Programme Specification

Programme Title and Name of Award	BSc (Hons) Marine & Freshwater Conservation with Integrated Foundation Year		
Academic Level	Level 6	**Total Credits**	480
Professional Body Accreditation / Qualification	N/A		
Date of Professional Body Accreditation	N/A	**Accreditation Period**	N/A
UCAS Code	To be confirmed		
HECoS Code	100848 Aquatic Biology (40%), 101318 Biodiversity Conservation (40%) and 100986 Water Resource Management (20%)		
Criteria for Admission to the Programme	The University's standard criteria for admissions apply. Please refer to the Applicant Information pages of the University website for more information. Detailed criteria for admission to this programme can be found on the programme webpage: https://www.cumbria.ac.uk/study/courses/undergraduate/marine-and-freshwater-conservation-with-integrated-foundation-year Please note that APL will not be permitted at Level 3 on this programme. Students who have studied an alternative Level 3 programme but have a confirmed fail in a core module on that programme with a mark in the range 35-39%, may be considered for transfer onto Level 4 of this programme. In these circumstances, normal university procedures apply and, provided that you meet the entry requirements and any pre-requisites for the alternative programme, then a transfer may be considered subject to space being available on that programme. Please visit:- https://www.cumbria.ac.uk/study/courses/foundation-courses/		
Teaching Institution	University of Cumbria		
Owning Institute	Science, Natural Resources and Outdoor Studies (SNROS)		
Principal Mode of Delivery	Blended Learning		

Pattern of Delivery	Full Time
Delivery Site(s)	Level 3 module delivery at Carlisle Fusehill Street Levels 4 – 6 module delivery at Lake District Campus, Ambleside
Programme Length	4 years Standard registration period (full-time) 8 years Maximum Registration period
Higher Education Achievement Report (HEAR)	Upon successful completion of this programme, you may receive a Diploma Supplement/Higher Education Achievement Report (HEAR).
Exit Awards	You may be awarded one of the following Exit Awards if you fail to achieve the requirements of the full programme: FDCert Science CertHE Conservation Biology DipHE Marine & Freshwater Conservation BSc Marine & Freshwater Conservation (ordinary degree)
Period of Approval	1st August 2020 to 31st July 2026
This programme has been approved (validated) by the University of Cumbria as suitable for a range of delivery modes and delivery patterns. This level of potential flexibility does not reflect a commitment on behalf of the University to offer the programme by all modes/patterns and at all locations in every academic cycle. The details of the programme offered for a particular intake year will be as detailed on the programme webpage: https://www.cumbria.ac.uk/study/courses/undergraduate/marine-and-freshwater-conservation-with-integrated-foundation-year	

Cumbria Graduate Attributes
Throughout your studies, you will be provided with the skills and knowledge relevant to the global workplace. All successful graduates of the University of Cumbria will be: • Enquiring and open to change • Self-reliant, adaptable and flexible • Confident in your discipline as it develops and changes over time • Capable of working across disciplines and working well with others • Confident in your digital capabilities • Able to manage your own professional and personal development • A global citizen, socially responsible and aware of the potential contribution of your work to the cultural and economic wellbeing of the community and its impact on the environment • A leader of people and of places • Ambitious and proud

Programme Features

Marine and freshwater ecosystems are some of the least understood and threatened habitats on the planet, yet our lives intricately depend on them. Climate change, ocean acidification, pollution and increased industrial activity are all impacting aquatic habitats. According to the Chartered Institute of Ecology and Environmental Management (CIEEM) and the Natural Environment Research Council (NERC) there is currently a shortage of graduates with key skills in marine and freshwater conservation in the UK.

The integrated foundation year (Year 0) of your Animal Conservation Science programme provides the opportunity for you to settle into University life and gain the confidence and skills to succeed in your chosen degree through participating in a supportive academic, personal and professional development programme.

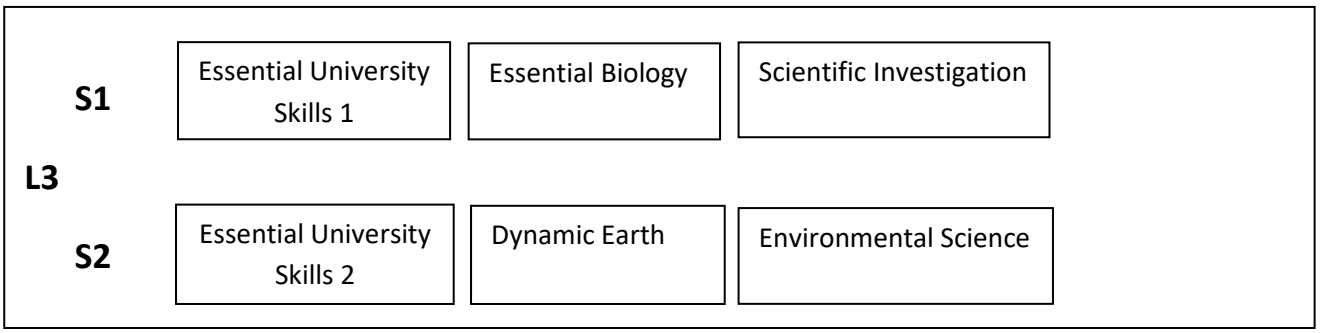
Students on the Animal Conservation Science foundation year will study six modules that will provide a good grounding for you to develop your academic and study skills to progress onto higher levels of study (Levels 4-6). This route offers a unique opportunity for developing your problem-solving skills, intellectual, key scientific, practical and investigative skills and techniques that underpin the study of Animal Conservation Science whilst providing you with a grounding in essential university skills and nurturing your career aspirations. You will develop your knowledge and understanding of the key scientific and social science principles of Biology, Climatology, Geology, Human Ecology to Toxicology, Public Health, Epidemiology and Parasitology. You will gain a solid foundation in laboratory and field skills in all four of your subject specific modules, Essential Biology, Dynamic Earth, Environmental Sciences and Scientific Investigation.

Throughout the integrated foundation year you will have the opportunity to develop your professional skills by developing key soft skills such as communication, team working, self-management and organisation. During the generic university wide modules, you will make links with the careers team to discuss your skill development and to help you reflect on how these link to your employability and graduateness. This will be accompanied by working on your digital skills profile, ensuring you have access to the universities MOOC's and 'Linked in Learning' to help build upon your current level of IT literacy.

To be an effective conservation scientist, you must have sound knowledge of global biodiversity and ecological processes within marine and freshwater habitats at varying scales. You must understand human relationships with the marine and freshwater world. You must understand the roles of conservation practitioners and managers in monitoring, evaluating, managing and restoring ecosystems and habitats to maintain biodiversity and ecosystem services, and develop an holistic approach to studying the complexity of the natural world. We have designed this programme with these in mind.

