Course Information Document: Foundation Year

For students starting in Academic Year 2020/21

1. Course Summary

Names of programme and award title(s)	Science Foundation Year
Award type	Foundation Year
Mode of study	Full-time
Framework of Higher Education Qualification (FHEQ) level of final award	Foundation Year
Normal length of the programme	1 year with progression onto a further three years at Keele
Maximum period of registration	The normal length as specified above plus 3 years
Location of study	Keele Campus
Accreditation (if applicable)	Not applicable
Regulator	Office for Students (OfS)
Tuition Fees	**UK/EU students:** Fee for 2020/21 is £9,250* **International students:** Fee for 2020/21 is £13,000**

How this information might change: Please read the important information at http://www.keele.ac.uk/student-agreement/. *This explains how and why we may need to make changes to the information provided in this document and to help you understand how we will communicate with you if this happens.*

* These fees are regulated by Government. We reserve the right to increase fees in subsequent years of study in response to changes in government policy and/or changes to the law. If permitted by such change in policy or law, we may increase your fees by an inflationary amount or such other measure as required by government policy or the law. Please refer to the accompanying Student Terms & Conditions. Further information on fees can be found at http://www.keele.ac.uk/studentfunding/tuitionfees/

** We reserve the right to increase fees in subsequent years of study by an inflationary amount. Please refer to the accompanying Student Terms & Conditions for full details. Further information on fees can be found at http://www.keele.ac.uk/studentfunding/tuitionfees/

2. What is a Foundation Year programme?

Keele has a long-standing Foundation Year programme. The Foundation Year programmes in general are for students who meet Keele's minimum entry requirements, but not the specific requirements for entry directly onto the degree programme of their choice. They extend the duration of the degree by one year.

3. Overview of the Programme

The Science Foundation Year provides a scientific background customised to individual students' needs, helping them to progress to the subsequent years of a degree programme at Keele. A broad range of modules is available from the life, physical, geographical and environmental sciences, mathematics, computing and psychology.

4. Aims of the programme

The broad aim of the programme is to provide preparation for subsequent study at Honours degree level in subjects provided in the Faculty of Natural Sciences. A full list of Honours degree programmes provided by each School in the Faculty of Natural Sciences can be found using the links below:

School of Computing and Mathematics: https://www.keele.ac.uk/scm/undergraduatestudy/

School of Life Sciences: https://www.keele.ac.uk/lifesci/undergraduatestudy/

School of Geography, Geology and the Environment: https://www.keele.ac.uk/gge/studyatgge/undergraduatecourses/

School of Chemical and Physical Sciences: https://www.keele.ac.uk/scps/

School of Psychology: https://www.keele.ac.uk/psychology/undergraduatestudy/

Institute of Liberal Arts and Sciences: https://www.keele.ac.uk/ilas/interdisciplinarydegrees/

For combined honours programmes the second subject may be a science, social science, humanities or business discipline.

5. What you will learn

The intended learning outcomes of the programme (what students should know, understand and be able to do at the end of the programme), can be described under the following headings:

- Subject knowledge and understanding
- Subject specific skills
- Key or transferable skills (including employability skills)

Subject knowledge and understanding

These are covered by the subject-specific modules, which are specific to individual programmes and not core to the Science Foundation Year.

Subject specific skills

These are covered by the subject-specific modules, which are specific to individual programmes and not core to the Science Foundation Year.

Key or transferable skills (including employability skills)

Successful students will be able to:

- communicate effectively in writing and produce professional reports;
- communicate effectively orally and give formal presentations;
- work cooperatively and collaboratively in groups;
- utilize effective independent study skills;
- reflect on own skills and progress;
- manage time effectively and work towards deadlines;
- write assignments with both formal and informal structures;
- perform mathematical calculations and solve problems through the application of mathematical equations;
- derive and interpret the accuracy of numerical values obtained from calculations;
- use bespoke commercial software used to represent numerical data graphically.

Keele Graduate attributes

Engagement with this programme will enable you to develop your intellectual, personal and professional capabilities. At Keele, we call these our ten Graduate Attributes and they include independent thinking, synthesizing information, creative problem solving, communicating clearly, and appreciating the social, environmental and global implications of your studies and activities. Our educational programme and learning environment is designed to help you to become a well-rounded graduate who is capable of making a positive and valued contribution in a complex and rapidly changing world, whichever spheres of life you engage in after your studies are completed.

Further information about the Keele Graduate Attributes can be found here: http://www.keele.ac.uk/journey/

6. How is the programme taught?

The programme will be delivered through a mixture of lectures, tutorials, seminars, workshops, computer classes, laboratory classes, problem-based learning and team-based learning. There will be activities outside of the classroom such as online directed learning activities and field trips. In addition, students are expected to undertake a large amount of independent study and revision.

