Disclaimer

This document was published in September 2019 and was correct at that time. The department* reserves the right to modify any statement if necessary, make variations to the content or methods of delivery of programmes of study, to discontinue programmes, or merge or combine programmes if such actions are reasonably considered to be necessary by the College. Every effort will be made to keep disruption to a minimum, and to give as much notice as possible.

* Please note, the term ‘department’ is used to refer to ‘departments’, ‘Centres and ‘Schools’. Students on joint or combined degree programmes will receive two departmental handbooks.

An electronic copy of this handbook can be found on the departmental website (https://intranet.royalholloway.ac.uk/geography/currentstudents/home.aspx) where it will be possible to follow the hyperlinks to relevant webpages.
Contents

1 INTRODUCTION TO YOUR DEPARTMENT ................................................................. 7
  1.1 WELCOME .......................................................................................................... 7
  1.2 HOW TO FIND US: THE DEPARTMENT ......................................................... 7
  1.3 MAP OF THE EGHAM CAMPUS ..................................................................... 7
  1.4 HOW TO FIND US: THE STAFF ....................................................................... 8
  1.5 HOW TO FIND US: THE SCHOOL OFFICE ...................................................... 9
  1.6 THE DEPARTMENT: PRACTICAL INFORMATION .......................................... 9
  1.7 COR STAFF RESEARCH INTERESTS ............................................................... 11
    1.7.1 Professor Simon Armitage ........................................................................ 11
    1.7.2 Professor Simon Blockley ........................................................................ 11
    1.7.3 Professor Ian Candy ................................................................................ 11
    1.7.4 Dr Daniele Colombaroli .......................................................................... 11
    1.7.5 Dr Bethan Davies ..................................................................................... 11
    1.7.6 Dr Stefan Engels ...................................................................................... 12
    1.7.7 Dr Lucy Flower ....................................................................................... 12
    1.7.8 Professor J. John Lowe ........................................................................... 12
    1.7.9 Dr. Celia Martin-Puertas ......................................................................... 12
    1.7.10 Dr Ian Matthews ..................................................................................... 12
    1.7.11 Dr Alice Milner ....................................................................................... 13
    1.7.12 Dr Adrian Palmer .................................................................................. 13
    1.7.13 Professor Danielle Schreve .................................................................... 13
    1.7.14 Dr Jenni Sherriff ................................................................................... 14
    1.7.15 Dr Varyl Thorndycraft .......................................................................... 14

2 THE MSC QUATERNARY SCIENCE ........................................................................... 15
  2.1 AIMS OF THE PROGRAMME .......................................................................... 15
  2.2 COURSE REGISTRATIONS .............................................................................. 16
  2.3 COURSE COMPONENTS ................................................................................ 16
  2.4 CORE COURSES (CONDONABLE) ................................................................. 16
  2.5 FIELD TRAINING PROGRAMME (CONDONABLE) ........................................ 17
  2.6 OPTION COURSES (CONDONABLE) ............................................................ 17
  2.7 DISSERTATION (NON-CONDONABLE) .......................................................... 17
  2.8 COURSE TIMETABLE .................................................................................... 18
  2.9 PART TIME STUDENTS .................................................................................. 19
  2.10 PERIODIC REVIEW COMMITTEE ................................................................ 20

3 MSC QUATERNARY SCIENCE COURSE OUTLINES ............................................... 21
  3.1 GG5291 QUATERNARY PALAEOCLIMATOLOGY .......................................... 21
  3.2 GG5205 SEDIMENTOLOGY AND STRATIGRAPHY ....................................... 22
  3.3 GG5232 PALAEOECOLOGY, DATING AND QUANTIFICATION .................... 23
  3.4 GG5293 TECHNIQUES OF QUATERNARY RESEARCH ............................... 25
  3.5 GG5234 ORAL REPORT ............................................................................... 27
  3.6 GG5230 FIELD TRAINING PROGRAMME ..................................................... 27
  3.7 GG5212 THEORY AND APPLICATIONS OF LUMINESCENCE DATING ....... 29
  3.8 GG5203 PALYNOLOGY .................................................................................. 30
  3.9 GG5209 MICROMORPHOLOGY .................................................................... 32
  3.10 GG5223 QUATERNARY MAMMALS ............................................................ 33
  3.11 GG5233 GLACIERS IN THE CLIMATE SYSTEM ......................................... 34
  3.12 GG5290 TEPHROCHRONOLOGY ................................................................. 36
  3.13 GG5235 PALAEOFIRES .............................................................................. 37
  3.14 GG5236 PALAEOCLIMATOLOGY ................................................................. 38
  3.15 GG5229 LATE QUATERNARY PALAEOHYDROLOGY ................................... 39
  3.16 GG5231 CHIRONOMIDS ............................................................................. 40

4 MSC QUATERNARY SCIENCE DISSERTATION ......................................................... 42
4.1 OVERVIEW ........................................................................................................... 42
4.2 CHOICE OF DISSERTATION TOPIC ................................................................... 43
4.3 THE DISSERTATION SUPERVISOR .................................................................... 43
4.4 DISSERTATION ARCHIVE ................................................................................. 43
4.5 TIMETABLE ........................................................................................................ 43
4.6 DISSERTATION PROPOSAL FORMS ................................................................. 43
4.7 FUNDING FOR DISSERTATION RESEARCH .................................................... 44
4.8 ETHICAL APPROVAL ......................................................................................... 44
4.9 FIELD EQUIPMENT REQUEST AND RISK ASSESSMENT FORMS ................. 45
4.10 SUBMISSION OF DISSERTATION TITLE ......................................................... 45
4.11 SUBMISSION DETAILS ..................................................................................... 45
4.12 CONTENT OF DISSERTATION ......................................................................... 45
4.13 PRESENTATION OF FIGURES .......................................................................... 46
4.14 REFERENCING ................................................................................................. 47
4.15 APPENDICES .................................................................................................... 47
4.16 WORD COUNT .................................................................................................. 47

5 MSC QUATERNARY SCIENCE PRIZES .................................................................. 48
5.1 Ed Derbyshire Award ......................................................................................... 48
5.2 Philippa Holmes Book Prize .............................................................................. 48
5.3 Curry Prize ....................................................................................................... 48

6 SUPPORT AND ADVICE ...................................................................................... 49
6.1 STUDENT CHARTER .......................................................................................... 49
6.2 PGT DEGREE REGULATIONS .......................................................................... 49
6.3 SUPPORT WITHIN YOUR DEPARTMENT ......................................................... 50
6.4 STUDENTS’ UNION ROYAL HOLLOWAY UNIVERSITY OF LONDON (SURHUL) ......................................................................................................................... 50
6.5 STUDENT-STAFF COMMITTEE ........................................................................ 50
6.6 STUDENT SERVICES CENTRE .......................................................................... 51
6.7 SUPPORT ADVISORY & WELLBEING ............................................................. 51
6.8 STUDENT WELLBEING .................................................................................... 51
6.9 DISABILITY & DYSLEXIA SERVICES (DDS) .................................................... 51
6.10 INTERNATIONAL STUDENT SUPPORT OFFICE (ISSO) .................................. 52
6.11 ACADEMIC SKILLS SUPPORT ..................................................................... 52
6.12 IT SERVICES DESK .......................................................................................... 52

7 COMMUNICATION ................................................................................................ 53
7.1 EMAIL ................................................................................................................ 53
7.2 POST .................................................................................................................. 53
7.3 YOUR CONTACT INFORMATION ..................................................................... 53
7.4 NOTICE BOARDS .............................................................................................. 53
7.5 PERSONAL TUTORS ........................................................................................ 53
7.6 QUESTIONNAIRES ............................................................................................ 54
7.7 SPACE ................................................................................................................ 54

8 TEACHING .......................................................................................................... 55
8.1 DATES OF TERMS ............................................................................................. 55
8.2 ACADEMIC TIMETABLE .................................................................................. 55

9 ATTENDING CLASSES AND ENGAGING WITH YOUR STUDIES .................... 56
9.1 ATTENDANCE REQUIREMENTS ....................................................................... 56
9.2 MONITORING ATTENDANCE .......................................................................... 56
9.3 FORMAL WARNINGS ........................................................................................ 57
9.4 WITHDRAWAL OF VISA .................................................................................. 57
9.5 MISSING CLASSES ............................................................................................ 57
9.6 MISSING AN EXAMINATION ............................................................................ 58
18  SELECTED RECENT DISSERTATION TOPICS........................................................................ 91
18.1  SELECTED DISSERTATION TOPICS 2018/2019...................................................................... 91
18.2  SELECTED DISSERTATION TOPICS 2017/18........................................................................ 91
18.3  SELECTED DISSERTATION TOPICS 2016/17........................................................................ 92
18.4  SELECTED DISSERTATION TOPICS 2015/16........................................................................ 92
18.5  SELECTED DISSERTATION TOPICS 2013/14........................................................................ 92
18.6  SELECTED DISSERTATION TOPICS 2012/13........................................................................ 93
19  APPENDIX: FORMS........................................................................................................... 94
1 Introduction to your department

1.1 Welcome

Welcome to Royal Holloway. Royal Holloway, University of London (hereafter 'the College') is one of the UK's leading research-intensive universities, with six academic schools spanning the arts and humanities, social sciences and sciences.

Welcome also to the Department of Geography at Royal Holloway. We very much hope that your year with us will be enjoyable and challenging, and we look forward to working with you on the programme. This handbook aims to give you all the basic information you will require for your academic studies. This includes information on the structure and organisation of the degree programme, teaching arrangements and assessment.

This handbook should be read in conjunction with the Department of Geography Postgraduate Taught Student Handbook, which is available on the departmental website.

An electronic copy of this handbook can be found on the departmental website: https://intranet.royalholloway.ac.uk/geography/currentstudents/home.aspx#tabbedareaC

1.2 How to find us: the Department

The Department of Geography is located in the Queen's Building. This can be found on the College campus map as building 35.

1.3 Map of the Egham campus
Please note, student parking is very limited and is not available if you live in Halls or within 1.5 miles of campus. If you do live more than 1.5 miles away or have a particular reason why you need to come to campus by car, you must apply for a parking permit. If you have a motorbike or scooter you must also register the vehicle with College. Find more information about the Parking Permit portal here.

1.4 How to find us: the staff

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1.5 How to find us: the School office

The School Office can be emailed on: LSE-school@rhul.ac.uk
The office for the School of Life and Environment is located in Wolfson Ground 118.
The School telephone number is: 01784 276 884.

1.6 The Department: practical information

If you have any questions, please contact the Programme Director (Bethan Davies), or the Postgraduate Administrators in the School Office will be able to answer general queries.

A map of Queen’s Building is provided below.
1.7 CQR Staff research interests

1.7.1 Professor Simon Armitage
Professor of Quaternary Science, Centre for Quaternary Research, Department of Geography, RHUL

Simon is the Director of the Geochronology Laboratory at Royal Holloway and has research interests in the technical and theoretical development of luminescence dating and its application to a wide range of Quaternary archaeological and palaeoenvironmental problems. He is particularly interested in climate change and archaeology in dryland environments, with current work focusing on the impacts of late Quaternary climatic changes upon pre-industrial human/hominin populations in Africa and the Arabian Peninsula.

1.7.2 Professor Simon Blockley
Professor of Quaternary Science, Centre for Quaternary Research, Department of Geography, RHUL

Simon's research activity focuses on improving chronologies, by better age modeling and through tephrochronology. He is a Co-Investigator on the NERC RESET (Response of Humans to Abrupt Environmental Transitions) consortium, leading efforts to trace and identify tephra layers in terrestrial sites in Europe and North Africa, and leads the Chronology workgroup of the EU-funded INTegrating Ice core, MArine and TErestrial records (INTIMATE) project, which aims to develop common protocols and methods to reconstruct abrupt and extreme climate change across Europe, 60,000 to 8000 years ago. Much of his research has been focused on the Lateglacial, including ongoing work at the classic late upper Palaeolithic/Mesolithic site of Star Carr (North Yorkshire).

1.7.3 Professor Ian Candy
Professor of Geography, Centre for Quaternary Research, Department of Geography, RHUL

Ian's research interests include the study of Quaternary sedimentary sequences from Britain through the Mediterranean and Near East with the aim of producing high resolution chronologies that allow better understanding of geomorphic response to environmental change. In particular Ian is keen on combining U-series dating with other complementary techniques (such as OSL) to produce high precision sediment chronologies that can be correlated with high resolution records of palaeoclimatic change.

1.7.4 Dr Daniele Colombaroli
Lecturer in Quaternary Science, Centre for Quaternary Research, Department of Geography, RHUL

Daniele is biosphere paleoecologist studying the role of disturbances (human impact, fire, extreme events) on ecosystem structure and functions (biodiversity). He is interested in key biogeographical areas for future global changes (including Equatorial Africa, the Mediterranean Basin, and mountain regions in Europe and North America), and covering temporal scales from annual tree rings to the millennial scale of climate variability. The specific proxy data that he uses are pollen, charcoal, sedimentological properties and stable isotopes from high-resolution paleoecological records. Daniele's research projects have examined Fire in the Anthropocene, climate-vegetation disequilibria, the origin of “iconic” cultural landscapes, quantitative fire reconstructions, and are oriented towards the applications of long-term ecological records in biodiversity conservation and forest management.

1.7.5 Dr Bethan Davies
Senior Lecturer, Centre for Quaternary Research, Department of Geography, RHUL

Bethan is a glacial geologist interested in the interaction between glaciers and climate over multiple timescales. She specialises in ice-sheet and glacier reconstruction in temperate and high latitudes. Bethan uses a combination of field studies, chronostratigraphical methods (especially cosmogenic nuclide dating), remotely sensed data sets and numerical modelling to quantify ice-sheet and ice-shelf history. She is particularly interested in glacial processes at the ice-bed interface, and has used detailed sedimentological analyses and micromorphology to analyse processes of entrainment, deposition and deformation. Her current research interests are orientated towards the Antarctic Peninsula, the Patagonian Ice Sheet and the last British-Irish Ice Sheet. She is an editor of the Royal Society Open Science, Scientific Reports and the Open Quaternary journals, and sits on the Steering Committee for the NERC Cosmogenic Isotope Analysis Facility.
1.7.6 Dr Stefan Engels
Lecturer, Department of Geography, Birkbeck University of London

Stefan is a palaeoecologist whose research focusses on the reconstruction of past environmental change by using biological indicators stored in lake sedimentary archives. He is an expert on the use of insect remains (specifically subfossil chironomids) as indicators of past ecosystem change across the last glacial/interglacial cycle. Recent research projects include the analysis of leads and lags in ecosystem responses to abrupt climate change, and the study of long-term trends in biodiversity.

