

Programme Specification

Programme Title and Name of Award	BSc (Hons) Microbiology (with integrated foundation year)		
Academic Level	Level 6	Total Credits	480
Professional Body Accreditation / Qualification	Not applicable		
Date of Professional Body Accreditation	Not applicable	Accreditation Period	Not applicable
UCAS Code	C501		
HECoS Code	100353		
Criteria for Admission to the Programme	<p>The University's standard criteria for admissions apply. Please refer to the Applicant Information pages of the University website for more information. For APL, please refer to the University website. Please note that APL will not be permitted at Level 3 on this programme</p> <p>https://www.cumbria.ac.uk/study/courses/foundation-courses/</p> <p>Detailed criteria for admission to this programme can be found on the programme webpage:</p> <p>https://www.cumbria.ac.uk/study/courses/undergraduate/microbiology-with-integrated-foundation-year/</p>		
Teaching Institution	University of Cumbria		
Owning Department	Science, Natural Resources and Outdoor Studies		
Programme delivered in conjunction with	NA		
Principal Mode of Delivery	Face to Face, Blended learning		
Pattern of Delivery	Full Time		
Delivery Site(s)	Fusehill Street Campus, Carlisle.		

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. BSc Microbiology (300 credits) DipHE Microbiology (240 credits) CertHE Microbiology (120 credits) FdCert Science (120 credits)
Period of Approval	1 st August 2020 to 31 st July 2026

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

Microbiology is the study of bacteria, viruses, fungi and protozoa all of which have an impact on human health, the environment, food and pharmaceutical industries. Micro-organisms may be both harmful or beneficial and our understanding of their importance continues to grow through advancements such as genome sequencing. Some of the most important discoveries that have underpinned modern society resulted from the research of microbiologists. Microbiology research has been, and continues to be, central to meeting many current global aspirations and challenges, such as maintaining food, medication and energy security for a healthy population.

Micro-organisms affect every aspect of life on Earth and whether you're fascinated by the genetics of microbial resistance and aspire to make advances in the fight against disease this modern Degree

Programme offers you the chance to study and research topical, worldwide issues preparing you for a rewarding career as a Microbiologist. The BSc (Hons) Microbiology is further designed to give a broad appreciation of the biology of organisms of microscopic size drawing on the mammalian immune response to infection whilst considering their many positive roles in industry now and for the future.

The integrated foundation year (Year 0) 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 Microbiology 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 Microbiology 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, Chemistry, 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, Essential Chemistry, 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.

The Programme is delivered by academic staff with extensive teaching, research and professional expertise. They bring together a wealth of knowledge and experience and are committed to providing high quality guidance and support. The course provides a substantial amount of laboratory based experiential learning alongside small group lectures and tutorials. The development of laboratory skills is therefore central to the programme and you will have regular access to our new, well-equipped science laboratories (Category 1 and Category 2) allowing you to learn in environments that closely replicate the workplace setting.

Guided by the themes of sustainability, creativity and employability, the University of Cumbria's mission is to provide and promote excellent and accessible higher education, which enhances the lives of individuals and fosters development of the communities to which we belong. Our primary goal is to develop a creative approach to teaching and assessing undergraduate science students, in order to support enquiry based learning, encourage independent thinking and establish relevance and understanding. The research profile and scientific interests of the staff team will inevitably enrich and influence curriculum development allowing for the insertion of case studies and inclusion of relevant knowledge and good practice in order to ensure module content integrity and relevance with regards to both content and the development of transferable skills.

This programme aims to incrementally increase your subject knowledge alongside, your academic development and further seeks to ensure that at the point of graduating you have the relevant employability skills for your chosen career path. We aim to provide a package that will allow you to maximise your potential in your future career, be it in academia, industry or commerce and feed your passion for all things microbiological.