Lectures are normally 50 minutes long and consist of a member of staff talking to the whole class with the aid of PowerPoint presentations, whiteboards and other visual aids. Many lectures involve only teaching by the lecturer, although there is usually opportunity to ask questions. However, some lectures are more interactive and may involve activities for the students to undertake.

Tutorials and **seminars** are small group sessions with a member of staff. Usually there is much more participation by students than in lectures. There is often opportunity for students to suggest the topics to be discussed, to ask questions and even to lead part of the session. Tutorials and seminars usually support the material delivered in the lectures; seminars often allow students and/or staff to introduce supplementary material.

Workshops are small group sessions based around an activity. These may be individual or group activities. A member of staff facilitates the session but the learning comes largely through the undertaking of the activity. Some workshops will complement the material delivered in the lectures rather than build on it directly.

Laboratory classes provide opportunity for students to perform experiments and other practical work under supervision.

Field trips allow students to carry out supervised investigations outside the class room.

In **computer classes** students complete tasks using a wide variety of computer applications. Members of staff are available to provide guidance.

Team-based learning and **problem-based learning** are group work classes that are facilitated by a tutor. Students complete a series of tasks to actively learn about a subject.
Directed learning activities are set by tutors, that will be completed by students independently, or as part of a group.

Independent study includes revision, wider reading around the subject, preparation and writing of assignments, preparatory reading, preparation for seminars and tutorials, and developing skills to complement the material delivered in class. Reading lists are provided to help students direct their reading.

Apart from these formal activities, students are also provided with regular opportunities to talk through particular areas of difficulty, and any special learning needs they may have, with their Personal Tutors or module lecturers on a one-to-one basis.

7. Teaching Staff

All Foundation Year Centre staff already have or are completing formal teaching qualifications and collectively have many years experience of teaching on foundation year programmes. Many are engaged in scholarship relating to teaching and learning. In some cases teaching may be delivered by staff from other Schools in the University, or external experts in their field contracted to deliver specific teaching.

The University will attempt to minimise changes to our core teaching teams, however, delivery of the programme depends on having a sufficient number of staff with the relevant expertise to ensure that the programme is taught to the appropriate academic standard.

Staff turnover, for example where key members of staff leave or fall ill may result in changes to the programme's content. The University will endeavour to ensure that any impact on students is limited if such changes occur.

8. What is the structure of the programme?

The academic year runs from September to June and is divided into two semesters. The number of weeks of teaching will vary from programme to programme, but you can generally expect to attend scheduled teaching sessions between the end of September and mid-December, and from mid-January to the end of April. Each module is usually a self-contained unit of study and each is usually assessed separately with the award of credits on the basis of 1 credit = 10 hours of student effort.

Students take a combination of modules to a total of 120 credits: compulsory modules will be those related to their intended degree programmes after their Foundation Year. Depending on their degree choice their may be some free choice. Modules are worth 15 or 30 credits.

An outline of the structure of the programme is provided below.

For further information on the content of modules currently offered, including the list of optional modules, please visit: https://www.keele.ac.uk/recordsandexams/modulecatalogue/

Module Lists

Foundation Year

Students will study their main science subject: Life Science, Chemistry, Computing, Geography, Geology and the Environment, Maths, Physics and Psychology.

Single honours students will study their main discipline subject and may have an option to study another subject area.

Combined honours students will study both of their disciplines. The modules studied will be determined by your chosen degree and can be from the Sciences, Business, Humanities or Social Sciences programmes.

Optional modules	Module Code	Credits	Period
Practical and Academic Skills in Science	FYO-00185	15	Semester 1
Academic Skills for Computer Scientists and Mathematicians	FYO-00187	15	Semester 1
Foundations of Chemistry	FYO-00189	15	Semester 1
Foundations of Geography, Geology and the Environment	FYO-00193	15	Semester 1
Foundations of Life Sciences	FYO-00197	15	Semester 1
Foundations of Psychology	FYO-00201	15	Semester 1
Foundations of Physics	FYO-00205	15	Semester 1
Foundations of Numerical and Quantitative Methods for Scientists	FYO-00211	15	Semester 1
Foundations of Mathematical Methods - CH Physics	FYO-00215	15	Semester 1
Foundations of Mathematical Methods	FYO-00217	30	Semester 1
Foundations of Computational Thinking	FYO-00219	15	Semester 1
Foundations of Computational Theory and Programming	FYO-00221	30	Semester 1
Foundations of Applied Mathematics - Mechanics and Statistics	FYO-00223	15	Semester 1
Advancing Chemistry	FYO-00191	30	Semester 2
Advancing Geography, Geology and the Environment	FYO-00195	30	Semester 2
Advancing Life Sciences	FYO-00199	30	Semester 2
Advancing Psychology	FYO-00203	30	Semester 2
Advancing Physics	FYO-00207	30	Semester 2
Advancing Physics (15 credits)	FYO-00209	15	Semester 2
Advancing Programming	FYO-00225	15	Semester 2
Advancing Computing: Client-Led Collaborative Design	FYO-00227	15	Semester 2
Advancing Mathematical Methods	FYO-00229	30	Semester 2
Advancing Mathematical Methods - CH Physics	FYO-00231	15	Semester 2
Advancing Applied Mathematics and Computing - Making Decisions	FYO-00233	15	Semester 2
Advancing Applied Mathematics and Computing - Logic, Codes and Cryptography	FYO-00235	15	Semester 2