1.7.7 Dr Lucy Flower
Lecturer, Centre for Quaternary Research, Department of Geography, RHUL

Lucy is a palaeontologist interested in Quaternary mammals, particularly in carnivores and their evolution and palaeoecology. Her research focuses on palaeodiet, and how carnivores, such as wolves, flexibly adapted both morphologically and behaviourally to changes in climate and environment during the Pleistocene of Britain and northwest Europe. Lucy is also interested in modern carnivore conservation and rewilding, in particular, whether a species’ response to abrupt Pleistocene climatic and environmental change can inform on its current, and possibly future, diet and behaviour.

Ongoing collaborative projects include the use of stable isotopes of carbon and nitrogen, derived from bone collagen, to explore Pleistocene wolf temporal palaeodietary variation in terms of community-level predator-prey interactions and carnivore competition during the Middle to Late Pleistocene of southwest Britain.

1.7.8 Professor J. John Lowe
Professor of Geography and Quaternary Science, Centre for Quaternary Research, Department of Geography, RHUL

John’s research interests include Quaternary palynology, high-precision geochronology of late Quaternary events, Late Quaternary palaeoclimate change, tephrostratigraphy, palaeolimnology and peat stratigraphy. He was Lead PI on the NERC RESET consortium and a founding member of the EU-funded INTegrating Ice core, MArine and TErrestrial records (INTIMATE) project. He is a Past President of the Quaternary Research Association and of the INQUA Palaeoclimate Commission.

1.7.9 Dr. Celia Martin-Puertas
Royal Society Research Fellow, Dorothy Hodgkin Fellow, Centre for Quaternary Research, Department of Geography, RHUL.

Celia is a palaeolimnologist with a strong research background in palaeoclimatology, high-resolution proxy data and Late-Quaternary chronology. She specialises in annually-laminated lake sediments to understand abrupt climate changes occurring on human timescales. In particular, Celia’s research aims to understand how variations in the solar activity influenced European climate in the past and may do so in the future. Celia uses microfacies analyses and chemical signatures in the sediments to reconstruct climate variability at seasonal resolution, cosmogenic isotopes (\(^{14}\)C and \(^{10}\)Be) detected in those sediments for both age validation and solar activity reconstructions, and tephrochronology to integrate local studies at the regional level.

1.7.10 Dr Ian Matthews
Senior Lecturer, Centre for Quaternary Research, Department of Geography, RHUL

Ian’s research combines aspects of geochronology, environmental archaeology and palaeoecology. Most recently, he has focused on constraining and testing Holocene human-environment interactions in European wetlands through high-precision geochronological techniques including tephrochronology. His interests currently extend into investigating abrupt climate change in a variety of geographic regions, including the North Atlantic seaboard and the central Mediterranean, through the generation of robust palaeoenvironmental and archaeological datasets underpinned by precise and accurate chronologies. He is a member of the EU-funded INTegrating Ice core, MArine and TErrestrial records (INTIMATE) project.
1.7.11 Dr Alice Milner
Senior Lecturer, Centre for Quaternary Research, Department of Geography, RHUL

Alice’s research is focussed on using a combined palaeo and contemporary approach to understand ecohydrological dynamics in peatlands, including understanding the processes of peatland erosion and regeneration and how peatlands respond to human- and climate-driven changes (e.g. pollution, land management practices, sea level rise). She also has interests in using high-resolution pollen records to characterise the effects of rapid climate changes on terrestrial ecosystems during the interglacials and early glacials of the late Quaternary (Eemian and Holocene). Much of Alice’s research has a strong science-policy focus and she addresses research questions that are particularly relevant to understanding human-environment interactions.

1.7.12 Dr Adrian Palmer
Senior Research Officer in Physical Geography, Centre for Quaternary Research, Department of Geography, RHUL

Adrian is the deputy Technical Operations Manager in the Department of Geography. His research involves the development of high-resolution chronologies for the UK using the thin section micromorphology technique for the analysis of annually laminated sediments. Adrian has particular interests in the Late Glacial of the Scottish Highlands but also works on Middle Pleistocene glacial and interglacial deposits, including the generation of high-resolution information for the Hoxnian parastratotype deep lake sequence at Marks Tey in Essex. He is also a member of the EU-funded INTegrating Ice core, MArine and TErrestrial records (INTIMATE) project, which aims to develop common protocols and methods to reconstruct abrupt and extreme climate change across Europe, 60,000 to 8000 years ago.

1.7.13 Professor Danielle Schreve
Professor of Quaternary Science, Centre for Quaternary Research, Department of Geography, RHUL

Danielle’s research is on Quaternary mammals, combining biostratigraphy and the reconstruction of past environments, with the investigation of palaeobiological aspects such as extinctions and evolutionary change, and the interaction of past mammalian communities with early humans. Current research foci include (i) mammalian responses to long-term patterns of interglacial climate forcing, (ii) responses to abrupt climate change over the last glaciation and (iii) multiproxy investigation of palaeodiet in mammals and early humans. Her research is increasingly applied in the fields of ancient DNA and conservation biology, in order to establish baseline conditions for mammalian dispersal in the past and to identify sources for reintroduction of extirpated species. She has worked extensively on fluvial sequences in the UK (especially the Thames and Trent), on tufa sites in central Europe and on many cave sites in England. As a Fellow of the Society of Antiquaries, former President of the Geologists’ Association and recent Vice-President of the Quaternary Research Association, she is a keen science communicator as well as an active fieldworker, currently leading investigations into a number of important new palaeontological sites in Britain.
**1.7.14 Dr Jenni Sherriff**  
Lecturer, Centre for Quaternary Research, Department of Geography, RHUL  

Jenni is a Quaternary sedimentologist interested in terrestrial environment change and hominin-landscape interactions. Her work combines field and desktop-based mapping, sedimentology, micromorphology and sediment geochemistry to understand site formation processes and geomorphic evolution during the Pleistocene. Her research areas currently encompass the British Isles and the Southern Caucasus, where she is working principally on fluvial sequences and several open-air and cave Palaeolithic sites. She is also interested in the terrestrial expression of Middle Pleistocene interglacials in these regions, in particular how stable isotopes ($\delta^{18}$O and $\delta^{13}$C) of biogenic and abiogenic carbonates can be used to reconstruct climatic changes during these periods.

**1.7.15 Dr Varyl Thorndycraft**  
Senior Lecturer, Centre for Quaternary Research, Department of Geography, RHUL  

Varyl is a fluvial geomorphologist with research interests in palaeohydrology and investigating the response of rivers to changing climate and land use drivers during the Holocene. His research areas currently encompass the north-west of England and southern Chile. His work combines alluvial stratigraphic and hydraulic flood modelling approaches to quantify flood response to past environmental change, by reconstructing pre-instrumentation flood magnitudes and frequencies from slackwater flood deposits preserved in bedrock gorges, and by quantifying the response of flood hydraulics to both autogenic and allogenic drivers. He is a Member of the Executive Committee of the British Society for Geomorphology and Vice-Chair of the Publications sub-Committee.
2 The MSc Quaternary Science

2.1 Aims of the programme
The MSc degree in Quaternary Science offers comprehensive and flexible postgraduate training in the established yet dynamic field of Quaternary Science, with the academic emphasis being on the time-dependent processes affecting environmental change. In recent years, Quaternary research has developed a multi- and inter-disciplinary approach to the study of recent Earth history. In addition to the development of new fieldwork and laboratory techniques, substantial advances have been made in geochronological (dating) techniques. These, together with information from new geological archives such as those from the deep ocean floors and in the polar ice sheets, have provided new insights into Quaternary environmental change and created a framework for reconstructing patterns of past change with a degree of accuracy, precision and detail not normally obtainable for older geological periods. Quaternary science therefore provides the best available ‘laboratory’ for researching Earth-system processes and for generating critical baseline data for predicting future climate change.

The aims of this programme are:

- provide a conversion programme 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 programme 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 programme 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 MSc is taught by members of the Centre for Quaternary Research (CQR) at Royal Holloway, a leading interdisciplinary research centre in the field of Quaternary Science. Expertise within the group covers geochronology, palaeoenvironmental proxies, sedimentology and stratigraphy, tephrochronology and palaeoclimatology amongst others, as well as a range of technical skills such as micromorphology and stable isotope analysis. This range of expertise is augmented by external staff who teach option courses such as Quaternary microfossils, Palynology and Glaciers in the climate system and Palynology. The MSc teaching staff are in a unique position to convey research knowledge, experience and skills that will have direct relevance to employability as well as research training for further education, namely doctoral research.

Past students of the course are now employed by national scientific policy making and implementing agencies such as Natural England, the British Geological Survey and the Environment Agency, within government Research Councils, science publishing, higher education institutions, and as teachers and researchers. Many of our alumni are also currently undertaking doctoral programmes in the UK and abroad.

Learning outcomes:
Teaching and learning in the programme are closely informed by the active research of staff. In general terms, the programme 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

2.2 Course registrations

You can only register for 180 credits’ worth of courses in each academic year (this excludes courses which are being re-sat). You will have the option of changing courses up to the end of the second weeks after the start of teaching (excluding Welcome week). Any courses that you wish to take on an extracurricular basis (that is, not counting towards your degree) must be identified at the start of the academic year or before any assessment has been completed for the course.

Students will be asked to choose their optional courses late in the Autumn term. Students are advised not to try and do too many courses back to back, however, if students wish to do 3 courses in a row, an extension to deadlines may be possible at the discretion of the MSc course director. Students wishing to undertake 3 courses in a row should seek advice from the MSc course director.

2.3 Course components

Attendance at all core elements/modules and the Field Training Programme is compulsory. Candidates choose 5 option modules and undertake a Dissertation.

The course breaks down as follows:

<table>
<thead>
<tr>
<th>Course Component</th>
<th>Credits</th>
<th>Time Period</th>
</tr>
</thead>
<tbody>
<tr>
<td>Five Core Courses (including oral report)</td>
<td>50</td>
<td>Autumn term</td>
</tr>
<tr>
<td>Five Option Courses</td>
<td>50</td>
<td>Spring term</td>
</tr>
<tr>
<td>Glen Roy Field Training Programme</td>
<td>20</td>
<td>Easter break</td>
</tr>
<tr>
<td>Dissertation</td>
<td>60</td>
<td>Summer term and summer holiday</td>
</tr>
</tbody>
</table>

2.4 Core courses (condonable)

• GG5291 Quaternary Palaeoclimatology (10 credits)
• GG5201 Sedimentology & Stratigraphy (10 credits)
• GG5293 Techniques of Quaternary Research (10 credits)
• GG5232 Palaeoecology, Dating & Quantification (10 credits)
• GG5234 Oral report (10 credits): the final oral presentation of your dissertation results.

Full details of the teaching staff, aims, content, teaching format, assessment, learning outcomes, and assessment goals of these compulsory core courses are provided in the following sections.
2.5 **Field training programme (condonable)**

All students are required to participate in the two main residential programmes that are elements of the GG5201 Sedimentology and Stratigraphy core course (4 days in total) and GG5295 (the main Field Training programme, of minimum 10 days). In addition, field training exercises form compulsory elements of some of the option courses.

The objectives of these exercises vary and include:

- collection and analysis of data in the field,
- collection of materials for laboratory analysis,
- application of advanced analytical skills, applying the principles of the methods taught in the relevant option course,
- in-depth study of Quaternary palaeoenvironmental and/or stratigraphical evidence.

The Glen Roy Field Training Programme is worth 20 credits of your MSc Degree.

2.6 **Option Courses (condonable)**

Below is a list of the option courses (condonable) offered in the Spring Term, from which students are required to select five. Some degree of flexibility in the curriculum is envisaged in order to make provision for staff sabbaticals and other logistical matters. Each course is worth 10 credits.

- GG5203 Palynology
- GG5209 Micromorphology
- GG5220 Quaternary Microfossils
- GG5223 Quaternary Mammals
- GG5233 Glaciers in the Climate System
- GG5290 Tephrochronology
- GG5236 Palaeolimnology
- GG5229 Late Quaternary Palaeohydrology
- GG5231 Chironomids
- GG5235 Palaeofire
- GG5212 Theory and application of optically stimulated luminescence dating

Full details of the teaching staff, aims, content, teaching format, assessment, learning outcomes, and assessment goals of these option courses are provided in Section 3.

Each option course is taught in a block of one week (5 working days). The assessment for option courses may take a variety of forms, including laboratory reports, practical exercises, essays and scientific papers, depending upon the course. However, the assessments are designed in such a way as to be capable of completion within a maximum of two days additional to the 5 days allocated to the course for instruction. You must choose 5 option courses. However, you may choose to “sit in” in other option courses if you wish. Please let the MSc Director know which courses you would like to “sit in” on when you select your option modules.

Option courses will only run with a minimum of 4 registrations, except for Chironomids, which has a minimum of 6 registrations (as it is taught by external lecturers).

2.7 **Dissertation (non-condonable)**

Candidates must also prepare a dissertation (GG5299) not exceeding 10,000 words. The aim of the dissertation is to build upon the research training provided in the core and option courses and to enable students to undertake an independent and original piece of research on a Quaternary Science topic of their
choice. The Dissertation is worth 60 credits of the MSc Degree, and it is non-condonable.

Members of staff may circulate a list of dissertation topics that they wish to supervise, but it is the student's responsibility to identify an appropriate topic and supervisor(s). Having done so, students must produce a written draft dissertation proposal outlining aims, methods and resource requirements. These drafts are circulated to staff attending the presentations in early May after which oral presentations of dissertation projects are made. After taking into account verbal and written comments of staff, students complete and submit a final dissertation proposal that must be approved by supervisors and the Programme Director before field or laboratory work can be undertaken.

All members of the Teaching Team are available to be supervisors and external advisers/co-supervisors may also be appointed where appropriate. Each student is allocated one or more supervisors who will provide guidance on appropriate techniques and approaches as required. It is the supervisor's responsibility to ensure that a student is made aware of the relevant health and safety procedures in the field and/or laboratory. The assessment should be submitted in both paper and electronic format.

2.8 Course timetable

The provisional course timetable is shown below. Coursework submission is due at 16.15 each day on the prescribed date. Please see Section 12.2 for more information.