- **Biological Diversity**: Conserving animal biodiversity requires an ability to identify different species and to understand the contribution of genetic and behavioural factors in maintaining biodiversity across a range of spatial and temporal scales.
- **Aquatic Ecosystems**: Being able to manage wildlife populations in situ and ex situ requires a profound understanding of the evolutionary processes that create animal biodiversity and how human activities such as habitat fragmentation are impacting them. Understanding the effects of environment, habitat quality and other species on population health is also critical.
- **Humans and the Aquatic Environment**: Human activities are the primary threat to aquatic ecosystems worldwide, yet we depend on them for essential resources and services (e.g., drinking water, food, mitigating climate change). Understanding and ultimately managing our own interactions with the aquatic world sustainably is the key to effective conservation.
- **Skills for Conservationists**: The toolkit available to conservationists has grown dramatically over the last decades. Being effective in the field requires a good command of a range of

survey techniques, data analysis and mapping tools, and digital skills in order to obtain,



analyse and communicate a range of information.

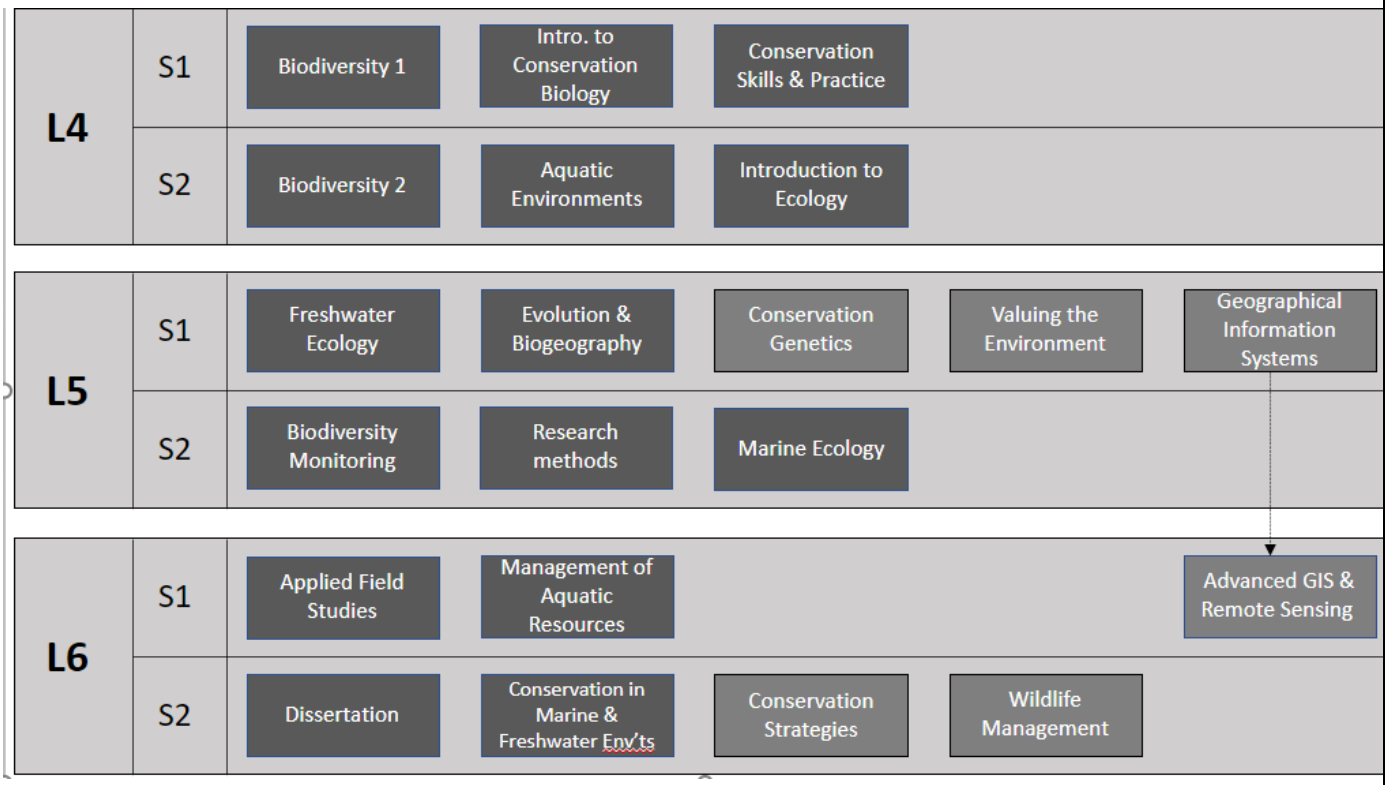


Figure 1 above: *Curriculum map of the BSc (Hons) Marine and Freshwater Conservation showing the different compulsory (black) and optional (dark grey) modules.*

Figure 1 presents a curriculum map of your programme. At level 3 we provide you with the underpinning biological and conservation/environmental theoretical knowledge and the academic and scientific skills you require in order to be prepred for and successful at level 4 and beyond. At Level 4 we provide you with a broad introduction to conservation biology as a discipline at university level, enabling you in your journey through the transition from school to university and placing particular emphasis on supporting your journey towards self-directed, independent learning. We focus on developing your appreciation of a wide range of species, their biology, as well as the ecological factors that affect marine and freshwater habitats. At Level 5 you will deepen your knowledge of aquatic conservation within all four programme themes noted above, but also begin to specialise in your own areas of interest, whilst retaining a clear sense of the interdisciplinarity that we feel is essential in a good conservationist. Your ability to explore sub-disciplines within marine and freshwater conservation deepens further in Level 6, which also presents the opportunity to demonstrate and apply your knowledge, understanding and skills, often within professional or external contexts, as well as exploring the boundaries of contemporary conservation knowledge through independent research within your dissertation.

The study of marine and freshwater conservation is multi-disciplinary by necessity and encompasses a wide range of topics. To be effective in the field, you need understand the physical and ecological

processes processes that affect aquatic ecosystems, but also the laws and regulations tht govern their resources. You need to be able to choose between different strategies for management and conservation, and be competent with the research methods and other skills required to investigate issues of aquatic conservation.

The teaching team for the BSc (Hons) Marine and Freshwater Conservation Science are members of the Centre for National Parks and Protected Areas, an inter-disciplinary research centre addressing global issues in natural resource management and biodiversity conservation. Your degree is therefore delivered by a research-active team with diverse and complementary interests and particular strengths in marine and freshwater ecology, animal behaviour, marine mammal science, human aspects of conservation, conservation genetics, marine protected areas, species restoration and rewilding. We draw on our own experience of working in conservation in the UK, across Europe and around the world – and we use these experiences to illustrate specific issues in marine and freshwater conservation and how they may be solved. The course team brings considerable expertise, experience and enthusiasm to the delivery of the programme and we put special emphasis on hands-on, practical learning in the field and laboratory paired with analysis and discussion. You will be supported in adapting to university life through a vibrant induction week programme, personal tutorials, personal development planning and a wide range of student support services (see section "Student Support" for details).