In conclusion: The BSc (Hons) Microbiology is geared towards addressing the needs of employees who work in a wide range of scientific settings. Developing your understanding of how science and technology is currently applied, within the field of Microbiology will inevitably increase your employability without narrowing down your career choice. Furthermore, the structure and delivery of

the Programme makes it accessible to a wide audience in terms of employment status and age. The course also provides a suitable platform for you to enter employment within other areas of science or to proceed to specialised postgraduate programmes of study.

The primary aim is to provide graduates with relevant, transferable skills with which to enter the science industry. As such, a wide range of transferable skills are covered. These include:

- Communication
- Group work
- Problem solving
- Data analysis
- Use of information technology
- Improving own learning and performance

The development of these skills and qualities is embedded throughout the Programme. For example, effective group work is encouraged within the laboratory setting, verbal communication skills through the delivery of short presentations and written communication skills through the production of scientific reports.

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 Microbiology.
3. To develop the academic personal and professional skills required to work in the context of Microbiology.
4. To instil in students an enthusiasm for biology and involve them in an intellectually stimulating experience of learning.
5. To develop an inter-disciplinary approach to science and technology and appreciation of the biosciences in an industrial, academic, economic and social context.
6. To develop critical awareness of advances at the forefront of biological science and provide students with the ability to plan and conduct experiments independently.
7. To provide students with a knowledge and skills base needed for success in their undergraduate studies and from which they can proceed to postgraduate study.

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 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.
- Communicate solutions, arguments and ideas clearly and in a variety of forms.
- Exercise considerable 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 Microbiology.

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

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

K1. Knowledge of a wide range of cells, and how their properties suit them for biological methods.

K2. Competence in both the basic experimental skills appropriate to the discipline under study and in the methods utilised to interpret and analyse biological and chemical information.

K3. Awareness of the contribution of their subject to development of knowledge about the diversity of life and its evolution.

K4. Familiarity with the terminology, nomenclature and classification systems as appropriate.

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

K5. An appreciation of the complexity and diversity of life processes through the study of organisms, their molecular, cellular and physiological processes, their genetics and evolution and the interrelationships between them and their environment.

K6. Understanding of how biosciences knowledge forms the basis for informed concern about the quality and sustainability of life.

K7. Knowledge of subject specific theories, paradigms, concepts or principles (for example the relationship between genes and proteins and the nature of essential nutrients in microbes).

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

K8. Engagement with current scientific developments and demonstrate an awareness and appreciation of the ethical and philosophical issues involved and the potential contribution bioscience research may make to the quality and sustainability of life.

K9. Knowledge in the methods of acquiring, interpreting and analysing information with a critical understanding of the appropriate contexts for their use through the study of texts, papers, reports and data sets.

K10. An appreciation of how their skills and learning contribute to the many careers to which graduates will be progressing.

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. The ability to apply a range of mathematical tools in the context of Microbiology.

S03. Demonstrate specific skills, techniques and competencies needed to study and work in Microbiology.

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

S1. Use and interpret a variety of sources of information: textual, numerical, verbal, graphical.

S2. Discipline and subject specific skills associated with good laboratory practice including the safe handling of specimens, sample preparation, aseptic techniques and the use of relevant

instrumentation taking into account factors such as accuracy, calibration, precision and replicability and accurate interpretation of data.

S3. Recognise and apply subject-specific theories, paradigms, concepts or principles.

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

S4. Carry out sample selection; record and analyse data in the laboratory; ensure validity, accuracy, calibration, precision, replicability and highlight uncertainty during collection.

S5. Communication skills (both oral and written): including the ability to use technical language correctly, present complex concepts and information in a clear and concise manner, and interact and communicate effectively to a variety of audiences.

S6. Investigative and analytical skills: including the ability to formulate problems clearly, identify key issues, design, plan and conduct an independent investigation taking health and safety into consideration and apply critical judgement to construct logical arguments.

S7. Develop the skills necessary for self-managed and lifelong learning (e.g. working independently, time management, organisational, enterprise and knowledge transfer skills).

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

S8. Critical and analytical skills including a recognition that statements should be tested and that evidence is subject to assessment and critical evaluation.