<table>
<thead>
<tr>
<th>Teaching week</th>
<th>Date</th>
<th>Autumn Term Core Courses</th>
<th>Course leader</th>
<th>Submission Deadline</th>
<th>Return marks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>23-27 Sept</td>
<td>*Induction week. Induction talks 24th September.</td>
<td>Ian Candy and Bethan Davies</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>30-5 Oct</td>
<td>*GG5291 Quaternary Palaeoclimatology</td>
<td>Celia MP &amp; CQR staff</td>
<td>5 Dec</td>
<td>13 Jan</td>
</tr>
<tr>
<td>3</td>
<td>7-11 Oct</td>
<td>*GG5291 Quaternary Palaeoclimatology</td>
<td>Ian Candy</td>
<td>21 Nov</td>
<td>14 Dec</td>
</tr>
<tr>
<td>4</td>
<td>14-19 Oct</td>
<td>*GG5201 Quaternary Stratigraphy &amp; Sedimentology</td>
<td>Ion Candy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>21-25 Oct</td>
<td>*GG5201 Quaternary Stratigraphy &amp; Sedimentology</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>28-1 Nov</td>
<td>Reading week.</td>
<td>Varyl Thorndycraft</td>
<td>Formative</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>4-8 Nov</td>
<td>*GG5293 Techniques of Quaternary Research I 6th November – London Quaternary Lectures</td>
<td>Jenni Sherriff</td>
<td>12 Dec</td>
<td>20 Jan</td>
</tr>
<tr>
<td>8</td>
<td>11-15 Nov</td>
<td>*GG5293 Techniques of Quaternary Research II</td>
<td>Lucy Flower</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>18-22 Nov</td>
<td>*GG5232 Palaeoecology, Dating &amp; Quantification I</td>
<td>Daniele C., Jenni Sherriff</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>25-29 Nov</td>
<td>*GG5232 Palaeoecology, Dating &amp; Quantification II</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>2-6 Dec</td>
<td>Reading week. 4th: Periodic Review Committee</td>
<td>Daniele C., Poppy Harding</td>
<td>13 Jan</td>
<td>10 Feb</td>
</tr>
</tbody>
</table>

Christmas Vacation (15 December – 11 January)
### Teaching week | Date | Spring Term Option Courses | Course leader | Submission Deadline | Return marks
---|---|---|---|---|---
1 (17) | 13-17 Jan | GG5290 Tephrochronology | Simon Blockley | 13 Feb | 12 Mar
2 (18) | 20-24 Jan | GG5212 Optically Stimulated Luminescence | Simon Armitage | 20 Feb | 19 Mar
3 (19) | 27-31 Jan | GG5203 Palynology | Alice Milner | 27 Feb | 26 Mar
4 (20) | 3-7 Feb | GG5233 Glaciers in the climate system | Bethan Davies | 5 Mar | 2 April
5 (21) | 10-14 Feb | GG5223 Quaternary Mammals | Danielle Schreve | 12 March | 9 April
6 (22) | 17-21 Feb | GG5231 Chironomids | Stefan Engels (BBK) | 19 March | 16 April
7 (23) | 24-28 Feb | GG5209 Micromorphology | Adrian Palmer | 26 Mar | 23 April
8 (24) | 2-6 Mar | GG5235 Palaeofires | Celia MP | 27 Apr | 24 May
9 (25) | 9-13 Mar | GG5236 Palaeolimnology | Varyl Thorndycraft | 27 Apr | 24 May
10 (26) | 16-20 Mar | GG5229 Palaeohydrology | | | |
11 (27) | 23-27 Mar | *GG5293 TQR III: Glen Roy training *Dissertation planning training session (2 hrs) | Adrian Palmer | | |

#### Easter Vacation (29 March – 25 April)
- Date tbc | *GG5230 Residential field training programme (Glen Roy) | Adrian Palmer | 11 May | 30 May

#### Summer term dissertation timetable (all compulsory)

<table>
<thead>
<tr>
<th>Submission Deadline</th>
</tr>
</thead>
<tbody>
<tr>
<td>*Initial Dissertation proposal form, countersigned by prospective supervisor (formative)</td>
</tr>
<tr>
<td>*Dissertation proposal presentations (formative)</td>
</tr>
<tr>
<td>*Final dissertation proposal form submitted to supervisor (formative)</td>
</tr>
<tr>
<td>1000-word report of progress submitted to supervisor (formative)</td>
</tr>
</tbody>
</table>

#### Summer vacation (15 June – 19 September). Mid-June: June PGT Sub-board

<table>
<thead>
<tr>
<th>Submission Deadline</th>
</tr>
</thead>
<tbody>
<tr>
<td>*GG5299 Final title of dissertation submitted to MSc course director</td>
</tr>
<tr>
<td>*GG5299 Dissertation submission</td>
</tr>
<tr>
<td>*GG5234 Oral presentation of dissertation results</td>
</tr>
</tbody>
</table>

#### 25th August: Periodic Review Committee.

### 2.9 Part time students

Part time students complete the MSc Quaternary Science over two years. While there is some flexibility in how they arrange their studies, a typical division of courses between the two years would be as follows:

#### Year 1
- All four core courses (Quaternary Palaeoclimatology, Sedimentology and Stratigraphy, Techniques in Quaternary Research and Palaeoecology Quantification and Dating) in the Autumn Term.
- The Field Training Programme (GG5230; the Glen Roy fieldtrip) at Easter
- ~2 option courses in the Spring Term

#### Year 2
- The balance of the option courses (~3) in the Spring Term.
- The dissertation (GG5299) in the Summer Term.

Students may choose to attend the Field Training Programme in the first or second year of their studies. Each course must be completed in a single year, and you are encouraged to complete at least the core courses in the first year.

Once the core courses are complete, there is some flexibility as to which year you take subsequent components in, though in general it makes sense if components are attempted in the same order as for full-time students. There are no provisions for evening tuition, or tuition via the internet.

2.10 Periodic Review Committee

Two elected Course Reps (for more information on course reps, visit the Course Reps homepage [https://www.su.rhul.ac.uk/voice/coursereps/) and also Section 6.5 (Student-Staff Committee)) should gather feedback from their colleagues, and represent these views to the termly Periodic Review Committee meetings.
3 MSc Quaternary Science course outlines

3.1 GG5291 Quaternary Palaeoclimatology

Staff

Dr Celia Martin-Puertas (coordinator), CQR staff

Aims

The course aims to provide a comprehensive introduction to the different palaeoclimatic archives and proxies. It will provide an overview of Quaternary climate forcing factors (both internal and external), events, cycles and thresholds, illustrated with a range of case studies.

Content

Week 1: The Quaternary Period and Climate Change

Overview of the structure of the Quaternary, characteristics, key terms; Onset of global cooling, potential causes for the onset of the Quaternary; Ice Age cycles, ideas of Orbital Forcing, the proxy record of Ice Age cycles in the benthic Δ18O record; The proxy record of Ice Age cycles in the ice core record; amplification of the orbital signal (albedo, dust and greenhouse gases); Abrupt climate change during the last Glacial; Heinrich events, D/O cycles and the Bi-Polar see-saw; proxy records of abrupt change and their correlation; Abrupt and short-term climate change during the Holocene; key events and their causes (8.2ka, Medieval Warm Period, Little Ice Age); response of ecosystems and landscapes.

Week 2: Quaternary climate change: its Physical Expression

Quaternary climate change in High latitudes; Quaternary Glaciations; Quaternary climate change in the temperate Mid-Latitudes (western Europe and the Mediterranean); Abrupt climate change in northwest Europe

Teaching format

The course is based upon lectures and class discussion.

Assessment

Coursework accounts for 100% of the marks: 3000 word essay in the style of a NERC-quality grant proposal, on a choice of palaeoclimatological topics.

Learning outcomes

By the end of this course, students should:

- Understand the nature and process of climate forcing factors during the Quaternary, including external (e.g. tectonics, orbital forcing, solar) and internal (e.g. ocean circulation, ice sheets, greenhouse gases) factors.
- Appreciate the archives available to provide Quaternary palaeoclimatic records, particularly ocean and ice cores.
- Have an overview of Quaternary climate thresholds, cycles and events (e.g. onset of Northern Hemisphere glaciation, Mid-Pleistocene Revolution, Glacial-Interglacial cycles, Dansgaard-Oeschger cycles, Heinrich events, ENSO, NAO)
- Understand the physical expression of Quaternary palaeoclimate through a range of case studies
Assessment goals

The degree to which students have successfully attained these learning outcomes is evaluated:

- Directly through the course work essay
- Indirectly through the dissertations which may benefit from an appreciation of the specific techniques and palaeoclimatic principles covered in the course

Promotion of transferable skills

Group discussion promotes evaluation and critique of published information. The course work encourages the assimilation, summary and interpretation of palaeoclimatic datasets, requiring considerable organisation and presentation skills. The style of a NERC grant proposal for the assignment promotes skills in designing and costing a research grant.

3.2 GG5201 Sedimentology and Stratigraphy

Staff

Professor Ian Candy & other CQR staff

Aims

The aim of the course is to make students aware of how Quaternary sequences are preserved and explain how sediments accumulate in a range of depositional environments (Including fluvial, marine, glacial, lacustrine and aeolian), highlighting the problems that different depositional environments present for the construction of continuous Quaternary records. The course also aims to highlight the issues associated with constructing stratigraphies within the fragmented terrestrial record and the problems of relating these stratigraphies to climatic events in the continuous marine isotopic record, and to explain the range of approaches that can be used to construct stratigraphies, with particular reference to the Quaternary stratigraphy of Britain. Finally, the course will develop student ability to describe and interpret sediment sequences using a range of techniques

Content

Week 1: Sedimentology

Introduction; Depositional processes and flow; Diamicton processes; Sorted sediment structures; Deformation structures; Particle size analysis; Sediment fabrics; Roundedness and other properties; Describing sediments in the field; Field sedimentology: poorly sorted sediments (Hunt’s Bay, South Wales); analysis of Quaternary sediments (practical) and presentation of field and laboratory results in the afternoon; Lacustrine sedimentation; sediment accumulation and preservation; Review of fieldwork data

Week 2: Stratigraphy

Quaternary climate change; Terrestrial stratigraphies and introduction; Stratigraphic techniques; the Early and early Middle Pleistocene in the UK; Warm climates in the early Middle Pleistocene; Lowland Glaciation; Interglacial episodes; Quaternary stratigraphy in the field (two day trip to eastern England); Last Glacial cycle and the Last Glacial Maximum; the Lateglacial/Interglacial transition; Review of fieldwork results

Teaching format
The course is based upon lectures, field trips, practicals and class discussion.

**Assessment**

Coursework accounts for 100% of the marks on the course. There are two coursework reports, based around the field trips (one based on sedimentology and one based on stratigraphy), both of these will be a maximum of 1500 words.

**Learning outcomes**

By the end of this course, students should:

- Understand the processes that lead to the accumulation of sediment sequences
- Identify the strengths and limitations of sediment sequences as archives of palaeoenvironmental change
- Develop skills in recording sediment characteristics and attributes in the field
- Be able to explain the main techniques that are commonly used to construct terrestrial stratigraphies
- Develop key skills in presenting and describing scientific data

**Assessment goals**

The degree to which students have successfully attained these learning outcomes is evaluated:

- Directly through the course work essays
- Indirectly through the dissertations which may benefit from an appreciation of the specific techniques and sedimentological/stratigraphical principles covered in the course

**Promotion of transferable skills**

Group discussion promotes evaluation and critique of published information. The fieldwork encourages observational and descriptive skills. The course work encourages the assimilation, summary and interpretation of sedimentological and stratigraphical datasets, requiring considerable organisation and presentation skills, in particular of stratigraphical logs.

### 3.3 GG5232 Palaeoecology, Dating and Quantification

**Staff**

Dr Lucy Flower (co-ordinator Week 1), Dr Daniele Colombaroli (co-ordinator Weeks 2 and 3), CQR Staff

**Aims**

The aims of the course are to provide an overview of important palaeoecological proxy methods used to reconstruct Quaternary environments and biotic assemblages and to provide instruction of methods employed to obtain quantitative estimates of past environmental conditions using palaeoecological data. Students will be introduced to the principal methods used to date Quaternary sequences, and learn to assess their limitations, and will then combine palaeoecological methods with chronological data in order to construct realistic age models from which the timing, rate and persistence of environmental changes can be inferred. The overarching aim is this to show how the above procedures and their outcomes fit into the wider perspective of global models of past environmental change and the potential for testing models of future environmental change.
Content

Week 1: Palaeoecology

Uniformitarianism; taphonomy; application, strengths and limitations of a range of environmental proxies, such as pollen, plant macrofossils, beetles, chironomids, cladocerans, vertebrates and hominins, diatoms, marine foraminifera, ostracods, molluscs and biomarkers

Week 2: Quaternary geochronology

The application, strengths and limitations of a range of Quaternary dating methods, including the construction of the SPECMAP timescale based on oxygen isotope variations, radiometric methods (potassium-argon; U-series; radiocarbon), radiation ‘damage’ methods (luminescence, fission track, and cosmogenic isotope ratio analysis), chemical and biological degradation methods (obsidian hydration, uranium uptake and calcification, amino-acid dating), time-equivalent procedures (palaeomagnetic variations, volcanic ash chronology) and annually-resolved methods (dendro-chronology, varve chronology, coral growth layers).

Week 3: Quantification and modelling

Radiocarbon calibration procedures; age model construction and testing; convergence testing of age models; modern analogue approach to modelling of past environmental conditions; transfer function approaches; spectral analysis; time-space reconstructions/mapping; biome models and Earth System Models.

Teaching format

The course is based upon lectures, practical exercises and class discussion.

Assessment

Coursework accounts for 100% of the marks on the course: a 3000 word course paper (on a choice of topic), reporting results of analysis of a palaeoecological data-set.

Learning outcomes

By the end of this course, students should:

- Have an up-to-date overview of key methods used in Quaternary palaeoecology and chronology
- Have experience of how these approaches are combined to generate integrated models of environmental change
- Be able to judge which methods have the highest potential and reliability in different geographical, stratigraphical and site contexts
- Have knowledge of running quantitative models, including Bayesian-based procedures, from which the magnitude and rate of environmental change can be inferred, and to assess the uncertainties associated with the results
- Be better equipped to design experiments that may lead to improved precision and accuracy of environmental reconstruction and geochronological definition. Understand the physical expression of Quaternary palaeoclimate through a range of case studies
Assessment goals

The degree to which students have successfully attained these learning outcomes is evaluated:

- Directly through the course work essay
- Indirectly through the dissertations which may benefit from an appreciation of the specific techniques and palaeoecological and geochronological principles covered in the course

Promotion of transferable skills

Group discussion promotes evaluation and critique of published information. The laboratory work encourages observational and descriptive skills. The course work encourages the assimilation, summary and interpretation of palaeoecological and geochronological datasets, requiring considerable organisation and presentation skills.

