

COURSE SPECIFICATION

This document describes the **Master of Science, Postgraduate Diploma and Postgraduate Certificate in Quaternary Science**. This specification is valid for new entrants from **September 2022**.

The aims of this course are:

- provide a *conversion course* for students of, for example, Biology, Physical Geography, Geology, Ecology, Archaeology, Oceanography, Environmental Science who wish to develop or augment a background in global environmental history and processes;
- provide a *training course* for students wishing to continue postgraduate study to PhD standards, and who require fundamental training in appropriate palaeoenvironmental, stratigraphical and/or quantitative principles and methods;
- provide a *vocational course* for teachers and professional scientists who desire or require a fuller understanding of the time-dependent elements of environmental change as essential context for their career.

The course is delivered over one year of full-time study (52 weeks) or up to five years of part-time study (260 weeks). If students chose to take the course part-time over two years**, they are encouraged to enrol in at least the core modules during their first year. Flexibility is integral to the course through its modular structure, offering a range of short modules, some of which are also offered as stand-alone training units to students and staff from other institutions who have an appropriate background and who seek training or refresher/up-dating modules in specific techniques or approaches.

** part time students are permitted under College regulations to complete their course of study over a period of up to five years. Students who are unable to complete the course within the standard two-year timeframe should liaise with the course director to agree a time frame for completion.

The course offers comprehensive and flexible postgraduate training in the rapidly developing field of Quaternary Science, with the academic emphasis being on the time-dependent processes affecting environmental change.

Further information

[Learning outcomes](#)

[Teaching, learning and assessment](#)

[Details of the course structure\(s\)](#)

[Progression and award requirements](#)

[Student support and guidance](#)

[Admission requirements](#)

[Further learning and career opportunities](#)

[Indicators of quality and standards](#)

[List of courses, with details of awards, degree titles, accreditation and teaching arrangements](#)

This document provides a summary of the main features of the course(s), and of the outcomes which a student might reasonably be expected to achieve if full advantage is taken of the learning opportunities provided. Further information is contained in the College prospectus, the College Regulations and in various handbooks issued to students upon arrival. Whilst Royal Holloway keeps all its information for prospective applicants and students under review, courses and the availability of individual modules are necessarily subject to change at any time, and prospective applicants are therefore advised to seek confirmation of any factors which might affect their decision to follow a specific course. In turn, Royal Holloway will inform applicants and students as soon as is practicable of any substantial changes which might affect their studies.

Learning outcomes

Teaching and learning in the course are closely informed by the active research of staff. In general terms, the course provides opportunities for students to develop and demonstrate the following learning outcomes:

Knowledge and understanding

- Acquire and demonstrate specialist disciplinary knowledge and understanding of key issues pertaining to Quaternary Science, in particular the core linking themes of:
 - a) high-resolution palaeoenvironmental records;
 - b) high-precision dating;
 - c) multi-proxy approaches to the investigation of past environmental changes.

Skills and other attributes

- ability to assess the causes, scale and rapidity of past climate and environmental fluctuations, encompassing field, laboratory, statistical and computing methods used in the acquisition, interpretation and modelling of proxy climatic and environmental data;
- ability in project formulation and design, sampling strategies and hypothesis testing;
- effective problem-solving and decision-making;*
- critical analysis and synthesis of information;*
- good communication skills;*
- advanced interpersonal skills;*
- quantitative analysis;*
- skills in Information Technology;*
- good time management;*
- effective team work.*

* transferable skills

[Back to top](#)

Teaching, learning and assessment

Teaching and learning is mainly by seminars, workshops, problem solving, group working, practical classes, completion of coursework and private study for the taught modules and departmental/college research training; and for the dissertation by independent research and private study, supported by research supervision. Students receive regular, scheduled, feedback on their performance in taught modules, their dissertation plan and draft proposal (spring term), their dissertation, web site, and oral presentation (summer term). Completion of tasks is monitored centrally to ensure students experiencing difficulty can be identified and provided with appropriate support. Full details of the assessments for individual modules can be obtained from the [Department](#).

[Back to top](#)

Details of the course structure(s)

The brief outline of the course is shown below; however, students can obtain further details from the Course Handbook. Credits are indicated in brackets, and indicate proportional weighting towards the Masters, Postgraduate Diploma and Postgraduate Certificate classification grade

Students must take the following mandatory modules:

- (i) GG5201: Quaternary Sedimentology and Stratigraphy (10 credits)
- (ii) GG5291: Quaternary Palaeoclimatology (10 credits)
- (iii) GG5232: Palaeoecology, Dating and Quantification (10 credits)
- (iv) GG5293: Techniques of Quaternary Research (10 credits)
- (v) GG5234 Oral Presentation (10 credits)

- (vi) GG5230: Field Training Course (Scotland) (20 credits)
- (vii) GG5299: Dissertation in Quaternary Science (60 credits) non-condonable

and choose five optional modules selected from a list of modules approved by the Department of Geography, each worth 10 credits.

Please note that the list of available options modules offered is subject to change and not all modules run each year. A full list of current modules can be obtained from the [Department](#).

[Back to top](#)

Progression and award requirements

Please note: all postgraduate taught students are required to take and pass the non-credit bearing Moodle-based Academic Integrity module SS1001 in order to be awarded. 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 otherwise meet the requirements for award as stipulated in the College's [Postgraduate Taught Regulations](#) (Section 15: Consideration and classification of candidates for the award) but fail to pass the Moodle-based Academic Integrity module will not be awarded.