S9. The ability to plan, execute and present a piece of hypothesis driven work within a supported framework in which qualities such as time management, problem solving and independence are evident.

S10. Recognise the moral and ethical issues of investigations and appreciate the need for ethical standards and profession codes of conduct.

S11. The ability to read and use appropriate literature with a full and critical understanding, while addressing such questions as content, context, aims, objectives, quality of information and its interpretation and application.

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:

Programme outcomes are aligned to the QAA Subject Benchmark Statements for Biosciences (2015) <http://www.qaa.ac.uk/en/Publications/Documents/Subject-benchmark-statement-Biosciences.pdf>.

The Society of Biology www.societyofbiology.org

Other internal reference points:

- [UoC Strategic Plan](#)
- [UoC Learning, Teaching and Assessment Strategy](#)
- [UoC Academic Regulations and Academic Procedures and Processes](#)

The Foundation Year is designed for students who have the ability to study for a degree but don't have the qualifications to enter directly onto a three year (FT) honours degree. It therefore attracts many students from non-traditional educational backgrounds and under-represented groups.

Graduate Prospects

Employers value the analytical, problem-solving skills developed by microbiology graduates. Microbiology overlaps with other areas of biology such as genetics, molecular biology and immunology. This means there are opportunities for a microbiology-related career in a wide range of sectors. Typical employers include:

- Healthcare organisations such as the NHS.
- Public health organisations.
- Environmental organisations.
- Industry - food and drink, pharmaceuticals, agriculture, water.
- Publicly funded research organisations
- Educational institutions.
- Students may also proceed to postgraduate study (e.g. MSc/PhD).

Typical responsibilities within a microbiological role include:

- Collect samples from diverse environments.
- Monitor and assess samples with a view to identifying micro-organisms.
- Conduct a variety of identification methods, including molecular techniques with which to test samples.

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.

The programme of teaching and learning is designed to enable you to demonstrate the attainment of the stated learning outcomes of the programme and assessment strategies are as such matched to these outcomes. You will be supported in a progressive acquisition of subject knowledge and skills, gradually advancing towards more independent learning whilst developing a reflective approach to personal progress.

Overarching considerations are the demonstrable acquisition by you of a clear appreciation of the scientific approach, and of the knowledge, skills and capacities needed for employment or further study. Above all, learning, teaching and assessment are designed to engage you in experiences that are enriching, enjoyable and intellectually stimulating.

Our learning and teaching strategy has been developed in line with the University's Learning, Teaching and Assessment Strategy 2017-2022. Encapsulated within the first aim of the programme is a drive to engage all students in learning experiences that are enriching, enjoyable and intellectually stimulating. All modules therefore include opportunities for engagement and participation.

Campus based learning is the predominant experience with attendance at all scheduled sessions seen as imperative to student progression. This is further enhanced by the use of 'virtual learning environments' (VLE) for example Blackboard where each module studied has a designated blackboard site providing not only standard lecture and practical material but supplementary reading, virtual exercises and the capacity for online forums. The utilisation of VLE allows for flexibility in learning whereby materials may be accessed at an individual's convenience on site or via remote access.

Learning and Teaching

The Department 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, 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.

A variety of learning and teaching methods are used to both reflect the variety of learning styles that inevitably exist within a group and ensure the acquisition and development of appropriate concepts, knowledge and skills. Using a blended approach, we will use multiple methods to deliver your learning, combining face-to-face sessions with online activities for example, by attending traditional lectures or through interaction with our virtual learning environment. This will enable you to experience teaching methods best suited to your own preferred learning style. Enhancing employability is a core theme throughout the programme therefore our learning and teaching methods are designed to support the move to autonomy and independent learning. For example, industry highly values micro-pipetting techniques and throughout HSOB4001 Introductory Biochemistry where you are required to develop your ability to pipette accurately over number of assays. This embeds the technique, which can then be refined in other modules.

