS OF THE FRAMEWORK / PROGRAMME(S)

BSc (Hons) Biological Sciences

This is a broad-based three-year biological sciences programme which provides an opportunity for increased specialisation in the final two years (in environmental or laboratory based/human biosciences). The programme considers the interaction of biological systems and focuses on the development of the skills necessary to apply biological concepts to the solution of practical problems.

The first year of the programme allow students to develop core knowledge and understanding in the areas of human biology, biochemistry, laboratory and investigative techniques and ecology. The final two years allows the student to choose taught units from the thematic areas developed in the first year and undertake a research project that offers the chance for a student to understand a topic in greater depth than is possible with the taught units.
Graduates will have a wide range of skills consistent with the QAA Biosciences benchmark statement and that are currently sought after by employers in the biological disciplines.

**Overall Programme Aims**

This undergraduate programme aims to develop in its students the ability to work as applied biological scientists both in the public and commercial sectors. The programme is naturally broad in scope to allow students to experience a range of different fields of study and gain experience and confidence as biological scientists before specialising in a more focused field.

The primary aim of this Programme is the development of graduates who:

- Have a critical understanding of the scientific and technical bases of biological science
- Have the necessary scientific knowledge base to develop successful careers as biological scientists
- Can apply appropriate skills to specific biological problems, and also communicate effectively with members of the public and with other scientists working in related fields
- Have the ability to carry out investigations in the area of biological science
- Have the capacity to give a clear and accurate account of a subject, marshal arguments in a mature way and engage in debate and dialogue both with specialists and non-specialists
- Have the skills and knowledge necessary for postgraduate study

The degree also aims to provide students with a substantial range of transferable skills in science laboratory practice, computing, data analysis and report writing as a basis for professional activity and development which may be applicable in other career areas.

**INTENDED LEARNING OUTCOMES**

**Overall Programme Outcomes**

This programme provides opportunities for students to develop and demonstrate knowledge as follows:

**Subject knowledge and understanding** - students will be expected to:

A1 Understand theories, concepts and principles relevant to a range of different fields within the biological sciences, and, in particular, an appreciation of the complexity and diversity of life processes and their origins, the taxonomic relationships between organisms and their interrelationships with their environment and the role of sub-cellular processes and their application to whole organism biology and applied aspects of biology (i.e. health)

A2 Be aware of current global biological themes, debates and concerns, and of the contribution of biological sciences to current debates and controversies

A3 Demonstrate an ability to read and use appropriate literature with an expanded and critical understanding, while addressing such questions as content, context, aims, objectives, quality of information, and its interpretation and application

A4 Recognise the moral and ethical dimensions of their actions and the need for professional codes of conduct
**Intellectual Skills** - students will be expected to:

B1 Evaluate critically, and apply scientific knowledge and skills in the development and implementation of practical solutions to biological problems

B2 Analyse and synthesise information relevant to the programme

B3 Define problems and devise and evaluate possible solutions, and to solve both routine and unfamiliar problems

B4 Integrate evidence from a range of sources to support findings and hypotheses

B5 Plan, execute and report on a projects involving original or directed research in the laboratory or field

**Subject-specific skills** - students will be expected to:

C1 Identify and use safely appropriate biological laboratory and fieldwork methods

C2 Observe, record accurately and report biological laboratory and fieldwork activity

C3 Prepare technical biological science reports and presentations

C4 Present biological science research findings in a range of effective and appropriate formats

C5 Make effective use of the relevant academic literature and other sources of information

C6 Critically analyse and synthesise research data from a wide range of sources and draw conclusions

C7 Reflect on their own experiences and learning within their subject areas and apply this learning to planning their careers and extra-curricular opportunities

C8 Make effective use of IT and software packages relevant to their areas of study

**Transferable skills** - students will be expected to:

D1 Communicate effectively by oral, written and visual means

D2 Use IT including the Web, spread sheets and word processing

D3 Apply a range of basic statistical tests on experimental and fieldwork data

D4 Solve numerical problems using appropriate techniques

D5 Work in collaboration with others, including staff and other students, in the UK and internationally

D6 Demonstrate problem solving skills and the application of knowledge across discipline areas

D7 Identify and work towards targets for personal, career, and academic development

D8 Be independent and reflective learners
Level Outcomes

LEVEL 4 OUTCOMES - CertHE Biological Sciences

Subject knowledge and understanding - students will be expected to have:

A1 A basic knowledge of chemistry and biology to underpin the requirements of the year 2 science units.

A2 A foundation in biochemistry, taxonomy, genetics and evolution

A3 An appreciation of the nature and sources of UK and EU law and the regulatory control that it places on biological problems/issues

A4 An understanding of the scientific and human behavioural dimensions of a range of biological, environmental and human health issues

A5 A basic understanding of sampling, investigative techniques and an understanding of basic statistical methods

A6 An appreciation of a range of techniques for the qualitative and quantitative analysis in the areas of chemistry and biology

Intellectual Skills - students will be expected to:

B1 Analyse numerical data and identify and use appropriate statistical tests

B2 Identify key areas of the law as they affect biological issues

B3 Identify and utilise appropriate information sources

B4 Demonstrate an awareness of the scientific method

B5 Develop laboratory skills relevant to the biological sciences

Subject specific skills - students will be expected to:

C1 Observe, record accurately and report laboratory / fieldwork activity

C2 Use laboratory / fieldwork equipment to generate data

C3 Make use of literature relevant to the programme, citing and referencing work in an appropriate manner

C4 Write appropriately structured reports

Transferable skills - students will be expected to:

D1 Communicate effectively by oral, written and visual means

D2 Use IT including Microsoft Office, e-learning material, and myBU
D3   Apply a range of basic statistical tests to experimental and fieldwork data
D4   Work in collaboration with others, including staff and students
D5   Demonstrate problem solving skills and the application of knowledge across discipline areas
D6   Be independent and reflective learners

LEVEL 5 OUTCOMES - DipHE Biological Sciences

Subject knowledge and understanding - students will be expected to have:
A1   A knowledge and understanding of the fundamental principles of biology (e.g. biochemistry, and evolution)
A2   A clear appreciation of the complexity and inter-disciplinary nature of biological problems
A3   Knowledge and critical understanding of the main concepts within the field of the studied units
A4   A knowledge of a range of methods and techniques, including experimental design and statistics, appropriate to the biological and environmental sciences
A5   Understanding of a range of laboratory and analytical skills

Intellectual Skills - students will be expected to:
B1   Apply scientific concepts to solve or investigation a range of biological problems
B2   Collect data using methods consistent with good evidence-based scientific practice
B3   Evaluate information relevant to the discipline and understand the context provided by current regulatory frameworks
B4   Apply theoretical knowledge and concepts to real-world biological problems
B5   Exercise judgement in using appropriate methods of data analysis and statistical methods

Subject specific skills - students will be expected to:
C1   Use appropriately, and safely biological science laboratory and field equipment
C2   Observe and record biological science activity in the field / laboratory
C3   Prepare technical and scientific reports and presentations, using relevant supporting information sources, citing and referencing work in an appropriate manner
C4   Make effective use of IT and software packages relevant to the Programme

Transferable skills - students will be expected to:
D1   Be reflective learners and analyse their strengths and weaknesses
D2   Communicate effectively in both written and verbal form
D3 Work effectively in teams
D4 Demonstrate problem solving skills
D5 Apply a range of statistical tests to experimental and fieldwork data
D6 Have strong IT skills

LEVEL 6 OUTCOMES - BSc (Hons) Biological Sciences

Subject knowledge and understanding - students will be expected to have:

A1 A critical and systematic understanding of key aspects of their fields of study with an appreciation of some contemporary themes, concepts and debates in the biological sciences
A2 A knowledge and understanding of experimental design, the value of fieldwork / laboratory based activity
A3 Knowledge and critical understanding of the main concepts within the field of the option choices selected
A4 A critical understanding of biological science research techniques and methods

Intellectual Skills - students will be expected to:

B1 Critically evaluate and review information from a range of sources and be aware of the complexity of issues and the often incomplete nature of the available data
B2 Apply appropriate research methodologies to address the often complex and unpredictable nature of research-orientated problems
B3 Identify and define problems, devise and evaluate solutions, demonstrating an ability to deploy effectively the ideas and techniques that are appropriate to the discipline
B4 Critically apply knowledge to specific situations and problems

Subject specific skills - students will be expected to:

C1 Plan, conduct and present either a directed or independent biological science research project using research skills, including, where appropriate, the use of the relevant statistical tests, appropriate to the subject at this level
C2 Relate biological science investigations to previous work and comment on appropriate aspects of current research in the disciplines covered by the programme, and be able to cite and reference work in an appropriate manner
C3 Be critically aware of health and safety issues, ethical questions, and the regulatory framework associated with applied biology science

Transferable skills - students will be expected to:

D1 Undertake self-management and personal organisation (e.g. time management)
D2 Work independently under pressure to meet deadlines

D3 Communicate information, ideas, problems and solutions to a range of audiences

D4 Demonstrate problems solving skills and the application of knowledge in their chosen specialist areas

D5 Recognise and respect the views of others, and, where appropriate, identify opportunities for further learning

D6 Work effectively both with others, and independently.

**LEARNING AND TEACHING STRATEGIES AND METHODS**

Teaching and learning will be delivered through combinations of lectures, seminars, practical work in the laboratory and field and small group tutorials. The exact combinations of these techniques will be unit specific, but there is a strong emphasis on small group tutorial learning in levels 4 and 5, particularly in relation to academic skills. These sessions will help with skills learning, by providing sessions in a subject specific context, but also will also help focus on assessment strategies and provide formative feedback.

**ASSESSMENT STRATEGIES AND METHODS**

The assessment strategy is a blend of coursework and exam, with no units in the LES framework being assessed solely by examination, and in any semester the overall percentage of examination being < 50%. Coursework might consist of essays, research papers, presentations, posters and sometimes a number of smaller tasks, such as multiple choice tests, which also serve to provide formative feedback throughout a unit. In almost all cases, alternative assessments can be provided where there is convincing evidence from ALS (additional learning support). The majority of work will be submitted electronically and feedback provided through myBU.
### Programme Skills Matrix

**Programme Skills Matrix Template – BSc (Hons) Biological Sciences**

| Level | Core / Option | Unit                                                                 | A1 | A2 | A3 | A4 | B1 | B2 | B3 | B4 | C1 | C2 | C3 | C4 | C5 | C6 | C7 | C8 | D1 | D2 | D3 | D4 | D5 | D6 | D7 | D8 | D9 | D10 |
|-------|---------------|----------------------------------------------------------------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| 6 p   | Core          | Advanced topics in Genetics                                          | X  | X  | X  |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 6 p   | Core          | Biological Oceanography                                              |    |    |    | X  | X  |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 6 p   | Core          | Marine conservation                                                  |    |    |    | X  | X  | X  |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 6 p   | Core          | Pathophysiology                                                      |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 6 p   | Core          | Biomolecules                                                         |    |    |    |    |    |    |    | X  | X  | X  |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 6 p   | Core          | Parasitology and Epidemiology                                         |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 6 p   | Core          | Primate Behavioural Ecology                                           |    |    |    |    |    |    |    | X  | X  | X  |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 6 p   | Core          | Topics in Wildlife Conservation                                       |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 5 p   | Core          | Independent Research Project                                          |    |    |    |    | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  |
| 5 p   | Core          | Advanced Skills For Biology                                           |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 5 p   | Core          | Animal Biology                                                       |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 5 p   | Core          | Biochemistry                                                          |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 5 p   | Core          | Ecosystems                                                            |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 5 p   | Core          | Advanced Cell Biology                                                 |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 5 p   | Core          | Behavioural Ecology                                                   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 5 p   | Core          | Becoming Human                                                        |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 5 p   | Core          | Environmental and Societal Challenges                                 |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 5 p   | Core          | Evolutionary Biology                                                  |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 5 p   | Core          | International Field Trip                                             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 5 p   | Core          | Introduction to toxicology                                            |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 5 p   | Core          | Microbiology                                                          |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 5 p   | Core          | Biological Research Skills                                            |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 4 c   | Core          | Chemistry                                                             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 4 c   | Core          | Practical Skills in Biology                                           |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 4 c   | Core          | Cell Biology                                                          |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 4 c   | Core          | Diversity of Life                                                     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 4 c   | Core          | Human Anatomy and Physiology                                          |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |

**A - Subject Knowledge and Understanding**

A1 Understand theories, concepts and principles relevant to a range of different fields within the biological sciences, and, in particular, an appreciation of the complexity and diversity of life processes and their origins, the taxonomic relationships between organisms and their interrelationships with their environment and the role of sub-cellular processes and their application to whole organism biology and applied aspects of biology (i.e. health)

A2 Be aware of current global biological themes, debates and controversies

A3 Demonstrate an ability to read and use appropriate literature with an expanded and critical understanding, while addressing such questions as content, context, aims, objectives, quality of information, and its interpretation and applicability;

A4 Recognise the moral and ethical dimensions of their actions and the need for professional codes of conduct.

**B - Intellectual Skills**

B1 Evaluate critically, and apply scientific knowledge and skills in the development and implementation of practical solutions to biological problems.

B2 Analyse and synthesise information relevant to the programme.

**C - Subject-specific/Practical Skills**

C1 Identify and use safely appropriate biological laboratory and fieldwork methods.

C2 Observe, record accurately and report biological laboratory and fieldwork activity.

C3 Prepare technical biological science reports and presentations.

C5 Make effective use of the relevant academic literature and other sources of information.

C7 Reflect on their own experiences and learning within their subject areas and apply this learning to planning their careers and extra-curricular opportunities.

C8 Make effective use of IT and software packages relevant to their areas of study.

**D - Transferable Skills**

D1 Communicate effectively by oral, written and visual means.

D2 Use IT including the Web, spreadsheets and word processing.

D3 Apply a range of basic statistical tests on experimental and fieldwork data.
| B3 | Define problems and devise and evaluate possible solutions, and to solve both routine and unfamiliar problems |
| B4 | Integrate evidence from a range of sources to support findings and hypotheses |
| B5 | Plan, execute and report on a project involving original or directed research in the laboratory or field |
| D4 | Solve numerical problems using appropriate techniques. |
| D5 | Work in collaboration with others, including staff and other students, in the UK and internationally |
| D6 | Demonstrate problem solving skills and the application of knowledge across discipline areas. |
| D7 | Identify and work towards targets for personal, career, and academic development. |
| D8 | Be independent and reflective learners. |
BSc (Hons) Ecology & Wildlife Conservation

Introduction
The conservation of biological systems is an essential component of sustainable environmental management. Ecological processes play large and complex roles in regulating the physical environment on Earth. However, natural biological systems across the world are currently being damaged by human activity. Factors such as pollution, land and water use for agriculture and the over exploitation of wild populations are causing large decreases in biological diversity. Further reduction in biological diversity will jeopardise both the stability of current ecological systems and the evolution of future systems.

The effective conservation of biological diversity requires professionals that can integrate an understanding of ecology with knowledge of the legislative frameworks and the regulatory authorities for environmental protection in general and conservation ecology in particular. It also requires that these individuals are able to put conservation ecology in the wider context of sustainable development. The broad aim of this degree is to provide a means by which students can develop these attributes.

Overall Programme Aims

This undergraduate programme aims to develop in its students the abilities to work in regulatory agencies, NGOs, environmental consultancy, related industry, and other organisations concerned with the conservation of the environment in general and biological systems in particular.

The primary aim of this course is the development of graduates who:

- Have a critical understanding of the scientific, technical, and regulatory bases of conservation ecology and wider environmental issues
- Have the necessary scientific, regulatory and management knowledge base to develop successful careers in specialist fields of Ecology and Wildlife Conservation
- Can apply these skills to specific environmental problems, and also communicate effectively with both those working in the field of Ecology and Wildlife Conservation and with the wider public
- Have the ability to carry out independent investigations in the area of conservation ecology and environmental science
- Have the skills and knowledge necessary for postgraduate study

The degree also aims to provide students with a substantial range of transferable skills in science laboratory practice, computing, data analysis, report writing and project management as a basis for professional activity and development which may be applicable in other career areas.