3.4 GG5293 Techniques of Quaternary Research

Staff

CQR Staff

Aims

The course aims to provide a range of specific and transferrable skills in laboratory, field and desktop techniques to: a) complement skills taught on other core and option courses; b) prepare the students for their dissertation; and c) improve employability.

Content

Attendance on the course is a compulsory pre-requisite for the students to attend the Scottish field trip (GG5230) and undertake the dissertation (GG5299).

The course is divided into three parts, each of a week’s duration:

Week 1: GIS and Remote Sensing. Led by Dr Varyl Thorndycraft

Introduction to Quaternary geomorphology; importance and applications of mapping and surveying in Quaternary Science; remote sensing; aerial photographs; Google Earth; NextMap and other methods; practical sessions on use of Google Earth using case studies; field surveying (Total Station, differential GPS, coring, sediment description); introduction and practical sessions on LiDAR and GIS.

Assessment for this week is formative.

Week 2:

I. Skills and Employability. Led by Dr Jenni Sherriff

Guidance on oral and poster presentations; PhD and grant applications advice; webpage design training and practice; science communication; graphics training (Adobe Illustrator and Photoshop); employability session with former graduates and other employers. No assessment.
II. **Online science communication. Led by Dr Jenni Sherriff**

Introduction to the concept of online science communication, with discussion and analysis of the perils and advantages.

Summative assessment: development of a science communication Wordpress website (2500 words).

**Week 3: Field Programme Training. Led by Dr Adrian Palmer**

Preparation for the Scottish Highlands field course, including approaches to mapping and interpreting glacial landforms; key elements of the glaciation history of the Highlands. Formative assessment.

**Teaching format**

The course is based upon fieldwork, laboratory and computer practicals, oral presentations and lectures.

**Assessment**

Students will be given formative verbal and written feedback on their mapping skills (Week 1) and oral presentations (Week 2). Summative assessment comprises the development of a website aimed at communicating a part of Quaternary Science to the general public (Week 2).

Coursework accounts for 100% of the marks on the course: A website conveying the findings and significance of a scientific paper to a general audience. This assignment assesses skills in communicating complex findings to non-experts and aims to develop skills in online science communication.

**Learning outcomes**

By the end of the course, students should:

- Be familiar with essential field techniques including remote sensing, surveying, mapping, coring and other methods
- Be able to integrate field data and LiDAR with GIS to generate and interpret landform models
- Be proficient in presentational skills, both orally and in the form of posters and web-page design;
- Be proficient in the use of graphics for Quaternary sediment logs and other purposes
- Be prepared for the fieldtrip in the Scottish Highlands by understanding approaches to mapping and interpreting landforms and sediments in the field and acquire background in the history of glaciations in Scotland; receive logistical, safety and academic briefings and guidance
- Be able to maximise employment or further research potential through acquisition of specific and transferrable skills

**Assessment goals**

The degree to which students have successfully attained these learning outcomes is evaluated:

- Directly through a series of field and practical exercises on the fieldtrip and elsewhere
- Directly through the assessed formative presentations
- Indirectly through the choice, design, content and execution of the dissertation/research project
Promotion of transferable skills

The course provides experience and skills in relevant information-based technology. Teamwork skills are developed through group co-operation for data synthesis and analysis. Skills in graphics and web-page design also form an integral part of this course. Over the course of the programme, each student has to present a minimum of three oral presentations to peers, other postgraduates and academic staff, under conference-type formal proceedings, which fosters communication skills.

3.5 GG5234 Oral report

The last day of the MSc Quaternary Science consists of an academic conference, where MSc students give conference style oral presentations on the topic of their dissertation. This conference will be the week following submission of the dissertation. Each student gives a presentation on their dissertation that lasts for 10 minutes, and is followed by 5 minutes of questions. Timings will be strictly observed. This oral presentation is worth 10 credits of your MSc Degree.

The overall performance of each student is assessed by members of the MSc Quaternary Science teaching staff, with a mean mark being calculated. The audience for the presentation consists of all members of the Centre for Quaternary Research (MSc, PhD, technicians and teaching staff), all of whom may ask questions. This conference is the finale of the MSc Quaternary Science.

3.6 GG5230 Field Training Programme

Staff

Dr Adrian Palmer, Dr Ian Matthews, Dr Bethan Davies and Professor John Lowe

Aims

This field course (currently based in the Western Highlands of Scotland) aims provides students with a sustained period in the field to gain in-depth experience of a range of field methods, including landform mapping, instrumental surveying, sub-surface coring, stratigraphic logging and applied numerical modelling. It also has been designed to bring together all of the relevant elements and approaches that the students have studied in the Core and Option courses. During the field course, these different threads are all brought to bear on a particular time period and landscape context, and a core theme. The theme is the extent, timing, rate and causes of the growth and demise of the last glacier ice masses to have occupied the Scottish Highlands. It is scheduled just before the date when students are required to select project topics for the dissertation element of the degree programme, and therefore provides instruction relevant to project design, execution and presentation. It therefore provides a bridge between the taught courses in Terms 1 and 2, and the Dissertation (individual project) of Term 3.

Content

Two preparatory days of lectures are provided in advance of departure to Scotland, to set the regional and scientific context, explain the structure, aims and content of the course, and introduce the students to the literature available. The field course itself is structured as follows:

The first six days of the course introduce the students to the local landscape and key geological features, to existing theory and understanding, and to the outstanding questions that remain to be answered, particularly concerning the extent, timing and causes of the last glacier ice masses to have occupied the Scottish Highlands. The party visits different locations throughout the Highlands, the students are shown important elements of the field evidence, and are required to keep notes of their observations and of the field discussions. In the evenings, staff lead discussions on the evidence covered each day, invite questions, and provide a steer towards current gaps in knowledge. Data projectors are available for this purpose.
**Day 7:** The students are then given a full day to review the information gathered during the first six days, and to design their own team projects that address some of the key issues raised in earlier discussions. The project proposals are reviewed by the staff on the evening of Day 7, and equipment lists and other logistical requirements are agreed with each project team.

**Days 8 and 9** are devoted to execution of the team projects, with the results and observations reviewed each evening. Students are encouraged to photograph the features they observe, the field methods employed, and any particularly problematic elements encountered, and in the evenings these can be shown to peers and staff, allowing the emerging evidence and project progress to be reviewed.

**Day 10** is student-led. In the morning each team co-ordinates their project results and prepares a PowerPoint presentation explaining the project’s aims, methods, results and scientific implications. In the afternoon, a mock-conference session is held, during which each team presents their project results within predetermined time limits. Each presentation is followed by questions and discussion.

Please note that in any given year, practical considerations may require a modification of the timetable outlined above.

**Assessment**
(a) A summative 2500 word Field Project Report, explaining the aims, methods, results and outcomes of the field project completed, with a 500-word appendix explaining the individual student’s contribution to the project (70% of marks).

b) An A3 colour poster to be presented at a mock conference session entitled ‘The Late Quaternary of Scotland: Current Issues and future perspectives’, together with a 500 word abstract. The students would be asked to identify a key scientific problem within one of the topics discussed during the field training programme, explain our current understanding and then summarise a future programme of research that might advance our understanding of the Late Quaternary Geology of Scotland (30% of marks).

Please note that the A3 colour poster should be submitted physically to the School helpdesk as well as to Turnitin.

**Learning outcomes**

By the end of the course, students should be able to:

- Plan and conduct field-based investigations that address key, modern research questions in Quaternary Science.
- Develop the optimal design strategies for field-based experiments, including the development of substantive aims and objectives for a project.
- Work as a team for the integration of linked field investigations and data synthesis
- Visualize field-based experimental results and evaluate their significance
- Present research results in poster form

The course also provides students with hands-on experience of a range of field equipment and illustrates the full gamut of progressive stages in field-based research, from conceptualising a problem, through experimental design, to delivery of results. The students will also have a much clearer idea of how the various topics taught in the Core and Option courses can be integrated for the reconstruction of relatively sophisticated palaeoenvironmental models.
Assessment goals

The degree to which students have successfully attained these learning outcomes is evaluated:

- Directly through the field report and poster
- Directly through a series of field and practical exercises on the fieldtrip
- Directly through the mock presentations
- Indirectly through the choice, design, content and execution of the dissertation/research project

Promotion of transferable skills

The course provides experience and skills in participating in field research and planning of field-based analyses. Fieldwork encourages individual observational and descriptive skills. Teamwork skills are developed through group co-operation for data synthesis and analysis. Students also present talks and posters under conference-type formal proceedings, which fosters communication skills and promotes abilities in synthesizing information.

3.7 GG5212 Theory and Applications of Luminescence Dating

Course Leader

Dr Simon Armitage

Aims

The course aims to introduce students to both theoretical and practical aspects of the luminescence dating of Quaternary sediments.

Content

The detailed syllabus includes the following topics:

- Physical mechanisms of luminescence dating
- Preparation techniques and measurement equipment
- Assessment of equivalent dose and environmental dose rate values
- Case studies of luminescence dating in a range of sedimentary contexts

Teaching format

The course is based upon lectures, practicals and class discussion.

Assessment

The course assessment consists of two elements:

1) Course Paper: A 2000 word review of an aspect of luminescence dating including technical information and details of the practical implications. This review should be written in the style of a scientific paper. 67% of course mark.
Learning outcomes

By the end of the course, students should:

- Be aware of the processes of luminescence signal accumulation, storage and stimulation
- Be aware of methodologies used to isolate and measure the luminescence signal of those minerals commonly used in luminescence dating
- Be aware of the principles, forms and reliability of environmental dose rate evaluation
- Be able to produce equivalent dose and environmental dose rate values, with associated values of statistical uncertainty, and hence luminescence age estimates

Assessment goals

The degree to which students have successfully attained these learning outcomes is evaluated:

- Directly through a series of practical exercises in the luminescence laboratory
- Directly through the formally-assessed course work, which tests their ability to assess technical information and interpret luminescence data
- Indirectly through the formulation and execution of dissertations which may benefit from an appreciation of OSL

Promotion of transferable skills

The course paper requires critical reading and the assimilation of a wide range of data. The ability to reduce this information to a specified word limit and communicate concisely is developed. The course paper should be in the style of a scientific paper, developing or affirming the knowledge of the technical requirements of such a publication. The laboratory report requires numerical and statistical skills, notably organisation and analysis of large volumes of data within a spreadsheet and practical approaches to error propagation.

3.8 GG5203 Palynology

Course Leader

Dr Alice Milner

Aims

The course aims to provide a thorough grounding in the theory and methodology of Quaternary pollen analysis, in particular pollen morphology, pollen identification, pollen recruitment and preservation, field and laboratory techniques, pollen counting, construction and zonation of pollen diagrams, and interpretation of pollen diagrams in terms of past flora, vegetation, landscape and environment. Particular emphasis is given to the “hands on” aspects of pollen analysis.

Content

The detailed syllabus covers the following topics:

- Basic pollen structure, pollen types and pollen identification
Field sampling selection criteria
Preparation and laboratory techniques
Pollen counting and pollen diagram construction
Zonation and use of computer programs to plot a pollen diagram
Interpretation of pollen analytical data
Factors affecting fossil pollen abundance, diversity and preservation

Teaching format

The course is based upon lectures, laboratory practical and data analysis classes.

Assessment

Course assessment is based on a 3000 word report, formatted as a short communication that conforms to the guidelines of a specified Quaternary journal. The aim of the assessment is to analyse and interpret pollen data to reconstruct vegetation and environmental change. The assessment gives experience in presenting and interpreting pollen data to a standard typical of a Quaternary publication, and includes a critical assessment of pollen data in context of published literature.

Learning outcomes

By the end of this course, students should:

- Understand the principles of pollen analysis as a tool in Quaternary Palaeoecology
- Be aware of the strengths and the weaknesses of pollen analysis as a tool in Quaternary research
- Know how to make reliable pollen counts of samples and plot a pollen diagram
- Appreciate the factors which influence the assessment and interpretation of Quaternary pollen-analytical data

Assessment goals

The degree to which students have successfully attained these learning outcomes is evaluated:

- Directly through the formally assessed work, in which the students must show an understanding of the theory and practice of Quaternary pollen analysis
- Directly through non-assessed practical exercises requiring the identification of key pollen taxa
- Indirectly through the dissertation, which may benefit from an appreciation of the specific techniques and palaeoecological principles, as well as the general concepts covered in the course

Promotion of transferable skills

The course encourages clear and logical thought in the design and implementation of Quaternary pollen-analytical studies and in the analysis and interpretation of Quaternary pollen stratigraphical data. The course involves individual practical work, which encourages observational skills. The assessment requires critical reading and assimilation of original papers, and the ability to synthesise and evaluate critically selected scientific publications.
3.9 GG5209 Micromorphology

Course Leader
Dr Adrian Palmer

Aims
The course will provide an introduction to the study of thin section micromorphology and its application to Quaternary sediments. The course will focus on the preparation of thin sections from unconsolidated sediments, using appropriate descriptive formats and generate robust interpretations of different Quaternary sediment sequences. Students should also have an understanding of how thin section micromorphology has become a key tool in Quaternary Sedimentology and is of crucial importance for the interpretation and palaeoenvironmental reconstruction of Quaternary sequences, whilst also essential for the generation of high-resolution chronologies.

Content
The emphasis of the course will be placed on developing the microscopy skills of the students and therefore much time will be devoted to microscopic work. During the examination of sediments time will be set aside for students to describe their findings to the group and discuss the processes of sediment deposition. The syllabus will cover:

- Examples of palaeoenvironmental reconstructions using micromorphology; Sampling techniques in the field and from cores; Preparation of samples in laboratories at RHUL; Introduction to petrological microscopy
- Glaciolacustrine sediments; Introduction to micromorphology of glacigenic sediments
- Glacigenic sediments
- Quaternary palaeopedology

Teaching format
The course is based upon lectures, practicals and class discussion.

Assessment
An essay (2000 words maximum) focussing on a critical examination of how thin section micromorphology has enhanced Quaternary research. Practical exercises focusing on the detailed analysis of one thin section selected from the suite of palaeoenvironments studied during the course. Thin sections will be made available in the two weeks subsequent to the course in order to develop more detailed descriptions of the sediments (1000 words).

Learning outcomes
By the end of this course, students should be able to:

- Understand how sections are sampled in the field and laboratory, including manufacture of thin sections, timescales for the preparation of the slides and costs associated with production
- Use of petrological microscopes for the description of Quaternary sediments
- Use appropriate descriptive techniques and generating summary sheets for communicating the findings of microscale analysis of the different Quaternary sediments covered in the course
- Make appropriate process-based interpretations of thin sections to develop a palaeoenvironmental reconstruction
- Critically examine the micromorphological technique in a variety of sedimentological contexts
Assessment goals

The degree to which students have successfully attained these learning outcomes is evaluated:

- Directly through a series of practical exercises requiring the description and interpretation of the microscopic characteristics of different deposits
- Directly through the formally-assessed course work, for which students have to complete exercises designed to test their ability to derive and interpret micromorphological data
- Indirectly through the formulation and execution of dissertations which may benefit from an appreciation of micromorphological studies

Promotion of transferable skills

Part of the assessed course work has to be submitted in the form of laboratory reports requiring manipulation of microscopic methods and computer software.

