Programme Specification

Science Foundation Year (2020-21)

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
Mode of Study: Full-time
Duration in years: 1
Accreditation details: None
Final award: Foundation Year Science
Name of award: Science Foundation Year
Interim Exit awards: Foundation Year Science

FHEQ level of final award: Level 0
UCAS code: CB71 (Biochemistry/Biomedical Sciences/Pharmacology); C108 (Biology/Zoology); F108 (Chemistry); F903 (Environmental Sciences); F602 (Geology); F701 (Oceanography); F705 (Marine Biology)

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.

Successful completion of the Foundation Year guarantees progression to any degree programme within the disciplines specified in this document

Your contact hours will vary depending on your module/option choices. Full information about contact hours is provided in individual module profiles.
Learning and teaching
You will acquire knowledge and understanding through a mixture of lectures, small group teaching in workshops, supported problem solving, practical demonstrations, laboratory work, private study and coursework (assessed and non-assessed).

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.

Programmes and major changes to programmes are approved through the University's programme validation process which is described in the University's quality handbook.

Special Features of the programme
N/A

Please note: 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.

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Educational Aims of the Programme
The aims of the programme are to: 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
On successful completion of this programme you will have knowledge and understanding of:

A1. Facts, terminology, principles, concepts and practical techniques relevant to biology and chemistry;
A2. 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**

On successful completion of this programme you will be able to:

B1. Use scientific and mathematical principles and concepts to describe, explain phenomena;
B2. Apply scientific and mathematical knowledge to solve unfamiliar problems
B3. Use knowledge to analyse information/experimental results and draw valid conclusions;
B4. 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**

On successful completion of this programme you will be able to:

C1. Manage your own learning;
C2. Solve problems;
C3. Communicate effectively;
C4. Record, analyse and evaluate data;
C5. Apply mathematics;
C6. Find information, cite & list references;
C7. 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

On successful completion of this programme you will be able to:

D1. Work safely in the laboratory;
D2. Use equipment accurately;
D3. Observe and record results accurately;
D4. Formulate hypotheses;
D5. Design & carry out experiments, identify sources of error and limitations;
D6. 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

The programme structure table is below:
Information about pre and co-requisites is included in individual module profiles.

Language

Part 0

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:

Part 0 Core

<table>
<thead>
<tr>
<th>Code</th>
<th>Module Title</th>
<th>ECTS</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>GENG0016</td>
<td>English Language</td>
<td>7.5</td>
<td>Core</td>
</tr>
<tr>
<td>GSCI0008</td>
<td>Fundamentals of Biology</td>
<td>15</td>
<td>Core</td>
</tr>
<tr>
<td>GSCI0009</td>
<td>Fundamentals of Chemistry</td>
<td>15</td>
<td>Core</td>
</tr>
<tr>
<td>GSCI0011</td>
<td>Laboratories and Coursework</td>
<td>15</td>
<td>Core</td>
</tr>
<tr>
<td>GSCI0012</td>
<td>Routes to Success for Scientists</td>
<td>7.5</td>
<td>Core</td>
</tr>
</tbody>
</table>

The programme structure table is below:
Information about pre and co-requisites is included in individual module profiles.

Standard

Part 0

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:
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<td>Core</td>
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<td>Core</td>
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<td>GSCI0011</td>
<td>Laboratories and Coursework</td>
<td>15</td>
<td>Core</td>
</tr>
<tr>
<td>GSCI0010</td>
<td>Mathematics for Scientists</td>
<td>7.5</td>
<td>Core</td>
</tr>
<tr>
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<td>Routes to Success for Scientists</td>
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<td>Core</td>
</tr>
</tbody>
</table>

### Progression Requirements

The programme follows the University's regulations for *Progression, Determination and Classification of Results: Undergraduate and Integrated Masters Programmes* and *Progression, Determination and Classification of Results: Postgraduate Master's Programmes*. Any exemptions or variations to the University regulations, approved by AQSC are located in *section VI of the University Calendar*.

### 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 Hartley Library.
- Enabling Services offering support services and resources via a triage model to access crisis management, mental health support and counselling. Support includes daily Drop In at Highfield campus at 13.00 – 15.00 (Monday, Wednesday and Friday out of term-time) or via on-line chat on weekdays from 14.00 – 16.00. Arrangements can also be made for meetings via Skype.
- 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 and Employability services, 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 and in the local community, (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 Director and Programme Leader
- A Liaison Tutor within your target academic School
- 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, School Programmes Committee OR providing comments to your student representative to feedback 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.

Further details on the University's quality assurance processes are given in the *Quality Handbook*.

**External Examiner(s) for the programme**

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

External examiners do not have a direct role in determining results for individual students, and students wishing to discuss their own performance in assessment should contact their Personal Academic Tutor in the first instance.

*Please note:* 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 they take full advantage of the learning opportunities that are provided. More detailed information can be found in the programme handbook.
Appendix 1:

Students are responsible for meeting the cost of essential textbooks, and of producing such essays, assignments, laboratory reports and dissertations as are required to fulfil the academic requirements for each programme of study. In addition to this, students registered for this programme also have to pay for:

**Additional Costs**

<table>
<thead>
<tr>
<th>Type</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>IT</td>
<td>Computers suitable for completing all assessed tasks for this course are provided in the University computing suites, but students may wish to purchase their own laptop to enable them to study more effectively away from the campus.</td>
</tr>
<tr>
<td>Stationery</td>
<td>You will be expected to provide your own day-to-day stationery items, e.g. pens, pencils, notebooks, etc. Any specialist stationery items will be specified under the Additional Costs tab of the relevant module profile.</td>
</tr>
<tr>
<td>Textbooks</td>
<td>Some modules suggest reading texts as optional background reading. The library may hold copies of such texts, or alternatively you may wish to purchase your own copies. Although not essential reading, you may benefit from the additional reading materials for the module.</td>
</tr>
<tr>
<td>Equipment and Materials</td>
<td>Students may wish to purchase additional laboratory notebooks. Cost varies depending on personal choice.</td>
</tr>
<tr>
<td>Printing and Photocopying Costs</td>
<td>In some cases, coursework and/or projects may be submitted electronically. Where it is not possible to submit electronically students will be liable for printing costs.</td>
</tr>
</tbody>
</table>

In some cases you’ll be able to choose modules (which may have different costs associated with that module) which will change the overall cost of a programme to you. Details of such costs will be listed in the Module Profile. Please also ensure you read the section on additional costs in the University's Fees, Charges and Expenses Regulations in the University Calendar available at www.calendar.soton.ac.uk.