INTENDED LEARNING OUTCOMES

Overall Programme Outcomes

This programme provides opportunities for students to develop and demonstrate knowledge as follows:

**Subject knowledge and understanding** - students will be expected to:

A1 Understand relevant theories, concepts and principles relevant to the field of Ecology and Wildlife Conservation

A2 Have a detailed knowledge and understanding of the essential facts and theories in the student's chosen area of specialisation

A3 Place their scientific knowledge in Ecology and Wildlife Conservation within the UK, EC and Global regulatory framework
A4 Understand the multidisciplinary nature of the degree programme and the need to apply knowledge from a range of subject areas in addressing problems in Ecology and Wildlife Conservation

A5 Recognise the moral and ethical dimensions of their actions and the need for professional codes of conduct

A6 Have knowledge and understanding of management techniques relevant to Ecology and Wildlife Conservation

**Intellectual Skills** - students will be expected to:

B1 Evaluate critically, and apply scientific knowledge and skills in the development and implementation of practical solutions to environmental and conservation biology problems

B2 Analyse and synthesise information relevant to the programme

B3 Define problems and devise and evaluate possible solutions, and to solve both routine and unfamiliar problems

B4 Integrate evidence from a range of sources to support findings and hypotheses

B5 Plan, execute and report on a project involving original research on location in the field

B6 Analyse critically published work in the field environmental protection

**Subject-specific skills** - students will be expected to:

C1 Identify and use safely appropriate laboratory and fieldwork methods

C2 Observe, record accurately and report laboratory and fieldwork activity

C3 Use spatial technologies in addressing problems efficiently

C4 Prepare technical reports and presentations

C5 Present research findings in a range of effective and appropriate formats

C6 Make effective use of the relevant academic literature and other sources of information

C7 Make effective use of IT and software packages relevant to the programme

**Transferable skills** - students will be expected to:

D1 Communicate effectively by oral, written and visual means

D2 Use IT including the Web, spread sheets and word processing

D3 Apply a range of basic statistical tests on experimental and fieldwork data

D4 Solve numerical problems using appropriate techniques

D5 Work in collaboration with others, including staff and students in a UK or global context

D6 Demonstrate problem-solving skills and the application of knowledge across discipline areas
D7 Identify and work towards targets for personal, career, and academic development through discussion with peers and maximising programme level and extra-curricular opportunities

D8 Be independent and reflective learners

LEVEL OUTCOMES

LEVEL 4 OUTCOMES - CertHE Ecology and Wildlife Conservation

Subject knowledge and understanding - students will be expected to have:

A1 A basic knowledge and understanding of the sciences relevant to Ecology and Wildlife Conservation

A2 An appreciation of nature and sources of UK and EU law and the role of environmental enforcement agencies

A3 An understanding of the scientific and human basis of a range of environmental issues

A4 A basic understanding of environmental investigative techniques

A5 An understanding of basic statistical methods

Intellectual Skills - students will be expected to:

B1 Analyse numerical data and identify appropriate statistical tests

B2 Identify key areas of the law as they affect land and the environment

B3 Identify and utilise appropriate information sources

B4 Demonstrate an awareness of the scientific method

B5 Recognise the origins and effects of different approaches to Ecology and Wildlife Conservation

Subject specific skills - students will be expected to:

C1 Observe, record accurately and report laboratory and fieldwork activity

C2 Use laboratory and fieldwork equipment to generate data

C3 Make use of literature relevant to the programme

C4 Write appropriately structured reports

Transferable skills - students will be expected to:

D1 Communicate effectively by oral, written and visual means

D2 Use IT including the Web, spread sheets and word-processing

D3 Apply a range of basic statistical tests to experimental and fieldwork data
D4 Work in collaboration with others, including staff and students
D5 Demonstrate problem-solving skills and the application of knowledge across discipline areas
D6 Be independent and reflective learners

LEVEL 5 OUTCOMES - DipHE Ecology & Wildlife Conservation

Subject knowledge and understanding - students will be expected to have:

A1 An appreciation of the inter-disciplinary and multi-disciplinary context of environmental problems
A2 A knowledge and understanding of a range of scientific concepts relevant to Ecology and Wildlife Conservation
A3 A knowledge of the current environmental regulatory framework and appreciation of the legal constraints on the regulatory bodies
A4 A basic knowledge and understanding of environmental and project management
A5 A knowledge of a range of research methods relevant to Ecology and Wildlife Conservation
A6 A knowledge of specific statistical methods

Intellectual Skills - students will be expected to:

B1 Apply scientific concepts to a range of situations in the context of Ecology and Wildlife Conservation
B2 Collect data using methodologies consistent with good scientific practice
B3 Evaluate the current regulatory framework
B4 Apply theoretical knowledge and concepts to environmental management
B5 Exercise judgment in using appropriate methods of data analysis and statistical methods

Subject specific skills - students will be expected to:

C1 Use appropriately and safely laboratory and field equipment
C2 Observe and record activity in the field and laboratory
C3 Prepare technical reports and presentations
C4 Make effective use of IT and software packages relevant to the programme

Transferable skills - students will be expected to:

D1 Be reflective learners and analyse their strengths and weaknesses
D2 Communicate effectively in both written and verbal form
D3 Work effectively in teams
D4 Demonstrate problem-solving skills
D5 Apply a range of statistical tests to experimental and fieldwork data

LEVEL 6 OUTCOMES - BSc (Hons) Ecology & Wildlife Conservation

Subject knowledge and understanding - students will be expected to have:

A1 A knowledge of the scientific, technical and regulatory framework within specialist areas of Ecology and Wildlife Conservation
A2 A knowledge of key aspects of environmental impact evaluation and remediation methods
A3 Detailed knowledge and understanding in the area of their chosen specialist areas

Intellectual Skills - students will be expected to:

B1 Critically evaluate and review information from a range of sources
B2 Apply appropriate research methodologies
B3 Define problems, devise and evaluate possible solutions
B4 Apply critically knowledge to specific situations

Subject specific skills - students will be expected to:

C1 Plan, conduct and present an independent project with limited reliance on guidance
C2 Relate investigations to prior work and reference appropriately
C3 Be aware of health and safety issues within Ecology and Wildlife Conservation

Transferable skills - students will be expected to:

D1 Undertake self-management & personal organisation (e.g. time management)
D2 Work under pressure to meet deadlines
D3 Communicate effectively
D4 Demonstrate problems solving skills and the application of knowledge in their chosen specialist areas
D5 Recognise and respect the views of others
D6 Work effectively with others and independently

LEARNING AND TEACHING STRATEGIES AND METHODS

Teaching and learning will be delivered through combinations of lectures, seminars, practical work in the laboratory and field and small group tutorials. The exact combinations of these techniques will be unit specific, but there is a strong emphasis on small group tutorial learning in levels 4 and 5, particularly in relation to academic skills. These sessions will help with skills learning, by providing sessions in a subject specific context, but also will also help focus on assessment strategies and provide formative feedback.
ASSESSMENT STRATEGIES AND METHODS

The assessment strategy is a blend of coursework and exam, with no units in the LES framework being assessed solely by examination, and in any semester the overall percentage of examination being < 50%. Coursework might consist of essays, research papers, presentations, posters and sometimes a number of smaller tasks, such as multiple choice tests, which also serve to provide formative feedback throughout a unit. In almost all cases, alternative assessments can be provided where there is convincing evidence from ALS (additional learning support). The majority of work will be submitted electronically and feedback provided through myBU.
<table>
<thead>
<tr>
<th>Programme Skills Matrix Ecology and Wildlife Conservation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Subject knowledge and understanding</strong> - students will be expected to:</td>
</tr>
<tr>
<td>A2 Have a detailed knowledge and understanding of the essential facts and theories in the student's chosen area of specialisation.</td>
</tr>
<tr>
<td>A3 Place their scientific knowledge in Ecology and Wildlife Conservation within the UK, EC and global regulatory framework</td>
</tr>
<tr>
<td>A4 Understand the multidisciplinary nature of the degree programme and the need to apply knowledge from a range of subject areas in addressing problems in Ecology and Wildlife Conservation.</td>
</tr>
<tr>
<td>A5 Recognise the moral and ethical dimensions of their actions and the need for professional codes of conduct.</td>
</tr>
<tr>
<td>A6 Have knowledge and understanding of management techniques relevant to Ecology and Wildlife Conservation.</td>
</tr>
<tr>
<td><strong>Subject-specific skills</strong> - students will be expected to:</td>
</tr>
<tr>
<td>C1 Identify and use safely appropriate laboratory and fieldwork methods.</td>
</tr>
<tr>
<td>C2 Observe, record accurately and report laboratory and fieldwork activity.</td>
</tr>
<tr>
<td>C3 Use spatial technologies in addressing problems efficiently.</td>
</tr>
<tr>
<td>C4 Prepare technical reports and presentations.</td>
</tr>
<tr>
<td>C5 Present research findings in a range of effective and appropriate formats.</td>
</tr>
<tr>
<td>C6 Make effective use of the relevant academic literature and other sources of information.</td>
</tr>
<tr>
<td>C7 Make effective use of IT and software packages relevant to the programme.</td>
</tr>
<tr>
<td><strong>Intellectual Skills</strong> - students will be expected to:</td>
</tr>
<tr>
<td>B1 Evaluate critically, and apply scientific knowledge and skills in the development and implementation of practical solutions to environmental and conservation biology problems.</td>
</tr>
<tr>
<td>B2 Analyse and synthesise information relevant to the programme.</td>
</tr>
<tr>
<td>B3 Define problems and devise and evaluate possible solutions, and to solve both routine and unfamiliar problems.</td>
</tr>
<tr>
<td>B4 Integrate evidence from a range of sources to support findings and hypotheses.</td>
</tr>
<tr>
<td>B5 Plan, execute and report on a project involving original research on location in the field</td>
</tr>
<tr>
<td>B6 Analyse critically published work in the field environmental protection.</td>
</tr>
<tr>
<td><strong>Transferable skills</strong> - students will be expected to:</td>
</tr>
<tr>
<td>D1 Communicate effectively by oral, written and visual means.</td>
</tr>
<tr>
<td>D2 Use IT including the Web, spreadsheets and word processing.</td>
</tr>
<tr>
<td>D3 Apply a range of basic statistical tests on experimental and fieldwork data.</td>
</tr>
<tr>
<td>D4 Solve numerical problems using appropriate techniques.</td>
</tr>
<tr>
<td>D5 Work in collaboration with others, including staff and students in a UK or global context</td>
</tr>
<tr>
<td>D6 Demonstrate problem-solving skills and the application of knowledge across discipline areas.</td>
</tr>
<tr>
<td>D7 Identify and work towards targets for personal, career, and academic development through discussion with peers and maximising programme level and extra-curricular opportunities</td>
</tr>
<tr>
<td>D8 Be independent and reflective learners</td>
</tr>
<tr>
<td>Level</td>
</tr>
<tr>
<td>-------</td>
</tr>
<tr>
<td>6</td>
</tr>
<tr>
<td>6</td>
</tr>
<tr>
<td>6</td>
</tr>
<tr>
<td>6</td>
</tr>
<tr>
<td>6</td>
</tr>
<tr>
<td>6</td>
</tr>
<tr>
<td>6</td>
</tr>
<tr>
<td>6</td>
</tr>
<tr>
<td>6</td>
</tr>
<tr>
<td>6</td>
</tr>
<tr>
<td>6</td>
</tr>
<tr>
<td>6</td>
</tr>
<tr>
<td>6</td>
</tr>
<tr>
<td>5</td>
</tr>
<tr>
<td>5</td>
</tr>
<tr>
<td>5</td>
</tr>
<tr>
<td>5</td>
</tr>
<tr>
<td>5</td>
</tr>
<tr>
<td>5</td>
</tr>
<tr>
<td>5</td>
</tr>
<tr>
<td>5</td>
</tr>
<tr>
<td>5</td>
</tr>
<tr>
<td>5</td>
</tr>
<tr>
<td>5</td>
</tr>
<tr>
<td>5</td>
</tr>
<tr>
<td>5</td>
</tr>
<tr>
<td>5</td>
</tr>
<tr>
<td>5</td>
</tr>
<tr>
<td>4</td>
</tr>
<tr>
<td>4</td>
</tr>
<tr>
<td>4</td>
</tr>
<tr>
<td>4</td>
</tr>
<tr>
<td>4</td>
</tr>
</tbody>
</table>
BSc (Hons) Environmental Science

Environmental Science integrates the natural sciences and geography, and considers how a wide range of factors may impact on the natural environment. It includes understanding of how both anthropogenic and natural forces result in environmental impacts such as climate change, ecosystem pollution and habitat loss. The study of Environmental Science also includes an appreciation of how technology and regulation can be applied to prevent environmental degradation and an awareness of practical remediation methods. Professionals working in the field of Environmental Science need to be able to combine an understanding of natural science with a knowledge of the legislative frameworks and the regulatory authorities for environmental protection and management.

Overall Programme Aims

This undergraduate programme aims to develop in its students the abilities to work in regulatory agencies, related industry and other organisations concerned with environmental science.

The primary aim of this course is the development of graduates who:

- Have a critical understanding of the scientific, technical, and regulatory bases of environmental science
- Have the necessary scientific, regulatory and management knowledge base to develop successful careers in specialist fields of environmental science
- Can apply these skills to specific environmental problems, and also communicate effectively with both those working in the field of environmental science and with the wider public
- Have the ability to carry out independent investigations in the area of environmental science
- Have the skills and knowledge necessary for postgraduate study

The degree also aims to provide students with a substantial range of transferable skills in science laboratory practice, computing, data analysis, report writing and project management as a basis for professional activity and development which may be applicable in other career areas.

INTENDED LEARNING OUTCOMES

Overall Programme Outcomes

This programme provides opportunities for students to develop and demonstrate knowledge as follows:

Subject knowledge and understanding - students will be expected to:

A1 Understand relevant theories, concepts and principles relevant to the field of environmental science
A2 Have a detailed knowledge and understanding of the essential facts and theories in the student's chosen area of specialisation
A3 Place the scientific knowledge in environmental science within the UK and international frameworks
A4 Understand the multidisciplinary and international nature of the degree programme and the need to apply knowledge from a range of subject areas in addressing problems in environmental protection and management
A5 Recognise the moral and ethical dimensions of their actions and the need for professional codes of conduct
A6 Have knowledge and understanding of management techniques relevant to environmental science
**Intellectual Skills** - students will be expected to:

B1 Evaluate critically, and apply scientific knowledge and skills in the development and implementation of practical solutions to environmental science problems

B2 Analyse and synthesise information relevant to the programme

B3 Define problems and devise and evaluate possible solutions, and to solve both routine and unfamiliar problems

B4 Plan, execute and report on a project involving original research in laboratory and field settings

B5 Integrate evidence from a range of sources to support findings and hypotheses

B6 Analyse critically published work in the field environmental science

**Subject-specific skills** - students will be expected to:

C1 Identify and use safely appropriate laboratory and fieldwork methods

C2 Observe, record accurately and report laboratory and fieldwork activity

C3 Use spatial technologies in addressing problems efficiently

C4 Prepare technical reports and presentations

C5 Present research findings in a range of effective and appropriate formats

C6 Make effective use of the relevant academic literature and other sources of information

C7 Make effective use of IT and software packages relevant to the programme

**Transferable skills** - students will be expected to:

D1 Communicate effectively by oral, written and visual means

D2 Use IT including the Web, spread sheets and word processing

D3 Apply a range of basic statistical tests on experimental and fieldwork data

D4 Solve numerical problems using appropriate techniques

D5 Work in collaboration with others, including staff and students in a UK or global context

D6 Demonstrate problem-solving skills and the application of knowledge across discipline areas

D7 Identify and work towards targets for personal, career, and academic development through discussion with peers and maximising programme level and extra-curricular opportunities

D8 Be independent and reflective learners

**LEVEL OUTCOMES**

**LEVEL 4 OUTCOMES - CertHE Environmental Science**
Subject knowledge and understanding - students will be expected to have:

A1  A basic knowledge and understanding of the sciences relevant to environmental science
A2  An appreciation of environmental regulation and enforcement
A3  An understanding of the scientific and human basis of a range of environmental issues
A4  A basic understanding of environmental investigative techniques
A5  An understanding of basic statistical methods

Intellectual Skills - students will be expected to:

B1  Analyse numerical data and identify appropriate statistical tests
B2  Identify key areas of the law as they affect land and the environment
B3  Identify and use appropriate information sources
B4  Demonstrate an awareness of the scientific method
B5  Recognise the different approaches and areas in environmental science

Subject specific skills - students will be expected to:

C1  Observe, record accurately and report laboratory and fieldwork activity
C2  Use laboratory and fieldwork equipment to generate data
C3  Make use of literature relevant to the programme
C4  Write appropriately structured reports

Transferable skills - students will be expected to:

D1  Communicate effectively by oral, written and visual means
D2  Use IT including the Web, spread sheets and word-processing
D3  Apply a range of basic statistical tests to experimental and fieldwork data
D4  Work in collaboration with others, including staff and students
D5  Demonstrate problem-solving skills and the application of knowledge across discipline areas
D6  Be independent and reflective learners

LEVEL 5 OUTCOMES - DipHE Environmental Science

Subject knowledge and understanding - students will be expected to have:

A1  An appreciation of the inter-disciplinary and multi-disciplinary context of environmental problems
A2  A knowledge and understanding of a range of scientific concepts relevant to environmental science
A3 A knowledge of the current environmental regulatory framework and appreciation of the legal constraints on the regulatory bodies

A4 A basic knowledge and understanding of environmental and project management

A5 A knowledge of a range of research methods relevant to environmental protection

A6 A knowledge of specific statistical methods

**Intellectual Skills** - students will be expected to:

B1 Apply scientific concepts to a range of situations in the context of environmental protection

B2 Collect data using methods consistent with good scientific practice

B3 Evaluate the current regulatory framework

B4 Apply theoretical knowledge and concepts to environmental management

B5 Exercise judgment in using appropriate methods of data analysis and statistical methods

**Subject specific skills** - students will be expected to:

C1 Use appropriately and safely laboratory and field equipment

C2 Observe and record activity in the field and laboratory

C3 Prepare technical reports and presentations

C4 Make effective use of IT and software packages relevant to the programme

**Transferable skills** - students will be expected to:

D1 Be reflective learners and analyse their strengths and weaknesses

D2 Communicate effectively in both written and verbal form

D3 Work effectively in teams

D4 Demonstrate problem-solving skills

D5 Apply a range of statistical tests to experimental and fieldwork data

**LEVEL 6 OUTCOMES - BSc (Hons) Environmental Science**

**Subject knowledge and understanding** - students will be expected to have:

A1 A knowledge of the legal and regulatory framework within specialist areas of environmental science

A2 A knowledge of environmental assessment methods and environmental management

A3 Detailed knowledge and understanding in the area of their chosen specialist areas
**Intellectual Skills** - students will be expected to:

**B1** Critically evaluate and review information from a range of sources

**B2** Apply appropriate research methods

**B3** Define problems, devise and evaluate possible solutions

**B4** Apply critically knowledge to specific situations

**Subject specific skills** - students will be expected to:

**C1** Plan, conduct and present a project with limited reliance on guidance

**C2** Relate investigations to prior work and reference appropriately

**C3** Be aware of health and safety issues in an environment context

**Transferable skills** - students will be expected to:

**D1** Undertake self-management & personal organisation (e.g. time management)

**D2** Work under pressure to meet deadlines

**D3** Communicate effectively

**D4** Demonstrate problems solving skills and the application of knowledge in their chosen specialist areas

**D5** Recognise and respect the views of others

**D6** Work effectively with others and independently

**LEARNING AND TEACHING STRATEGIES AND METHODS**

Teaching and learning will be delivered through combinations of lectures, seminars, practical work in the laboratory and field and small group tutorials. The exact combinations of these techniques will be unit specific, but there is a strong emphasis on small group tutorial learning in levels 4 and 5, particularly in relation to academic skills. These sessions will help with skills learning, by providing sessions in a subject specific context, but also will also help focus on assessment strategies and provide formative feedback.

**ASSESSMENT STRATEGIES AND METHODS**

The assessment strategy is a blend of coursework and exam, with no units in the LES framework being assessed solely by examination, and in any semester the overall percentage of examination being < 50%. Coursework might consist of essays, research papers, presentations, posters and sometimes a number of smaller tasks, such as multiple choice tests, which also serve to provide formative feedback throughout a unit. In almost all cases, alternative assessments can be provided where there is convincing evidence from ALS (additional learning support). The majority of work will be submitted electronically and feedback provided through myBU.
## Environmental Sciences Programme Skills Matrix

### Subject knowledge and understanding - students will be expected to:
- A1 Understand relevant theories, concepts and principles relevant to the field of environmental science.
- A2 Have a detailed knowledge and understanding of the essential facts and theories in the student’s chosen area of specialisation.
- A3 Place the scientific knowledge in environmental science within the UK and international frameworks.
- A4 Understand the multidisciplinary and international nature of the degree programme and the need to apply knowledge from a range of subject areas in addressing problems in environmental protection and management.
- A5 Recognise the moral and ethical dimensions of their actions and the need for professional codes of conduct.
- A6 Have knowledge and understanding of management techniques relevant to environmental science.

### Subject-specific skills - students will be expected to:
- C1 Identify and use safely appropriate laboratory and fieldwork methods.
- C2 Observe, record accurately and report laboratory and fieldwork activity.
- C3 Use spatial technologies in addressing problems efficiently.
- C4 Prepare technical reports and presentations.
- C5 Present research findings in a range of effective and appropriate formats.
- C6 Make effective use of the relevant academic literature and other sources of information.
- C7 Make effective use of IT and software packages relevant to the programme.

### Intellectual Skills - students will be expected to:
- B1 Evaluate critically, and apply scientific knowledge and skills in the development and implementation of practical solutions to environmental science problems.
- B2 Analyse and synthesise information relevant to the programme.
- B3 Define problems and devise and evaluate possible solutions, and to solve both routine and unfamiliar problems.
- B4 Plan, execute and report on a project involving original research in laboratory and field settings.
- B5 Integrate evidence from a range of sources to support findings and hypotheses.
- B6 Analyse critically published work in the field environmental science programme.

### Transferable skills - students will be expected to:
- D1 Communicate effectively by oral, written and visual means.
- D2 Use IT including the Web, spreadsheet and word processing.
- D3 Apply a range of basic statistical tests on experimental and fieldwork data.
- D4 Solve numerical problems using appropriate techniques.
- D5 Work in collaboration with others, including staff and students in a UK or global context.
- D6 Demonstrate problem-solving skills and the application of knowledge across discipline areas.
- D7 Identify and work towards targets for personal, career, and academic development through discussion with peers and maximising programme level and extra-curricular opportunities.
- D8 Be independent and reflective learners.
| Level   | Unit                                          | Core/Opt | A1 | A2 | A3 | A4 | A5 | A6 | B1 | B2 | B3 | B4 | B5 | B6 | C1 | C3 | C4 | C5 | C6 | C7 | D1 | D2 | D3 | D4 | D5 | D6 | D7 | D8 |
|---------|-----------------------------------------------|----------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| 4       | Chemistry                                     | c        | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  |
| 4       | Environmental Research Skills                 | c        | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  |
| 4       | Physical Geography                            | c        | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  |
| 4       | Diversity of Life                             | c        | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  |
| 4       | Fundamentals of environmental sciences        | c        | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  |
| 4       | Residential Field Trip                        | c        | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  |
| 5       | Advanced Skills for Environmental Science     | c        | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  |
| 5       | Applications of Environmental Sciences        | c        | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  |
| 5       | Ecosystems                                    | o        | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  |
| 5       | Behavioural Ecology                            | o        | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  |
| 5       | Environmental and Societal Challenges         | o        | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  |
| 5       | International Field Trip                      | o        | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  |
| 5       | Microbiology                                  | o        | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  |
| 5       | Environmental Pollution                       | c        | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  |
| 5       | Geographic Information Systems                | o        | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  |
| 5       | Marine Geography                              | o        | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  |
| 5       | Quaternary Environments                       | o        | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  |
| 5       | Biological Oceanography                       | o        | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  |
| 5       | Marine conservation                           | o        | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  |
| 6       | Topics in Wildlife Conservation               | o        | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  |
| 6       | Independent Research Project                  | c        | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  |
| 6       | Globalisation and sustainable development     | o        | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  |
| 6       | Applied Biogeography                          | o        | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  |
| 6       | Climate and Environmental Change              | o        | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  |
| 6       | Earth surface processes and landforms        | o        | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  |
| 6       | Emergence & Extinction                        | o        | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  |
| 6       | Environmental law and management              | o        | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  |
| 6       | Environmental Remote Sensing                  | o        | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  |
| 6       | Freshwater Resource Management                | o        | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  |
BSc (Hons) Geography

The pathway is designed to lay a sound foundation of geographical knowledge and the means by which it can be applied as an effective tool for understanding, resolving or mitigating societal, land use and landscape problems in the social, economic and physical spheres, but with a strong environmental focus. As such it provides a preparation for a wide range of practical and scientific roles in a number of related disciplines, including the environmental and landscape sciences, planning, land use management, development and conservation. The course also underpins a wide range of postgraduate study and professional development.

The primary aim of the course is the development of graduates who:

- Have a sound understanding of the technical and analytical skills applicable to the field of geographical sciences
- Can apply these skills to specific land use, landscape and environmental problems
- Can communicate effectively with both the wider public and those working in the fields of geographical and environmental sciences, planning and resource management
- Have the necessary scientific, regulatory and management knowledge-base to develop successful careers as professionals in relevant specialist fields

The degree also aims to provide students with a substantial range of transferable skills in report writing; computing; statistical sampling, application of spatial information systems, remote sensing, project management; fieldwork and data analysis and laboratory practice, as a basis for professional activity and development which may be applicable in other career areas.

INTENDED LEARNING OUTCOMES

Overall Programme Outcomes

This programme provides opportunities for students to develop and demonstrate knowledge as follows:

Subject knowledge and understanding - students will be expected to:

A1 Understand relevant philosophical approaches, concepts and principles underpinning contemporary geographical thought, with an emphasis on environment
A2 Have a detailed knowledge and understanding of the technical and analytical skills relevant to geographical science
A3 Understand the legal frameworks underpinning sustainable development at the global, European and local scale
A4 Have knowledge and understanding of relevant environmental management techniques
A5 Understand the multidisciplinary and international nature of the degree programme and the need to apply knowledge from a range of subject areas in addressing environmental management problems
A6 Define problems and devise and evaluate possible solutions, and to solve both routine and unfamiliar problems
A7 Recognise the moral and ethical dimensions of their actions and the need for professional codes of conduct
A8 Integrate evidence from a range of sources to support findings and hypotheses
Intellectual Skills - students will be expected to:

B1 Evaluate critically, and apply scientific knowledge and skills in the development and implementation of practical solutions to environmental problems

B2 Analyse and synthesise information relevant to the programme

B3 Plan, execute and report on projects involving original research on location in the field

B4 Integrate and evaluate data from a variety of sources

B5 Analyse critically published work in the field of geography

Subject-specific skills - students will be expected to:

C1 Identify and use safely appropriate laboratory and fieldwork methods

C2 Observe, record and accurately report laboratory and fieldwork activity

C3 Use spatial technologies in addressing problems efficiently

C4 Prepare technical reports and presentations

C5 Present research findings in a range of effective and appropriate formats

C6 Make effective use of the relevant academic literature and other sources of information

C7 Make effective use of IT and software packages relevant to the programme

Transferable skills - students will be expected to:

D1 Communicate effectively by oral, written and visual means.

D2 Use IT including the Web, spread sheets and word processing.

D3 Apply a range of basic statistical tests on experimental and fieldwork data.

D4 Solve numerical problems using appropriate techniques

D5 Work in collaboration with others, including staff and students in a UK or global context

D6 Demonstrate creativity in problem-solving and the application of knowledge across discipline areas

D7 Identify and work towards targets for personal, career, and academic development through discussion with peers and maximising programme level and extra-curricular opportunities

D8 Be independent and reflective learners

LEVEL OUTCOMES

LEVEL 4 OUTCOMES - CertHE Geography

Subject knowledge and understanding - students will be expected to have:
A1 A basic knowledge and understanding of earth and environmental systems

A2 Knowledge and understanding of range of philosophical approaches, concepts and principles that underlie the geographical discipline

A3 An understanding of the origin and nature of environmental issues and the interrelationships between the physical and human environments

A4 A basic understanding of the range of investigative techniques (instrumentation, remote sensing, land surveying, social survey, observation, textual and archive sources, etc) relevant to the subject

A5 A competence in the acquisition of basic geographical data sets, their analysis and forms of presentation

A6 Knowledge of the legal frameworks within which the environment and issues that surround it are managed

Intellectual Skills - students will be expected to:

B1 Demonstrate a geographical perspective and understanding through effectively communication of ideas, principles and theories

B2 Recognise the origins, diversity and effects of different geographical approaches to problem-solving

B3 Analyse quantitative and qualitative data, identify appropriate statistical tests and other mathematical procedures

B4 Identify key areas of the law as they affect land-use management and the environment

B5 Identify and utilise appropriate information sources

B6 Demonstrate an understanding and awareness of the scientific method

Subject specific skills - students will be expected to:

C1 Observe, record accurately and report laboratory and fieldwork activity

C2 Use laboratory and fieldwork equipment to generate data

C3 Make use of literature relevant to the programme

C4 Write appropriately structured reports

Transferable skills - students will be expected to:

D1 Communicate effectively by oral, written and visual means

D2 Use IT including the Web, spread sheets and word-processing

D3 Apply a range of basic statistical tests to experimental and fieldwork data, and understand other relevant mathematical procedures in the processing of data

D4 Work in collaboration with others, including staff and students
D5  Demonstrate problem-solving skills and the application of knowledge across discipline areas
D6  Be independent and reflective learners

LEVEL 5 OUTCOMES - DipHE Geography

Subject knowledge and understanding - students will be expected to have:

A1  An appreciation of the nature of change in the human and physical environments
A2  An appreciation of sense of place, and the spatial relationships between places and between regions at a variety of scales
A3  An appreciation of the inter-disciplinary and multi-disciplinary context of problems in the human and physical environments
A4  A knowledge and understanding of a range of scientific concepts relevant to environmental management
A5  A knowledge of the current legal framework controlling land use and development in the UK and an appreciation of the role of regulatory and other environmental bodies
A6  A basic knowledge and understanding of the operation of public and private environmental organisations, and of the principles of environmental and project management
A7  A knowledge of a range of research methods relevant to resource management and environmental protection including an understanding of the principles of GIS and knowledge of specific statistical methods

Intellectual Skills - students will be expected to:

B1  Apply understanding of scientific and geographical concepts to a range of situations
B2  Question and probe the contested and provisional nature of knowledge and understanding
B3  Identify and evaluate approaches to problem-solving and risk management
B4  Collect data using methods/methodologies consistent with good geographical practice
B5  Evaluate the current legal frameworks for land-use planning and environmental protection
B6  Apply theoretical knowledge and concepts to environmental management
B7  Exercise judgment in using appropriate methods of data analysis and statistical methods and demonstrate understanding of the diversity of techniques and approaches in the presentation of geographical information (GIS, cartography)

Subject specific skills - students will be expected to:

C1  Use appropriately and safely laboratory and field equipment
C2  Observe and record activity in the field and laboratory
C3 Prepare technical reports and presentations
C4 Make effective use of IT and software packages relevant to the programme

Transferable skills - students will be expected to:
D1 Be reflective learners and analyse their strengths and weaknesses
D2 Communicate and argue effectively in both written and verbal form
D3 Work effectively in teams
D4 Demonstrate problem-solving skills
D5 Apply a range of statistical tests to experimental and fieldwork data
D6 Have competence in the use of more specialised C&IT skills, in particular GIS and CAD

LEVEL 6 OUTCOMES - BSc (Hons) Geography
Subject knowledge and understanding - students will be expected to have:
A1 An ability to review and creatively apply geographical principles, knowledge and processes and skills to the resolution or mitigation of real world problems
A2 A knowledge of key aspects of environmental impact assessments and the UK planning system
A3 Detailed knowledge and understanding in the area of their chosen specialist areas

Intellectual Skills - students will be expected to:
B1 Apply original ideas to new situations by building upon the strengths and weaknesses in the arguments of others
B2 Critically evaluate and review information from a range of sources
B3 Apply appropriate research methodologies and undertake independent learning to achieve proficient and sustained attainment
B4 Define problems, devise and evaluate possible solutions
B5 Apply critically knowledge to specific situations

Subject specific skills - students will be expected to:
C1 Plan, conduct and present an independent project with limited reliance on guidance
C2 Relate investigations to prior work and reference appropriately
C3 Demonstrate a knowledge of a repertoire of geographical research skills and the appropriate applications of these skills
C4 Be aware of health and safety issues within geographical based activities
Transferable skills - students will be expected to:

D1 Be competent in self-management & personal organisation (e.g. time management)
D2 Work under pressure to meet deadlines
D3 Communicate effectively
D4 Demonstrate problem-solving skills and the application of knowledge in their chosen specialist areas
D5 Recognise and respect the views of others
D6 Work effectively with others and independently

LEARNING AND TEACHING STRATEGIES AND METHODS

Teaching and learning will be delivered through combinations of lectures, seminars, practical work in the laboratory and field and small group tutorials. The exact combinations of these techniques will be unit specific, but there is a strong emphasis on small group tutorial learning in levels 4 and 5, particularly in relation to academic skills. These sessions will help with skills learning, by providing sessions in a subject specific context, but also will also help focus on assessment strategies and provide formative feedback.

