Royal Holloway, University of London
Course specification for an undergraduate award
BSc Geology with Integrated Foundation Year (F60F)

Section 1 – Introduction to your course
This course specification is a formal document, which provides a summary of the main features of your course and the learning outcomes that you might reasonably be expected to achieve and demonstrate if you take full advantage of the learning opportunities that are provided. Further information is contained in the College prospectus, and in various handbooks, all of which you will be able to access online. Alternatively, further information on the College's academic regulations and policies can be found here. Further information on the College's Admissions Policy can be found here. Your degree course in BSc Geology with an Integrated Foundation Year is delivered in four stages, each of which comprises one year of full-time study during which you must follow modules to the value of 120 credits. The Foundation Year prepares you for university study by offering a rigorous introduction to university-level study methods and skills, transitioning from FHEQ Level 3 to FHEQ Level 4. It provides progressive structures in which you are able to gain ever-wider knowledge and understanding of approaches to your chosen degree subject, together with embedded good academic practice and study skills, leading towards increasingly discipline-specific modules which facilitate greater levels of specialisation and individual choice through specialist options. The mandatory modules include the fundamentals of geology or geoscience with a range of geological and geoscience subjects, including an independent research project tested by a wide variety of assessment methods including (but not limited to) short written reports, Moodle-based quizzes, verbal and poster presentations, and a dissertation. Undergraduate courses in Geology are characterised by the provision of a broad base in skills and knowledge in stages one and two, followed by opportunities for specialisation in stage three. The courses also have strong compulsory spines of fieldwork culminating in an independent mapping project. Training in data collection, data analysis and presentation of reports is provided in core modules along with a range of transferrable skills that contribute to the successful progression of Earth Science graduates into a wide range of careers. Teaching and learning in the course are designed to provide graduates with a sound basis of knowledge and skills in the geological sciences akin to those required by a professional geologist. Specialist modules offered in stage three are closely informed by the active research of staff, particularly in the general areas of "Ancient and Modern Earth Systems" (modern atmospheres, surface processes, palaeobiology, ancient Earth systems), Tectonics and Basins (sedimentology, mountain evolution, uplift, and erosion, numerical modelling, seismic interpretation, lithospheric and asthenospheric processes) and Geochemistry (palaeoceanography, crust-mantle evolution, plumes and ridges, volcanic arcs).

While Royal Holloway keeps all the information made available under review, courses and the availability of individual modules, especially optional modules are necessarily subject to change at any time, and you are therefore advised to seek confirmation of any factors which might affect your decision to follow a specific course. In turn, Royal Holloway will inform you as soon as is practicable of any significant changes which might affect your studies.

The following is brief description for some of the most important terminology for understanding the content of this document:

Degree course – May also be referred to as 'degree programme' or simply 'programme', these terms refer refers to the qualification you will be awarded upon successful completion of your studies.
Module – May also be referred to as 'course unit', this refers to the individual units you will study each year to complete your degree course. Undergraduate degrees at Royal Holloway comprise a combination of modules in multiples of 15 credits to the value of 120 credits per year. On some degree courses, a certain number of optional modules must be passed for a particular degree title.

Section 2 – Course details			
Date of specification update	December 2022	**Location of study**	Egham Campus
Course award and title	BSc Geology with an Integrated Foundation Year	**Level of study**	Undergraduate
Course code	3669	**UCAS code**	F60F
Year of entry	2022/23		
Awarding body	Royal Holloway, University of London		
Department or school	Department of Earth Sciences	**Other departments or schools involved in teaching the course**	IFY: Centre for the Development of Academic Skills (CeDAS)
Mode(s) of attendance	Full-time	**Duration of the course**	4 years
Accrediting Professional, Statutory or Regulatory Body requirement(s)	Geological Society of London In order to satisfy the accreditation requirements of the Geological Society of London you will need to meet certain conditions. In the case of the BSc Geology, this means that you must successfully complete an Independent Field Mapping Project.		
Link to Coursefinder for further information:	https://www.royalholloway.ac.uk/studying-here/	**For queries on admissions:**	https://royalholloway.ac.uk/applicationquery