Foundation Year Module Rules

In Semester 1 students study the foundation modules that follow onto the appropriate advancing modules in Semester 2.

9. Final and intermediate awards

Students successfully completing the programme with 120 credits will be eligible for the Certificate in Foundation Year Studies.

The certificate will only be awarded to students who successfully complete the Keele Foundation Year and then choose not to continue their studies at Keele.

10. How is the Programme Assessed?

The wide variety of assessment methods used on this programme at Keele reflects the broad range of knowledge and skills that are developed as you progress through the degree programme. Teaching staff pay particular attention to specifying clear assessment criteria and providing timely, regular and constructive feedback that helps to clarify things you did not understand and helps you to improve your performance. The following list is representative of the variety of assessment methods used on your programme:

- **Unseen closed and open book examinations** in different formats test students' knowledge and understanding of the subject. Examinations may consist of essay, short answer and/or multiple choice questions, and paper comprehension.
- **Essays, blogs and reports** allow students to demonstrate their ability to articulate ideas clearly, using argument and reasoning skills and with close reference to the contexts and critical concepts covered in the modules. Essays also develop and demonstrate research and presentation skills (including appropriate scholarly referencing).
- **Class tests** taken either conventionally or online via the Keele Learning Environment (KLE) assess students' subject knowledge and often their ability to apply it in a more structured and focused way.
- **Research projects** test student's knowledge of different research methodologies and the limits and provisional nature of knowledge. They also enable students to demonstrate their ability to formulate research questions and to answer them using appropriate methods.
- **Oral, poster and video presentations, podcasts and reports** assess individual students' subject knowledge and understanding. They may also test their ability to work effectively as members of a team, to communicate what they know orally and visually, and to reflect on these processes as part of their own personal development.
- **Portfolios** may consist of a range of different pieces of work but routinely include a requirement that students provide some evidence of critical reflection on the development of their own learning.
- **Peer assessment:** In some cases students will be involved in peer evaluation of other students' work, particularly in group work. This helps students to take responsibility, improve their performance, and reflect on both their own work and that of others.
- **Course work assignments** consist of short written pieces completed in students' own time and provide the opportunity to test a range of deeper learning concepts; they are expected to make use of a variety of source material, as well as their lecture notes and text books etc., to complete these assignments.
- **Laboratory reports** - structured proformas and full laboratory reports are formal summaries of work carried out in the laboratory. They test students' understanding of the practical aspects of the programme and develop the skills necessary to enable students to present and analyse their results, as well as explain the rationale behind an experiment, describe an associated replicable methodology and draw valid conclusions.

Marks are awarded for summative assessments designed to assess your achievement of learning outcomes. You will also be assessed formatively to enable you to monitor your own progress and to assist staff in identifying and addressing any specific learning needs. Feedback, including guidance on how you can improve the quality of your work, is also provided on all summative assessments within three working weeks of submission, unless there are compelling circumstances that make this impossible, and more informally in the course of tutorial and seminar discussions.

11. Accreditation

This programme does not have accreditation from an external body.

12. University Regulations

The University Regulations form the framework for learning, teaching and assessment and other aspects of the student experience. Further information about the University Regulations can be found at: http://www.keele.ac.uk/student-agreement/

If this programme has any exemptions, variations or additions to the University Regulations these will be detailed in an Annex at the end of this document titled 'Programme-specific regulations'.

13. Other Learning Opportunities

Students are encouraged to participate in a wide range of activities offered by the University and the Students' Union, including societies, sports and volunteering. Involvement can be recognized in a number of ways including the Higher Education Achievement Record and Keele SU awards.

14. Additional Costs

Activity	Estimated Cost
Field courses - compulsory - for "Geography, Geology and the Environment" module only	£10 - returnable on attendance
Field courses - optional for "Advancing Psychology" module only	£14
Equipment - protective equipment for Chemistry and Biology modules	£15
Equipment - approved calculator for Mathematics and Science modules only	£10
Total estimated additional costs	**£35**

Students taking a mathematical or scientific module will require an approved calculator.