ASSESSMENT STRATEGIES AND METHODS

The assessment strategy is a blend of coursework and exam, with no units in the LES framework being assessed solely by examination, and in any semester the overall percentage of examination being < 50%. Coursework might consist of essays, research papers, presentations, posters and sometimes a number of smaller tasks, such as multiple choice tests, which also serve to provide formative feedback throughout a unit. In almost all cases, alternative assessments can be provided where there is convincing evidence from ALS (additional learning support). The majority of work will be submitted electronically and feedback provided through myBU.
<table>
<thead>
<tr>
<th><strong>Subject knowledge and understanding</strong> - students will be expected to:</th>
<th><strong>Intellectual Skills</strong> - students will be expected to:</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1 Understand relevant philosophical approaches, concepts and principles underpinning contemporary geographical thought, with an emphasis on environment.</td>
<td>B1 Evaluate critically, and apply scientific knowledge and skills in the development and implementation of practical solutions to environmental problems.</td>
</tr>
<tr>
<td>A2 Have a detailed knowledge and understanding of the technical and analytical skills relevant to geographical science.</td>
<td>B2 Analyse and synthesise information relevant to the programme.</td>
</tr>
<tr>
<td>A3 Understand the legal frameworks underpinning sustainable development at the global, European and local scale.</td>
<td>B3 Plan, execute and report on projects involving original research on location in the field.</td>
</tr>
<tr>
<td>A4 Have knowledge and understanding of relevant environmental management techniques.</td>
<td>B4 Integrate and evaluate data from a variety of sources.</td>
</tr>
<tr>
<td>A5 Understand the multidisciplinary and international nature of the degree programme and the need to apply knowledge from a range of subject areas in addressing environmental management problems.</td>
<td>B5 Analyse critically published work in the field of applied geography.</td>
</tr>
<tr>
<td>A6 Define problems and devise and evaluate possible solutions, and to solve both routine and unfamiliar problems.</td>
<td></td>
</tr>
<tr>
<td>A7 Recognise the moral and ethical dimensions of their actions and the need for professional codes of conduct.</td>
<td></td>
</tr>
<tr>
<td>A8 Integrate evidence from a range of sources to support findings and hypotheses.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Subject-specific skills</strong> - students will be expected to:</th>
<th><strong>Transferable skills</strong> - students will be expected to:</th>
</tr>
</thead>
<tbody>
<tr>
<td>C1 Identify and use safely appropriate laboratory and fieldwork methods.</td>
<td>D1 Communicate effectively by oral, written and visual means.</td>
</tr>
<tr>
<td>C2 Observe, record and accurately report laboratory and fieldwork activity.</td>
<td>D2 Use IT including the Web, spreadsheets and word processing.</td>
</tr>
<tr>
<td>C3 Use spatial technologies in addressing problems efficiently.</td>
<td>D3 Apply a range of basic statistical tests on experimental and fieldwork data.</td>
</tr>
<tr>
<td>C4 Prepare technical reports and presentations.</td>
<td>D4 Solve numerical problems using appropriate techniques.</td>
</tr>
<tr>
<td>C5 Present research findings in a range of effective and appropriate formats</td>
<td>D5 Work in collaboration with others, including staff and students in a UK or global context.</td>
</tr>
<tr>
<td>C6 Make effective use of the relevant academic literature and other sources of information.</td>
<td>D6 Demonstrate creativity in problem-solving and the application of knowledge across discipline areas.</td>
</tr>
<tr>
<td>C7 Make effective use of IT and software packages relevant to the programme.</td>
<td>D7 Identify and work towards targets for personal, career, and academic development through discussion with peers and maximising programme level and extra-curricular opportunities.</td>
</tr>
<tr>
<td></td>
<td>D8 Be independent and reflective learners.</td>
</tr>
<tr>
<td>Level</td>
<td>Unit</td>
</tr>
<tr>
<td>-------</td>
<td>----------------------------------------</td>
</tr>
<tr>
<td>4</td>
<td>Geographic Research Skills</td>
</tr>
<tr>
<td>4</td>
<td>Physical Geography</td>
</tr>
<tr>
<td>4</td>
<td>Practical Skills in Geography</td>
</tr>
<tr>
<td>4</td>
<td>Earth and Society</td>
</tr>
<tr>
<td>4</td>
<td>Human Geography</td>
</tr>
<tr>
<td>4</td>
<td>Residential Field Trip</td>
</tr>
<tr>
<td>5</td>
<td>Advanced Skills for Geography</td>
</tr>
<tr>
<td>5</td>
<td>Geographic Information Systems</td>
</tr>
<tr>
<td>5</td>
<td>Marine Geography</td>
</tr>
<tr>
<td>5</td>
<td>Quaternary Environments</td>
</tr>
<tr>
<td>5</td>
<td>Applications of Environmental Sciences</td>
</tr>
<tr>
<td>5</td>
<td>Ecosystems</td>
</tr>
<tr>
<td>5</td>
<td>Environmental &amp; Societal Challenges</td>
</tr>
<tr>
<td>5</td>
<td>International Field Trip</td>
</tr>
<tr>
<td>5</td>
<td>Understanding Globalisation</td>
</tr>
<tr>
<td>5</td>
<td>Environmental Pollution</td>
</tr>
<tr>
<td>6</td>
<td>Independent Research Project</td>
</tr>
<tr>
<td>6</td>
<td>Applied Biogeography</td>
</tr>
<tr>
<td>6</td>
<td>Biological Oceanography</td>
</tr>
<tr>
<td>6</td>
<td>Climate &amp; Environmental Change</td>
</tr>
<tr>
<td>6</td>
<td>Cultural Ecology</td>
</tr>
<tr>
<td>6</td>
<td>Earth Surface Processes &amp; Landforms</td>
</tr>
<tr>
<td>6</td>
<td>Emergence &amp; Extinction</td>
</tr>
<tr>
<td>6</td>
<td>Environmental Law &amp; Management</td>
</tr>
<tr>
<td>6</td>
<td>Environmental Remote Sensing</td>
</tr>
<tr>
<td>6</td>
<td>Freshwater Resource Management</td>
</tr>
<tr>
<td>6</td>
<td>Globalisation &amp; Sustainable Development</td>
</tr>
<tr>
<td>6</td>
<td>Marine Conservation</td>
</tr>
<tr>
<td>6</td>
<td>Wildlife and Ecotourism</td>
</tr>
</tbody>
</table>
BSc (Hons) Marine Ecology and Conservation – Top-up

This course builds directly on foundation courses, and provides a university experience and opportunity to co-create research with academics in the discipline. It provides new legislative contexts for conservation, as well as further fieldwork opportunities and chances to learn about ecology of charismatic megafauna.

Specifically this course aims to:

• Introduce new contexts for understanding conservation in the marine environment, such as UK habitat directives and legislation and policy frameworks
• Provide opportunities to deliver in depth understanding of subjects of general public interest in marine biology, such as marine mammals
• Provide a smooth transition to a University research environment, and opportunities to co-create research through the Independent Research Project

INTENDED LEARNING OUTCOMES

Note, the course learning outcomes are provided only, as this course only consists of level 6.

A1 Understand theories, concepts and principles relevant to a range of different fields within marine ecology and conservation, and, in particular, an appreciation of the complexity of interactions in the marine environment

A2 Be aware of current themes, debates and concerns, and of the contribution of marine ecology to current debates and controversies at a local, national and international level

A3 Demonstrate an ability to read and use appropriate literature with an expanded and critical understanding, while addressing such questions as content, context, aims, objectives, quality of information, and its interpretation and application

A4 Recognise the moral, ethical and legal dimensions of the discipline and how to apply these for effective conservation

Intellectual Skills - students will be expected to:

B1 Evaluate critically, and apply scientific knowledge and skills in the development and implementation of practical solutions to problems

B2 Analyse and synthesise information relevant to the programme

B3 Define problems and devise and evaluate possible solutions, and to solve both routine and unfamiliar problems

B4 Integrate evidence from a range of sources to support findings and hypotheses

B5 Plan, execute and report on a project involving original or directed research in the laboratory or field

Subject-specific skills - students will be expected to:

C1 Identify and use safely appropriate laboratory and fieldwork methods

C2 Present research findings in a range of effective and appropriate formats

C3 Make effective use of the relevant academic literature and other sources of information
C4 Critically analyse and synthesise research data from a wide range of sources and draw conclusions
C5 Reflect on their own experiences and learning within their subject areas and apply this learning to planning their careers and extra-curricular opportunities

Transferable skills - students will be expected to:

D1 Communicate effectively by oral, written and visual means
D2 Solve numerical problems using appropriate techniques
D3 Work in collaboration with others, including staff and other students, in the UK or internationally
D4 Demonstrate problem solving skills and the application of knowledge across discipline areas
D5 Be independent and reflective learners.

Marine ecology and Conservation Programme Skills Matrix

| Level | Unit                              | Core/Opt | A1 | A2 | A3 | A4 | B1 | B2 | B3 | B4 | B5 | C1 | C2 | C3 | C4 | C5 | D1 | D2 | D3 | D4 | D5 |
|-------|-----------------------------------|----------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| 6     | Marine conservation               | c        | x  | x  | x  | x  | x  | x  | x  | x  | x  | x  | x  | x  | x  | x  | x  | x  | x  | x  |
| 6     | Independent Research Project      | c        | x  | x  | x  | x  | x  | x  | x  | x  | x  | x  | x  | x  | x  | x  | x  | x  | x  | x  |
| 6     | Environmental law and management  | o        | x  | x  | x  | x  | x  | x  | x  | x  | x  | x  | x  | x  | x  | x  | x  | x  | x  | x  |
| 6     | Marine Mammal Ecology and Behaviour| c       | x  | x  | x  | x  | x  | x  | x  | x  | x  | x  | x  | x  | x  | x  | x  | x  | x  | x  |
| 6     | Marine Field Study Techniques     | c        | x  | x  | x  | x  | x  | x  | x  | x  | x  | x  | x  | x  | x  | x  | x  | x  | x  | x  |
| 6     | Freshwater Resource Management    | o        | x  | x  | x  | x  | x  | x  | x  | x  | x  | x  | x  | x  | x  | x  | x  | x  | x  | x  |
| 6     | Biological Oceanography           | o        | x  | x  | x  | x  | x  | x  | x  | x  | x  | x  | x  | x  | x  | x  | x  | x  | x  | x  |

LEARNING AND TEACHING STRATEGIES AND METHODS

Teaching and learning will be delivered through combinations of lectures, seminars, practical work in the laboratory and field and small group tutorials. The exact combinations of these techniques will be unit specific, but there is a strong emphasis on small group tutorial learning in levels 4 and 5, particularly in relation to academic skills. These sessions will help with skills learning, by providing sessions in a subject specific context, but also will also help focus on assessment strategies and provide formative feedback.

ASSESSMENT STRATEGIES AND METHODS

The assessment strategy is a blend of coursework and exam, with no units in the LES framework being assessed solely by examination, and in any semester the overall percentage of examination being < 50%. Coursework might consist of essays, research papers, presentations, posters and sometimes a number of smaller tasks, such as multiple choice tests, which also serve to provide formative feedback throughout a unit. In almost all cases, alternative assessments can be provided where there is convincing evidence from ALS (additional learning support). The majority of work will be submitted electronically and feedback provided through myBU.
MSc Biodiversity Conservation

MSc Biodiversity Conservation is taught by specialists within the school and supported through strong, research lead, links with nature conservation practitioners. It is designed to give students an in-depth knowledge and understanding of the science and practice of biodiversity conservation. Field-based teaching features to capitalise on the university's location within a biodiversity hotspot. Flexibility is built in to allow students to tailor the course to their needs and career aspirations.

INTENDED LEARNING OUTCOMES

Graduates from this programme will possess the essential mix of knowledge and high level transferable skills that are demanded from current employers in the field. They are expected to become lifelong learners, taking on the challenge of the rapid rate of change and emergence of new knowledge in biodiversity conservation.

**Subject Knowledge and Understanding** - This pathway provides opportunities for students to develop and demonstrate knowledge and understanding as follows:

- **A1** Have a critical understanding of relevant theories, concepts and principles relevant to biodiversity conservation
- **A2** Place their knowledge of biodiversity conservation within the UK, EU and international regulatory framework
- **A3** Understand the multidisciplinary nature of biodiversity conservation and the need to apply knowledge from a range of disparate areas in assessing problems and formulating solutions
- **A4** Recognise the ethical dimensions of their actions and the need for professional codes of conduct
- **A5** Have knowledge and understanding of the techniques relevant to the analysis and solution of problems in biodiversity conservation
- **A6** Critically analyse published work in the field of biodiversity conservation

**Intellectual Skills** - This pathway provides opportunities for students to develop and demonstrate intellectual skills as follows:

- **B1** Evaluate critically and apply scientific knowledge and skills, in the development and implementation of practical solutions to problems of biodiversity conservation
- **B2** Analyse and synthesise information relevant to biodiversity conservation
- **B3** Use specialised technical and academic skills in the area of study
- **B4** Define problems and devise and evaluate possible solutions to both routine and unfamiliar problems
- **B5** Integrate evidence from a range of sources to support findings and hypotheses
- **B6** Plan, execute and report on a project involving original research

**Subject Specific Skills** - This pathway provides opportunities for students to develop and demonstrate skills as follows:
C1 Demonstrate an understanding of ecological and human systems, the inter-relationships between them and management options for biodiversity conservation

C2 Demonstrate an understanding of the range of techniques for assessing environmental systems, with specific relevance to the conservation of biodiversity

C3 Interpret, analyse and evaluate the outputs from relevant environmental information systems and demonstrate the ability to deal with complex issues and make appropriate judgments, in the absence of complete data

C4 Present research findings in a range of effective and appropriate formats, prepare technical reports and presentations

C5 Make effective use of the relevant academic literature and other sources of information

C6 Make effective use of IT and software relevant to the pathways.

Transferable Skills - This pathway provides opportunities for students to develop and demonstrate transferable skills as follows:

D1 Communicate effectively by oral, written and visual means

D2 Make effective use of IT, including the Web and word-processing

D3 Analyse a range of fieldwork and laboratory data

D4 Work in collaboration with others, including staff and students

D5 Demonstrate problem-solving skills and the application of knowledge across the boundaries of different disciplines

D6 Identify and work towards targets for personal, career and academic development

D7 Be independent and reflective learners
<table>
<thead>
<tr>
<th>Level</th>
<th>Unit</th>
<th>Core/Opt</th>
<th>A1</th>
<th>A2</th>
<th>A3</th>
<th>A4</th>
<th>A5</th>
<th>A6</th>
<th>B1</th>
<th>B2</th>
<th>B3</th>
<th>B4</th>
<th>B5</th>
<th>B6</th>
<th>C1</th>
<th>C2</th>
<th>C3</th>
<th>C4</th>
<th>C5</th>
<th>C6</th>
<th>D1</th>
<th>D2</th>
<th>D3</th>
<th>D4</th>
<th>D5</th>
<th>D6</th>
<th>D7</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>Quantitative and Spatial Analysis</td>
<td>c</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td></td>
<td></td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Advanced Quantitative Methods</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Biodiversity &amp; Ecosystem Services</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Conservation genetics</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>7</td>
<td>Conservation in Practice</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Field Ecology Skills</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>7</td>
<td>Frontiers in Biodiversity</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>International law of the environment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Primate behaviour and ecology</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Research Project</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
LEARNING AND TEACHING STRATEGIES AND METHODS

Teaching and learning will be delivered through combinations of lectures, seminars, practical work in the laboratory and field and small group tutorials. The exact combinations of these techniques will be unit specific, but there is a strong emphasis on practical skills including fieldwork and taxonomy, as well as analytical techniques (statistics and GIS).

ASSESSMENT STRATEGIES

All assessments are coursework, taking the form of skills needed in the real conservation world (charities, consultancies NGOs and academia). Presentations, posters, essays, technical reports and scientific papers all form assignment methods for this programme.
MSc Green Economy

Overall Pathway Aims

The development of a green economy, or an economy that is environmentally sustainable, has become a political and socio-economic imperative. Key drivers include the need to reduce carbon emissions to reduce the risk of climate change, and the global extinction crisis and widespread environmental degradation which is eroding the natural capital on which human wellbeing depends. The transition to sustainable economic development represents a substantial challenge to society, particularly in the current era of rapid environmental and socio-economic change. This programme seeks to provide the scientific understanding on which the transition to a green economy can be based, including the principles of environmental sustainability and the societal responses required to implement these in practice.

Overall Pathway Outcomes

Graduates from this pathway will possess the essential mix of specialist skills and high level transferable skills that are demanded from current employers. They are expected to become lifelong learners, taking on the challenge of the rapid rate of change and emergence of new knowledge relating to environmental science and its application to sustainable development. The environmental, social and economic challenges, currently facing society, are unprecedented in their magnitude and scope. Rather than purely presenting solutions, this course will aim to develop the skills and knowledge that will enable students to solve problems themselves, through a process of co-learning between staff and students.