Another example of how we develop learning and teaching is demonstrated in the anatomy and physiology module HSOB4003 where you learn to recognise what normal cells look like through the utilisation of real images, simulation and case study. From this you then explore how to recognise an 'abnormal' state, this then feeds in directly into higher-level modules where you will use the skills acquired to identify appropriate landmarks and form judgement.

In addition, some modules are shared with other student cohorts so that you will benefit from varied perspectives and approaches. Furthermore, industry based knowledge is applied across several of the modules ensuring the techniques practised are of the relevant standard and are transferable upon graduating.

Learners are expected and encouraged to be reflective in their learning and as such the strategies adopted focus on deep and experiential learning and typically include:

- lectures
- laboratory classes (Category 1 and Category 2 laboratories).
- individual and group tutorials
- the utilisation of case studies
- seminars and workshops
- directed and independent study involving electronic resources (VLE), textbooks and other self-study materials
- problem-based learning
- training and practice in the use of IT
- project work, both individually and in groups
- reading and interpreting research publications

Assessment Strategy

Our assessment strategy has also been developed to be in line with the University's Learning, Teaching and Assessment Strategy 2017-2022.

Module assessments at level 3 introduce students to the type of assessments that they will encounter as they progress through their 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 in both content and approach.
- be fully supported by, and integrated with, technological approaches such as the Blackboard virtual learning environment (VLE).
- impart academic rigour to the teaching and learning processes.
- support the development of independence, autonomy and self-reflection.
- support learners' needs at different stages of development.

The assignments themselves have been designed with the employer in mind. For example, within the modules Microbiological Techniques and Microbial Genetics, you will undertake assessment that is predominantly practical in nature. This will involve preparing the required growth media, culturing the samples and identifying them using a range of both molecular and biochemical tests. The tests utilised are those routinely adopted within the industrial setting.

Within a balanced scheme, assessment methods will include:

- examinations
- open book examinations

- short note class tests.
- laboratory reports
- computer-based assessments
- problem solving exercises (both of a practical and written format)
- critical analysis of case studies of both national and international importance.
- oral, audio-visual and poster presentations
- dissertations
- peer and self-assessment
- group work

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

Summative and Formative Assessment

The adopted assessment methods:

- Are designed to provide a creative and balanced strategy across the programme
- Enable the valid testing of the programme learning outcomes
- Work to enable the development of independent and autonomous thinkers
- Are relevant to the needs of the workplace, allowing for authentic assessment.

Formative assessment is used extensively throughout the Programme. The emphasis is on a more developmental approach to building the knowledge and skills you will need to enter employment. Formative assessment encourages you to think about the learning process and develop your ability to learn independently.

Supporting Student workload.

Each year the team work together to create an assessment matrix. The idea of the matrix is to ensure that all staff and students are made aware of upcoming deadlines and to ensure there is appropriate spread across the academic year.

Employability Plan

Enhancing your employability is embedded within the programme aims, outcomes, learning activities and assessments. For example, each module works towards developing key transferable skills as well as deepening the level of scientific knowledge accrued. The employability skills targeted are highlighted within the learning outcomes of the module or individual assessment brief allowing for transparency.

Specialist Teaching Accommodation and Equipment

The development of laboratory skills is central to the programme and you will have access to well-equipped science laboratories (Cat.1 and Cat. 2), which host a range of equipment that may be utilised in scientific investigation allowing for the development of skillsets that are transferable to industry.

Support for International Students

The English Language entry requirement for this programme is IELTS 6 or equivalent, with no less than 5.5 in each skill. Language support will be provided, as required, for students whose first language is not English. This is in addition to the range of academic support offered through IS.

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 Learning Information and Student Support service (LiSS). They will run sessions on expectations for studying in higher education and show you around the library and learning resources. You will receive a programme handbook which will clearly explain your award, how it will run, and the people involved. In addition, it will provide hyperlinks where you will find help on module enrolment, assessment submission and if you need to apply for 'extenuating circumstances'. Your programme handbook will also include further information on the options available to you at levels 5 and 6 and the Programme Leader and Module Leaders will support you through this decision making process, to help you to achieve your personal goals and ambitions. 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.