The Lake District Campus is located in the midst of Lake District National Park, also a UNESCO World Heritage Site. Cumbria is home to a range of iconic species, such as ospreys, Atlantic salmon, as well as some of the UKs most endangered freshwater species such as Arctic charr, vendace, schelly, white-clawed crayfish and freshwater pearl mussels. We have access to a range of distinctive marine and freshwater ecosystems within a short walk or drive of campus, each with their own unique flora and fauna. These include lowland and upland peat bogs, wetlands, upland streams and lowland rivers, coastal saltmarshes, rocky and sandy shores, and the productive sand and mudflats of Morecambe Bay and the Solway Firth. This gives you the opportunity to experience aquatic conservation first hand throughout your study. It allows us to take the learning outside and teach you hands on how to collect field data and survey marine and freshwater ecosystems.

We work very closely with a range of local, national and international conservation organisations to ensure that the degree provides you with the knowledge and skills required for a successful career in marine and freshwater conservation. These may include Cumbria Wildlife Trust, Wildfowl and Wetlands Trust, Lake District National Park, Freshwater Biological Association, RSPB, Rivers Trusts, and others. We have good contacts with other conservation practioners and scientists and have ensured that you are taught the practical, analytical and digital skills and procedures relevant to the modern workplace.

Aims of the Programme

The overall aims of the Programme are:

1. To provide a supportive transitional route into higher education equipping students with the skills essential for successful participation in academic study
2. To develop an inter-disciplinary knowledge and understanding of theoretical concepts in a range of contexts applicable to studying marine and freshwater conservation.
3. To develop the academic personal and professional skills required to work in the context of conservation.
4. To develop the knowledge and skills needed for success in your undergraduate studies.
5. Develop your knowledge, understanding and enthusiasm for marine and freshwater conservation.
6. Acquire detailed knowledge of ecological concepts and practical skills used in conservation and environmental protection and management.

7. Develop your awareness of threats to biodiversity (both natural and anthropogenic) and of social and political constraints to conservation.
8. Integrate complex information from biogeochemical, political and socio-economic sources and develop an holistic, interdisciplinary approach to conservation and environmental management.
9. Develop an in-depth knowledge and understanding of environmental sustainability and anthropogenic impacts on marine and freshwater resources.
10. Critically assess and make informed, evaluative choices regarding the conservation of biodiversity and habitats using appropriate literature, legislation, guidelines and frameworks.
11. Formulate and apply suitable quantitative and qualitative methods to acquire, analyse and interpret data from a variety of sources using appropriate information technology.
12. Learn appropriate written and oral communication skills to present data and explain evidence-based arguments to both specialist and general audiences.
13. Develop a commitment to professional and ethical standards and practices relevant to employment in conservation and environmental science and enhance your portfolio of transferable skills also of value to other types of employment and post-graduate study.
14. Become a mature, confident individual, with the ability to think critically and apply your knowledge and skills in a variety of contexts, independently or as part of a team.

Level Descriptors

Level Descriptors describe in general terms the expected outcomes you will achieve at each level of study as you progress through your programmes. They describe the relative demand, complexity, depth of learning and learner autonomy associated with a particular level of learning and achievement. The University's Level Descriptors are aligned to the national Framework for Higher Education Qualifications (FHEQ) and are a key mechanism for ensuring the academic standards of the University's provision.

At Level 3: (Usually Year 0 undergraduate), you will be able to:

- Recognise the breadth of the field of study and apply the skills of manipulation of knowledge to make informed judgements within routine contexts and with guidance.
- Begin to work beyond defined contexts
- Apply established approaches to solving well defined problems, showing emerging recognition of the complexity of associated issues and communicate outcomes effectively in an appropriate format
- Within a defined context and under guidance, evaluate personal and workplace experience and manage information and data from a range of sources appropriate to the field of study.

At Level 4: (Usually Year 1 undergraduate), you will be able to demonstrate that you have the ability to:

- Apply a systematic approach to the acquisition of knowledge, underpinning concepts and principles and deploy a range of subject specific, cognitive and transferable skills.
- Evaluate the appropriateness of different approaches to solving well defined problems and communicate outcomes in a structured and clear manner.
- Identify and discuss the relationship between personal and work place experience and findings from books and journals and other data drawn from the field of study.

At Level 5: (Usually Year 2 undergraduate), you will be able to demonstrate that you have the ability to:

- Apply and evaluate key concepts and theories within and outside the context in which they were first studied.
- Select appropriately from and deploy a range of subject-specific, cognitive and transferable skills and problem-solving strategies to problems in the field of study and in the generation of ideas and to effectively communicate information and arguments in a variety of forms.
- Accept responsibility for determining and achieving personal outcomes.
- Reflect on personal and work place experience in the light of recent scholarship and current statutory regulations.

At Level 6: (Usually Year 3 undergraduate), you will be able to demonstrate that you have the ability to:

- Critically review, consolidate and extend a systematic and coherent body of knowledge.
- Critically evaluate concepts and evidence from a range of resources.
- Transfer and apply subject-specific, cognitive and transferable skills and problem-solving strategies to a range of situations and to solve complex problems.
- Communicate solutions, arguments and ideas clearly and in a variety of forms.
- Exercise balanced judgement in a range of situations.
- Accept accountability for determining and achieving personal and group outcomes.
- Reflect critically and analytically on personal and work place experience in the light of recent scholarship and current statutory regulations.

Programme Outcomes – Knowledge and Understanding

The programme provides opportunities for you to develop and demonstrate the following:

After 120 credits of study (FdCert) you will be able to demonstrate:

K01 A knowledge and understanding of a range of data collection and handling techniques applied within the context of Marine and Freshwater Conservation.

K02 The ability to apply and explain theories, models, concepts and principles that underpin the study of Marine and Freshwater Conservation.

After 240 credits of study (CertHE) you will be able to demonstrate:

K1 Knowledge and understanding of theories, paradigms, concepts and principles relevant to marine and freshwater conservation.

K2 An appreciation and understanding of how biogeochemical cycles and processes affect marine and freshwater ecosystems.

K3 Knowledge of the impacts of human activities on aquatic environments including economic and social aspects of ecology and the natural environment, pollution management and sustainable use of marine and freshwater resources.

After 360 credits of study (DipHE) you will be able to demonstrate:

K4 A scientific and interdisciplinary approach to identifying, understanding and managing aquatic organisms and ecosystem processes, goods and services.

K5 Knowledge of key practices and theories relevant to biodiversity assessment, monitoring and management.

K6 Comprehension and critical evaluation of population processes, dynamics and interactions, and associated models.

After 480 credits of study (BSc Hons) you will be able to demonstrate:

K7 A critical appreciation of the complex relationships which affect the structure, biogeography and diversity of aquatic ecosystems in relation to factors such as climate, geology, geography, land use, palaeo-history, evolution and human activity.

K8 A critical evaluation of the roles of institutions, organisations and other stakeholders in developing environmental policy and practice within local, national and international contexts.

