

Science Foundation Year Description

Title of programme:

This specification provides a concise summary of the main features of the programme and the learning outcomes that a typical student might reasonably be expected to achieve and demonstrate if s/he takes full advantage of the learning opportunities that are provided.

Awarding Institution	University of Southampton
Teaching Institution	University of Southampton
Accreditation details	Leading to accredited degree programmes
Final award	Successful completion of the Foundation Year guarantees progression to any degree programme within the disciplines specified in this document.
UCAS code	CB71 (Biochemistry/Biomedical Sciences/Pharmacology); C108 (Biology/Zoology); F108 (Chemistry); F903 (Environmental Sciences); F602 (Geology); F701 (Oceanography); F705 (Marine Biology)
Programme Director	Professor Anna Barney
Programme Lead	Dr David Read
Date specification was written	December 2011 (transferred into new format in March 2015)
Date Programme was validated	June 2012

Programme Overview

Brief outline of the programme

The Foundation Year exists to prepare students without the traditional entry qualifications of A levels in at least two science subjects (or equivalent qualifications) for entry to specified degree courses provided by Biological Sciences, Ocean and Earth Sciences, Chemistry and Environmental Science.

Learning and teaching

You will acquire knowledge and understanding through a mixture of lectures, small group teaching in workshops, supported problem solving, tutorials, practical demonstrations, laboratory work, private study and (non-assessed) coursework.

Assessment

You will be assessed through unseen written exams, short tests, assessed coursework in the form of laboratory reports, problems and other set assignments.

As a research-led University, we undertake a continuous review of our programmes to ensure quality enhancement and to manage our resources. As a result, this programme may be revised during a student's period of registration, however, any revision will be balanced against the requirement that the student should receive the educational service expected. Please read our [Disclaimer](#) to see why, when and how changes may be made to a student's programme.

Educational Aims of the Programme

The aims of the programme are to:

- develop your knowledge and understanding of facts, concepts and principles in the areas of biology and chemistry and related subjects;
- develop your understanding of scientific methods;
- develop your knowledge and understanding of the mathematics that underpins chemistry, biology and related sciences;
- prepare you to progress onto Year 1 of your chosen science degree course.

Programme Learning Outcomes

Knowledge and Understanding

Having successfully completed this programme you will be able to demonstrate knowledge and understanding of:

- A 1. facts, terminology, principles, concepts and practical techniques relevant to biology and chemistry;
- A 2. mathematical techniques and their application to science.

Teaching and Learning Methods

You will acquire knowledge and understanding through a mixture of lectures, small group teaching in workshops, supported problem solving, tutorials, practical demonstrations, laboratory work, private study and (non-assessed) coursework.

Assessment methods

You will be assessed through unseen written exams, short tests, assessed coursework in the form of laboratory reports, problems and other set assignments.

Subject Specific Intellectual and Research Skills

Having successfully completed this programme you will be able to:

- B 1. use scientific and mathematical principles and concepts to describe, explain phenomena;
- B 2. apply scientific and mathematical knowledge to solve unfamiliar problems
- B 3. use knowledge to analyse information/experimental results and draw valid conclusions;
- B 4. appreciate the applications and technological implications of scientific principles and concepts.

Teaching and Learning Methods

Intellectual skills are developed through the teaching and learning programme outlined above but especially through problem-solving, comprehension and data analysis exercises and group discussions. Individual and group feedback and advice on progress in these areas throughout the programme should enhance the development of these skills.

Assessment methods

The assessment methods described above place emphasis on your ability to demonstrate the intellectual skills listed here through the production of coherent answers to problems, suitable choices of methods and assumptions.

Transferable and Generic Skills

Having successfully completed this programme you will be able to:

- C 1. manage your own learning;
- C 2. solve problems;
- C 3. communicate effectively;
- C 4. record, analyse and evaluate data;
- C 5. apply mathematics;
- C 6. find information, cite & list references;
- C 7. use common IT tools.