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 [Onelist](#).

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.

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.

Head Start

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

This is the university's one-to-one voluntary mentoring scheme, traditionally matching individual first year students with second and third year Cumbria Student Mentors; however, any student may request a mentor if needed. This scheme provides unique pastoral support to new students during their transition into university life. It is also a great opportunity for more experienced students to broaden their own skill-set through the specific training all new mentors undergo, and through the practices they will utilise throughout the mentoring process.

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 for BSc (Hons) Microbiology.					
Academic Level	Module Code	Module Title	Credits	Module Status*	Programme Outcomes achieved
3	UNIF3003	Essential University Skills 1	20	Compulsory	K02, S01
3	UNIF3005	Essential Biology	20	Core	K02, S01
3	UNIF3015	Scientific Investigation	20	Compulsory	K01, K02, S03
3	UNIF3004	Essential University Skills 2	20	Compulsory	K02, S01
3	UNIF3016	Essential Chemistry	20	Core	K02, S01
3	UNIF3017	Environmental Sciences	20	Compulsory	K01, K02, S01, S02
4	HSOB4001	Introductory Biochemistry	20	Compulsory	K2, K3, K4, S1, S2, S3
4	HSOB4002	Cell Biology	20	Compulsory	K1, K2, K3, K4, S1, S2, S3
4	HSOB4003	Human Anatomy and Physiology	20	Compulsory	K2, K3, K4, S1, S2, S3
4	HSOB4004	Introductory Microbiology and Immunology	20	Compulsory	K1, K2, K3, K4, S1, S2, S2
4	HSOB4005	Molecular Biology	20	Compulsory	K1, K2, K3, K4, S1, S2, S3
4	HSOB4006	Practical Laboratory Science	20	Compulsory	K1, K2, K3, K4, S1, S2, S3
5	HSOS5106	Exploring Research	20	Compulsory	K2, K9, S4, S8
5	HSOB5003	Introduction to Bioinformatics	20	Compulsory	K5, K6, K7, S5, S6, S7
5	HSOB5005	Infection and Immunity	20	Compulsory	K5, K6, K7, S4, S5, S6, S7
5	HSOB5006	Medical Microbiology	20	Compulsory	K5, K6, K7, S4 S5, S6, S7,

5	HSOB5007	Microbial Genetics	20	Compulsory	K5, K6, K7, S4, S5, S6, S7
5	HSOB5008	Microbiological Techniques	20	Compulsory	K5, K6, K7, S4, S5, S6, S7
6	HSOB6001	Bioethics	20	Compulsory	K8, K9, K10, S8, S10, S11
6	HSOB6005	Advanced Genetics	20	Compulsory	K8, K9, K10, S8, S10, S11
6	HSOS6106	Dissertation	40	Compulsory	K8, K9, K10, S8, S9, S10, S11
6	HSOB6002	Parasitology	20	Compulsory	K8, K9, K10, S8, S10, S11
6	HSOB6006	Microbial Biotechnology	20	Compulsory	K8, K9, K10, S8, S9, S10, S11

Notes

This programme operates in accordance with the University's Academic Regulations and Academic Procedures and Processes. This programme contains at least one core module at Level 3 and as such in addition to any other progression requirement this/ these module(s) must be passed in order for you to continue on this programme at Level 4. If you have passed all your other modules at Level 3 but have a confirmed fail in a core module, with a mark of between 35% and 39%, then a transfer to another integrated foundation programme for Level 4 study, where the programme does not have any core modules at Level 3, may be considered. 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.

Students must achieve an aggregate mark of 40% for each module. A failed student will not be permitted to re-register on the same programme.