Section 3 – Degree course structure										
3.1 Mandatory module information **The following table summarises the mandatory modules which students must take in each year of study**										
Year	**Module code**	**Module title**	**Contact hours***	**Self-study hours**	**Written exams****	**Practical assessment****	**Coursework****	**Credits**	**FHEQ level**	**Module status (see below)**
0	FY1001	Interdisciplinary Approaches to Global Perspectives 1	68	82	10%	40%	50%	15	HE Level 0	MC
0	FY1002	Interdisciplinary Approaches to Global Perspectives 2	64	86	0	0	100%	15	HE Level 0	MC
0	FY1005	Foundation Mathematics 1	55	95	70%	0	30%	15	HE Level 0	MNC
0	FY1006	Foundation Mathematics 2	55	95	70%	0	30%	15	HE Level 0	MNC
0	FY1009	Foundation Programming	44	106	0	60%	40%	15	HE Level 0	MC
0	FY0012	Foundation Life Sciences and the Environment	30	120	50%	20%	30%	15	HE Level 0	MC
0	GL0998	Earth Sciences Practical Skills	30	120	0	40%	60%	15	HE Level 0	MC
0	GL0999	Earth Sciences Project	22	128	0	30%	70%	15	HE Level 0	MC
1	GL1101	Evolving Earth	64	236	10	40	50	30	4	MC

1	GL1201	Dynamic Planet	60	240	25	50	25	30	4	MC
1	GL1301	Human Interactions with the Earth	54	246	75	0	25	30	4	MC
1	GL1500	Physics and Chemistry of the Earth	64	86	100	0	0	15	4	MC
1	GL1900	Earth Scientists Toolkit	122	28	0	0	100%	15	4	MC
2	GL2200	Stratigraphy and History of Life	66	84	60%	0	40%	15	5	MC
2	GL2210	Regional Geology	48	102	60%	0	40%	15	5	MC
2	GL2400	Igneous and Metamorphic Geology	57	93	60%	0	40%	15	5	MC
2	GL2410	Geochemistry	57	93	50%	30%	20%	15	5	MC
2	GL2901	Advanced Scientific and Geological Field Skills	162	138	0	20%	80%	30	5	MNC
3	GL3010	Techniques in Earth Sciences	108	42	0	75%	25%	15	6	MC
3	GL3901	Independent Geological Field Mapping	30	270	0	0	100%	30	6	MNC

This table sets out the most important information for the mandatory modules on your degree course. These modules are central to achieving your learning outcomes, so they are compulsory, and all students on your degree course will be required to take them. You will be automatically registered for these modules each year. Mandatory modules fall into two categories; 'condonable' or 'non-condonable'.

In the case of mandatory 'non-condonable' (MNC) modules, you must pass the module before you can proceed to the next year of your course, or to successfully graduate with a particular degree title. In the case of mandatory 'condonable' (MC) modules, these must be taken but you can still progress or graduate even if you do not pass them. Please note that although Royal Holloway will keep changes to a minimum, changes to your degree course may be made where reasonable and necessary due to unexpected events. For example; where requirements of relevant Professional, Statutory or Regulatory Bodies have changed and course requirements must change accordingly, or where changes are deemed necessary on the basis of student feedback and/or the advice of external advisors, to enhance academic provision.

*Contact hours come in various different forms, and may take the form of time spent with a member of staff in a lecture or seminar with other students. Contact hours may also be laboratory or, studio-based sessions, project supervision with a member of staff, or discussion through a virtual learning environment (VLE). These contact hours may be with a lecturer or teaching assistant, but they may also be with a technician, or specialist support staff.

**The way in which each module on your degree course is assessed will also vary, however, the assessments listed above are all 'summative', which means you will receive a mark for it which will count towards your overall mark for the module, and potentially your degree classification, depending on your year of study. On successful completion of the module you will gain the credits listed. 'Coursework' might typically include a written assignment, like an essay. Coursework might also include a report, dissertation or portfolio. 'Practical assessments' might include an oral assessment or presentation, or a demonstration of practical skills required for the particular module.

3.2 Optional modules

In addition to mandatory modules, there will be a number of optional modules available during the course of your degree. The following table lists a selection of optional modules that are likely to be available. However, not all may be available every year. Although Royal Holloway will keep changes to a minimum, new options may be offered or existing ones may be withdrawn. For example; where reasonable and necessary due to unexpected events, where requirements of relevant Professional, Statutory or Regulatory Bodies (PSRBs) have changed and course requirements must change accordingly, or where changes are deemed necessary on the basis of student feedback and/or the advice of External Advisors, to enhance academic provision.There may be additional requirements around option selection; please contact the Departmenthttps://www.royalholloway.ac.uk/research-and-teaching/departments-and-schools/earth-sciences/about-us/ for further information.