3.10 GG5223 Quaternary Mammals

Course Leader

Prof. Danielle Schreve

Aims

The course aims to provide students with a theoretical and practical understanding of the value of mammalian fossil material to Quaternary studies and its use in Palaeolithic zooarchaeology. The course promotes a familiarity with the techniques involved in the excavation, identification and analysis of mammalian fossil material, an understanding of taphonomic factors and an awareness of different depositional environments. The course further aims to provide students with an understanding of the principles behind the use of mammalian assemblages in biostratigraphy and the implications for Quaternary climatic and environmental change.

Content

The course will provide a thorough grounding in Quaternary vertebrate (principally mammalian) palaeontology, with particular reference to sampling and processing techniques, taphonomy and the description, identification and interpretation of vertebrate assemblages against a background of Quaternary climatic and environmental change. The detailed syllabus covers the following topics:

- Site formation processes and biases in the fossil record
- Techniques for the collection, processing and analysis of fossil vertebrate remains
- Identification and taxonomy of key vertebrate groups
- Palaeoecology of Quaternary vertebrates
- The application of ancient DNA to Quaternary mammal studies
- European Quaternary mammalian faunal history, including the application of biostratigraphical techniques to sedimentary sequences, evolutionary trends, responses of mammals to Quaternary climatic and environmental change
- Identification of evidence of mammalian exploitation by early hominins
- Quaternary mammals of North and South America and Australia
- Megafaunal extinctions
Teaching format

The course will include lectures, practicals, demonstrations and class discussion. A hands-on approach is encouraged with ample opportunity to handle fossils, casts and recent comparative mammalian material.

Assessment

The course assessment (100%) will take the form of a guided practical exercise (to be written up as a 3000 word report), during which students will be expected to interpret vertebrate assemblages of different ages and from different depositional environments.

Learning outcomes

By the end of the course in which discussion, practical exercises and course work form integral parts, students should have acquired:

- Basic identification skills in a number of key fossil vertebrate groups
- An appreciation of the nature of the vertebrate fossil record, with regard to taphonomy
- An understanding of Pleistocene vertebrate faunal histories and their use in biostratigraphy and palaeoecological reconstruction
- A knowledge of early hominin practices relating to mammalian remains
- An awareness of the strengths and weaknesses of vertebrate remains in the interpretation of Quaternary sequences

Assessment goals

The degree to which students have successfully attained these learning outcomes is evaluated:

- Directly through practical exercises requiring the description and identification of key fossil groups
- Directly through the formal assessment, for which students must apply their knowledge of taphonomic processes, vertebrate palaeoecology and biostratigraphy to interpret fossil assemblages
- Indirectly, through the formulation and execution of the dissertation that may benefit from an appreciation of the specific techniques and palaeontological principles, as well as the general concepts covered in the course

Promotion of transferable skills

Vertebrate identification encourages observational and descriptive skills, as well as the application of identification keys. The formal assessment encourages the collection, assimilation and summary of diverse lines of evidence (taphonomic, biostratigraphical, palaeoecological), requiring considerable organisation and presentation skills.

3.11 GG5233 Glaciers in the Climate System

Course Leader

Dr Bethan Davies

Aims

To give students an introduction to the key concepts and methods used in modern glacial geology and glaciology, including process glaciology, glacial geology and numerical ice-sheet modelling.
Content

The detailed syllabus will include some or all of the following topics:

- To understand processes of glacier flow and dynamics;
- To examine the basis and techniques for the reconstruction of past glaciers and ice sheets;
- To develop critical evaluation of evidence of past glacier fluctuations and a range of approaches to past glacier reconstruction;
- To develop quantitative statistical skills for the reconstruction of past glaciers and ice sheets and analysis of present glaciers.

Teaching format

The course consists of lectures, practical classes and informal class discussions. Lectures will introduce the fundamental principles, whilst practical classes will encourage deeper, active learning. These practical classes will provide students with key experience in numerical modelling, GIS and remote sensing, and ice penetrating radar.

Assessment

a) A 1000 word report on the practical exercises conducted in the class (33% of marks for the course).

b) A 2000 word essay on one of a series of possible essay questions, exploring themes introduced in the module (67% of marks for the course).

Learning outcomes

By the end of this course, in which practical learning and assessed work form an integral part of the learning process, students should:

1. Understand the physical processes of ice flow;
2. Critically understand and be aware of the limitations and advantages in reconstructing past ice sheets from glaciological and glacial geological data;
3. Understand the key principals of ice-sheet and glacier modelling;
4. Develop skills in quantitative GIS.

Assessment goals

The degree to which students have successfully attained these learning outcomes is evaluated:

- Directly through a series of practical sessions
- Directly through the summatively-assessed course work
- Indirectly through the formulation and execution of dissertations which may benefit from an appreciation of the key concepts and methods used in modern glacial geology and glaciology

Promotion of transferable skills

The course paper requires critical reading and the assimilation of a wide range of data. The ability to reduce this information to a specified word limit and communicate concisely is developed. The practical exercises will enhance data handling, numerical and statistical skills.
3.12 GG5290 Tephrochronology

Course leader

Professor Simon Blockley

Aims

To give students an introduction to the scientific underpinning of tephrostratigraphy and tephrochronology and the essential practical skills required to undertake tephra studies in palaeoenvironmental records.

Content

The detailed syllabus includes the following topics:

- Volcanological background to tephrochronology and tephrostratigraphy
- Transport, deposition and stratigraphic issues in distal tephra research
- Identification and extraction of distal tephra
- Geochemical characterization of tephra
- Age modelling and tephrochronology

Teaching format

The course is based upon lectures, and practical classes, with about 50% of the course being based around practical teaching.

Assessment

Building on the skills and information acquired during the practical sessions, students will prepare a research paper on the identification, correlation and age modelling of tephra located in the cores they have been analysing. This should be concise and of a style suitable for an academic journal (3000 words).

Learning outcomes

By the end of this course, in which practical exercises and assessed coursework form an integral part, students should:

- Be aware of the scientific underpinning of tephra research
- Be aware of methodologies used to identify and correlate tephra
- Be aware of the potential for improving age models based by integrating tephra with other dating and correlation methods
- Be able to extract distal ash from host sediments, identify microscopic tephra and evaluate tephra chemical data
- Be able to integrate tephra with various dating methods

Assessment goals

The degree to which students have successfully attained these learning outcomes is evaluated:

- Directly through the formally-assessed course work consisting of a focused research paper
- Directly through a set of non-assessed practical exercises which culminate in the production of a tephra correlation exercise
• Indirectly, through the formulation and execution of the dissertation that may benefit from an appreciation of the analytical techniques and general concepts covered in the course

Promotion of transferable skills

The course paper requires critical reading and the assimilation of a wide range of information. The ability to integrate this with data from the practical exercises is a key skill across a range of sciences. The course paper should be in the style of a scientific paper, developing or affirming the knowledge of the technical requirements of such a publication. Tephra identification requires a set of practical skills applicable in many areas of research, particularly the use of a polarizing microscope. Moreover correlating tephra using chemical and other information, as well as integrating tephra into age models requires develops a range of statistical and numerical skills.

3.13 GG5235 Palaeofires

Course leader

Dr Daniele Colombaroli

Aims

The course will introduce students to the methodology and theory of sediment charcoal analysis in Quaternary records, including laboratory techniques, charcoal identification of source biomass, and numerical techniques to assess fire-vegetation interactions, at different temporal and spatial scales.

Content

This course unit explores the present biogeography of fire, as well as its past temporal evolution over time. Historical aspects of fire trajectories (“Fire history”) are complemented by information about the ecological impacts of fire on vegetation (“Fire ecology”). This broader approach will help developing a more critical understanding of key environmental stressors of ecosystem change, integrating both natural (climatic) factors, and cultural aspects (“The Anthropocene”).

Finally, “hot debate” topics such as fire management and biodiversity conservation will be examined under specific case studies, that are relevant for future social, economic, and environmental changes. The course unit includes a series of practicals focusing on methodological approaches (Charcoal as a fire proxy), state-of-the-art quantitative analyses, and some basic R-programming skills to perform data mining and statistical analysis of palaeoecological data.

Assessment goals

The course assessment is based on a written essay (3000 words) based on the discussion of a selected case-study. Students will have to locate a site based on geographical coordinates, download and plot the data. For their essay, the students will use their acquired skills to highlight:

1) the fire regime properties of the area
2) the dynamic of fire over time, and its effect on vegetation
3) what can we learn from the past to assess future scenarios of global changes.
Learning outcomes

- Understand the present distribution of fires in different biomes, and relative environmental drivers (climate, vegetation, and humans)
- Critically assess data quality and resolution of charcoal records
- Assess the temporal evolution of fire, and the mechanisms maintaining natural vs. anthropogenic systems
- Understand fire ecology in key biodiversity hotspots, including fire impact on vegetation structure and composition
- Undertake basic programming in R

Promotion of transferable skills

The theoretical background, together with acquired skills for numerical data analyses and interpretation, will provide knowledge to design and implement a research study on the history and ecology of fire, and for addressing present ecological questions about forest conservation and biodiversity in a future changing world.

3.14 GG5236 Palaeolimnology

Staff
Dr. Celia Martin-Puertas

Aims
The course aims to provide specialisation in lake environment and the study of lake history from preserved sediment records. Lakes are very sensitive to environmental change and act as ideal sediment traps, continuously recording climate and landscape evolution. The course provides an overview of methods in palaeolimnology with special focus on geochemistry, and how those methods are integrated to interpret past changes that may occur in a lake system in order to achieve a comprehensive view on past landscape and climate evolution.

Content
The course is taught over an one week period including an one-day fieldtrip. The detailed syllabus covers the following topics:

- Introduction to limnology and palaeolimnology: Lakes as environmental archives, types of lakes, and physical, chemical and biological processes in the water column.
- The proxy record in lake deposits: the hydroclimate filter, types of proxy-based records and multiproxy environmental and climatic reconstructions. Applications of palaeolimnology and limnogeology in the real world.
- Developments in palaeolimnology and interpretation: log-ratio calibration and multivariate statistical analyses of X-ray Fluorescence (XRF) core scanning data.

Fieldtrip to Diss Mere (Norfolk). In situ measurements of limnological parameters (e.g. temperature, pH, conductivity) and collection of sediments from a sediment trap previously set up in the lake.

Teaching format
The course integrates lectures, practical classes and informal discussions.

Assessment
Students will write a report on the environmental discussion of a lacustrine record based on a given multiproxy dataset in combination with their own results from the practical sessions.
Report length: 3000 words (100% of coursework grade)

**Learning outcomes**
- Understand the geological, physical, chemical and biological processes that affect the lake system.
- Identify the internal and external causes that lead changes in the lake.
- Develop skills in lake monitoring and proxy calibration.
- Be able to integrate environmental information derived from different proxy dataset and the importance of multi-proxy palaeoenvironmental and palaeoclimatological reconstructions.
- Develop key skills in log-ratio calibration and multivariate statistical analyses of geochemical X-ray Fluorescence (XRF) core scanning data, one of the most advanced techniques for the interpretation of lake sedimentation.

**Assessment goals**
The degree to which students have successfully attained these learning outcomes is evaluated:
- Directly through the formally-assessed course work consisting of a 3000 word report
- Directly through a set of non-assessed practical
- Indirectly, through the formulation and execution of the dissertation that may benefit from an appreciation of the analytical techniques and general concepts covered in the course

**Promotion of transferable skills**
Developing skills in palaeolimnology, geochemistry and limnology will equip students for a broad spectrum of job profiles beyond a career in research, such as wetland management, climate-related mitigation strategies and environmental consultancy.

**3.15 GG5229 Late Quaternary Palaeohydrology**

**Course Leader**
Dr Varyl Thorndycraft

**Aims**
To provide an overview and critical discussion of key issues in Late Quaternary palaeohydrology through two main topics: 1) Late Pleistocene glacial meltwater palaeohydrology; and 2) Holocene alluvial systems.

To provide practical research experience in palaeohydrology, including: 1) geomorphic mapping of Late Quaternary river systems using GIS; and 2) fieldwork on alluvial floodplain stratigraphy.

**Content**
The course will cover the following topics:
- Introduction to fluvial processes: flow hydraulics and sediment transport.
- Late Quaternary meltwater palaeohydrology: meltwater pulses and palaeoclimate; glacial lake outburst floods and landscape change; GIS mapping of glacierised catchments.
- Holocene alluvial systems: floodplain sedimentary environments; deciphering allogenic and autogenic drivers of change; palaeoflood hydrology: Holocene floods and climate; Fieldwork on late Holocene floodplain palaeoenvironments: testing allogenic vs autogenic drivers in the River Erme (Devon).

**Teaching format**
The course consists of lectures, a fieldtrip, group presentations (on their field data), group discussions, and a GIS practical.
Assessment
Coursework (100%). One piece of written coursework (3000 words maximum): A dating proposal for River Erme (Devon) field site to test allogenic vs autogenic drivers of floodplain change.

Learning outcomes
By the end of this course, students should have gained knowledge of:

- How Late Pleistocene meltwater pulses can influence palaeoclimate
- The role of glacial lake outburst floods in causing regional to local scale catastrophic changes in landscape
- The roles of allogenic versus autogenic drivers of change in Late Quaternary fluvial systems.
- The controls on fluvial terrace formation and preservation.
- Holocene climate change and flooding through evidence from palaeoflood hydrology.
- Techniques of reconstructing floodplain environments: geomorphological mapping and coring; floodplain stratigraphy and depositional environments;
- Mapping Late Quaternary palaeohydrology using GIS.

Assessment goals
The degree to which students have successfully attained these learning outcomes is evaluated:

- Directly by assessment of the formal assessment exercise
- Indirectly through fieldwork, class discussions and informal oral presentations
- Indirectly, through the formulation and execution of the dissertation that may benefit from an appreciation of the analytical techniques and general concepts covered in the course

Promotion of transferable skills
The fieldwork promotes group collaboration and synthesis of ideas and data. The GIS practical builds on GIS work in TQR1 to provide further experience in the application of GIS software (ArcMap). Student presentations provide experience in scientific dissemination techniques.