Students working in the chemistry and biology laboratories will be required to wear protective equipment. These can be purchased from the University.

Students taking Geography, Geology and the Environment module/s will be required to take part in field trips.
Students taking Advancing Psychology will be be given the option of a prison visit.

Students taking Advancing Applied Maths and Computing - Logic, Codes and Cryptography will be given the option of a field trip.

All field trips are subject to their availability.

As to be expected there will be additional costs for inter-library loans and potential overdue library fines, print and graduation.

These costs have been forecast by the University as accurately as possible but may be subject to change as a result of factors outside of our control (for example, increase in costs for external services). Forecast costs are reviewed on an annual basis to ensure they remain representative. Where additional costs are in direct control of the University we will ensure increases do not exceed 5%.

We do not anticipate any further costs for this Foundation Year programme.

15. Annex - Programme-specific regulations

Programme Regulations: Science Foundation Year

Final Award and Award Titles	Science Foundation Year
Intermediate Award(s)	n/a
Last modified	May 2020
Programme Specification	https://www.keele.ac.uk/qa/programmespecifications

The University's Academic Regulations which can be found on the Keele University website (https://www.keele.ac.uk/regulations/)[1] apply to and regulate the programme, other than in instances where the specific programme regulations listed below over-ride them. These programme regulations list:

- *Exemptions* which are characterised by the omission of the relevant regulation.
- *Variations* which are characterised by the replacement of part of the regulation with alternative wording.
- *Additional Requirements* which set out what additional rules that apply to students in relation to this programme.

The following **exemptions, variations** and **additional requirements** to the University regulations have been checked by Academic Services and have been approved by the Faculty Education Committee.

A) EXEMPTIONS

The clause(s) listed below describe where an exemption from the University's Academic Regulations exists:

For the whole duration of their studies, students on this Programme are exempt from the following regulations:

No exemptions apply.

B) VARIATIONS

The clause(s) listed below describe where a variation from the University's Academic Regulations exists:

No variations apply

Additional Requirements

The programme requirements listed below are in addition to the University's Academic Regulations:

Additional requirement 1:

Regulations regarding Foundation Certificates

If, at the end of the academic year, a student's credit total is 120 then that student will be awarded a Certificate in Foundation Year Studies. This is a virtual certificate but can be realised by students who subsequently withdraw from the University without successfully completing a further year of study.

Additional requirement 2:

Regulations regarding progression to level 4

Satisfactory completion of the Foundation Year programme depends upon obtaining 120 credits. Progression to the next level of a particular degree programme at Keele depends on passing modules to the value of 120 credits and obtaining threshold marks in subject specific modules.

If, at the end of the Spring Semester, a student's credit total is below 120, the Foundation Year Examination Board may recommend to the University Senate one of the following courses of action - that the student:

- progress to the next year of the degree programme without further assessment,
- retake assessments in specific modules,
- submit additional written work or take additional modules,
- repeat the year of study, or
- withdraw from the University.

Students with fewer than 70 credits at the end of the year will normally be required to repeat the Foundation Year unless they have already repeated the year once, in which case they will be required to withdraw from the University. Students who have more than 70 but less than 120 credits will normally be offered reassessment in failed modules in order to satisfactorily complete the year.

Students who fail to reach a threshold mark at first attempt may be permitted to take reassessment (once only) across the full mark range. For students who pass the module at first attempt, reassessment across the full mark range will be offered in all cases; the mark obtained will in that case be used for progression decisions and also retained on the student's transcript. In cases where such a student fails a module at first attempt, reassessment will be offered across the full mark range only if the student attempted all assessments by the cut-off deadline for marking (i.e. up to one week late); the mark obtained will then be used for progression decisions but the agreed mark which appears on the transcript will be capped at 40%.

Students with at least 70 credits who cannot progress on the basis of autumn semester modules failed at second attempt may under certain circumstances be offered a third attempt during the summer reassessment period, but only to obtain a capped mark of 40%. Such students will not be able to progress to a subject with a requirement of a threshold mark above 40% in the module in question. If they subsequently still fail the Foundation Year and are offered a repeat year, then they will have only one further opportunity in any assessments already taken three times. No student will be allowed more than four valid attempts at any assessment.

Students with fewer than 120 credits who cannot progress on the basis of spring semester modules failed at second attempt will not be entitled to carry failed modules into the next year of study.

[1] References to University Regulations in this document apply to the content of the University's Regulatory Framework as set out on the University website here https://www.keele.ac.uk/regulations/.

Version History

This document

Date Approved: 14 May 2020

Previous documents

Version No	Year	Owner	Date Approved	Summary of and rationale for changes
1	2019/20	SIMON RIMMINGTON	14 May 2020	