Year 0	Year 1	Year 2	Year 3
None	None	GL2230 Sedimentary Basin Analysis	GL3200 Marine Geology
		GL2320 Geohazards	GL3210 Advanced Topics in Sedimentology
		GL2340 GIS Remote Sensing	GL3300 Aqueous Geology
		GL2500 Applied Geophysics	GL3460 Volcanology
		GL2520 Computational Earth Sciences	
		GL2600 Structural Analysis and Remote Sensing	

3.3 Optional module requirements
Year 0 - none Year 1 – none In year 2, you must choose modules to the value of 30 credits. In year 3, you must choose modules to the value of 75 credits.

Section 4 - Progressing through each year of your degree course
For further information on the progression and award requirements for your degree, please refer to Royal Holloway's Academic Regulations In order to progress from the Foundation Year to Year One you must achieve a stage average of at least 40% and either pass 120 credits or pass modules to the value of between 90-105 credits achieve a Fail outcome of at least 30% in the remaining credits. Opportunities for resits are detailed in the Academic Regulations. All first year undergraduate students are required to take and pass the non-credit bearing Moodle-based Academic Integrity module SS1001 in order to progress into the second year of study (unless their course includes the alternative mandatory SS1000 module). The pass mark for the module assessment is stated in the on-line Academic Integrity Moodle module. Students may attempt the assessment as often as they wish with no penalties or capping. Students who meet the requirements for progression as stipulated in the College's Undergraduate Regulations (Section: Conditions for progression to the next stage) but fail to pass the Moodle-based Academic Integrity module will not be permitted to progress into their second year of academic study at the College. Once progression has been confirmed, you may choose your preferred pathway which will normally be the BSc Geology but can be chosen from one of the other undergraduate degrees offered by the department

Section 5 – Educational aims of the course
For the Foundation Year: • to develop the mathematical and I scientific concepts and techniques needed for level 4 study in Geology; • to equip you with the basic experimental, programming or practical techniques required for scientific degrees; • to start the process of independent project work in science with support of expert academics; • to put in context scientific knowledge and developments into a wider context of history, society and globalisation.
The aims of the Honours Degree course in Geology are: • To understand the physical Earth and the dynamic processes that continue to alter and change our environment by understanding the geology of our planet • to provide a sound and extensive basis for the study of the Geological Sciences, meeting the requirements for course accreditation by the Geological Society where appropriate and the general requirements of the subject benchmarking statement; • to provide you with knowledge of the science, and equip them with discipline-specific and transferable skills; • to provide a flexible and progressive structure in which you are able to gain knowledge, understanding and appropriate skills relating to distinctive research specialisms; • to offer a range of specialist modules and research projects which allow you to develop expertise and research interests in your chosen field; • to equip you with the knowledge and skills appropriate for a career in the Earth Sciences, and generally to provide you with a range of personal attributes relevant to the world beyond Higher Education, enabling you to engage in lifelong learning and to contribute to the wider community.

Section 6 - Course learning outcomes

In general terms, the courses provide opportunities for students to develop and demonstrate the following learning outcomes. (*Categories – Knowledge and understanding (K), Skills and other attributes (S), and Transferable skills (*)*)

1. Knowledge and understanding:

a) Demonstrate a broad understanding of the fundamental scientific knowledge and terminology of Geology/Earth Sciences

b) Demonstrate an awareness of current areas of debate and discovery in Earth Sciences, and their investigation by scientific knowledge and methods

c) Demonstrate knowledge, understanding and appropriate skills relating to distinctive research specialisms

2. Cognitive and intellectual skills: (S*)

a) Identify correctly the concepts and principles underlying theoretical frameworks in Geology/Earth Sciences

b) Evaluate the reliability of data, results and information using well-defined techniques and/or criteria

c) Use and apply specific scientific techniques and information sources.