K9 Synthesis and discussion of the holistic, interdisciplinary perspective on conservation in marine and freshwater ecosystems.

Programme Outcomes – Skills and other Attributes (including Employability Skills)

The programme provides opportunities for you to develop and demonstrate the following:

After 120 credits of study (FdCert) you will be able to demonstrate:

S01. Academic, personal and professional skills needed to succeed in higher education.

S02. Competence and progressive development in basic and core experimental skills.

S03. Fieldwork and data skills, techniques and competencies needed to study and work in conservation.

After 240 credits of study (CertHE) you will be able to demonstrate:

S1 Proficient taxonomic skills including an ability to identify a range of plants, fungi, and invertebrate and vertebrate animals

S2 The ability to access scientific information, employ scientific writing style and present scientific data in tables and figures

S3 Team working, acknowledging different roles within groups and teams and accommodating a range of personal styles.

After 360 credits of study (DipHE) you will be able to demonstrate:

S4 The ability to apply ecological survey and monitoring techniques to quantitatively assess biodiversity and habitat quality

S5 Professional competencies in conducting safe and ethical practical work in the field and the laboratory.

S6 Proficient use of information technology systems to access, analyse and interpret data, research findings and evidence from a variety of different sources.

S7 Effective communication and the ability to convey complex concepts, information and arguments to a variety of audiences using a range of formats.

After 480 credits of study (BSc Hons) you will be able to demonstrate:

S8 The ability to plan, conduct and present independent projects using appropriate practical, numerical and statistical techniques and information technologies.

S9 Professional level scientific communication, critical evaluation and the ability to synthesise new ideas and approaches to meet conservation challenges using existing and novel methods

S10	An awareness of personal development skills, including the ability to identify and reflect on where further training or skill acquisition is necessary for self-improvement.

External and Internal Reference Points

The following Subject Benchmark Statements and other external and internal reference points have been used to inform the Programme Outcomes:

As an interdisciplinary programme, the BSc (Hons) Marine and Freshwater Conservation is primarily aligned to a number of benchmark statements.

- *QAA Benchmark Statements - Earth Science, Environmental Science and Environmental Studies* (published in 2014): When designing the module content and curriculum we have made sure that our programme meets these benchmarks in terms of intellectual skills, analysis and data interpretation skills, as well as communication, presentation and information technology skills. This gives you the multi-disciplinary knowledge and experience required for effective scholarship and practice in sustainability, sustainable development and ecosystem-level analysis.
- Institute of Environmental Management - Closing the Gap: Rebuilding Ecological Skills in the 21st Century (published in 2011): The programme was designed to provide training in the 4 key ecological skills identified by the Institute of Environmental Management. These are
    - Species identification, especially of invertebrates, fish and lower plants.
    - Ecological survey, sampling, data assessment, evaluation and monitoring skills for fish and invertebrates.
    - Habitat creation, restoration and management in marine, coastal and upland environments.
    - Techniques to control the spread of invasive species and wildlife diseases.
- *Chartered Institute of Ecology and Environmental Management (CIEEM) Competency Framework*: The Programme Outcomes for Skills and other Attributes (including Employability Skills) are aligned with CIEEM's benchmark competencies: ecological concepts, human ecology and impacts, biodiversity, conservation, environmental policy and law, environmental management, species identification and survey skills, and professional skills. This alignment ensures that you have the skills, knowledge, and behaviour for a successful career in aquatic conservation.

Internal University of Cumbria plans, strategies and policies including:

- UoC Strategic Plan
- UoC Learning, Teaching and Assessment Strategy
- UoC Academic Regulations and Academic Procedures and Processes
- **Institute** of Science, Natural Resources and Outdoor Studies Business Plan

Graduate Prospects

Halting and reversing the current rate of biodiversity loss in marine and freshwater habitats requires a new generation of skilled conservationists. National and international legislation related to biodiversity and water quality combined with increasing public awareness about threats to the

world's water bodies have ensured that there are good employment opportunities for aquatic conservationists with the right knowledge and skills. The Marine and Freshwater Conservation programme at the University of Cumbria has been designed to meet a need for more graduates in this field of conservation science. Upon completing the degree, you will have the necessary knowledge, training and practical experience to work as a ranger, reserves manager, or biodiversity officer for many different conservation organisations (for example Rivers Trusts, Wildfowl and Wetlands Trust, Sharks Trust and Marine Conservation Society). There are many opportunities to find employment with environmental consultancies or statutory authorities like the Environment Agency, and our practical curriculum, aligned with the CIEEM competencies, means you may be eligible to apply for chartered status with a range of Environmental or Ecological Institutes upon graduation, further enhancing your graduate prospects.

For graduates wishing to gain further academic training to establish themselves in aquatic conservation research, the degree provides a solid foundation of theoretical understanding and analytical skills for postgraduate study. Masters programmes in marine or freshwater biology or environmental science are provided in the UK or abroad and more research-orientated students may be able to go directly into PhD study.

Learning, Teaching and Assessment Strategies employed to enable the Programme Outcomes to be Achieved and Demonstrated

As a student at the University of Cumbria, you are part of an inclusive learning community that recognises diversity. You will have opportunities to learn by interacting with others in a collegiate, facilitative and dynamic learning environment. Teaching, assessment and student support will allow equal and equitable opportunities for you to optimise your potential and develop autonomy.

We seek to create a stimulating and innovative community of learning, whether encountered on campus or at a distance, on placement or in the workplace. Facilitated by our expert practitioner staff, you will experience a learning environment that is well equipped, flexible, and stimulating.

Delivery is based at the Lake District Campus, Ambleside, through lectures supplemented by seminars, directed reading and independent study (including individual project work). To give you the necessary practical experience, your theoretical learning is augmented by a wide range of field practicals and where appropriate, laboratory work.

Learning and Teaching

The Institute of Science, Natural Resources and Outdoor Studies want to motivate you in your foundation year studies through a variety of teaching and learning approaches that support different learners' needs and help to integrate you into university life. Transferable skills are central to learning opportunities and assessment. Students are encouraged to reflect on their skills development in learning and personal contexts so they develop their ability to make appropriate choices and decisions. Challenging and authentic tasks will be used to stretch your capabilities in real world learning and assessment resulting in a deeper approach to learning. The mode of assessment introduces you to the type of assessments you will encounter as you progress through your degree. Assessment load has been set in line with comparative level 3 assessments such as at A-level. You will undertake a range of assessments including written assignments, reports and essays, oral presentations and poster presentations, portfolios and set exercises such as undertaking individual research. There is a strong emphasis on formative assessment in all modules to assist with the learning process.

The foundation year modules utilise a full range of UoC digital resources and learning technology where suitable; for example, through the University's virtual learning environment (Blackboard).

Vocational practice opportunities form an essential part of the programme and encourages you to make meaningful links between the underpinning theoretical concepts within the subject area.