INTENDED LEARNING OUTCOMES

Subject Knowledge and Understanding

This pathway provides opportunities for students to develop and demonstrate knowledge and understanding as follows:

A1 Have a critical understanding of relevant theories, concepts and principles relevant to sustainability science and the development of a green economy

A2 Place their knowledge of the green economy in the context of UK, EU and international policy frameworks

A3 Understand the interdisciplinary nature of sustainable development and the need to integrate knowledge from a range of disparate areas in assessing problems and formulating solutions

A4 Recognise the ethical dimensions of their actions and the need for professional codes of conduct

A5 Have knowledge and understanding of the methods and techniques relevant to the analysis and solution of problems in sustainability science and development of the green economy

A6 Critically evaluate published work in the field of sustainability science and the green economy

Intellectual Skills

This pathway provides opportunities for students to develop and demonstrate intellectual skills as follows:

B1 Evaluate critically, and apply scientific knowledge and skills in the development and implementation of practical solutions to problems of sustainable development

B2 Analyse and synthesise information relevant to sustainability and the green economy

B3 Use specialised technical and academic skills in the area of study
B4 Define problems and devise and evaluate possible solutions to both routine and unfamiliar problems

B5 Integrate evidence from a range of sources to support findings and test hypotheses

B6 Plan, execute and report on a project involving original research or professional practice

**Subject Specific Skills**
This pathway provides opportunities for students to develop and demonstrate skills as follows:

C1 Demonstrate an understanding of ecological and human systems, the inter-relationships between them and the options for sustainable development

C2 Demonstrate an understanding of the range of techniques for assessing integrated social-ecological systems with specific relevance to sustainable development and the green economy

C3 Interpret, analyse and critically evaluate evidence from a range of sources, and demonstrate the ability to examine complex issues and make appropriate judgments in areas of uncertainty

C4 Present research findings in a range of effective and appropriate formats. Prepare technical reports and presentations

C5 Make effective use of the relevant academic literature and other sources of information

C6 Make effective use of IT and software relevant to the pathway

**Transferable Skills**
This pathway provides opportunities for students to develop and demonstrate transferable skills as follows:

D1 Communicate effectively by oral, written and visual means.

D2 Make effective use of IT, including the Web and word-processing software.

D3 Analyse and integrate data from a range of sources.

D4 Work in collaboration with others, including staff and students.

D5 Demonstrate problem-solving skills and the application of knowledge across the boundaries of different disciplines.

D6 Identify and work towards targets for personal, career and academic development.

D7 Be independent and reflective learners
# PROGRAMME SKILLS MATRIX

## MSc Green Economy

<table>
<thead>
<tr>
<th>Units</th>
<th>Subject knowledge and understanding</th>
<th>Intellectual Skills</th>
<th>Subject-specific/practical skills</th>
<th>Transferable skills</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A1 A2 A3 A4 A5 A6 B1 B2 B3 B4 B5 B6 C1 C2 C3 C4 C5 C6 D1 D2 D3 D4 D5 D6 D7</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Biodiversity and ecosystem services</td>
<td>X X X X X X X X X X X X X X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Carbon management</td>
<td>X X X X X X X X X X X X X X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Environmental law and social justice</td>
<td>X X X X X X X X X X X X X X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Frontiers of sustainability science</td>
<td>X X X X X X X X X X X X X X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Green technology and renewable energy</td>
<td>X X X X X X X X X X X X X X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Sustainable development in practice</td>
<td>X X X X X X X X X X X X X X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Extended Professional Placement</td>
<td>X X X X X X X X X X X X X X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Research Project</td>
<td>X X X X X X X X X X X X X X</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
TEACHING, LEARNING AND ASSESSMENT STRATEGY

The student learning experience reflects the nature of this course through its delivery as distance learning. Students are encouraged to be actively engaged in their learning process at all times. This is achieved by building each unit around a series of problem-based tasks, which are designed to support the student through the process of accessing, interpreting and understanding the scientific literature. Each task focuses on selected scientific literature (typically four or five journal papers), which are provided to the students in electronic form. The tasks are supported by the provision of written documents, which together with the directed reading material, are provided on-line. These documents provide a thorough introduction to each individual topic, as well as providing links for further exploration of literature and internet resources. They also encourage reflective learning by explicitly inviting students to consider different perspectives on the material presented. The tasks each require short written answers to specific questions, relating to the literature provided. In addition, the students are required to apply the knowledge they have gained to the solution of practical, real-world problems.

A key element of the student experience, and a notable feature of this course, is the level of formative feedback provided to students. Each student receives individual feedback on each of the draft tasks submitted via myBU, using the Turnitin feature. Written feedback is then provided by class tutors on each task using the same mechanism. The ability of students to submit draft answers, and receive detailed feedback, ensures that students each receive personalised support throughout their period of study. This has undoubtedly been a major factor in helping students achieve a high level of performance, and improve their standard of work. It also is a major contributor to the high level of student satisfaction recorded on this course to date.

The distance learning approach means that students can study this course from anywhere in the world, meaning travel to a campus to attend lectures is not a requirement. Hence issues of inclusivity in relation to access to buildings/rooms/labs are not relevant. The course does place a great emphasis on written material, but this is provided electronically to students through approved VLE systems, meaning that industry standard mechanisms (such as reading software) could be used where necessary. Students on this programme have full access to support services provided by the University, and additional forms of assessment can be provided if agreed by Disability and Additional Learning Support.
MSc Marine and Freshwater Management

This programme allows students to apply their existing knowledge of ecological, environmental, geographical or biological sciences to the management of marine or freshwater environments. It applies scientific, legal and management techniques to rivers, estuaries, coasts and oceans; covering a diversity of key species, from shellfish to finfish, as well as exploring effective management and conservation techniques for charismatic species such as whale sharks or manta rays which are targeted as part of traditional medical trades. Students will learn industry standard techniques and software to deal effectively with data as well as having the opportunity to learn effective species identification skills (skills defined by the Natural Environmental Research Council as in critical shortage in environmental scientists).

INTENDED LEARNING OUTCOMES

Subject Knowledge and Understanding
This pathway provides opportunities for students to develop and demonstrate knowledge and understanding as follows:

A1 Have a critical understanding of relevant theories, concepts and principles relevant to management of aquatic environments

A2 Place their knowledge of aquatic sciences in the context of UK, EU and international policy frameworks.

A3 Critically evaluate current methods of aquatic management and apply the latest scientific theories to improve these

A4 Have knowledge and understanding of the methods and techniques relevant to the analysis and solution of problems in aquatic management.

Intellectual Skills
This pathway provides opportunities for students to develop and demonstrate intellectual skills as follows:

B1 Evaluate critically, and apply scientific knowledge and skills in the development and implementation of practical solutions to problems in aquatic management

B2 Analyse and synthesise information including statistically and spatially

B3 Use specialised technical and academic skills in the area of study

B4 Define problems and devise and evaluate possible solutions to both routine and unfamiliar problems

B5 Integrate evidence from a range of sources to support findings and test hypotheses

B6 Plan, execute and report on a project involving original research or professional practice

Subject Specific Skills
This pathway provides opportunities for students to develop and demonstrate skills as follows:

C1 Demonstrate an critical awareness of the management of ecological systems

C2 Demonstrate an understanding of the range of techniques for assessing integrated social-ecological systems with specific relevant to aquatic systems

C3 Present research findings in a range of effective and appropriate formats. Prepare technical reports and presentations
C4 Make effective use of the relevant academic literature and other sources of information
C5 Make effective use of IT and software relevant to the pathway

Transferable Skills
This pathway provides opportunities for students to develop and demonstrate transferable skills as follows:

D1 Communicate effectively by oral, written and visual means
D2 Analyse and integrate data from a range of sources
D3 Work in collaboration with others, including staff and students
D4 Demonstrate problem-solving skills and the application of knowledge across the boundaries of different disciplines
D5 Identify and work towards targets for personal, career and academic development
D6 Be independent and reflective learners
## LEARNING AND TEACHING STRATEGIES AND METHODS

Teaching and learning will be delivered through combinations of lectures, seminars, practical work in the laboratory and field and small group tutorials. The exact combinations of these techniques will be unit specific, but there is a strong emphasis on practical skills including fieldwork and taxonomy, as well as analytical techniques (statistics and GIS).

## ASSESSMENT STRATEGIES

All assessments are coursework, taking the form of skills needed in the real conservation world (charities, consultancies NGOs and academia). Presentations, posters, essays, technical reports and scientific papers all form assignment methods for this programme.

---

### Marine and Freshwater Management – Programme Skills Matrix

<table>
<thead>
<tr>
<th>Level</th>
<th>Unit</th>
<th>Core/Opt</th>
<th>A1</th>
<th>A2</th>
<th>A3</th>
<th>A4</th>
<th>A5</th>
<th>A6</th>
<th>B1</th>
<th>B2</th>
<th>B3</th>
<th>B4</th>
<th>B5</th>
<th>B6</th>
<th>C1</th>
<th>C2</th>
<th>C3</th>
<th>C4</th>
<th>C5</th>
<th>D1</th>
<th>D2</th>
<th>D3</th>
<th>D4</th>
<th>D5</th>
<th>D6</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>Quantitative and Spatial Analysis</td>
<td>c</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>7</td>
<td>Advanced Quantitative Methods</td>
<td>o</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Biodiversity and Ecosystem Services</td>
<td>o</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Field Ecology Skills</td>
<td>o</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>7</td>
<td>Fisheries Ecology and Management</td>
<td>c</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Integrated Coastal Zone Management</td>
<td>c</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>7</td>
<td>International Law of the Environment</td>
<td>c</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Research Project</td>
<td>c</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>Simple models for the management</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>of aquatic environments</td>
<td>o</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

50
WORK-BASED LEARNING (WBL) / PLACEMENTS ELEMENTS

Work-based learning requirements are met through professional practice placements (see Placement Handbook – note this is the existing placement handbook for the Applied Sciences framework – students on the LES framework will not undertake placements in the next academic year). From 2013 all Bournemouth University programmes offer an optional minimum 30-week placement which forms the third year of a four-year sandwich degree, and this option is provided in the proposed programme and the entire framework. In addition to this, many undergraduate degree programmes requires students to undertake a short placement of a minimum of 25 working days which will normally run during the summer between years 1 and 2 and is ratified as part of Level 5 of the programme. Students who do not enrol on a 4-year degree will complete a second short placement between the second and final years of their study.

Explanatory note on process: All students will enrol on a 3-year course in their first year of study. They can then opt to undertake a 4-year degree which includes the placement year of a minimum of 30 weeks. The decision to undertake a placement year has to be made ideally at the end of the first year, at the latest in Semester 2 of Level 5. Students who do not wish to do a placement year will have to pass short placement(s) of 5 weeks’ duration on those courses which offer them. Students wishing to progress onto a 4-year course will have to pass one short placement between Level 4 and Level 5. Ratification of pass/fail for the short placement will take place as early as possible during Level 5. Failure to pass the short placement forfeits the option to progress to the placement year.

Placements involve the completion of activities/projects and are assessed via a portfolio of evidence, including logs/diaries and reflective essays, collated over the placement period and assessed as either pass or fail depending on whether the portfolio is complete. This evidence will include a satisfactory host report. Placements are not credit-weighted and are normally unpaid, although some employers may offer expenses. In the past, a number of students have secured placements through the STEP project, which guarantees payment for an eight-week placement.

Placements can be undertaken in any part of the UK or abroad (any additional cost borne by the student) and are approved by the Faculty on the basis of the registration details provided by the student. Students are expected to be proactive at every stage of researching and obtaining appropriate placement offers. Their efforts are supported throughout by the Placement and Programmes Co-ordinator, who provides guidance and brings opportunities to the attention of students. Throughout Level 4 (Year 1) and Level 5 (Year 2), students are counselled on work experience opportunities and personal development activities are provided to enable students to produce a CV, complete application forms, compile and maintain a portfolio and develop interview and presentation skills.

The framework team already have a wide range of external links to potential placement organisations and a searchable database of placement hosts is available to students via myBU. A wide range of hosts is available to reflect the diverse interests of the students studying on different programmes.

The placement aims to provide students with:

• A wider experience within practice plus a detailed knowledge of an area of discipline within which the student may wish to work once graduated

• An understanding of the inter-relationship of practitioner and management skills in the context of the host organisation

• An opportunity to apply the knowledge and skills, gained from studies, in the work environment

• An experience of work roles, practices and procedures, working relationships and interpersonal communications, employment, working hours and practical constraints, within the working environment

• An opportunity to develop personal and career plans in the light of the experiences derived from the placement.

The placement thus provides students with the experience of how an organisation operates, as well as an opportunity to enhance their personal development and future employability. The placements play an important role within the degree structure, complementing the academic programme and allow students to
begin to put theory and competencies into practice as well as develop new skills. The placements especially articulate with the research skills unit at Level 4, along with Field Work and field trips and similar units at Level 4 and 5, and may also articulate with the Research Project at Level 6. The overall placement experience also provides an excellent unique selling point for student CVs and future employment.
PROGRAMME DIAGRAM
BSc (Hons) Biological Sciences

Year 4/Level 6
Core units (Compulsory)
Independent Research Project (LES) (40)
Option units
Choose 4 of the following:
- Advanced topics in genetics (20)
- Biological Oceanography (20)
- Marine Conservation (20)
- Pathophysiology (20)
- Parasitology and Epidemiology (20)
- Primate Behavioural Ecology (20)
- Topics in Wildlife Conservation (20)
Exit qualification: BSc (Hons) Biological Sciences
Sandwich UG programme:
Requires 120 Level 6 credits, 120 Level 5 credits and 120 Level 4 credits

Year 3/Level P
Optional placement year in industry/business
Progression requirements
Satisfactory completion of a minimum 30-weeks of work in industry/business

Year 2/Level 5
Core units (Compulsory)
Advanced Skills for Biology (20)
Evolutionary Biology (20)
Option units
Choose 4 of the following:
- Animal Biology (20)
- Biochemistry (20)
- Ecosystems (20)
- Advanced Cell Biology (20)
- Behavioural Ecology (20)
- Becoming Human (20)
- Environ and Societal Challenges (20)
- International Field Trip (20)
- Microbiology (20)
- Introduction to Toxicology (20)
Progression requirements
Requires 120 credits at Level 5
Exit qualification: Dip HE Biological Sciences
Requires 120 Level 5 credits and 120 Level 4 credits

Year 1/Level 4
Core units (Compulsory)
Biological Research Skills (20)
Chemistry (20)
Cell Biology (20)
Practical Skills in Biology (20)
Diversity of Life (20)
Human Anatomy and Physiology (20)
Progression requirements
Requires 120 credits at Level 4
Exit qualification: Cert HE Biological Sciences
Requires 120 Level 4 credits
*Additional programme exit requirement: two short placements of 5 weeks duration at any point within the programme (Pass/Fail) OR one short placement of 5 weeks duration in addition to the minimum 30-week placement (Pass/Fail). Failure of a placement which is specified as a programme exit requirement will require a repeat placement/alternative placement.
PROGRAMME DIAGRAM
BSc (Hons) Environmental Science

Year 4/Level 6
Core units (Compulsory)
Independent Research Project (LES)(40)
Option units
Choose 4 of the following
Globalisation and Sustainable Development (20)
Climate and Environmental Change (20)
Applied Biogeography (20)
Environmental Remote Sensing (20)
Earth Surface Processes and Landforms (20)
Topics in Wildlife Conservation (20)
Env. Law and Management (20)
Biological Oceanography (20)
Emergence and Extinction: Reconstructing Pliocene and Pleistocene Environment (20)
Freshwater Resource Management (20)
Marine Conservation (20)
Exit qualification*: BSc (Hons) Environmental Science
Sandwich UG programme:
Requires 120 Level 6 credits, 120 Level 5 credits and 120 Level 4 credits
Standard UG programme:
Requires 120 Level 6 credits, 120 Level 5 credits and 120 Level 4 credits

Year 3/Level P
Optional placement year in industry/business
Progression requirements
Satisfactory completion of a minimum 30-weeks of work in industry/business

Year 2/Level 5
Core units (Compulsory)
Adv. Skills for Env Sci (20)
Applications of Env Sci (20)
Environmental Pollution (20)
Option units
Choose 3 of the following:
Ecosystems (20)
Geographical Information Systems (20)
Env. and Societal Challenges (20)
International Field Trip (20)
Behavioural Ecology (20)
Microbiology (20)
Marine Geography (20)
Quaternary Environments (20)
Progression requirements
Requires 120 credits at Level 5
Exit qualification: Dip HE Environmental Science
Requires 120 Level 5 credits and 120 Level 4 credits