3.16 GG5231 Chironomids

Course Leader
Dr Stefan Engels

Aims
The course aims to provide a thorough grounding in the theory and methodology of subfossil chironomid analysis. It will introduce students to the concepts and methods of this exciting palaeoecological technique and will discuss classic approaches such as chironomid-based temperature reconstructions as well as state-of-the-art applications including long-term diversity research or human-impact studies. The course will take the student on a journey that starts with field sampling, laboratory techniques and chironomid identification to the presentation and interpretation of datasets.

Content
The detailed syllabus covers the following topics:

- Chironomid ecology and life cycle
- Field sampling: how, what and why
- Preparation and laboratory techniques
- Chironomid identification
- Palaeoecological presentation and interpretation techniques
Quantitative climate reconstructions

Teaching format
The course is based upon lectures, practicals and class discussion. Lectures will introduce concepts, and fundamental principles, where the practicals will be used to gain hands-on skills in chironomid identification and in data-handling methodologies.

Assessment
Course assessment is based on a 3000 word learning journal. The journal should include:

(i) the results of laboratory analytical exercises undertaken during the course;
(ii) data plots and chironomid-inferred temperature reconstruction;
(iii) critical assessment of the data in the context of relevant published late Quaternary records.

Learning outcomes
By the end of this course students should have an understanding of:

• Methods of, and problems associated with, chironomid identification
• The occurrence, biology and ecology of chironomids
• Limitations and advantages of chironomid data in multi-proxy palaeoenvironmental studies
• Ongoing developments in the field of chironomid palaeoecology

Assessment goals
The degree to which students have successfully attained these learning outcomes is evaluated:

• Directly through the formally assessed work, in which the students must show an understanding of the theory and practice of subfossil chironomid analysis and the ability to perform reliable identifications
• Indirectly through the dissertation, which may benefit from an appreciation of the specific techniques and palaeoecological principles, as well as the general concepts covered in the course

Promotion of transferable skills
The course encourages clear and logical thought in the design and implementation of Quaternary chironomid studies and in the analysis and interpretation of Quaternary palaeoecological data. The course involves individual practical work, which encourages observational skills. It includes an introduction to the application of relevant statistical techniques, encouraging data-handling skills. The assessment requires critical reading and assimilation of original papers, and the ability to synthesise and evaluate critically selected scientific publications.
4 MSc Quaternary Science Dissertation

4.1 Overview
A dissertation forms an integral, assessed component of the MSc degree programme. This should report the results of an original piece of research that includes fieldwork and/or laboratory analyses on a topic relevant to the MSc programme syllabus. Dissertations must be submitted typed on A4 paper following the instructions set out below, and the whole report, including all figures and tables, should also be submitted in electronic form, this to accompany the paper copy by the set deadline.

Learning outcomes of the dissertation

By the end of the dissertation, students should be able:

- To plan, design and execute an advanced and rigorous piece of Quaternary Science research
- To undertake effective fieldwork/laboratory/desk-based analysis with due regard for safety and risk assessment
- To collect, combine, present, analyse and interpret different types of Quaternary Science data

Assessment goals

The degree to which students have successfully attained these learning outcomes is evaluated:

- Directly through the dissertation

Promotion of transferable skills

The dissertation develops a range of transferable skills including time management, problem solving, presentation, writing and critical analysis.

Formal requirements for the preparation and submission of the dissertation are outlined in Section 7. Section 8 outlines the dissertation marking guidelines and grade descriptors. Section 9 lists a selection of the topics chosen by students registered for the degree programme in recent years; this will give an indication of the wide range of topics and techniques available.

Dissertations should include:

(i) a clear statement and explanation of the problem being examined;
(ii) relevant background information, including a concise literature review and evaluation of proposed methodology;
(iii) details of the data collected and the various analyses carried out;
(iv) interpretation of results;
(v) discussion of the wider context and relevance of the results;
(vi) conclusion(s).

The written text should be supplemented by appropriate tables, maps, diagrams, photographs and other illustrative material. The dissertation should not exceed 10,000 words in the main text. This excludes the abstract, acknowledgements, title page, contents page, list of figures and tables, figure and table captions and the bibliography.
4.2 Choice of dissertation topic

Students are free to design their own research project, but may also choose to work on a project suggested by members of CQR staff. Potential dissertation topics that staff members are interested in supervising will be circulated after the Glen Roy Field Trip.

4.3 The dissertation supervisor

Your department will assign you a dissertation supervisor who will oversee your work. In most cases students are happy with the supervisory relationship. However, there are occasions where for some reason the supervisory relationship does not work and breaks down. If this happens, you should speak as soon as possible with the Programme Director or your Personal Tutor to see whether the problem can be resolved informally, e.g. through mediation, changing supervisor. You should not wait until after you have received your final degree results to raise the matter as it is very difficult for the College to resolve such matters or take remedial action at that point.

Supervisors will provide guidance on appropriate techniques and approaches. During the summer vacation, there is no formally scheduled contact with supervisors during this period, although it is expected that students will consult them as appropriate to discuss progress of their research and writing. Supervisors are, however, NOT permitted to comment on draft chapters of the dissertation beyond a short (less than 1000 words) report of progress, which should be submitted in writing to your supervisor in mid-July (see Timetable), unless alternative arrangements have been made (such as a workshop, or personal meeting for oral report on progress).

4.4 Dissertation archive

Past dissertations (grade at 65% and above) may be viewed on the MSc Quaternary Science dissertation archive, under 'Information for Current Students -> Postgraduate'. College log-in is required.

https://intranet.royalholloway.ac.uk/account/login.aspx?ReturnURL=http%3a%2f%2fwww.rhul.ac.uk%2fgeography%2fdissertations%2fhome.aspx

4.5 Timetable

Key deadlines are indicated in Section 2.8. All submission deadlines are at 4.15 pm on the day indicated.

4.6 Dissertation proposal forms

Shortly after the Easter field course, a draft dissertation proposal form (APPENDIX), counter-signed by the prospective supervisor, must be submitted to the director of the programme. The proposal should include as full as possible an account of the main research aims, methodology, location of field or lab work and any budgetary considerations (e.g. costs of running particular analyses and how these will be financed).

In early May, each student will make a ten minute dissertation proposal oral presentation (followed by questions) of their dissertation project in front of staff and postgraduates, at which staff will give feedback to improve the proposals. Final dissertation proposals, taking into account this feedback and countersigned by a supervisor, should then be submitted to the Programme Director (deadline in Error! Reference source not found.).

Students who have not submitted their research proposal will not be allowed to proceed to do their fieldwork and dissertation. Approval of the research proposal is required before candidates are permitted to start field or laboratory work for the main research. The supervisor will then proceed, with the student, to complete the Departmental risk assessment forms.
4.7 Funding for Dissertation Research

MSc Quaternary Science Dissertation Award
CQR is proud to support MSc student dissertations and therefore provides an annual £300 fund for students to put towards dissertation expenses. Applications are due at 4 pm on the day of the MSc initial proposals. One fund of £300 is awarded annually.
The award will be made on a competitive basis, on the following grounds:

- Quality of the proposed research (assessed via the application)
- Quality of the MSc Dissertation Proposal Presentation
- Quality of the student’s work to date on the course (assessed through grades to date).

Typical expenses that could be costed in could include:

- Fieldwork expenses
- Visits to another laboratory
- Laboratory procedures

The application procedure will include:

- A 2-page CV
- A 2-page covering letter explaining the proposed research, and why the funds are necessary
- An appendix with a detailed budget showing how the funds will be spent. Quotes for travel, etc, should be included.

Applications will be ranked and judged by the Director of the MSc in Quaternary Science and two other members of staff.

External awards
Other funds available for MSc students include the New Research Workers’ Award from the Quaternary Research Association. More details are available on the QRA website. Applicants should be members of at least 6 months standing. Note that the deadline is Early May each year, so applicants need to be well organized to apply for this external award. https://www.qra.org.uk/.

Departmental funding
Some limited departmental funding is also available for MSc Quaternary Science students. They include:

- Paula-Ann Award. The Prize is awarded annually towards meeting the costs of dissertation fieldwork expenses (usually up to £1,000) for a student undertaking any master’s programme in the Department of Geography. Students must come from countries classified as low-income, lower-middle income or upper-middle income according to World Bank classifications in July in the previous year. Students taking Master's degrees which are jointly run by the Department of Geography and another RHUL department, are entitled to apply, if their dissertation is supervised by a member of Geography staff.

4.8 Ethical approval

All MSc students must apply for ethical approval for their dissertation using the online form: https://intranet.royalholloway.ac.uk/geography/documents/doc/currentstudents/geography-department-ethics-form.docx

This form should be completed electronically. Hand-written forms will not be accepted. If you have any
queries, please contact the Chair of the Departmental Ethics Committee. Email: geographyethics@rhul.ac.uk

4.9 Field equipment request and risk assessment forms

Students wishing to undertake fieldwork as part of their dissertation should:

- Complete a fieldwork risk assessment:
  https://intranet.royalholloway.ac.uk/geography/currentstudents/departmentalhsforstudents/departmentalhsforstudents.aspx
- Complete a field equipment request form:
  (https://intranet.royalholloway.ac.uk/geography/documents/pdf/currentstudents/fieldtrip/field-equipment-request-form.pdf)

4.10 Submission of dissertation title

Titles of dissertations in their final form must be submitted to the Programme Director by email by the deadline indicated in Error! Reference source not found..

4.11 Submission Details

- TWO identical spiral-bound copies of the dissertation must be submitted by the prescribed submission date. Please liaise with Jenny Thornton and allow adequate time for this if you are arranging for it to be done in the department.

- In addition, an electronic copy of the final and complete version of the dissertation (including figures and any supplementary data) should also be submitted on a USB drive (which will be returned to you), by the same deadline. This electronic copy should take the form of a single .pdf file, to facilitate distribution to future MSc students.

- You must also submit an identical copy to Turnitin by the same deadline. This should be a single PDF file.

- You should also complete and include the 'Statement of Work' form, which is included in the appendix of this document.

Please also note that you should leave plenty of time for printing your dissertation if you wish to print it in the department. Too many students trying to print long documents at once can cause the printer to crash! Any dissertations received after the submission date will NOT be marked but referred to the main Board of Examiners Meeting for appropriate action. Please calculate carefully the amount of time needed for carrying out the field and laboratory work and writing, typing and producing the final dissertation.

4.12 Content of dissertation

Dissertations must conform to the following layout unless alternative arrangements have been given prior approval by the Programme Director.

Written Report

(a) Dissertations should not be more than 10,000 words in length. You are advised that conciseness is a desirable quality in producing a scientific report and your ability to write concisely will be assessed. A report in excess of 10,000 words will be subject to the penalties outlined in College Postgraduate Taught Degree Regulations.

(b) Page sizes for the dissertation are to be A4
Dissertations must be typed, using font size 12, preferably in Arial and line spacing 1.5 (single spacing may be used in figure captions, tables, headings and list of references, and also in appendices)

The title page of the dissertation should state the following:

i. The title of the dissertation in capitals centrally placed.

ii. Centrally placed below the title, the author's name and initials.

iii. Towards the bottom of the page in smaller font, the words “submitted as an integral part of the Masters of Science Degree in Quaternary Science, Royal Holloway, University of London. This report presents the results of original research undertaken by the author and none of the results, illustrations or text are based on the published or unpublished work of others, except where specified and acknowledged. This text does not exceed the 10,000-word limit, being...words in length (excluding bibliography, appendices and illustrations)”.

iv. At the bottom of the page, right-hand side, the date of submission and the candidate's signature.

The form and the sequence of the dissertation should be as follows:

i. Title page

ii. Abstract (300 words maximum)

iii. Acknowledgements: outline all help you have received, and where you have used data provided by another party.

iv. Table of Contents

v. List of tables

vi. List of figures and maps

vii. Introduction/introductory chapters, outlining the scientific problem and approach, research aims and objectives, with (where appropriate) a concise literature review and a critical evaluation of the proposed methodology

viii. The main body of the dissertation, suitably arranged in parts, sections or chapters. This section should cover matters such as site descriptions, laboratory analyses, interpretations of results.

ix. Discussion, setting the results in the wider context and emphasising critical comparisons

x. Conclusion, concisely restating the findings and indicating the advances the work has made and its scientific relevance

xi. Bibliography, conforming to the style of presentation in Journal of Quaternary Science (title of journals and books must be in full).

xii. Appendix/appendices

Only one side of a sheet should be used for text or illustrative material (i.e. print single-sided).

To allow for binding, the left margin should be 3.5 cm and a 2.5 cm right margin is recommended. All pages must be numbered.

4.13 Presentation of figures

Figures (including maps) should be clear and produced to a publishable standard. Normally this will involve production using a graphics package (eg. Adobe Illustrator, CorelDraw) but hand-drawn is acceptable. Allowance for margins should be as described above. Maps or diagrams larger than A4 should be avoided if possible, and kept to a minimum where essential.

Any figures that are hand-drawn are to be drawn in waterproof ink on smooth white paper or on tracing material. However, lettering must be mechanically or electronically formed (e.g. computer-generated), not freehand.

Descriptive, clearly worded legends should accompany all the maps, diagrams, figures, tables and plates, and the source(s) must be cited always. Captions should be typed at the base of the figure (not on figures) in the fashion adopted by major science journals.
4.14 Referencing

Referencing should follow guidelines as set out in the Generic PGT Handbook.

Referencing within the dissertation should conform to the Harvard System, i.e. references in the text should give the surname of the author and the year of publication in brackets, for example, Collins (1970) or (Smith & Jones, 2002), followed by a, b, etc. when two or more references to work by one author are given for the same year - e.g. (Harris, 1996c). Page numbers should be given for quotes, for example, (Collins, 1970: 42). At the end of the text the references should be listed in a single bibliographical list, in alphabetical order of authors' names and in chronological order for each author.

An example of this style of referencing can be seen in the Journal of Quaternary Science.

4.15 Appendices

Any raw data should be summarised and included in tabulated form in the main body of the thesis. Raw data in full should be included as an appendix to the thesis, either as printed forms or as a CD or memory stick of data.

4.16 Word count

The dissertation must not exceed 10,000 words. Please refer to the PGT Regulations for information on over-length penalties. In addition to the text, the word count should include quotations and footnotes.

Please note that the following are excluded from the word count: candidate number, title, course title, preliminary pages (including abstract and acknowledgements), table of contents, illustrations, bibliography and appendices.

You should not use tables for large bodies of text. Tables should only be used for the presentation of data. Your abstract should be no longer than 300 words.
5 MSc Quaternary Science Prizes

The MSc in Quaternary Science annual awards several prizes to high-achieving students, and nominates students for society prizes. They are usually awarded annually at the London Quaternary Lectures (LQLs).