During the integrated foundation year you will be taught with students on a range of Science programmes at our Carlisle Fusehill Street Campus, you will be working in groups and teams to achieve solutions to set problems, researching case studies and delivering events. Each module is led by a module leader which is the lead tutor with over-arching responsibility for that module. However, one of the strengths of this programme is our team-taught approach to delivery, you may be taught on a module by more than one tutor. This ensures you are taught topics by subject specialists, experience the different delivery styles you will encounter as you progress through your programme and on modules that you share with other programmes ensures you will meet staff from your degree programme. In Semester 2 one of our modules UNIF3018 Dynamic Earth will be delivered as a one week residential on our Ambleside Campus where you will be transferring to at then end of this year. The aim of this is for you to get to know better staff from your programme team and to become more familiar with the Ambleside Campus, accommodation, facilities and services. It will also provide the opportunity for you to meet other students on your programme from other year groups so helping with the transitional change from Carlisle to Ambleside the next year.

Our learning and teaching strategy has been developed in line with the University's Learning & Teaching Plan 2017-2022. Encapsulated within the first aim of the programme is a drive to engage our students in learning experiences that are enriching, enjoyable and intellectually stimulating. Below are some focused learning and teaching strategies which are designed to aid your learning and enhance your experience at university.

Varied Teaching Styles

We view you as a partner in learning and all modules include opportunities for your engagement and participation. A variety of learning and teaching methods are used to reflect the variety of individual learning styles that inevitably exist within a group, so that you will experience teaching methods best suited to your own preferred learning style. Delivery of your course is through practical sessions in the field and in the classroom, through lectures and seminars and through field visits and laboratory practicals. The location of the campus at Ambleside allows us to access different ecosystems, managed for many different objectives. Your tutors have built up links with local conservation organisations who often give site tours or guest lecturers or seminars as part of modules. The teaching facilities at the Ambleside campus are of a good standard and you have access to specialised teaching rooms such as a computer suite and laboratories which are used in modules at Levels 4, 5 and 6. All modules include extensive opportunities for engagement and participation. To do this we blend a range of teaching approaches which will typically include:

- Lectures
- Field work and field trips
- Laboratory classes
- Individual and group tutorials
- Utilisation of case studies
- Seminars and workshops
- Guided independent study involving electronic resources (VLE), textbooks and other self-study materials
- Problem-based learning using real life scenarios
- Training and practice in the use of IT and software packages
- Project work, both individually and in teams
- Reading and interpreting research publications

Applied Teaching within a National Park

The focus of your learning will be achieved through the integration of academic study and practical activity and application. We are situated within one of the world's best-known National Parks, where people live and work next to and amongst some of the most iconic landscapes in England. Consequently, field work is one of the main pillars of your programme, allowing you to continually put theory and concept into context, enabling you to explore real world scenarios and develop your problem-solving abilities. As a result, we blend extensive field and laboratory work opportunities throughout your programme. For Example, at Level 4 you will have the opportunity to participate in a range of free half-day and full day fieldtrips to explore fundamentals of aquatic conservation and consider what is in front of you and recognise the processes that define our discipline. This will be undertaken in modules such as Conservation Skills and Practice, Introduction to Ecology and Biodiversity 1 and 2. As you move into Level 5, we deepen your knowledge through more investigative exercises to appreciate the complexities of the real world, and recognising the diversity of approaches to 'doing' marine and freshwater conservation, including one week of practical field work within Cumbria during the Biodiversity Monitoring module. By Level 6, you will be undertaking independent field research for your Dissertation module within the region or elsewhere.

Global Focus

Your tutors are experienced in conservation as a discipline and in teaching. They have varied backgrounds in practical and research-based conservation from all over the world and have strong involvement in the sector. You will benefit from their practice-based knowledge, research informed teaching and links they have developed during their careers. An example of this is through the Applied Field Studies module in which you are given the opportunity to go on an international field trip (this carries additional costs). This enables you to learn about societal, environmental and economic differences of conservation in different countries. You will also be able to apply theory and practice gained at Level 4 and 5 to a research project in the field. For example, you will build upon societal issues through the Introduction to Conservation Biology module at Level 4 and the Valuing the Environment Module at Level 5.

Interactive Computer-based Learning

Blended learning though lectures, seminars and workshops, with attendance at all scheduled sessions, is seen as imperative to your progression. This is further enhanced by the use of our 'virtual learning environment' (VLE) 'Blackboard' where each module studied has a designated blackboard site providing not only standard lecture and practical material, but supplementary reading, virtual exercises and online forums. This blended approach allows for flexibility in learning whereby materials may be accessed at your convenience on site or via remote access. Most assignments are also submitted through Turnitin on Blackboard.

Supported Learning

You will be supported in your learning through structured personal tutorials and thorough timely feedback on your assignments. We take marking very seriously and operate an internal moderation process where a sample of marked assignments are reviewed by a colleague to ensure fair and consistent grading and quality of feedback.

You will be supported in the progressive acquisition of subject knowledge and skills, gradually advancing towards more independent learning at Level 6, whilst developing a reflective approach to personal progress. This means many of the skills you learn are transferable across modules and build up through the levels. For example, in Level 4 we explore collection of basic information in modules such as Introduction to Ecology, Biodiversity and Conservation Skills and Practice, skills which are then developed in modules at Level 5, such as Biodiversity Monitoring, Research Methods, and Geographical Information Systems and which in turn are used in Level 6 modules such as Applied Field Studies and your Dissertation. At each level your analytical and planning skills are developed further.

Our aim is to support your development as an independent, passionate, critical thinker and help you establish yourself as a competent and respected member of an international community of researchers and practitioners dedicated to reversing biodiversity loss. Our teaching frequently draws on case studies and research from across the globe and you will have opportunity to engage in learning abroad as part of the international field trip. We hope that our graduates emerge with a strong sense of global citizenship and the competence to address conservation issues on a global scale.

Employability

This programme is focused on providing you with the skills and knowledge to become a competent conservation researcher of marine and freshwater ecosystems. Employability is therefore an important aim of the programme. Modules such as Conservation Skills and Practice at Level 4, Biodiversity Monitoring and Research Methods at Level 5 and Applied Field Studies and Dissertation at Level 6 provide vital employability skills because they combine real world data collection techniques with professional report standard assignments to demonstrate your understanding not only of how to undertake the work yourself, but also that you have the depth of knowledge to supervise the work of others in future and would be capable of critically appraising the quality of the results. Many of the assignments are designed to reflect the skills that would be required in the workplace and which involve collection of information, analysis and presentation of results.

Summative and Formative Assessment

Our assessment strategy has also been developed to be in line with the University's Learning & Teaching Plan 2017-2022. The overarching consideration is to provide assessments which are seen as "for and as learning" rather than simply testing ability and knowledge.

Module assessments at level 3 introduce you to the type of assessments you will encounter as you progress through your degree and there is a strong emphasis on formative assessment in all modules to assist with the learning process. Assessment load has been set in line with comparative level 3 assessments such as at A-level.