Year 1/Level 4
Core units (Compulsory)
Environmental Research Skills (20)
Fundamentals Env Sci (20)
Physical Geography (20)
Chemistry (20)
Diversity of Life (20)
Residential Field Trip (20)
Progression requirements
Requires 120 credits at Level 4
Exit qualification: Cert HE Environmental Science
Requires 120 Level 4 credits
*Additional programme exit requirement: two short placements of 5 weeks duration at any point within the programme (Pass/Fail) OR one short placement of 5 weeks duration in addition to the minimum 30-week placement (Pass/Fail). Failure of a placement which is specified as a programme exit requirement will require a repeat placement/alternative placement.
**Programme Diagram**

**BSc (Hons) Geography**

**Year 4/Level 6**

Core units (Compulsory)
- Independent Research Project (LES) (40)

Option units
Choose 4 of the following:
- Geographic Research Skills (20)
- Physical Geography (20)
- Seminars (20)
- Marine Geography (20)
- Quaternary Environments (20)
- Environmental Law and Management (20)
- Environmental Remote Sensing (20)
- Freshwater Resource Management (20)

Exit qualification:
BSc(Hons) Geography
Sandwich UG programme:
Requires 120 Level 6 credits, 120 Level 5 credits and 120 Level 4 credits
Level 4 credits and successful completion of a placement year
Standard UG programme:
Requires 120 Level 6 credits, 120 Level 5 credits and 120 Level 4 credits

**Year 3/Level P**

Optional placement year in industry/business

Progression requirements
Satisfactory completion of a minimum 30-weeks of work in industry/business

**Year 2/Level 5**

Core units (Compulsory)
- Advanced Skills for Geography (20)
- Geographic Information Systems (20)
- Marine Geography (20)
- Quaternary Environments (20)

Option units
Choose 2 of the following:
- Applications of Environmental Sciences (20)
- Ecosystems (20)
- Environmental and Societal Challenges (20)
- International Field Trip (20)
- Understanding Globalisation (20)
- Environmental Pollution (20)

Progression requirements
Requires 120 credits at Level 5
Exit qualification: Dip HE Geography
Requires 120 Level 5 credits and 120 Level 4 credits

**Year 1/Level 4**

Core units (Compulsory)
- Geographic Research Skills (20)
- Physical Geography (20)
- Practical Skills in Geography (20)
- Earth and Society (20)
- Human Geography (20)
- Residential Field Trip (20)

Progression requirements
Requires 120 credits at Level 4
Exit qualification: Cert HE Geography
Requires 120 Level 4 credits
*Additional programme exit requirement: two short placements of 5 weeks duration at any point within the programme (Pass/Fail) OR one short placement of 5 weeks duration in addition to the minimum 30-week placement (Pass/Fail). Failure of a placement which is specified as a programme exit requirement will require a repeat placement/alternative placement.
Year 1/Level 6

Core units (Compulsory)
- Marine conservation (20)
- Independent Research Project (LES) (40)
- Marine Mammal Ecology and Behaviour (20)
- Marine Field Study Techniques (20)

Option units
Choose 1 of the following:
- Environmental law and management (20)
- Freshwater Resource Management (20)
- Biological Oceanography (20)

Exit qualification:
BSc(Hons) Marine Ecology and Conservation
Requires 120 Level 6 credits
120 Level 5 Credits and 120 level 4 Credits

6 level entry
On attainment of an overall Pass, Merit or Distinction profile from FdSc Marine Ecology and Conservation
*Additional programme exit requirement: One short placement of 6 weeks duration at any point within the programme (Pass/Fail). Failure of a placement which is specified as a programme exit requirement will require a repeat placement/alternative placement.
PROGRAMME DIAGRAM
MSc Marine and Freshwater Management

Stage 2/Level 7

Core units (Compulsory)
Research Project (LES) (60)

Option units

Exit qualification: MSc Marine and Freshwater Management
Requires 180 Level 7 credits

Stage 1/Level 7

Core units (Compulsory)
Qualitative and Spatial Analysis (20)
Integrated Coastal Zone Management (20)
International Law of the environment (20)
Fisheries Ecology and Management (20)

Option units
Choose 2
Simple Models for the Management of Aquatic Environments (20)
Advanced Quantitative Methods (20)
Biodiversity & Ecosystem Services (20)
Field Ecology Skills (20)

Progression requirements
120 Level 7 credits

Exit qualification: PG Cert Marine and Freshwater Management
Requires 60 Level 7 credits

Exit qualification: PG Dip Marine and Freshwater Management
Requires 120 Level 7 credits
ADMISSION REGULATIONS

The regulations for this framework are the University’s Standard Undergraduate and Postgraduate Regulations.

https://intranetsp.bournemouth.ac.uk/pandptest/3a-undergraduate-admissions-regulations.doc

https://intranetsp.bournemouth.ac.uk/pandptest/3a-postgraduate-admissions-regulations.doc

ASSESSMENT REGULATIONS

The regulations for this framework are the University’s Standard Undergraduate and Postgraduate Relations.


## PROGRAMME PROFILES

**Originating Institution(s):** BU  
**School/Faculty:** SciTech  
**Partner:** n/a  
**Place(s) of Delivery:** BU Talbot  
**Framework Title (in full):** Life and Environmental Sciences  
**Programme Award and Title:** BSc (Hons) Biological Sciences  
**Interim Award and Titles & Required Credits:** CertHE Biological Sciences (120 credits), DipHE Biological Sciences (240 credits)  
**Mode(s) of Study:** FT/PT  
**Expected Length of Study:** 3 years FT/ 6 years PT  
**BU Credit Structure & ECTS:**  
- Level 6 120 (60 ECTS)  
- Level 5 120 (60 ECTS)  
- Level 4 120 (60 ECTS)  

### Unit identification

<table>
<thead>
<tr>
<th>Unit version no.</th>
<th>Unit name</th>
<th>HESA HECoS Subject Code</th>
<th>CC1</th>
<th>%</th>
<th>HESA HECoS Subject Code</th>
<th>CC2</th>
<th>%</th>
<th>Prog year FT</th>
<th>Prog year PT</th>
<th>Core/ option</th>
<th>No of credits</th>
<th>Level (C/4, I/5, H/6, PgC, PgD, M/7)</th>
<th>Assessment Regs</th>
</tr>
</thead>
<tbody>
<tr>
<td>v1.1</td>
<td>Biological Research Skills</td>
<td>100346</td>
<td>111</td>
<td>100</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>v1.1</td>
<td>Chemistry</td>
<td>100417</td>
<td>112</td>
<td>100</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>v1.1</td>
<td>Cell Biology</td>
<td>100822</td>
<td>112</td>
<td>100</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>v1.1</td>
<td>Practical Skills in Biology</td>
<td>100346</td>
<td>112</td>
<td>100</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>v1.1</td>
<td>Diversity of Life</td>
<td>100346</td>
<td>111</td>
<td>100</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>V1.2</td>
<td>Human Anatomy and Physiology</td>
<td>100350</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>v1.1</td>
<td>Advanced Skills for Biology</td>
<td>100346</td>
<td>112</td>
<td>100</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>v1.1</td>
<td>Evolutionary Biology</td>
<td>100858</td>
<td>111</td>
<td>100</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>v1.2</td>
<td>Animal Biology</td>
<td>100522</td>
<td>111</td>
<td>100</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>v1.1</td>
<td>Biochemistry</td>
<td>100344</td>
<td>126</td>
<td>100</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>v1.2</td>
<td>Ecosystems</td>
<td>100347</td>
<td>111</td>
<td>100</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>v1.1</td>
<td>Advanced Cell Biology</td>
<td>100822</td>
<td>111</td>
<td>100</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>v1.1</td>
<td>Behavioural Ecology</td>
<td>100522</td>
<td>111</td>
<td>100</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>V1.12</td>
<td>Becoming Human</td>
<td>100663</td>
<td>126</td>
<td>50</td>
<td>100437</td>
<td>50</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>v1.1</td>
<td>Environmental and Societal Challenges</td>
<td>100488</td>
<td>111</td>
<td>100</td>
<td>2</td>
<td>O</td>
<td>20</td>
<td>5</td>
<td>30</td>
<td>70</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>v1.2</td>
<td>International Field Trip</td>
<td>100347</td>
<td>111</td>
<td>50</td>
<td>100410</td>
<td>111</td>
<td>50</td>
<td>2</td>
<td>O</td>
<td>20</td>
<td>5</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>v1.1</td>
<td>Microbiology</td>
<td>100353</td>
<td>111</td>
<td>100</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>v1.1</td>
<td>Introduction to Toxicology</td>
<td>100277</td>
<td>112</td>
<td>100</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>v1.1</td>
<td>Independent Research Project (LES)</td>
<td>100346</td>
<td>111</td>
<td>50</td>
<td>100410</td>
<td>111</td>
<td>50</td>
<td>3</td>
<td>C</td>
<td>40</td>
<td>6</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>v1.1</td>
<td>Advanced Topics in Genetics</td>
<td>100259</td>
<td>111</td>
<td>100</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>v1.1</td>
<td>Biological Oceanography</td>
<td>100351</td>
<td>111</td>
<td>100</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>v1.1</td>
<td>Marine Conservation</td>
<td>100351</td>
<td>111</td>
<td>100</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>v1.1</td>
<td>Pathophysiology</td>
<td>100038</td>
<td>112</td>
<td>100</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>v1.1</td>
<td>Biomolecules</td>
<td>100354</td>
<td>112</td>
<td>100</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>v1.1</td>
<td>Parasitology and Epidemiology</td>
<td>100826</td>
<td>126</td>
<td>100</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>v1.1</td>
<td>Primate Behavioural Ecology</td>
<td>100522</td>
<td>126</td>
<td>100</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>v1.1</td>
<td>Topics in Wildlife Conservation</td>
<td>10347</td>
<td>111</td>
<td>100</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Effective from**

| Yr. 1 | Sept | 15 |
| Yr. 2 | Sept | 16 |
| Yr. 3 | Sept | 17 |

**Contact in School/Faculty:** (tel no. or generic UG/PG/programme specific email)

**Date approved**

**Programme Specification version no.**

**Placement**: Optional 40 week placement (Pass/Fail)

Please note, not all option units may run in each year
## PROGRAMME PROFILE

<table>
<thead>
<tr>
<th>Unit identification</th>
<th>Unit name</th>
<th>Prog year *</th>
<th>Core / option</th>
<th>HECoS Subject Code</th>
<th>CC 1</th>
<th>CC2</th>
<th>No of credits **</th>
<th>Level</th>
<th>Assessment ***</th>
<th>Element Weightings</th>
</tr>
</thead>
<tbody>
<tr>
<td>v1.1</td>
<td>Ecological Research Skills</td>
<td>1</td>
<td>C</td>
<td>100381</td>
<td>111</td>
<td>100</td>
<td>20</td>
<td>4</td>
<td>30</td>
<td>70</td>
</tr>
<tr>
<td>v1.1</td>
<td>Ecology</td>
<td>1</td>
<td>C</td>
<td>100347</td>
<td>111</td>
<td>100</td>
<td>20</td>
<td>4</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>v1.1</td>
<td>Physical Geography</td>
<td>1</td>
<td>C</td>
<td>100410</td>
<td>111</td>
<td>100</td>
<td>20</td>
<td>4</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>v1.1</td>
<td>Wildlife Protection</td>
<td>1</td>
<td>C</td>
<td>100469</td>
<td>111</td>
<td>100</td>
<td>20</td>
<td>4</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>v1.1</td>
<td>Diversity of Life</td>
<td>1</td>
<td>C</td>
<td>100346</td>
<td>111</td>
<td>100</td>
<td>20</td>
<td>4</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>v1.2</td>
<td>Residential Field Trip</td>
<td>1</td>
<td>C</td>
<td>100347 (balanced) 100410 (balanced)</td>
<td>111</td>
<td>50</td>
<td>111</td>
<td>50</td>
<td>20</td>
<td>4</td>
</tr>
<tr>
<td>v1.1</td>
<td>Advanced Skills for Conservation</td>
<td>2</td>
<td>C</td>
<td>100381</td>
<td>112</td>
<td>100</td>
<td>20</td>
<td>5</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>v1.1</td>
<td>Wildlife Survey Skills</td>
<td>2</td>
<td>O</td>
<td>100347</td>
<td>111</td>
<td>100</td>
<td>20</td>
<td>5</td>
<td>30</td>
<td>70</td>
</tr>
<tr>
<td>v1.1</td>
<td>Applications of Environmental Science</td>
<td>2</td>
<td>O</td>
<td>101078</td>
<td>112</td>
<td>100</td>
<td>20</td>
<td>5</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>v1.1</td>
<td>Evolutionary Biology</td>
<td>2</td>
<td>C</td>
<td>100858</td>
<td>111</td>
<td>100</td>
<td>20</td>
<td>5</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>v1.2</td>
<td>Animal Biology</td>
<td>2</td>
<td>O</td>
<td>100522</td>
<td>111</td>
<td>100</td>
<td>20</td>
<td>1</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>v1.1</td>
<td>Environmental Pollution</td>
<td>2</td>
<td>O</td>
<td>101078</td>
<td>111</td>
<td>100</td>
<td>20</td>
<td>5</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>v1.2</td>
<td>Ecosystems</td>
<td>2</td>
<td>C</td>
<td>100347</td>
<td>111</td>
<td>100</td>
<td>20</td>
<td>5</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>v2.0</td>
<td>Geographic Information Systems</td>
<td>2</td>
<td>O</td>
<td>100369</td>
<td>111</td>
<td>100</td>
<td>20</td>
<td>5</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>v1.1</td>
<td>Environmental and Societal Challenges</td>
<td>2</td>
<td>O</td>
<td>100488</td>
<td>111</td>
<td>100</td>
<td>20</td>
<td>5</td>
<td>30</td>
<td>70</td>
</tr>
<tr>
<td>v1.2</td>
<td>International Field Trip</td>
<td>2</td>
<td>O</td>
<td>100347 (balanced) 100410 (balanced)</td>
<td>111</td>
<td>50</td>
<td>111</td>
<td>50</td>
<td>20</td>
<td>5</td>
</tr>
<tr>
<td>v1.1</td>
<td>Behavioural Ecology</td>
<td>2</td>
<td>O</td>
<td>100829</td>
<td>111</td>
<td>100</td>
<td>20</td>
<td>5</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>v1.1</td>
<td>Microbiology</td>
<td>2</td>
<td>O</td>
<td>100353</td>
<td>111</td>
<td>100</td>
<td>20</td>
<td>5</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>v1.1</td>
<td>Marine Geography</td>
<td>2</td>
<td>O</td>
<td>101065</td>
<td>111</td>
<td>100</td>
<td>20</td>
<td>5</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>v1.1</td>
<td>Quaternary Environments</td>
<td>2</td>
<td>O</td>
<td>100398</td>
<td>111</td>
<td>100</td>
<td>20</td>
<td>5</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>v1.1</td>
<td>Independent Research Project (LES)</td>
<td>3</td>
<td>C</td>
<td>100346 (balanced)</td>
<td>100</td>
<td>111</td>
<td>50</td>
<td>40</td>
<td>6</td>
<td>100</td>
</tr>
<tr>
<td>v1.1</td>
<td>Globalisation and Sustainable Development</td>
<td>3</td>
<td>O</td>
<td>100488</td>
<td>111</td>
<td>100</td>
<td>20</td>
<td>6</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>v1.1</td>
<td>Climate and Environmental Change</td>
<td>3</td>
<td>O</td>
<td>100408</td>
<td>111</td>
<td>100</td>
<td>20</td>
<td>6</td>
<td>30</td>
<td>70</td>
</tr>
<tr>
<td>v1.1</td>
<td>Applied Biogeography</td>
<td>3</td>
<td>O</td>
<td>101318</td>
<td>111</td>
<td>100</td>
<td>20</td>
<td>6</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>v2.0</td>
<td>Environmental Remote Sensing</td>
<td>3</td>
<td>O</td>
<td>101056</td>
<td>111</td>
<td>100</td>
<td>20</td>
<td>6</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>v1.1</td>
<td>Parasitology and Epidemiology</td>
<td>3</td>
<td>O</td>
<td>100826</td>
<td>126</td>
<td>100</td>
<td>20</td>
<td>6</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>v1.0</td>
<td>Primate Behavioural Ecology</td>
<td>3</td>
<td>O</td>
<td>100522</td>
<td>126</td>
<td>100</td>
<td>20</td>
<td>6</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>v1.1</td>
<td>Topics in Wildlife Conservation</td>
<td>3</td>
<td>O</td>
<td>100347</td>
<td>111</td>
<td>100</td>
<td>20</td>
<td>6</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>v1.1</td>
<td>Environmental Law and Management</td>
<td>3</td>
<td>O</td>
<td>100485</td>
<td>111</td>
<td>100</td>
<td>20</td>
<td>6</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>v1.1</td>
<td>Biological Oceanography</td>
<td>3</td>
<td>O</td>
<td>100351</td>
<td>111</td>
<td>100</td>
<td>20</td>
<td>6</td>
<td>70</td>
<td>30</td>
</tr>
<tr>
<td>v1.1</td>
<td>Emergence and Extinction: Reconstructing Pliocene and Pleistocene Environments</td>
<td>3</td>
<td>O</td>
<td>100398</td>
<td>111</td>
<td>100</td>
<td>20</td>
<td>6</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>v1.1</td>
<td>Freshwater Resource Management</td>
<td>3</td>
<td>O</td>
<td>100849</td>
<td>111</td>
<td>100</td>
<td>20</td>
<td>6</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>v1.1</td>
<td>Marine Conservation</td>
<td>3</td>
<td>O</td>
<td>100351</td>
<td>111</td>
<td>100</td>
<td>20</td>
<td>6</td>
<td>50</td>
<td>50</td>
</tr>
</tbody>
</table>
**PROGRAMME PROFILE**