5.1 Ed Derbyshire Award

The Ed Derbyshire Award is presented annually as a course prize for the student in the cohort with the highest overall grade. The award is a cheque for £125 and is presented on the occasion of the London Quaternary Lectures in the year of completion of the course. The prize was set up by Lanzhou University in China to commemorate the work of Ed, a visiting professor of long-standing in our department.

Travel and one night accommodation (if required) are paid to allow the winner to attend the LQLs.

5.2 Philippa Holmes Book Prize

The Philippa Holmes Book Prize is awarded annually for the best dissertation in sedimentology and stratigraphy.

The Philippa Holmes Memorial Prize was set up in 2010 in memory of Philippa, who gained a Distinction in the M.Sc in Quaternary Science at Royal Holloway. The prize consists of a cheque for £50 (to be spent on books) and is awarded to the student with the best dissertation in any aspect of stratigraphy or sedimentology.

The award is presented on the occasion of the London Quaternary Lectures in the year of completion of the course. Attendance at the LQLs is funded for the prize winner.

5.3 Curry Prize

The Curry Prize (£1000) is awarded each year by the Geologists’ Association for the best MSc thesis on a geological topic arising from a geoscience taught course in a UK university. If there is a dissertation of sufficiently high quality, it is nominated by CQR for this prize.

The Curry Fund of the Association was established in 1986 by a gift of Dennis Curry (1912-2001). Although Curry is best known as joint Managing Director (1946-1968) and Chairman (1968-1984) of the high street electrical goods chain Currys Ltd, he was also a gifted non-professional geologist and palaeontologist, with over 130 publications in the field. He was Visiting Professor at University College London (1971-84), where he taught micro-palaeontology to the Marine Geology MSc course. He joined the Association in 1934, was its President (1964-66), was honoured with its Foulerton Award in 1962 and was made an Honorary Member in 1971.

The aim of the Curry Prize is to encourage student excellence. The prize is awarded to the best one or more Master’s degree theses in the opinion of the judging panel on a geology-related topic arising from an MSc taught course in a UK university. Each prize consists of £1000 plus membership of the Geologists’ Association for the following calendar year. Prize winners will also be invited to submit a manuscript based on their thesis to the Proceedings of the Geologists’ Association for consideration for publication (subject to the normal refereeing process). The judging panel has the right to withhold the award in any year if the quality of the entries is deemed insufficient. The prizes will be awarded at the AGM of the GA (usually in early May) for theses produced in the previous year.
6 Support and advice

6.1 Student Charter

The College aims to bring all students into a close, harmonious relationship with each other and with the wider community. The Student Charter outlines how you can support the College in achieving these goals and also seeks to encourage you to act as an effective ambassador for the College, during your time as a student and later as part of the College's alumni.

This Charter is not intended to constitute a binding agreement but is offered as a framework of aspirations, designed to be of benefit primarily to you as a student and to underpin the College's aim of ensuring that you have a highly enjoyable and rewarding experience during the course of your degree.

6.2 PGT Degree Regulations

The Postgraduate Taught Regulations set out the various standards that shape the regulatory framework of your Postgraduate Taught degree with the College. These include a variety of essential information, ranging from admissions to academic progression and examination. Some frequently used elements of the regulations are covered in this handbook.

Details of course regulations are outlined later on in this PGT handbook, including details of registration, attendance, extenuating circumstances, visas and misconduct.

More information about Academic Regulations is found here: https://intranet.royalholloway.ac.uk/staff/teaching/aqpo/academic-regulations-and-policies/academic-regulations-and-policies.aspx

The Postgraduate Taught regulations can be found here: https://intranet.royalholloway.ac.uk/students/assets/docs/pdf/academic-regulations/academic-regulations-2019-20/13-postgraduate-taught-regulations-2019-20fv.pdf

The MSc includes mandatory modules in which a fail mark may be condoned or non-condoned. Students must pass all non-condonable courses in order to progress. The dissertation is mandatory and non-condonable, and so must be passed to qualify for the award.

The following is excerpted from the Postgraduate taught regulations (Section 15 (4)):

(4) The following minimum criteria shall apply for the award of Taught Masters Degrees and Postgraduate Diplomas:
   a) for the award of Pass, a weighted average of 50.0% or above, calculated to one decimal place, save for the provisions of paragraph (5) below;
   b) for the award of Merit, a weighted average of 60.0% or above, calculated to one decimal place, in the final assessment save for the provisions of paragraph (5) below;
   c) for the award of Distinction, a weighted average of 70.0% or above, calculated to one decimal place, in the final assessment save for the provisions of paragraph (5) below;

For the award of a Postgraduate Certificate with a Pass, Merit or Distinction a pass mark of 50% in each course unit is required, in addition to the weighted averages outlined in (a) –(c) above.

(5) For students first registered on Taught Masters and Postgraduate Diplomas with effect from September 2014, the examiners may, at their discretion and with the agreement of the External Examiner(s), condone a mark of Fail in taught courses constituting up to a maximum of 40 credits, except that the percentage score in any such course may not normally be below 40%.
For students first registered on such programmes prior to September 2014 the examiners may, at their discretion and with the agreement of the External Examiner(s), condone a mark of Fail in taught courses constituting up to one quarter of the final assessment, or a maximum of 40 credits, except that the percentage score in any such course may not normally be below 40%. Taught courses in which a mark of Fail may not be condoned will be specified in the programme specification. A Fail in the dissertation/research project cannot be condoned for the award of a Taught Masters degree. The examiners will not condone failure in credits leading to the award of a Postgraduate Certificate.

A candidate for the award of MSc who satisfies both the following criteria will automatically be raised into the next class:

a) the Final Average must fall within 2.0% of one of the classification boundaries above;

b) The mark for the dissertation/research project is above the classification boundary.

6.3 Support within your department

Your first point of reference for advice within the Department is your Programme Director. Inevitably, problems will sometimes arise that the Programme Director is not qualified to deal with. The College offers a high level of student welfare support which, includes a highly regarded Counselling Service, dedicated educational and disability support, as well as a wealth of student wellbeing, financial, career and other advice. There is also an NHS GP practice (the Health Centre) on campus located in Founder’s East. Further details of each service can be found on the College web on the Student Welfare page:

If you have a disability or specific learning difficulty, it is important that you bring it to our attention as soon as possible. The Departmental Disability and Dyslexia Service (DDS) representative is Mike Dolton (QB173). You must also contact the DDS (Founders West 143; tel: +44 (0)1784 276473; email: disability-dyslexia@royalholloway.ac.uk) who advise on appropriate sources of help. Further information is available on the College web on the Support, health and welfare page https://www.royalholloway.ac.uk/students/help-support/disabilities-and-dyslexia/home.aspx.

6.4 Students’ Union Royal Holloway University of London (SURHUL)

The Students’ Union Royal Holloway University of London (SURHUL) is a registered charity (Registered No: 1141998) and actively represents the students of Royal Holloway University of London. SURHUL promotes your needs and interests by offering employment, participation, entertainment, support and advice, your clubs and societies, catering, transport, volunteering, campaigning and advocacy.

The SU Advice and Support Centre, situated on the first floor of the Students’ Union, is a free service that offers you the opportunity to discuss any concerns you may have and receive impartial advice and information from the team of experienced and professional advisers. Open 9.30am - 5pm, Monday – Friday, it operates an open door policy exclusively for students during term time. However, during vacation periods students should call to book an appointment.

Phone: 01784 246700
Email: helpdesk@su.rhul.ac.uk

Find out more about the Students’ Union

6.5 Student-staff committee

We want to hear your views on the way the department operates. There is a student-staff committee on which both taught and research students are represented. Course representatives are elected by you to represent your views and ultimately, to help improve the quality of education provided by the College.
The Students' Unions take the lead in training and supporting course representatives, working with the department and professional services to help you make as many positive changes as possible.

The Student-Staff Committee meets at least once a term and plays an important role in the department as a forum for airing student views. For more information see the Course Reps page on the SURHUL website.

You can use the Committee to raise any issues which concern students. Notices will appear on departmental notice boards giving details of forthcoming elections or the names of current representatives.

Course Reps also represent MSc Quaternary Science students at the termly Periodic Review Committee meetings, where they are able to discuss the course directly with teaching staff.

6.6  Student Services Centre

The Student Services Centre is located in the Davison Building and provides a single point of contact for all non-academic related queries including accommodation, fees, enrolment and graduation.

Phone: 01784 27 6641
Email: studentservices@royalholloway.ac.uk

Find out more about the Student Services Centre

6.7  Support Advisory & Wellbeing

The College offers a high level of student wellbeing support which includes triage and support through Student Wellbeing, a BACP accredited Counselling Service, dedicated disability & dyslexia support, financial and budgeting advice and support for international students. There is also access to an NHS run Health Centre on campus.

Phone: 01784 44 3394
Email: wellbeing@royalholloway.ac.uk

Find out more about Support Advisory & Wellbeing

6.8  Student Wellbeing

Student Wellbeing provides advice and guidance to all students on personal and emotional wellbeing, to assist you in maintaining a healthy balanced lifestyle and to support you from transition to university and then in the continuation of your studies towards graduation. The Student Wellbeing team actively encourages all members of the campus community to alert them to concerns or signs of vulnerability to enable proactive engagement with intervention.

Phone: 01784 44 3395 / 44 3132 / 27 6757
Email: wellbeing@royalholloway.ac.uk

Find out more about Student Wellbeing

6.9  Disability & Dyslexia Services (DDS)

If you have a disability, long standing medical condition or specific learning difficulty, it is important that you bring it to the College's attention as soon as possible.
The College Disability & Dyslexia Services support dyslexic and disabled students and those with mental health or chronic medical conditions to demonstrate their academic abilities by arranging support packages, dyslexia assessments and study skills sessions.

Phone: 01784 27 6473
Email: disability-dyslexia@royalholloway.ac.uk

Find out more about Disability & Dyslexia Services

Your first point of contact for advice and guidance is your Disability & Dyslexia Services Network Member in your department:

Name: Dr Mike Dolton
Phone: 01784 443575
Email: M.Dolton@rhul.ac.uk

6.10 International Student Support Office (ISSO)

The International Student Support Office offers advice to international students on visa issues, working in the UK, opening a bank account, processing federal loans and police registration.

Phone: 01784 27 6168
Email: internationaladvice@royalholloway.ac.uk

Find out more about the International Student Support Office

6.11 Academic Skills Support

The Centre for the Development of Academic Skills, CeDAS, offers a variety of courses, workshops, 1:1 tutorials, online resources that aim to ensure all students at Royal Holloway reach their full academic potential in a range of areas, including academic writing, oral communication skills and maths and statistics.

Whatever your needs, CeDAS is there to ensure that you can perform to the best of your ability, whether it be through a workshop that introduces you to a crucial academic skill, a session within your department that focuses on writing in the discipline, a course that develops your confidence and competence in academic English language, or a 1:1 tutorial with a specialist to help you master a maths technique or sharpen your essay skills.

The CeDAS Office can be found on the ground floor of the International Building, room IN002, and you can follow them on Twitter: @cedasrhul.

6.12 IT Services Desk

The College IT Service Desk offers a range of support covering all aspects of IT services, such as email access, connecting to the College’s wireless network, connecting devices such as iPads and making use of College printing facilities. The IT Service Desk will also be able to provide expert advice and guidance on a range of more specific IT issues, should you experience any problems. They also offer a range of free software, including Microsoft Office 365, Sofos Antivirus, NVivo and SPSS.

Phone: 01784 41 4321
Email: itservicedesk@royalholloway.ac.uk
In person: Visit the IT support office in the Davison Library (ground floor)

Find out more about IT Services
7 Communication

It is vitally important that you keep in touch with us and we keep in touch with you. Members of staff will often need to contact you to inform you of changes to teaching arrangements, special preparations you may have to make for a class, or meetings you might be required to attend. You will need to contact members of the Department if, for example, you are unable to attend a class, or you wish to arrange a meeting with your Personal Tutor.

7.1 Email

The College provides an email address for all students free of charge and stores the address in a College email directory (the Global Address List). Your account is easily accessed, both on and off campus, via the campus-wide portal, CampusNet, or direct via Outlook.com.

We will routinely email you at your College address and you should therefore check your College email regularly (at least daily). We will not email you at a private or commercial address. Do not ignore emails from us. We will assume you have received an email within 48 hours, excluding Saturdays and Sundays.

If you send an email to a member of staff in the department during term time you should normally receive a reply within 3-4 working days of its receipt. Please remember that there are times when members of staff are away from College at conferences or undertaking research.

7.2 Post

All post addressed to you in Geography department is delivered to the student pigeonholes (alphabetical by surname) in the Post Room (QB163). At the end of each term student pigeonholes are cleared of accumulated mail which is then destroyed. Important information from Academic Services is often sent by internal post and tutors sometimes return work to you via the pigeonholes so you are advised to check them regularly.

7.3 Your Contact Information

There can be occasions when the Department needs to contact you urgently by telephone or send you a letter by post. It is your responsibility to ensure that your telephone number (mobile and landline) and postal address (term-time and forwarding) are kept up to date. Further information about maintaining your contact information is available here.

You can find out about how the College processes your personal data by reading the Student Data Collection notice.

7.4 Notice boards

The official PGT student notice boards are on the walls in corridor adjacent to Q162. Every effort is made to post notices relating to classes well in advance.

It is your responsibility to check the times and venues of all class meetings and of any requirements (e.g. essay deadlines) relating to your courses, so, if in doubt, please ask!

7.5 Personal Tutors

Each student on the MSc Quaternary Science is assigned a Personal Tutor who has responsibility for their pastoral care for the duration of the course. You will have a 1:1 meeting with them each term. Personal tutors are available for support and guidance, can advise on mitigating circumstances and can be requested to write
letters of reference.

**7.6 Questionnaires**

It is important that we gain feedback from you on how the programme has been delivered and what your experience has been. At the end of each term college questionnaires will take place during lectures. All questionnaires are anonymous. Please take some time to give your response to the course - these questionnaires form an important part of the way we monitor the quality of teaching and learning in the Departments. All questionnaires are seen by the Head of Department and Programme Director, and are analysed as part of the College’s 14 Page Annual Monitoring process. Constructive criticism is always welcomed and plays an important role in course development. Deserved praise is also very welcome and can make a tremendous contribution to the job satisfaction of your lecturers!