The main drivers of this strategy are to:

- provide innovative, challenging and stimulating assessment which will enable you to develop the knowledge and professional skills required for employment
- be student-centred, flexible and modern
- be fully supported by, and integrated with, technological approaches such as the Blackboard virtual learning environment (VLE) and electronic portfolio
- impart academic rigour to the teaching and learning processes
- support the development of your independence, autonomy and critical self-reflection
- support different learners' needs at different stages of development

Within a balanced scheme, assessment methods may include:

- unseen examinations
- open-book examinations and practical tests
- laboratory and field reports
- computer-based assessments (statistical analysis)
- problem solving
- critical analysis of case studies and field work problems
- oral, audio-visual and poster presentation

- production of scientific papers
- research plan
- dissertations
- peer and self-assessment
- group work

One of the first modules studied is Conservation Skills and Practice at Level 4. This module is essential as it enables you to learn about key academic skills such as report writing, presentations and referencing sources of information. These are essential employability skills. These skills are then built upon during your other modules at Levels 4, 5 and 6. For example, students may be struggling with presentations skills and you are therefore given poster and group presentations at Level 4, as your confidence grows and you apply feedback given to you by your tutor you then move to individual presentations at Level 5; by Level 6 you are expected to present confidently.

At the start of each academic year, an assessment schedule is published on the Conservation site within Blackboard to give you a clear indication of when the deadlines for submission occur for all modules within your Marine and Freshwater Conservation programme. The programme team works very carefully to distribute assessment throughout the academic year to avoid bunching of assessments; however, it is also your responsibility to plan and manage your time within this assessment framework. All submitted assessments are marked by the appropriate member of the programme team (usually the person that designed the assessment), and marking is internally moderated before provisional marks and feedback are released. A selection of work will be sampled by our external examiner (an equivalent academic delivering similar courses at another university) to ensure quality and comparability of marking and assessment with national and sectoral norms.

Personal development and reflective practice will take place throughout the programme and will be implemented through the wide range of assessment and feedback activities (both formative and summative) as well as via our structured personal tutorial process.

Within the Marine and Freshwater Conservation programme, we believe that engaging with feedback is probably the most important stage of the learning process. Modules contain formative feedback opportunities, typically early in the module, to enable your development towards the summative assessments, and our focus in giving feedback is to highlight ways in which you can improve your future work.

All of this is ultimately focussed on enabling you to embark on a relevant career as a conservation graduate. Our close links to industry ensure that our teaching is focussed on real world issues and the assignments reflect work you would be likely to do in your future career.

Student Support

We provide responsive learner support that promotes student success. Our approach to learner support is designed to support achievement and progression, champion inclusivity and accessibility, prepare you for opportunities beyond study, and promote independence and resilience, enabling you to achieve your potential.

As a student of the University of Cumbria, you will be taught by academics and expert practitioners who facilitate learning through structured inquiry. You will be provided with access to high quality academic resources through physical and digital libraries and will be supported to develop skills that enable you to become a critical, reflective, discerning and independent learner and researcher.

Induction

Induction takes place during Welcome Week prior to the start of the programme. All level 3 students will share a common induction programme to provide the opportunity for you to meet with other students in your subject area and those from other level 3 foundation programs who share common university-wide modules. You will undertake a series of activities designed to form cohesion amongst the student group, to familiarise you with the University and introduce you to a range of support services and staff who are there to help you settle into university life and help you progress through your studies. You will be shown how to use our Virtual Learning Environment (VLE) which is called 'Blackboard' and how to submit assessments using 'Turn it In'. All students will attend centrally organised sessions, Student Life and Help is at Hand.

During the induction week you are allocated a Personal Tutor (PT), as are all students at the university, but in addition integrated foundation year students will also be supported by the level 3 subject area lead. You will also meet your dedicated Student Transition Advisor who is part of our awarding winning Student Support. They will run sessions on expectations for studying in higher education and show you around the library and learning resources.

Progressing students will not be required to attend all induction activities at level 4, however will be invited to be involved in activities that will enable them to meet and feel fully integrated with their new cohort such as introduction to programme structure, modules and assessments and team building activities. In addition the students will be invited by the programme leader to mentor and support new students in other activities such as campus tours and general tips and guidance on being a UOC student.

Student Transition Advisor Support (level 3)

During the first year of your programme (year 0) you will have access to support from dedicated Student Transition Advisors. These advisors will provide you with individual academic and pastoral support alongside the academic team to ensure you reach your full potential whilst you are on this programme. In particular they will help you to adjust adjustment to university study, assist you in the navigation of the academic environment, policies, expectations and signposting to a wide range of services. They also work with you and your personal tutor to help you to develop your own strategies for effective study and provide additional one-to-one and group support in academic writing and numeracy skills.

A key feature of the foundation year programme is the additional student support that has been built into the modules in particular the Essential University Skills 1 and Essential University Skills 2 modules, that have an additional 12 contact hours included to enable staff to provide additional individual and group tutorials facilitated by the Student Transition Advisors.

Personal Tutoring

You will also be allocated a Personal Tutor. Your Personal Tutor will be proactively involved in the delivery of your programme and will have contact with you throughout your time at the University. They will support your learning and development, including through tutorials, Progress Reviews and other support as outlined in the Personal Tutoring Policy. Your Personal Tutor is there to support you with the academic aspects of your studies.

Personal Development Planning

As a relatively small programme the teaching team will quickly come to know you on an individual basis and support your personal development throughout your studies. Personal Development Planning is an integral part of our tutorial system. You will work with your Personal Tutor as well as with your Programme Leader to regularly review your studies and achievements identify opportunities and plan your studies for the time ahead.

Library and Academic Support (based in Information Services)

Module leaders will collaborate with Library and Academic Advisors to ensure that your reading and resource lists are current, and items are available via the library discovery tool OneSearch. In order

to maximise access, availability and usefulness, eBooks and electronic journal titles will, in most cases, be prioritised. You can access a wide range of electronic and print content using OneSearch and you can find out more about key texts, databases and journals for your subject by accessing the library's subject resources webpages. Where appropriate, module reading and resource lists will be made available to you electronically using the University's online reading and resource list system.

The Skills@Cumbria service can help support your academic skills and success throughout your programme. The service is delivered by a team of professional Library and Academic Advisors. It includes a suite of online self-help resources accessible 24/7 via the University's website and Blackboard site. It also provides group and individual advice and guidance accessible through and alongside your course and by different means such as face to face, email or virtual. Visit skills@cumbria for more details.

IT and Technical Support

Technology is an invaluable asset when it comes to studying, so it's important you know how to make the most out of the excellent facilities we have available. Our aim is to ensure you can access university electronic resources from anywhere or any device, whether on or off campus. The Student Hub is your one-stop gateway to all university systems, Outlook email, and OneDrive.

Whether you consider yourself a computer expert or you're not confident about your IT skills, we're always around to ensure you get the level of support you need. We have a wealth of information and support available on the website and have a dedicated IT Service Desk where you can talk to someone by phone or log your question online from anywhere, at any time.