<table>
<thead>
<tr>
<th>Unit identification</th>
<th>Unit name</th>
<th>Prog year*</th>
<th>Core / option</th>
<th>HECoS Subject Code</th>
<th>CC 1</th>
<th>%</th>
<th>CC2</th>
<th>%</th>
<th>No of credits **</th>
<th>Level</th>
<th>Assessment ***</th>
<th>Element Weightings</th>
</tr>
</thead>
<tbody>
<tr>
<td>v1.1</td>
<td>Environmental Research Skills</td>
<td>1</td>
<td>C</td>
<td>100381</td>
<td>111</td>
<td>100</td>
<td>20</td>
<td>4</td>
<td>50</td>
<td>70</td>
<td>Exam 1</td>
<td>C/Work 1 C/Work 2</td>
</tr>
<tr>
<td>v1.1</td>
<td>Fundamentals of Environmental Science</td>
<td>1</td>
<td>C</td>
<td>100348</td>
<td>111</td>
<td>100</td>
<td>20</td>
<td>4</td>
<td>50</td>
<td>50</td>
<td>C/Work 1</td>
<td>C/Work 1</td>
</tr>
<tr>
<td>v1.1</td>
<td>Physical Geography</td>
<td>1</td>
<td>C</td>
<td>100410</td>
<td>20</td>
<td>4</td>
<td>20</td>
<td>4</td>
<td>4</td>
<td>50</td>
<td>C/Work 1</td>
<td>C/Work 1</td>
</tr>
<tr>
<td>v1.1</td>
<td>Chemistry</td>
<td>1</td>
<td>C</td>
<td>100417</td>
<td>112</td>
<td>100</td>
<td>20</td>
<td>4</td>
<td>50</td>
<td>50</td>
<td>C/Work 1</td>
<td>C/Work 1</td>
</tr>
<tr>
<td>v1.1</td>
<td>Diversity of Life</td>
<td>1</td>
<td>C</td>
<td>100346</td>
<td>111</td>
<td>100</td>
<td>20</td>
<td>4</td>
<td>50</td>
<td>50</td>
<td>C/Work 1</td>
<td>C/Work 1</td>
</tr>
<tr>
<td>v1.1</td>
<td>Residential Field Trip</td>
<td>1</td>
<td>C</td>
<td>100347 (balanced)</td>
<td>111</td>
<td>50</td>
<td>111</td>
<td>50</td>
<td>20</td>
<td>4</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>v2.0</td>
<td>Advanced Skills for Environmental Science</td>
<td>2</td>
<td>C</td>
<td>100381 (balanced)</td>
<td>112</td>
<td>100</td>
<td>20</td>
<td>5</td>
<td>50</td>
<td>50</td>
<td>C/Work 1</td>
<td>C/Work 1</td>
</tr>
<tr>
<td>v1.1</td>
<td>Applications of Environmental Science</td>
<td>2</td>
<td>C</td>
<td>101078</td>
<td>112</td>
<td>100</td>
<td>20</td>
<td>5</td>
<td>50</td>
<td>50</td>
<td>C/Work 1</td>
<td>C/Work 1</td>
</tr>
<tr>
<td>v1.1</td>
<td>Environmental Pollution</td>
<td>2</td>
<td>C</td>
<td>101078</td>
<td>111</td>
<td>100</td>
<td>20</td>
<td>5</td>
<td>50</td>
<td>50</td>
<td>C/Work 1</td>
<td>C/Work 1</td>
</tr>
<tr>
<td>v1.2</td>
<td>Ecosystems</td>
<td>2</td>
<td>O</td>
<td>100347</td>
<td>111</td>
<td>100</td>
<td>20</td>
<td>5</td>
<td>50</td>
<td>50</td>
<td>C/Work 1</td>
<td>C/Work 1</td>
</tr>
<tr>
<td>v2.0</td>
<td>Geographic Information Systems</td>
<td>2</td>
<td>O</td>
<td>100369</td>
<td>111</td>
<td>100</td>
<td>20</td>
<td>5</td>
<td>50</td>
<td>50</td>
<td>C/Work 1</td>
<td>C/Work 1</td>
</tr>
<tr>
<td>v1.1</td>
<td>Environmental and Societal Challenges</td>
<td>2</td>
<td>O</td>
<td>100488</td>
<td>111</td>
<td>100</td>
<td>20</td>
<td>5</td>
<td>50</td>
<td>70</td>
<td>C/Work 1</td>
<td>C/Work 1</td>
</tr>
<tr>
<td>v1.2</td>
<td>International Field Trip</td>
<td>2</td>
<td>O</td>
<td>100347 (balanced)</td>
<td>111</td>
<td>50</td>
<td>111</td>
<td>50</td>
<td>20</td>
<td>5</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>v1.1</td>
<td>Behavioural Ecology</td>
<td>2</td>
<td>O</td>
<td>100829</td>
<td>111</td>
<td>100</td>
<td>20</td>
<td>5</td>
<td>50</td>
<td>50</td>
<td>C/Work 1</td>
<td>C/Work 1</td>
</tr>
<tr>
<td>v1.1</td>
<td>Microbiology</td>
<td>2</td>
<td>O</td>
<td>100353</td>
<td>111</td>
<td>100</td>
<td>20</td>
<td>5</td>
<td>50</td>
<td>50</td>
<td>C/Work 1</td>
<td>C/Work 1</td>
</tr>
<tr>
<td>v1.1</td>
<td>Marine Geography</td>
<td>2</td>
<td>O</td>
<td>101065</td>
<td>111</td>
<td>100</td>
<td>20</td>
<td>5</td>
<td>50</td>
<td>50</td>
<td>C/Work 1</td>
<td>C/Work 1</td>
</tr>
<tr>
<td>v1.1</td>
<td>Quaternary Environments</td>
<td>2</td>
<td>O</td>
<td>100398</td>
<td>111</td>
<td>100</td>
<td>20</td>
<td>5</td>
<td>50</td>
<td>50</td>
<td>C/Work 1</td>
<td>C/Work 1</td>
</tr>
<tr>
<td>v1.1</td>
<td>Course Title</td>
<td>Code</td>
<td>C</td>
<td>100346 (balanced)</td>
<td>100410 (balanced)</td>
<td>111</td>
<td>50</td>
<td>111</td>
<td>50</td>
<td>40</td>
<td>6</td>
<td>100</td>
</tr>
<tr>
<td>------</td>
<td>--------------------------------------------------</td>
<td>------</td>
<td>---</td>
<td>------------------</td>
<td>------------------</td>
<td>-----</td>
<td>----</td>
<td>-----</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>-----</td>
</tr>
<tr>
<td>v1.1</td>
<td>Independent Research Project (LES)</td>
<td>3</td>
<td>C</td>
<td></td>
<td></td>
<td>111</td>
<td>100</td>
<td></td>
<td></td>
<td>20</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>v1.1</td>
<td>Globalisation and Sustainable Development</td>
<td>3</td>
<td>O</td>
<td>100488</td>
<td>111</td>
<td>100</td>
<td></td>
<td></td>
<td></td>
<td>20</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>v1.1</td>
<td>Climate and Environmental Change</td>
<td>3</td>
<td>O</td>
<td>100408</td>
<td>111</td>
<td>100</td>
<td></td>
<td></td>
<td></td>
<td>20</td>
<td>6</td>
<td>30</td>
</tr>
<tr>
<td>v1.1</td>
<td>Applied Biogeography</td>
<td>3</td>
<td>O</td>
<td>101318</td>
<td>111</td>
<td>100</td>
<td></td>
<td></td>
<td></td>
<td>20</td>
<td>6</td>
<td>50</td>
</tr>
<tr>
<td>v2.0</td>
<td>Environmental Remote Sensing</td>
<td>3</td>
<td>O</td>
<td>101056</td>
<td>111</td>
<td>100</td>
<td></td>
<td></td>
<td></td>
<td>20</td>
<td>6</td>
<td>50</td>
</tr>
<tr>
<td>v1.1</td>
<td>Earth Surface Processes and Landforms</td>
<td>3</td>
<td>O</td>
<td>100410</td>
<td>111</td>
<td>100</td>
<td></td>
<td></td>
<td></td>
<td>20</td>
<td>6</td>
<td>50</td>
</tr>
<tr>
<td>v1.1</td>
<td>Topics in Wildlife Conservation</td>
<td>3</td>
<td>O</td>
<td>100347</td>
<td>111</td>
<td>100</td>
<td></td>
<td></td>
<td></td>
<td>20</td>
<td>6</td>
<td>50</td>
</tr>
<tr>
<td>v1.1</td>
<td>Environmental Law and Management</td>
<td>3</td>
<td>O</td>
<td>100485</td>
<td>111</td>
<td>100</td>
<td></td>
<td></td>
<td></td>
<td>20</td>
<td>6</td>
<td>50</td>
</tr>
<tr>
<td>v1.1</td>
<td>Biological Oceanography</td>
<td>3</td>
<td>O</td>
<td>100351</td>
<td>111</td>
<td>100</td>
<td></td>
<td></td>
<td></td>
<td>20</td>
<td>6</td>
<td>70</td>
</tr>
<tr>
<td>v1.1</td>
<td>Emergence and Extinction: Reconstructing Pliocene and Pleistocene Environments</td>
<td>3</td>
<td>O</td>
<td>100398</td>
<td>111</td>
<td>100</td>
<td></td>
<td></td>
<td></td>
<td>20</td>
<td>6</td>
<td>50</td>
</tr>
<tr>
<td>v1.1</td>
<td>Freshwater Resource Management</td>
<td>3</td>
<td>O</td>
<td>100849</td>
<td>111</td>
<td>100</td>
<td></td>
<td></td>
<td></td>
<td>20</td>
<td>6</td>
<td>50</td>
</tr>
<tr>
<td>v1.1</td>
<td>Marine Conservation</td>
<td>3</td>
<td>O</td>
<td>100351</td>
<td>111</td>
<td>100</td>
<td></td>
<td></td>
<td></td>
<td>20</td>
<td>6</td>
<td>50</td>
</tr>
</tbody>
</table>

Please note, not all option units may run in each year.
<table>
<thead>
<tr>
<th>Unit identification</th>
<th>Unit name</th>
<th>Prog year</th>
<th>Core / option</th>
<th>HECoS Subject Code</th>
<th>CC 1</th>
<th>CC2</th>
<th>No of credits</th>
<th>Level</th>
<th>Assessment ***</th>
<th>Element Weightings</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>v1.1</td>
<td>Geographic Research Skills</td>
<td>1</td>
<td>C</td>
<td>100408</td>
<td>111</td>
<td>100</td>
<td>20</td>
<td>4</td>
<td>Exam 1</td>
<td>30</td>
</tr>
<tr>
<td>v1.1</td>
<td>Earth and Society</td>
<td></td>
<td>C</td>
<td>100408</td>
<td>111</td>
<td>100</td>
<td>20</td>
<td>4</td>
<td>Exam 1</td>
<td>30</td>
</tr>
<tr>
<td>v1.1</td>
<td>Physical Geography</td>
<td>1</td>
<td>C</td>
<td>100410</td>
<td></td>
<td></td>
<td>20</td>
<td>4</td>
<td>C/Work 1</td>
<td>50</td>
</tr>
<tr>
<td>v1.1</td>
<td>Human Geography</td>
<td>1</td>
<td>C</td>
<td>100478</td>
<td></td>
<td></td>
<td>20</td>
<td>4</td>
<td>C/Work 1</td>
<td>40</td>
</tr>
<tr>
<td>v1.1</td>
<td>Practical Skills in Geography</td>
<td>1</td>
<td>C</td>
<td>100410</td>
<td></td>
<td></td>
<td>20</td>
<td>4</td>
<td>C/Work 1</td>
<td>30</td>
</tr>
<tr>
<td>v1.2</td>
<td>Residential Field Trip</td>
<td>1</td>
<td>C</td>
<td>100408</td>
<td>111</td>
<td>100</td>
<td>20</td>
<td>4</td>
<td>Exam 1</td>
<td>50</td>
</tr>
<tr>
<td>v1.1</td>
<td>Advanced Skills for Geography</td>
<td>2</td>
<td>C</td>
<td>100410</td>
<td>112</td>
<td>100</td>
<td>20</td>
<td>5</td>
<td>Exam 1</td>
<td>50</td>
</tr>
<tr>
<td>v1.1</td>
<td>Marine Geography</td>
<td>2</td>
<td>C</td>
<td>101065</td>
<td>111</td>
<td>100</td>
<td>20</td>
<td>5</td>
<td>Exam 1</td>
<td>50</td>
</tr>
<tr>
<td>v2.0</td>
<td>Geographic Information Systems</td>
<td>2</td>
<td>C</td>
<td>100369</td>
<td>111</td>
<td>100</td>
<td>20</td>
<td>5</td>
<td>Exam 1</td>
<td>50</td>
</tr>
<tr>
<td>v1.1</td>
<td>Quaternary Environments</td>
<td>2</td>
<td>O</td>
<td>100398</td>
<td>111</td>
<td>100</td>
<td>20</td>
<td>5</td>
<td>Exam 1</td>
<td>50</td>
</tr>
<tr>
<td>v1.2</td>
<td>Ecosystems</td>
<td>2</td>
<td>O</td>
<td>100347</td>
<td>111</td>
<td>100</td>
<td>20</td>
<td>5</td>
<td>C/Work 1</td>
<td>50</td>
</tr>
<tr>
<td>v1.1</td>
<td>Environmental and Societal Challenges</td>
<td>2</td>
<td>O</td>
<td>100408</td>
<td>111</td>
<td>100</td>
<td>20</td>
<td>5</td>
<td>C/Work 1</td>
<td>30</td>
</tr>
<tr>
<td>v1.2</td>
<td>International Field Trip</td>
<td>2</td>
<td>O</td>
<td>100347</td>
<td>111</td>
<td>50</td>
<td>20</td>
<td>5</td>
<td>Exam 1</td>
<td>50</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>v3.0</td>
<td>Understanding Globalisation</td>
<td>2</td>
<td>O</td>
<td>100627</td>
<td></td>
<td></td>
<td>20</td>
<td>5</td>
<td>Exam 1</td>
<td>30</td>
</tr>
<tr>
<td>v1.1</td>
<td>Environmental Pollution</td>
<td>2</td>
<td>O</td>
<td>101078</td>
<td>111</td>
<td>100</td>
<td>20</td>
<td>5</td>
<td>Exam 1</td>
<td>50</td>
</tr>
<tr>
<td>v1.1</td>
<td>Applications of Environmental Science</td>
<td>2</td>
<td>O</td>
<td>101078</td>
<td>112</td>
<td>100</td>
<td>20</td>
<td>5</td>
<td>Exam 1</td>
<td>50</td>
</tr>
<tr>
<td>Code</td>
<td>Title</td>
<td>ECT</td>
<td>Compulsory</td>
<td>HSC</td>
<td>Core</td>
<td>EC</td>
<td>EC</td>
<td>Total</td>
<td></td>
<td></td>
</tr>
<tr>
<td>------</td>
<td>-----------------------------------------------------------------------</td>
<td>----</td>
<td>------------</td>
<td>-----</td>
<td>------</td>
<td>----</td>
<td>----</td>
<td>-------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>v1.1</td>
<td>Independent Research Project (LES)</td>
<td>3</td>
<td>C</td>
<td>100346 (balanced)</td>
<td>111</td>
<td>50</td>
<td>111</td>
<td>50</td>
<td>40</td>
<td>6</td>
</tr>
<tr>
<td>v1.1</td>
<td>Globalisation and Sustainable Development</td>
<td>3</td>
<td>O</td>
<td>100488</td>
<td>111</td>
<td>100</td>
<td>20</td>
<td>6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>v1.1</td>
<td>Climate and Environmental Change</td>
<td>3</td>
<td>O</td>
<td>100408</td>
<td>111</td>
<td>100</td>
<td>20</td>
<td>6</td>
<td>30</td>
<td>70</td>
</tr>
<tr>
<td>v1.1</td>
<td>Applied Biogeography</td>
<td>3</td>
<td>O</td>
<td>101318</td>
<td>111</td>
<td>100</td>
<td>20</td>
<td>6</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>v1.1</td>
<td>Environmental Remote Sensing</td>
<td>3</td>
<td>O</td>
<td>101056</td>
<td>111</td>
<td>100</td>
<td>20</td>
<td>6</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>v1.1</td>
<td>Earth Surface Processes and Landforms</td>
<td>3</td>
<td>O</td>
<td>100410</td>
<td>111</td>
<td>100</td>
<td>20</td>
<td>6</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>v1.2</td>
<td>Wildlife and Ecotourism</td>
<td>3</td>
<td>O</td>
<td>100347</td>
<td>111</td>
<td>100</td>
<td>20</td>
<td>6</td>
<td>40</td>
<td>60</td>
</tr>
<tr>
<td>v1.1</td>
<td>Environmental Law and Management</td>
<td>3</td>
<td>O</td>
<td>100485</td>
<td>111</td>
<td>100</td>
<td>20</td>
<td>6</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>v1.1</td>
<td>Biological Oceanography</td>
<td>3</td>
<td>O</td>
<td>100351</td>
<td>111</td>
<td>100</td>
<td>20</td>
<td>6</td>
<td>70</td>
<td>30</td>
</tr>
<tr>
<td>v1.1</td>
<td>Emergence and Extinction: Reconstructing Pliocene and Pleistocene Environments</td>
<td>3</td>
<td>O</td>
<td>100398</td>
<td>111</td>
<td>100</td>
<td>20</td>
<td>6</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>v1.1</td>
<td>Freshwater Resource Management</td>
<td>3</td>
<td>O</td>
<td>100849</td>
<td>111</td>
<td>100</td>
<td>20</td>
<td>6</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>v1.1</td>
<td>Marine Conservation</td>
<td>3</td>
<td>O</td>
<td>100351</td>
<td>111</td>
<td>100</td>
<td>20</td>
<td>6</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>v1.1</td>
<td>Cultural Ecology</td>
<td>3</td>
<td>O</td>
<td>100437</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>50</td>
</tr>
</tbody>
</table>