To pass the course a student must achieve an overall weighted average of at least 50.00%, with no mark in any of the elements which counts towards the final assessment falling below 50%. Failure marks between 40-49% can be condoned in modules which do not constitute more than 40 credits, provided that the overall weighted average is at least 50.00%, but a failure mark (i.e. below 50%) in the dissertation cannot be condoned.

The Masters degree with Merit may be awarded if a student achieves an overall weighted average of 60.00%.

The Masters degree with Distinction may be awarded if a student achieves an overall weighted average of 70.00% or above.

The Postgraduate Diploma may be awarded if a student achieves an overall weighted average of at least 50.00%, with no mark in any module which counts towards the final assessment falling below 50% and has either chosen not to proceed to the dissertation, or has failed the dissertation on either the first or second attempt. Failure marks in the region 40-49% are not usually condoned for the award of a Postgraduate Diploma, but if they are, such condoned fails would be in modules which do not constitute more than 40 credits.

The Postgraduate Diploma with Merit may be awarded if a student achieves an overall weighted average of 60.00% or above. Failure marks in the region 40-49% are not usually condoned for the award of a Postgraduate Diploma, but if they are, such condoned fails would be in modules which do not constitute more than 40 credits.

The Postgraduate Diploma with Distinction may be awarded if a student achieves an overall weighted average of 70.00% or above. Failure marks in the region 40-49% are not usually condoned for the award of a Postgraduate Diploma, but if they are, such condoned fails would be in modules which do not constitute more than 40 credits.

The Postgraduate Certificate may be awarded if a student passes GG5291, GG5232 and a further 40 credits from any combination of taught mandatory modules.

The Postgraduate Certificate may be awarded if a student achieves an overall weighted average of at least 50.00% with no mark in any taught module which counts towards the final assessment falling below 50%. Failure marks in the region of 40 – 49% will not be condoned for the award of a Postgraduate Certificate.

The Postgraduate Certificate with Merit may be awarded if a student achieves an overall weighted average of 60.00% or above, with no mark in any module which counts towards the final assessment falling below 50%.

The Postgraduate Certificate with Distinction may be awarded if a student achieves an overall weighted average of 70.00% or above, with no mark in any module which counts towards the final assessment falling below 50%.

Please note that if the student holds a Tier 4 (General) Student Visa and they choose to leave (or are required to leave because of non-progression) or complete early (before the module end date stated on your CAS), then this will be reported to UKVI.

[Back to top](#)

Student support and guidance

- All students are allocated a Personal Advisor, with whom they are expected to meet at least once a term to discuss pastoral issues. Additional meetings may be arranged where appropriate with either the Personal Advisor or Course Director.
- Students are allocated a Dissertation Supervisor, with whom they meet regularly to discuss all matters relating to their dissertation.
- All staff available and accessible through an open-door policy or by operating an office hours system.
- Two student representatives are elected to the Periodic Review Committee; their attendance at meetings also gives the opportunity to voice specific or general student views on the course content and delivery.
- Representation on the Student-Staff Committee.
- Membership of a research group.
- Detailed PG handbook and module booklets.
- Extensive supporting materials and learning resources in the Department, College and University libraries, as well as the Computer Centre.
- Dedicated Departmental teaching rooms and computer suite.
- A Geography Disability and Neurodiversity Services Network Officer.
- College Careers Service and Department Employability Lead Officer.
- Access to all College and University support services, including Student Counselling Service, the Centre for the Development of Academic Skills, Health Centre, Students' Union and students with additional learning needs also have access to Disability and Neurodiversity Services.

[Back to top](#)

Admission requirements

For details of admissions requirements please refer to the [Course Finder](#).

[Back to top](#)

Further learning and career opportunities

The majority of graduates go on to doctoral research in the UK and abroad, ultimately leading to a PhD. Other graduates have successfully progressed into a wide range of professions and some are now employed by the British Geological Survey, the British Antarctic Survey, Natural Environment Research Council (NERC), environment agencies, higher education institutions, and private sector natural resource companies, as researchers, technicians, and teachers. Information on these opportunities is provided by talks on careers and higher degree opportunities, organised by the Department and College Careers Service. For more details on further learning and career opportunities please refer to the [Careers Service](#).

[Back to top](#)

Indicators of quality and standards

Royal Holloway's position as one of the UK's leading research-intensive institutions was confirmed by the results of the most recent Research Excellence Framework (REF 2014) conducted by the Higher Education Funding Council (HEFCE). The scoring system for the REF 2014 measures research quality in four categories, with the top score of 4* indicating quality that is world-leading and of the highest standards in terms of originality, significance and rigour and 3* indicating research that is internationally excellent. 81% of the College's research profile was deemed to be within the 4* or 3* categories, an increase of over 20% since 2008. This results for the quality of our research outputs placed Royal Holloway 15th in the UK based on an overall Grade Point Average (GPA) score and 20th in the UK for 4* and 3* research. The Department of Geography is ranked 1st in the UK for 3* and 4* research and is ranked within the top 5 departments for their subject in the UK.

[Back to top](#)

List of courses

The course is taught by staff at Royal Holloway, University of London, with additional support provided through the involvement of staff from the Natural History Museum (London). The course leads to an award of the University of London. Courses in Geography are not subject to accreditation by a professional body. The Banner course code is given in parentheses.

Master of Science in Quaternary Science

MSc in Quaternary Science (1372)

Postgraduate Diploma in Quaternary Science

PG Diploma in Quaternary Science (2504)

Postgraduate Certificate in Quaternary Science

PG Certificate in Quaternary Science (3074)

[Back to top](#)