Student Support Services

Student Support Services offer a wide range of support, including: careers and employability, financial help, counselling, health and wellbeing and support for disabled students and those with specific learning requirements. We also offer mentoring by trained students which you can request at any point during your studies. We know that you want to get the most out of your programme, make the best use of your time and find or continue in the career you always dreamed of. Access university support and facilities easily and quickly via the website and/or via the Student Services guidance tile on the Student Hub.

In addition to the range of guidance above, you have the opportunity to further develop your personal, academic and professional skills by taking part in a number of initiatives coordinated and delivered by professional services advisers:

Headstart

Head Start is a self-learning pre-entry module that is completed online and at your own pace. The module gives new undergraduate students an opportunity to prepare for their transition into university and to start to develop the academic skills that will help them become successful students.

All UG students are given the opportunity to register and complete Head Start prior to entry on their main programme of study. If you haven't been able to complete Head Start before starting your course, you can access the module via Blackboard by selecting the Skills@Cumbria tab and then the Head Start tile. Learning at university, academic writing and referencing are the key topics introduced in the module and previous students have told us how useful they have found the online resources and activities.

Head Start Plus

Head Start Plus is also an online skills development course, designed to support students who are about or who have just started study at Level 5 or 6 (2nd and 3rd year undergraduate). This course is particularly recommended to students who may not have studied at HE level for some time or who are transitioning into the higher HE levels. The course provides a useful refresh on academic skills and practice and an insight into the expectations of tutors at those levels.

This course is free and available via the Open Education Platform powered by Blackboard. To access the course, follow the link to https://openeducation.blackboard.com/cumbria and set-up a free account with Open Education. Once logged on, select the course free of charge and work through it at your own pace.

Peer Mentoring @ Cumbria

You will be allocated a student Mentor who will be in touch to offer a non-judgemental and friendly hand and to help with various aspects of your student experience, from making friends to settling in, to helping you understand the expectations of academic study and dealing with assessment worries.

Mature Students' Events

Whether it is a coffee morning, lunchtime gathering or a social event, there are events happening throughout the year to link you up with other mature students who will also be juggling a number of commitments alongside their studies.

Help is at Hand Events

Keep a look out for these interactive events on campus around October and January. You are encouraged to attend these as they showcase the range of support available here and give you the opportunity to talk to people from Finance, Accommodation, the Students' Union, the Wellbeing and Disability Team etc.

Career Ahead+

Career Ahead+ is the University of Cumbria's Employability Award. Completing Career Ahead+ will help you recognise and develop your skills, providing a greater opportunity for you to get the job you want when you graduate. The award is based on what employers look for in an ideal candidate, in relation to skills, knowledge and experience. You will be supported with career direction, gaining experience, and providing all the skills needed to complete the perfect application and be successful in that all-important job interview. Contact careerahead@cumbria.ac.uk or visit www.cumbria.ac.uk/careerahead for more information.

Programme Curriculum Map					
Academic Level	**Module Code**	**Module Title**	**Credits**	**Module Status***	**Programme Outcomes achieved**
3	UNIF3003	Essential University Skills 1	20	Compulsory	K01, S01
3	UNIF3005	Essential Biology	20	Compulsory	K02, S01
3	UNIF3015	Scientific Investigation	20	Compulsory	K01, K02, S03
3	UNIF3004	Essential University Skills 2	20	Compulsory	K02, S01
3	UNIF3017	Environmental Sciences	20	Compulsory	K01, K01, S01, S02
3	UNIF3018	Dynamic Earth	20	Compulsory	K01, K02, S02, S03
4	HSOC4100	Conservation Skills and Practice	20	Compulsory	K1 & K3 S2, S3, S5 & S6
4	HSOC4101	Introduction to Conservation Biology	20	Compulsory	K1, K2, K3, K6, K7, K8 & K9 S2, S3, S5 & S6
4	HSOC4105	Biodiversity 1	20	Compulsory	K1, K4, K5, K7 & K9 S1, S2, S3, S5 & S6
4	HSOC4106	Biodiversity 2	20	Compulsory	K1, K4, K5, K7 & K9 S1, S2, S3, S5 & S6
4	HSOC4108	Introduction to Ecology	20	Compulsory	K1, K2, K3, K5, K6, K7, K8 & K9 S1, S2, S3, S4, S5, & S6
4	HSOC4107	Aquatic Environments	20	Compulsory	K1, K2, K3, K4, K5, K6, K7, K8 & K9

					S1, S2, S3, S4, S5 & S6
5	HSOC5113	Biodiversity Monitoring	20	Compulsory	K1, K2, K3, K4, K5, K6, K7, K8 & K9 S1, S2, S3, S4, S5, S6 & S7
5	HSOC5103	Evolution & Biogeography	20	Compulsory	K1, K2, K3, K6, K7 & K9 S3, S5 & S6
5	HSOC5110	Freshwater Ecology	20	Compulsory	K1, K2, K3, K4, K5, K6, K7, K8 & K9 S1, S2, S3, S4, S5 & S6
5	HSOC5100	Research Methods & Data Analysis	20	Compulsory	K1, K5, K6 & K9 S3, S5, S6 & S7
5	HSOC5111	Marine Ecology	20	Compulsory	K1, K2, K3, K4, K5, K6, K7, K8 & K9 S1, S2, S3, S4, S5 & S6
Additionally, choose 20 credits from the following:					
5	HSOC5112	Conservation Genetics	20	Optional	K1, K3, K4, K5, K6, K7 & K9 S1, S2, S3, S5 & S6
5	HSOF5102	Geographic Information Systems	20	Optional	K2, K3, K4, K5, K6, K7, K8 & K9 S3, S4, S5 & S6
5	HSOR5010	Valuing the Environment	20	Optional	K3, K5, K8, & K9 S6, S7 & S8
6	HSOC6100	Dissertation	40	Compulsory	K1, K2, K3, K4, K5, K6, K7, K8 & K9 S1, S2, S3, S4, S5, S6, S7, S8 & S9
6	HSOC6110	Management of Aquatic Resources	20	Compulsory	K1, K2, K3, K4, K5, K6, K7, K8 & K9

					S2, S3, S4, S5, S6, S7, S8 & S9
6	HSOC6116	Applied Field Studies	20	Compulsory	K1, K2, K3, K4, K5, K6, K7, K8 & K9 S1, S2, S3, S4, S5, S6, S7, S8 & S9
6	HSOC6111	Conservation in Marine & Freshwater Ecosystems	20	Compulsory	K1, K2, K3, K4, K5, K6, K7, K8 & K9 S3, S5, S6, S7, S8 & S9
Students will choose 20 credits from the following:					
6	HSOF6112	Advanced GIS and Remote Sensing	20	Optional[1,2]	K1, K3, K4, K6, K7, K8 & K9 S4, S5, S6, S7, S8 & S9
6	HSOC6117	Conservation Strategies	20	Optional[1]	K1, K4, K5, K6, K7, K8 & K9 S2, S3, S5, S6, S8 & S9
6	HSOC6115	Wildlife Management	20	Optional	K3, K5, K6, K7, K8 & K9 S2, S3, S4, S5, S6, S8 & S9

Notes

[1] This optional module may be subject to availability and viability. If we have insufficient numbers of students interested in an optional module in any given academic year, this may not be offered. If an optional module will not be running, we will advise you as soon as possible and help you choose an alternative module. Optional modules are normally selected 3 - 5 months in advance.