Please note, not all option units may run in each year.
## PROGRAMME PROFILE

**Originating Institution(s):** BU  
**School/Faculty:** SciTech  
**Partner:** Kingston Maurward College  
**Place(s) of Delivery:** BU Talbot  
**Framework Title (in full):** Life and Environmental Sciences  
**Programme Award and Title:** BSc (Hons) Marine Ecology and Conservation – Top Up  
**Interim Award and Titles & Required Credits:** n/a  
**Mode(s) of Study:**  
1. FT/PT  
**Expected Length of Study:**  
1 year FT/ 2 years PT  
**BU Credit Structure & ECTS:**  
- Level 6: 120 ECTS (60ECTS)

### Unit Identification

<table>
<thead>
<tr>
<th>Unit version no.</th>
<th>Unit name</th>
<th>HECoS Subject Code</th>
<th>CC1 %</th>
<th>HECoS Subject Code</th>
<th>CC2 %</th>
<th>Prog year FT</th>
<th>Prog year PT</th>
<th>Core/option</th>
<th>No of credits</th>
<th>Level (4,5,6, PgC, PgD, 7)</th>
<th>Assessment Element Weightings</th>
</tr>
</thead>
<tbody>
<tr>
<td>v1.1</td>
<td>Environmental law and management</td>
<td>100485</td>
<td>111</td>
<td></td>
<td></td>
<td>1</td>
<td>O</td>
<td>20</td>
<td>6</td>
<td></td>
<td>50</td>
</tr>
<tr>
<td>v1.1</td>
<td>Freshwater Resource Management</td>
<td>100849</td>
<td>111</td>
<td></td>
<td></td>
<td>1</td>
<td>O</td>
<td>20</td>
<td>6</td>
<td></td>
<td>50</td>
</tr>
<tr>
<td>v1.1</td>
<td>Independent Research Project (LES)</td>
<td>100346</td>
<td>111</td>
<td>50</td>
<td>111</td>
<td>50</td>
<td>C</td>
<td>40</td>
<td>6</td>
<td></td>
<td>100</td>
</tr>
<tr>
<td>v1.1</td>
<td>Marine Conservation</td>
<td>100351</td>
<td>111</td>
<td></td>
<td></td>
<td>1</td>
<td>C</td>
<td>20</td>
<td>6</td>
<td></td>
<td>50</td>
</tr>
<tr>
<td>v1.0</td>
<td>Marine Field Study Techniques</td>
<td>100351</td>
<td>KMC</td>
<td></td>
<td></td>
<td>1</td>
<td>C</td>
<td>20</td>
<td>6</td>
<td></td>
<td>40</td>
</tr>
<tr>
<td>v1.0</td>
<td>Marine Mammal Ecology and Behaviour</td>
<td>100347</td>
<td>KMC</td>
<td></td>
<td></td>
<td>1</td>
<td>C</td>
<td>20</td>
<td>6</td>
<td></td>
<td>50</td>
</tr>
<tr>
<td>v1.1</td>
<td>Biological Oceanography</td>
<td>100351</td>
<td>111</td>
<td></td>
<td></td>
<td>1</td>
<td>O</td>
<td>20</td>
<td>6</td>
<td></td>
<td>70</td>
</tr>
</tbody>
</table>
### PROGRAMME PROFILE

**Originating Institution(s):**
- Kingston Maurward College
- Bournemouth University

**Faculty:**
- Applied Sciences & Technology

**Partner:**
- Kingston Maurward College

**Place(s) of Delivery:**
- Kingston Maurward College

**Framework Title (in full):**
Integrated Animal and Environmental Sciences

**Programme Award and Title:**
FdSc Marine Ecology and Conservation

**Interim Award and Titles & required credits:**
- Cert HE Marine Ecology and Conservation (requires 120 credits at Level 4)

**Mode(s) of study:**
- PT / FT

**Expected Length of study:**
- FT = 2 years
- PT = 4 years

**BU Credit Structure & ECTS:**
- Level I 120 (60 ECTS)
- Level C 120 (60 ECTS)

**Language of delivery (if not English):**

**Programme HECoS code:** 100418

<table>
<thead>
<tr>
<th>Unit identification</th>
<th>Cost Centre(s)</th>
<th>Unit Details</th>
<th>Assessment Regs:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>SR</td>
</tr>
<tr>
<td></td>
<td>HECoS Subject Code</td>
<td>CC 1</td>
<td>%</td>
</tr>
<tr>
<td>2</td>
<td>100962</td>
<td>14</td>
<td>100</td>
</tr>
<tr>
<td>2</td>
<td>100351</td>
<td>14</td>
<td>100</td>
</tr>
<tr>
<td>1</td>
<td>100347</td>
<td>14</td>
<td>100</td>
</tr>
<tr>
<td>2</td>
<td>100418</td>
<td>14</td>
<td>100</td>
</tr>
<tr>
<td>2</td>
<td>100937</td>
<td>14</td>
<td>100</td>
</tr>
<tr>
<td>2</td>
<td>101276</td>
<td>14</td>
<td>100</td>
</tr>
<tr>
<td>2</td>
<td>100883</td>
<td>14</td>
<td>100</td>
</tr>
<tr>
<td>2</td>
<td>100883</td>
<td>14</td>
<td>100</td>
</tr>
<tr>
<td>2</td>
<td>100394</td>
<td>14</td>
<td>100</td>
</tr>
<tr>
<td>2</td>
<td>101318</td>
<td>14</td>
<td>100</td>
</tr>
<tr>
<td>2</td>
<td>100976</td>
<td>14</td>
<td>100</td>
</tr>
<tr>
<td>1</td>
<td>100351</td>
<td>14</td>
<td>100</td>
</tr>
<tr>
<td>2</td>
<td>100391</td>
<td>14</td>
<td>100</td>
</tr>
</tbody>
</table>

Please note, not all option units may run in each year
**PROGRAMME PROFILE**

Please note, not all option units may run in each year

<table>
<thead>
<tr>
<th>Originating Institution(s): BU</th>
<th>Place(s) of Delivery: BU Talbot</th>
</tr>
</thead>
<tbody>
<tr>
<td>School/Faculty: SciTech</td>
<td></td>
</tr>
<tr>
<td>Partner:</td>
<td></td>
</tr>
</tbody>
</table>

**Framework Title (in full): Life and Environmental Sciences**

Programme Award and Title: MSc Biodiversity Conservation

Interim Award and Titles & Required Credits: **PGCert** Biodiversity Conservation (60 Credits), **PGDip** Biodiversity Conservation (120 Credits)

**Mode(s) of Study**: FT/PT

Expected Length of Study: 1 years FT / 2 years PT

BU Credit Structure & ECTS:
Level 7 180 credits (90 ECTS)

### Unit identification

<table>
<thead>
<tr>
<th>Unit version no.</th>
<th>Unit name</th>
<th>HECoS Code</th>
<th>CC1</th>
<th>%</th>
<th>HECoS Code</th>
<th>CC2</th>
<th>%</th>
<th>Prog year FT</th>
<th>Prog year PT</th>
<th>Core/option</th>
<th>No of credits</th>
<th>Level (4,5,6, PgC, PgD, 7)</th>
<th>Assessment Element Weightings</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Conservation in Practice</td>
<td>100468</td>
<td>111</td>
<td>100</td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td>C</td>
<td>20</td>
<td>7</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Field Ecology Skills</td>
<td>100347</td>
<td>111</td>
<td>100</td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td>C</td>
<td>20</td>
<td>7</td>
<td>50 50</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Frontiers in Biodiversity</td>
<td>101318</td>
<td>111</td>
<td>100</td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td>C</td>
<td>20</td>
<td>7</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Quantitative and Spatial Analysis</td>
<td>101030 100369</td>
<td>111</td>
<td>100</td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td>C</td>
<td>20</td>
<td>7</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Advanced Quantitative Methods</td>
<td>101030 100369</td>
<td>111</td>
<td>100</td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td>O</td>
<td>20</td>
<td>7</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Biodiversity and Ecosystem Services</td>
<td>101318</td>
<td>111</td>
<td>100</td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td>O</td>
<td>20</td>
<td>7</td>
<td>50 50</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Conservation Genetics</td>
<td>100902</td>
<td>111</td>
<td>100</td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td>O</td>
<td>20</td>
<td>7</td>
<td>70 30</td>
<td></td>
</tr>
<tr>
<td></td>
<td>International Law of the Environment</td>
<td>100485</td>
<td>111</td>
<td>100</td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td>O</td>
<td>20</td>
<td>7</td>
<td>50 50</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Primate Behaviour and Ecology</td>
<td>100522</td>
<td>126</td>
<td>100</td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td>O</td>
<td>20</td>
<td>7</td>
<td>50 50</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Research Project (LES)</td>
<td>100986</td>
<td>111</td>
<td>50</td>
<td>100410</td>
<td>111</td>
<td>50</td>
<td>1</td>
<td>C</td>
<td>60</td>
<td>7</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

**Unit Details**

**Assessment Regs**: Exam: 1 C/Work: 1 C/Work: 2
Please note, not all option units may run in each year

<table>
<thead>
<tr>
<th>Originating Institution(s): BU</th>
<th>Place(s) of Delivery: BU Talbot</th>
<th>Framework Title (in full): Life and Environmental Sciences</th>
</tr>
</thead>
<tbody>
<tr>
<td>School/Faculty: SciTech</td>
<td>Language of Delivery (if not English):</td>
<td></td>
</tr>
<tr>
<td>Partner:</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Programme HESA JACS code: D448/ D447 / F750</td>
<td></td>
</tr>
</tbody>
</table>

Programme Award and Title: MSc Green Economy

Interim Award and Titles & Required Credits: **PGCert Green Economy (60 Credits)**, **PGDip Green Economy (120 Credits)**

**Mode(s) of Study** 1: FT/PT Online

**Expected Length of Study** 2: 1 years FT/ 2 years PT

**BU Credit Structure & ECTS** 3: Level 7 180 credits (90 ECTS)

### Unit Identification

<table>
<thead>
<tr>
<th>Unit version no.</th>
<th>Unit name</th>
<th>Cost Centre(s)</th>
<th>Unit Details</th>
<th>Assessment Regs 4</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>HESA JACS Subject Code</td>
<td>CC1 %</td>
<td>HESA JACS Subject Code</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Carbon Management</td>
<td>H221</td>
<td>111 100</td>
<td>100175</td>
</tr>
<tr>
<td></td>
<td>Environmental Law &amp; Social Justice</td>
<td>L800</td>
<td>111 100</td>
<td>100488</td>
</tr>
<tr>
<td></td>
<td>Biodiversity &amp; Ecosystem Services</td>
<td>C181</td>
<td>111 100</td>
<td>101318</td>
</tr>
<tr>
<td></td>
<td>Frontiers of Sustainability Science</td>
<td>F810</td>
<td>111 100</td>
<td>100408</td>
</tr>
<tr>
<td></td>
<td>Green Technology &amp; Renewable Energy</td>
<td>H220</td>
<td>111 100</td>
<td>100180</td>
</tr>
<tr>
<td></td>
<td>Sustainable Development in Practice</td>
<td>F810</td>
<td>111 100</td>
<td>100408</td>
</tr>
<tr>
<td></td>
<td>Research Project (LES)</td>
<td>C100</td>
<td>111 50</td>
<td>100986 111 50</td>
</tr>
<tr>
<td></td>
<td>Extended Professional Placement</td>
<td>L800</td>
<td>111 50</td>
<td>F800 111 50</td>
</tr>
</tbody>
</table>
**PROGRAMME PROFILE**

**Originating Institution(s):** BU  
**Place(s) of Delivery:** BU Talbot  
**School/Faculty:** SciTech  
**Partner:**  
**Language of Delivery (if not English):**  
**Framework Title (in full):** Life and Environmental Sciences  
**Programme Award and Title:** MSc Marine and Freshwater Management  
**Interim Award and Titles & Required Credits:**  
- **PGCert** Marine and Freshwater Management (60 credits)  
- **PGDip** Marine and Freshwater Management (120 Credits)  
**Mode(s) of Study:** FT/PT  
**Expected Length of Study:** 1 years FT/ 2 years PT  
**BU Credit Structure & ECTS:**  
- Level 7 180 credits (90 ECTS)  
**HECoS codes:**  
- 100418  
- 100848

<table>
<thead>
<tr>
<th>Unit identification</th>
<th>Cost Centre(s)</th>
<th>Unit Details</th>
<th>Assessment Regs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit version no.</td>
<td>HECoS Code</td>
<td>CC1 %</td>
<td>Core/option</td>
</tr>
<tr>
<td></td>
<td>CC2 %</td>
<td>Prog year FT</td>
<td>No of credits</td>
</tr>
<tr>
<td></td>
<td>Prog year PT</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Quantitative and Spatial Analysis</strong></td>
<td>100369</td>
<td>111</td>
<td>100</td>
</tr>
<tr>
<td><strong>Integrated Coastal Zone Management</strong></td>
<td>100408/101065</td>
<td>111</td>
<td>100</td>
</tr>
<tr>
<td><strong>International Law of the Environment</strong></td>
<td>100485</td>
<td>111</td>
<td>100</td>
</tr>
<tr>
<td><strong>Fisheries Ecology and Management</strong></td>
<td>100848</td>
<td>111</td>
<td>100</td>
</tr>
<tr>
<td><strong>Simple models for the management of aquatic environments</strong></td>
<td>100469</td>
<td>126</td>
<td>100</td>
</tr>
<tr>
<td><strong>Advanced Quantitative Methods</strong></td>
<td>101030</td>
<td>111</td>
<td>100</td>
</tr>
<tr>
<td><strong>Biodiversity &amp; Ecosystem Services</strong></td>
<td>101318</td>
<td>111</td>
<td>100</td>
</tr>
<tr>
<td><strong>Field Ecology Skills</strong></td>
<td>100347</td>
<td>111</td>
<td>100</td>
</tr>
<tr>
<td><strong>Research Project (LES)</strong></td>
<td>100986</td>
<td>111</td>
<td>50</td>
</tr>
</tbody>
</table>