Teaching and Learning Methods

These skills are developed in classes and tutorials through discussion and interaction as well as individual work. Managing your own learning is learnt, rather than taught, through the requirement to organise your private study and to meet the deadlines for submission of work; problem solving is a theme you will find running throughout the course as is the application of mathematics. Data recording, analysis and evaluation is developed through practical laboratory sessions and theoretical exercises. Effective communication is developed through a variety of assignments including essays and reports, group discussions and presentations. Finding information from different types of sources is developed through research for essays and reports.

Assessment methods

Assessment of these skills is integrated into the coursework for the programme. Effective communication and information skills are assessed through essays, reports and presentations. Data recording, analysis and evaluation are important in presenting the outcomes of laboratory work; application of mathematics and problem solving are generally assessed through unseen written examinations and coursework assignments. ICT skills are not directly assessed.

Subject Specific Practical Skills (optional)

Having successfully completed this programme you will be able to:

- D 1. work safely in the laboratory;
- D 2. use equipment accurately;
- D 3. observe and record results accurately;
- D 4. formulate hypotheses;
- D 5. design & carry out experiments, identify sources of error and limitations;
- D 6. make accurate drawings of biological specimens.

Teaching and Learning Methods

These skills are developed as part of the teaching and learning and are integrated into the courses, tutorials and individual work. Individual feedback on progress in developing these skills may be given during personal tutorials and problem solving classes.

Assessment methods

Assessment of these skills is integrated into the coursework for the programme.

Programme Structure

Typical course content

The Foundation Year is taught full time over 2 semesters. All modules in each semester are compulsory.

You will study the following modules over both semesters:

Module title	ECTS Points
Fundamentals of Biology	15
Fundamentals of Chemistry	15
Mathematics for Scientists	7.5
Laboratories and Coursework	15
Routes to Success	7.5

Progression Requirements

The regulations for progression from the Foundation Year to the next Part of your degree course are given below and in the University Calendar: <http://www.calendar.soton.ac.uk/sectionVIII/foundationregs.html> . These two sets of regulations should be read together.

In Semesters 1 & 2 formal assessment is through coursework and written examination. Written Examinations are held in held in January (Semester 1) and May/June (Semester 2). The formal assessment requirements are as follows:

There is an overall aggregate pass mark for all modules. To progress, you will be required to pass each individual module on the overall aggregate. You will also be required to achieve the qualifying mark in the Coursework and Routes to Success modules.

Students achieving the qualifying mark in the individual modules will be entitled to progress to the next Part of their degree course. The qualifying marks for individual modules are shown below:

Qualifying marks	
Fundamentals of Biology	60%
Fundamentals of Chemistry	60%
Mathematics for Scientists	60%
Laboratories and Coursework	60%
Routes to Success	60%

If you do not achieve the qualifying mark in modules worth up to 15 ECTS, you will be required to retake the assessment for the failed papers. This is known as “referral”. At referral, a student will be required to take all papers of a failed module for which a mark of less than the qualifying mark was achieved at the first attempt. Students may not refer in any paper where a mark equal to the qualifying mark was achieved or exceeded.

If you fail to achieve the qualifying marks in modules worth more than 15 ECTS, you will be required to retake the assessment for all the modules (including any modules where you achieved the qualifying mark). This is known as a “repeat”. You will only be allowed one attempt to repeat the Foundation Year.

If you are asked to refer and you do not achieve the qualifying mark for any individual module in the referral examination, you have the right to repeat.

Support for student learning

There are facilities and services to support your learning, some of which are accessible to students across the University and some of which will be geared more particularly to students in your particular Faculty or discipline area.

The University provides:

- library resources, including e-books, on-line journals and databases, which are comprehensive and up-to-date; together with assistance from Library staff to enable you to make the best use of these resources;
- high speed access to online electronic learning resources on the Internet from dedicated PC Workstations onsite and from your own devices; laptops, smartphones and tablet PCs via the Eduroam wireless network. There is a wide range of application software available from the Student Public Workstations;
- computer accounts which will connect you to a number of learning technologies for example, the Blackboard virtual learning environment (which facilitates online learning and access to specific learning resources);
- standard ICT tools such as Email, secure filestore and calendars;
- access to key information through the MySouthampton Student Mobile Portal which delivers timetables, Module information, Locations, Tutor details, Library account, bus timetables etc. while you are on the move;
- IT support through a comprehensive website, telephone and online ticketed support and a dedicated helpdesk in the University Library, Highfield Campus;
- Enabling Services offering support services and resources via a triage model to access crisis management, mental health support, and counselling;
- Assessment and support (including specialist IT support) facilities if you have a disability, long term health problem or Specific Learning Difficulty (e.g dyslexia), the Student Services Centre (SSC) to assist

you with a range of general enquiries including financial matters, accommodation, exams, graduation, student visas, ID cards;

- Career Destinations, advising on job search, applications, interviews, paid work, volunteering and internship opportunities and getting the most out of your extra-curricular activities alongside your degree programme when writing your CV;
- Other support that includes health services (GPs), chaplaincy (for all faiths), and 'out of hours' support for students in Halls (18.00 – 08.00);
- a Centre for Language Study, providing assistance in the development of English language and study skills for non-native speakers.

The Students' Union provides

- an academic student representation system, consisting of Course Representatives, Academic Presidents, Faculty Officers and the Vice-President Education; SUSU provides training and support for all these representatives, whose role is to represent students' views to the University.
- opportunities for extracurricular activities and volunteering
- an Advice Centre offering free and confidential advice including support if you need to make an academic appeal
- Support for student peer-to-peer groups, such as Nightline.

Associated with your programme you will be able to access:

- The individual module lecturers
- The Science Foundation Year Programme Leader
- A Liaison Tutor within your target academic School
- The Foundation Year Director
- Study skills and academic subject support through personal and group tutorials

Methods for evaluating the quality of teaching and learning

You will have the opportunity to have your say on the quality of the programme in the following ways:

- Completing student evaluation questionnaires for each module of the programme
- Acting as a student representative on various committees, e.g. Staff: Student Liaison Committees, Faculty Programmes Committee OR providing comments to your student representative to feed back on your behalf.
- Serving as a student representative on Faculty Scrutiny Groups for programme validation
- Taking part in programme validation meetings by joining a panel of students to meet with the Faculty Scrutiny Group

The ways in which the quality of your programme is checked, both inside and outside the University, are:

- Regular module and course reports which are monitored by the Faculty
- A major review of the Foundation Year, normally every five years with an External Advisor.
- A Principal Examiner, who checks academic standards and produces an annual report
- Professional body accreditation/inspection
- Institutional Review by the Quality Assurance Agency

Criteria for admission

University Commitment

The University will at all times seek to operate admissions regulations that are fair and are in accordance with the law of the United Kingdom, and the University's Charter, Statutes, Ordinances and Regulations.

This includes specific compliance with legislation relating to discrimination (e.g. Equality Act 2010) and the University's Equal Opportunities Policy Statement.

This includes a commitment that the University will:

- actively assist groups that experience disadvantage in education and employment to benefit from belonging to the University;
- actively seek to widen participation to enable students from groups that do not traditionally participate in Higher Education to do so;

- ensure that admission procedures select students fairly and appropriately according to their academic ability and that the procedure is monitored and regularly reviewed.

Entry Requirements

This Foundation Year is only for students who have not taken qualifications that would permit direct entry to our degree programmes.

Details of acceptable qualifications and required entry grades can be found on the Foundation Year web site:

http://www.southampton.ac.uk/undergraduate/courses/foundation_years/

Principal Examiner for the Science Foundation Year

Name Dr Chris Jackson

Students must not contact the Principal Examiner directly, and the Principal Examiner has been advised to refer any such communications back to the Foundation Year Director. Students should raise any general queries about the assessment and examination process for the Science Foundation Year with their Course Representative, for consideration through the Staff-Student Liaison Committee in the first instance, and Student representatives on Staff-Student Liaison Committees will have the opportunity to consider the Principal Examiner's reports as part of the University's quality assurance process.

The Principal Examiner does not have a direct role in determining results for individual students, and students wishing to discuss their own performance in assessment should contact the Science Foundation Year Programme Leader in the first instance.

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