A failed student will not be permitted to re-register on the same programme

[2]Requires HSOF5102 Geographic Information Systems as prerequisite

* **Key to Module Statuses**	
Core Modules	Must be taken and must be successfully passed

Compulsory Modules	Must be taken although it may possible to condone/compensate as a marginal fail (within the limits set out in the Academic Regulations and provided that all core or pass/fail elements of module assessment have been passed)
Optional Modules	Are a set of modules from which you will be required to choose a set number to study. Once chosen, it may possible to condone/compensate as a marginal fail (within the limits set out in the Academic Regulations and provided that all core or pass/fail elements of module assessment have been passed)
Qualificatory Units	These are non- credit-bearing pass/fail components that are used to satisfy relevant professional, statutory or regulatory body professional requirements that are associated with the programme

Programme Delivery Structure: Full Time				
Module Code	**Module Title**	**Delivery Pattern**	**Method(s) of Assessment**	**Approximate Assessment Deadline**
		Autumn Semester / Spring Semester / Extended Spring Semester / Year-Long		
UNIF3003	Essential University Skills 1	Autumn	Written assignment (50%) Presentation (50%)	Mid Semester 1 End Semester 1
UNIF3004	Essential University Skills 2	Spring	Written assignment (50%) Presentation (50%)	Mid Semester 2 End Semester 2
UNIF3005	Essential Biology	Autumn	Portfolio (50%) Set Exercise (50%)	Mid Semester 1 End Semester 1
UNIF3015	Scientific Investigation	Autumn	Set Exercise (50%) Report (50%)	Mid Semester 1 End Semester 1
UNIF3018	Dynamic Earth	Spring	Set Exercise (50%) Written Exam (50%)	Mid Semester 2 End Semester 2
UNIF3017	Environmental Sciences	Spring	Portfolio (100%)	End Semester 2
Students exiting at this point with 120 credits would receive a FDCert Science				
HSOC4100	Conservation Skills and Practice	Autumn Semester	20% portfolio 80% report	Autumn Semester

HSOC4101	Introduction to Conservation Biology	Autumn Semester	50% written assignment 50% written assignment	Autumn Semester
HSOC4105	Biodiversity 1	Autumn Semester	70% portfolio 30% written assignment	Autumn Semester
HSOC4106	Biodiversity 2	Spring Semester	70% portfolio 30% presentation	Spring Semester
HSOC4108	Introduction to Ecology	Spring Semester	70% written assignment 30% portfolio	Spring Semester
HSOC4107	Aquatic Environments	Spring Semester	50% written assignment 50% written assignment	Spring Semester
Students exiting at this point with 240 credits would receive a CertHE Conservation Biology				
HSOC5113	Biodiversity Monitoring	Autumn Semester	50% report 50% report	Autumn Semester
HSOC5100	Research Methods & Data Analysis	Year Long	30% practical skills assessment 70% written assignment	Spring Semester
HSOC5110	Freshwater Ecology	Autumn Semester	50% written assignment 50% written assignment	Autumn Semester
HSOC5111	Marine Ecology	Spring Semester	40% oral presentation 60% written assignment	Spring Semester
HSOC5103	Evolution & Biogeography	Autumn Semester	40% poster presentation 60% written assignment	Autumn Semester

Plus 20 credits from one of the following:				
HSOC5112	Conservation Genetics	Autumn Semester	60% project work 40% written assignment	Autumn Semester
HSOF5102	Geographic Information Systems	Autumn Semester	70% portfolio 30% written assignment	Autumn Semester
HSOR5010	Valuing the Environment	Spring Semester	40% written assignment 60% set exercise	Spring Semester
Students exiting at this point with 360 credits would receive a DipHE Marine & Freshwater Conservation				
HSOC6100	Dissertation	Year Long	20% poster presentation 80% dissertation thesis	Autumn Semester Spring Semester
HSOC6110	Management of Aquatic Resources	Autumn Semester	50% written assignment 50% written exam	Autumn Semester
HSOC6116	Applied Field Studies	Autumn Semester	20% oral presentation 80% written assignment	Autumn Semester
HSOC6111	Conservation in Marine & Freshwater Ecosystems	Spring Semester	50% oral presentation 50% written exam	Spring Semester
Plus 20 credits from the following:				
HSOF6112	Advanced GIS and Remote Sensing	Spring Semester	70% project work 30% written assignment	Spring Semester
HSOC6117	Conservation Strategies	Spring Semester	60% oral presentation	Spring Semester

			40% written assignment	
HSOC6115	Wildlife Management	Spring Semester	30% oral presentation 70% written assignment	Spring Semester
Students exiting at this point with 420 credits would receive an Ordinary BSc Marine & Freshwater Conservation				
Students exiting at this point with 480 credits would receive a BSc (Hons) Marine & Freshwater Conservation				

Methods for Evaluating and Improving the Quality and Standards of Learning	
Mechanisms used for the Review and Evaluation of the Curriculum and Learning, Teaching and Assessment Methods	• Annual Monitoring • External Examiner reports • Formative assessment • Module Evaluation • National Student Survey (NSS) • Peer review and internal staff moderation • Penultimate Year Survey (PYS) • Programme validation and periodic review • Student and staff module evaluation • Student Success and Quality Assurance Committee • Student/staff forums • Level 3 Management Group
Mechanisms used for gaining and responding to feedback on the quality of teaching and the learning experience – gained from: Students, graduates, employers, placement and work-based learning providers, other stakeholders, etc.	• Academic Quality and Standards Committee (AQSC) • Alumni • Group tutorials and informal student feedback • Meetings with External Examiners • Module Assessment Board • Module Evaluation Forms • Module/Programme/Personal tutorials • National Student Survey NSS • Penultimate Year Survey (PYS) • Programme evaluation • Student/staff forums • University Assessment Board • University Board and Faculty Management Team

Date of Programme Specification Production:	25.02.2020
Date Programme Specification was last updated:	May 2024
For further information about this programme, refer to the programme page on the University website:	

https://www.cumbria.ac.uk/study/courses/undergraduate/marine-and-freshwater-conservation-with-integrated-foundation-year

The following information has implications for potential international applicants who require a Tier 4 visa to study in the UK	
Is the placement requirement more than 50% of the programme?	No
If yes, what % of the programme is the placement requirement?	
If yes, is the amount of placement a statutory requirement to meet Professional, Statutory or Regulatory Body (PSRB) or Department of Education requirements?	