* 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: BSc (Hons) Microbiology				
Module Code	Module Title	Delivery Pattern	Method(s) of Assessment	Approximate Assessment Deadline
		Autumn Semester / Spring Semester		
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%) Written Exam (50%)	Mid Semester 1 End Semester 1
UNIF3015	Scientific Investigation	Autumn	Set Exercise (50%) Report (50%)	Mid Semester 1 End Semester 1
UNIF3016	Essential Chemistry	Spring	Portfolio (40%) Written Exam (60%)	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				
HSOB4001	Introductory Biochemistry	Spring Semester	Report 40% Exam 60%	Mid Semester 2 End Semester 2
HSOB4002	Cell Biology	Autumn Semester	Written assignment 40% Exam 60%	End Semester 1 End Semester 1

HSOB4003	Human Anatomy and Physiology	Autumn Semester	Oral Presentation 40% Exam 60%	Mid Semester 1 End Semester 1
HSOB4004	Introductory Microbiology and Immunology	Spring Semester	Written Assignment 40% Exam 60%	Mid Semester 2 End Semester 2
HSOB4005	Molecular Biology	Year long	Set exercises 100%	End Semester 2
HSOB4006	Practical Laboratory Science	Year long	Portfolio 100%	End Semester 2
Students exiting at this point with 240 credits would receive a CertHE Microbiology				
HSOS5106	Exploring Research	Spring Semester	Written Assignment 60% Project Work 40%	Mid Semester 2 End Semester 2
HSOB5003	Introduction to Bioinformatics	Spring Semester	Portfolio 100%	End Semester 2
HSOB5005	Infection and Immunity	Autumn Semester	Oral Presentation 40% Exam 60%	End Semester 1 for both
HSOB5006	Medical Microbiology	Spring Semester	Written assignment 40% Exam 60%	End semester 2 for both
HSOB5007	Microbial Genetics	Autumn Semester	Oral Presentation 40% Exam 60%	Mid Semester 1 End Semester 1
HSOB5008	Microbiological Techniques	Autumn Semester	Portfolio 100%	End Semester 1
Students exiting at this point with 360 credits would receive a DipHE Microbiology				
HSOB6001	Bioethics	Spring Semester	Oral Presentation 30% Written assignment 70%	Mid Semester 2 End Semester 2

HSOB6002	Parasitology	Autumn Semester	Written assignment 50% Exam 50%	Mid Semester 2 End Semester 2
HSOB6005	Advanced Genetics	Autumn Semester	Written assignment 50% Exam 50%	End Semester 1 for both
HSOB6006	Microbial Biotechnology	Spring Semester	Project Work 60% Exam 40%	End Semester 2 for both
HSOS6106	Dissertation	Year long	Set Exercise 0% Oral Presentation 20% Dissertation 80%	Mid Semester 1 End Semester 1 End Semester 2
<p>Students exiting at this point with 420 credits would receive an Ordinary BSc Microbiology</p> <p>Students exiting at this point with 480 credits would receive a BSc (Hons). Microbiology</p>				

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

Modules are evaluated regularly by the Programme team and by students as per university guidelines. Each year an annual evaluatory review is produced for the programme, which goes on to inform the AMR. In addition, staff take part in annual peer review of teaching and learning activities, which is shared with the Head of Department, good practice being shared with the group.

The external examiner will be contacted throughout the year as an external reference point, and as a source of inspiration/critical support. An external examiner report and response is produced annually. General reporting mechanisms include:-

- Module Evaluation
- Programme Validation and Periodic Review
- Annual Monitoring
- Peer Review of Teaching
- External Examiner Reports
- Student Success and Quality Assurance Committee
- 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.

- Staff Student Forum
- Module Evaluation Forms
- Programme Evaluation: National Student Survey, UK Engagement Survey
- Module/Programme/Personal tutorials
- Meetings with External Examiners

Date of Programme Specification Production:

31/1/19

Date Programme Specification was last updated:

04/10/2019

For further information about this programme, refer to the programme page on the University website:-

<https://www.cumbria.ac.uk/study/courses/undergraduate/microbiology-with-integrated-foundation-year/>