3. Key, transferable and employment-related skills (S*)

a) Written and oral communication skills and be able to use these in a variety of contexts;

b) Problem-solving skills, relating to qualitative and quantitative information;

c) Numeracy and computational skills

d) Information-retrieval skills, in relation to primary and secondary information sources;

e) Demonstrate an awareness of their own capabilities and develop study skills via guided self-direction

f) Knowledge and skills appropriate for a career in the Earth Sciences, a range of personal attributes relevant to the world beyond Higher Education, and engagement in lifelong learning and contribution to the wider community

4. Practical skills (S*)

a) Demonstrate the skills required to conduct standard fieldwork and laboratory procedures in Geology/Earth Sciences

c) Demonstrate skills in monitoring, observation, documentation and quantitative and qualitative measurement in the laboratory and field.

Section 7 - Teaching, learning and assessment
Teaching and learning on your course is closely informed by the active research of staff, particularly in the areas of: Geodynamics and Sedimentary Systems (Earth-structure and lithospheric dynamics; Geological fault and fracture evolution; Planetary remote sensing; Sedimentology of marine systems), Global Environmental Change (Marine bioturbation; Paleogene life and climate; Reconstructing ancient landscapes), Physics and Chemistry of Earth Processes (Earth and oceanic geochemistry; Environmental chemistry of soils and surface waters; Greenhouse gas monitoring; Mineral resources; Modern atmospheric chemistry) In general terms, the course provides an opportunity for you to develop and demonstrate the learning outcomes detailed herein. Teaching and learning is mostly by means of lectures; seminars; practical field and laboratory work; study groups; oral presentations and guided independent study. Assessment of knowledge and understanding is typically by formal examinations, coursework, examined reports, online quizzes and exercises, oral presentations and the dissertation. A breakdown of assessment types for individual modules is shown in section 3.

Section 8 – Additional costs
There are no additional costs greater than £50 associated with this course. Mandatory field trips costs are subsidised by the department.
These estimated costs relate to studying this particular degree course at Royal Holloway. General costs such as accommodation, food, books and other learning materials and printing etc., have not been included, but further information is available on our website.

Section 9 – Indicators of quality and standards	
QAA Framework for Higher Education Qualifications (FHEQ) Level	4-6
Your course is designed in accordance with the FHEQ to ensure your qualification is awarded on the basis of nationally established standards of achievement, for both outcomes and attainment. The qualification descriptors within the FHEQ set out the generic outcomes and attributes expected for the award of individual qualifications. The qualification descriptors contained in the FHEQ exemplify the outcomes and attributes expected of learning that results in the award of higher education qualifications. These outcomes represent the integration of various learning experiences resulting from designated and coherent courses of study.	
QAA Subject benchmark statement(s)	http://www.qaa.ac.uk/quality-code/subject-benchmark-statements
Subject benchmark statements provide a means for the academic community to describe the nature and characteristics of courses in a specific subject or subject area. They also represent general expectations about standards for the award of qualifications at a given level in terms of the attributes and capabilities that those possessing qualifications should have demonstrated.	

Section 10 – Further information
This specification provides a concise summary of the main features of the course and the learning outcomes that a typical student might reasonably be expected to achieve and demonstrate when taking full advantage of the learning opportunities that are available. More detailed information on modules, including teaching and learning methods, and methods of assessment, can be found via the online Module Catalogue. The accuracy of the information contained in this document is reviewed regularly by the university, and may also be checked routinely by external agencies, such as the Quality Assurance Agency (QAA). Your course will be reviewed regularly, both by the university as part of its cyclical quality enhancement processes, and/or by your department or school, who may wish to make improvements to the curriculum, or in response to resource planning. As such, your course may be revised during the course of your study at Royal Holloway. However, your department or school will take reasonable steps to consult with students via appropriate channels when considering changes. All continuing students will be routinely informed of any significant changes.

Section 11 – Intermediate exit awards (where available)		
You may be eligible for an intermediate exit award if you complete part of the course as detailed in this document. Any additional criteria (e.g. mandatory modules, credit requirements) for intermediate awards is outlined in the sections below.		
Award	**Criteria**	**Awarding body**
Diploma in Higher Education (DipHE)	Pass in 210 credits of which at least 90 must be at or above FHEQ Level 4 and at least 120 of which must be at or above FHEQ Level 5	Royal Holloway and Bedford New College
Certificate in Higher Education (CertHE)	Pass in 120 credits of which at least 90 must be at or above FHEQ Level 4	Royal Holloway and Bedford New College

Section 12 - Associated award(s)	
BSc Geology (F600) BSc Geology with a Year in Industry (F603)	