Issues, comments, observations and key recommendations raised by the Visiting Examiner and minutes of the examination sub-board meeting are recorded and reviewed by the Programme Director at the end of each academic year and are discussed with the teaching staff for future development of the programme. Key summaries of these are submitted to the College for annual monitoring of postgraduate taught courses. Annual Review of the programme takes place at the end of the academic year to enable staff to identify points for action where necessary, and to plan programme developments from a sound knowledge base.

On-going feedback from students is achieved through student representation on the Staff-Student Committee as a formal liaison and feedback mechanism. A student from each programme will be encouraged to volunteer as the Staff-Student Committee Liaison. From time to time you may find another lecturer sitting in one of your classes. The Departments operate a system of ‘peer-observation’ of teaching - members of the teaching staff observe and comment on each other’s teaching during the year. Your programme may have additional questionnaires, please find further details in the Programme Module Handbook.

**7.7 Space**

Students can use the study spaces in Founder’s Library and the Emily Wilding Davison Library. In the Department, students can use the Library @ Geography.
8 Teaching

8.1 Dates of terms

Term dates for the year are as follows.

**Autumn term**: Monday 23 September to Friday 13 December 2019  
**Spring term**: Monday 13 January to Friday 27 March 2020  
**Summer term**: Monday 27 April to Friday 12 June 2020

You are expected to be in the UK and engaging with your studies during term time. In the case of an emergency which requires you to leave the country and/or miss lectures/seminars/practicals etc., you are expected to inform your department and fill in a Notification of Absence Form (explained further below).

During the summer term, after the examination period, you are expected to attend all required academic activities organized by the department and to be available should you be required to meet with College staff for any reason. Furthermore, as Master's programmes run for one calendar year from September to September you are required to engage with your studies and be available to meet with staff after the end of the Summer Term until your programme end date in September. For Master's programmes there is no summer vacation period.

8.2 Academic Timetable

Your individual student timetable will be available via the **Your Timetable** page on the Student Intranet. Log in with your College username and password and view your timetable via the system or download to a personal calendar. In September you will receive communications by email about exactly how to access and download your timetable, so keep any eye out for these. Timetables are subject to change during the course of the academic year, so you should check yours regularly, (as a minimum every two days) to ensure you are using the most up to date timetable. The college will endeavour to notify you via an e-mail to your RHUL account for late changes to your timetable that will affect teaching within the next two working days, so please also check your emails regularly.

All classes start on the hour. They end ten minutes before the hour to allow you to move between classes.

The MSc Quaternary Science course timetable is given in Section 2.8.
9 Attending classes and engaging with your studies

The College has a responsibility to ensure that all students are attending classes regularly and progressing with their studies. We also have legal obligations placed on us under the Equality Act (2010), UK Visa and Immigration (UKVI) and Student Finance to ensure we monitor your attendance and engagement with studies.

Your regular attendance in class and consistent engagement with your studies are essential to your learning experience with the College. If you encounter difficulties with this, do please tell your tutor or another member of staff as soon as you can. They will put you in contact with Disability and Dyslexia Services (D&DS) who will advise on what support can be offered. Failure to attend and/or absence without permission from the College can result in serious consequences and may lead to disciplinary action, including the termination of your registration.

9.1 Attendance requirements

Your classes are the learning activities deemed essential to your programme of study. These could include a variety of different activities, including lectures, seminars, tutorials, workshops, field work, laboratory work, and meetings with your Personal Tutor.

While you are expected to attend all the classes related to your programme of study, the College understands that emergencies may occur at any time throughout the year. In light of this, the attendance threshold is set at 80% of monitored activities as set by College. You should be aware that you may also study courses that have different and specific course attendance requirements, particularly if you are taking courses in another department, so it is essential that you check all programme and course handbooks to ensure you are fully aware of the requirements. You can find out more about attendance policy here.

It is vital that you manage your time effectively, so that any paid employment, voluntary work, extracurricular activities or social commitments do not interfere with periods where you are required to attend classes. The Postgraduate Taught Programme Regulations stipulate that the amount of paid work undertaken by a student enrolled with the College on a full-time basis must not exceed 20 hours per week during term time. You may not undertake paid work which may conflict with your responsibilities as a student of the College. International students must ensure that any working restrictions, as stated on their visa, are also adhered to.

9.2 Monitoring attendance

It is your responsibility to make sure that your attendance has been recorded. It is also essential that you arrive at your classes in good time, as you will be marked absent if you turn up late without good reason.

You will be contacted in the event that:

i. you display a pattern of absence that the department feel is affecting or is likely to affect your work, i.e. failure to attend for two weeks without providing a valid reason or your attendance percentage drops close to or below the threshold

ii. you display a pattern of absence that causes concern over your wellbeing or which may point to an undisclosed disability

The Geography Department will monitor your attendance at lectures, seminars, workshops & laboratory work. It is your responsibility to complete any attendance register that is circulated and to make sure that your attendance has been noted. The activities at which your attendance is monitored may vary depending upon the discipline in which you are studying or the department in which you are taking courses in the case of electives, for example.
It is important that you attend all the learning activities related to your programme of study. Whilst attendance is compulsory at all learning activities, it is recognised that emergencies may occur at any time throughout the year and therefore as indicated above a minimum attendance requirement has been set.

Your responsibilities around attendance and engagement include:

- attending all classes necessary for the pursuit of your studies (including lectures, seminars, practicals and personal tutorials);
- undertaking all summative and formative assessment requirements for your courses;
- attending all meetings and other activities as required by the department(s) in which you are studying;
- where you experience any form of difficulty in attending classes, for whatever reason, contacting the department(s) in which you are studying to notify them of your circumstances at the earliest possibility.

You are expected to fully engage in your classes, undertaking any reading, research or further preparation identified between these sessions alongside punctual attendance. It is essential that you make suitable arrangements for travel to your classes and plan to arrive in good time, as teaching starts on the hour and finishes at ten minutes before the hour. You will be marked absent if you turn up late without good reason.

9.3 Formal Warnings

Should it become apparent that there are no acceptable reasons for your non-attendance and/or general lack of engagement with your studies, you may be issued with a formal warning which can escalate to the termination of your registration at the College. You are strongly advised to read the guidance on the formal warning process and the consequences of receiving such a warning in section 17 of the Postgraduate Taught regulations.


In situations where you are experiencing documented severe difficulties the Department and College will make every effort to support you and counsel you as to the best course of action. However, there may be cases where, although non-attendance is explained by an acceptable reason, your level of attendance falls to a level which compromises educational standards and/or your ability to reach the learning outcomes of the course. In such cases it will be necessary to implement disciplinary procedures as detailed above.

9.4 Withdrawal of visa

If you are sponsored by Royal Holloway on a Tier-4 (General) Student visa, should your registration at the College be terminated for non-attendance, general lack of engagement with your studies or any other disciplinary matter you will be reported to the UK Visa and Immigration (UKVI) and your Tier 4 (General) Student visa will be withdrawn. Alternatively, in line with the College’s legal obligations to UKVI, if you fail to meet the requirement of your Tier 4 (General) Student visa, including attendance and completion of assessments, the College may terminate your student registration without following the disciplinary procedures outlined in the Academic Regulations. This decision would not be open to appeal as it is part of the College’s obligations to the UKVI. Please see our Postgraduate Taught Regulations.

9.5 Missing classes

If you face difficulty in attending any classes or undertaking an assessment it is very important that you inform Student Administration as early as possible, giving the reasons for your non-attendance. Student
Administration will decide whether or not to authorise your absence. If you are experiencing such difficulties on an ongoing basis, please contact your Personal Tutor or Programme Director. In addition, an extensive range of additional support, guidance and advice is available from the College’s Student Advisory & Wellbeing teams. As explained in section 2 above, the Students’ Union also operate an Advice and Support Centre. If you are unable to attend classes for whatever reason you must tell the department in which you are taking the course(s) in question and follow the Notification of Absence Procedure to notify Student Administration. You must submit a Notification of Absence Form together with any supporting documentation either before your absence begins or within five working days of the end of the period of absence. The exact form to submit depends on the reason for your absence, as explained in the on line guidance. If you are absent for a prolonged period it is essential that you keep in touch with the Department (e.g. through regular emails with your Personal Tutor). The Department will monitor the frequency of self-certified absences and the Head of Department may request a doctor’s medical certificate from you in the event of multiple and/or sustained instances of self-certified illness. If you are sponsored by Royal Holloway on a Tier-4 (General) Student visa please be aware that if you do not follow the process to submit a notification of absence or have an acceptable reason for absence you are putting your Tier 4 visa at risk of withdrawal. Therefore, it is very important that you continue to communicate with the College through your Department and the Advisory & Wellbeing teams if you are struggling to attend.

9.6 Missing an examination

If you are unable to attend an exam (e.g. through reasons of sudden illness) then there are two steps to follow.

Step 1
You must notify the Student Services Centre at the earliest possibility. Wherever possible, please e-mail them at studentservices@royalholloway.ac.uk before the scheduled start of the exam with your name, student ID and confirmation of the exam that you are unable to attend. Please include a brief explanation within the email why you cannot attend the exam. The Student Services Centre will then forward this information to your department so that we are aware of your non-attendance.

Step 2
Read the Extenuating Circumstances Guidance and, if your circumstances meet the criteria outlined in the guidance, complete and submit the Extenuating Circumstances application form with your supporting evidence. Section 8 below provides further details about Extenuating Circumstances.
10 Degree Structure

Full details about your programme of study, including, amongst others, the aims, learning outcomes to be achieved on completion, courses which make up the programme and any programme-specific regulations are set out in the programme specification available through the Programme Specification Repository.

10.1 Department Specific information about degree structure

Full details about your programme of study, including, amongst others, the aims, learning outcomes to be achieved on completion, courses which make up the programme and any programme-specific regulations are set out in the programme specification available through the Programme Specification Repository.

10.2 Change of programme

Where provision is made for this in the programme specification, you may transfer to another programme, subject to the following conditions being met before the point of transfer:

(a) you must satisfy the normal conditions for admission to the new programme;
(b) you must satisfy the requirements in respect of mandatory courses and progression specified for each stage of the new programme up to the proposed point of entry;
(c) the transfer must be approved by both the department(s) responsible for teaching the new programme and that for which you are currently registered.
(d) if you are a student with Tier 4 sponsorship a transfer may not be permitted by Tier 4 Immigration rules.
(e) you may not attend a new programme of study until their transfer request has been approved.

Further information about changing programmes is available in Section 8 of the Postgraduate Taught Regulations. If you hold a Tier 4 (General) student visa, there may be further restrictions in line with UKVI regulations.
Facilities

11.1 Facilities and resources within your department

11.1.1 ‘Library@Geography’
In addition to the central library facilities, the Department has its own study space supported by the library: ‘Library@Geography’ (QB174) containing work space, maps and some reference material. Please see the postgraduate administrators (QB162) for access.

Library@Geography offers a quiet place for students to work – food, drink and the use of mobile phones are not permitted.

There are times when Library@Geography is used for small group teaching, during which use by other students is not possible. These are kept to a minimum, with times posted on the door at the start of each week.

Masters students have use of a PG photocopier in the post room (QB163). It has the facility to copy and print. The annual allocation for copies is 750 pages for full time students and 400 pages for part time or joint department students. Please request your photocopying code from Liz Hamilton or Karen Oliver (QB162).

All Full-time Masters students are eligible for £75 free printing credit in each academic year and part time or joint department students are eligible for £40. This credit is only for use in the Geography department and cannot be transferred to another student account. If the credit is used up before the end of the academic year students can pay to top it up. Any remaining balance from the top up can be transferred to the next academic year. The credit is applied to all accounts in September at the beginning of the academic year.

PG students can use the facilities in the geography common room (QB144) which consists of a small kitchen and seating area.

11.1.2 Queens Building Laboratories
<table>
<thead>
<tr>
<th>Building</th>
<th>Room</th>
<th>Facility Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>QB102</td>
<td>Sample Reception Laboratory</td>
<td>Marta Perez</td>
</tr>
<tr>
<td>QB103</td>
<td>Sediment Description Laboratory</td>
<td>Adrian Palmer</td>
</tr>
<tr>
<td>QB104</td>
<td>Furnace Room</td>
<td>Katy Flowers</td>
</tr>
<tr>
<td>QB105</td>
<td>Wet Sieving Laboratory</td>
<td>Marta Perez</td>
</tr>
<tr>
<td>QB106</td>
<td>Sample Store &amp; Dry Sieving</td>
<td>Adrian Palmer</td>
</tr>
<tr>
<td>QB107</td>
<td>Palaeoecology Laboratory</td>
<td>Marta Perez</td>
</tr>
<tr>
<td>QB110-112</td>
<td>Thin Section Suite</td>
<td>Adrian Palmer</td>
</tr>
<tr>
<td>QB113</td>
<td>Microscope Laboratory</td>
<td>Marta Perez/Katy Flowers</td>
</tr>
<tr>
<td>QB128</td>
<td>Image Analysis Suite</td>
<td>Adrian Palmer</td>
</tr>
<tr>
<td>QB133</td>
<td>Laminar Flow Room</td>
<td>Marta Perez</td>
</tr>
<tr>
<td>QB134</td>
<td>Instrument Particle Size Lab</td>
<td>Adrian Palmer</td>
</tr>
<tr>
<td>QB135</td>
<td>Clean Laboratory</td>
<td>Marta Perez</td>
</tr>
<tr>
<td>QB137</td>
<td>Humphries Graphics Suite</td>
<td>Jenny Thornton</td>
</tr>
<tr>
<td>QB146</td>
<td>Geospatial and Visual Methods Lab</td>
<td>Ray Aung</td>
</tr>
</tbody>
</table>

11.1.3 Geochronology Suite
<table>
<thead>
<tr>
<th>Building</th>
<th>Room</th>
<th>Facility Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>GE001-005</td>
<td>Geochronology Laboratories</td>
<td>Iñaki Valcarcel</td>
</tr>
<tr>
<td>GE006</td>
<td>Tephrochronology Laboratory</td>
<td>Katy Flowers</td>
</tr>
</tbody>
</table>

11.1.4 Munro Fox
<table>
<thead>
<tr>
<th>Building</th>
<th>Room</th>
<th>Facility Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MF010</td>
<td>Munro Fox Teaching Laboratory</td>
<td>Iñaki Valcarcel</td>
</tr>
<tr>
<td>MF005</td>
<td>Preparation Laboratory</td>
<td>Iñaki Valcarcel</td>
</tr>
<tr>
<td>MF006</td>
<td>Instrument Laboratory</td>
<td>Iñaki Valcarcel</td>
</tr>
</tbody>
</table>
11.2 The Library

The Library is housed in the Emily Wilding Davison Building.

Details, including Library Search, dedicated subject guides and opening times can be found online from the Library home page.

The Ground Floor of the Library contains a High Use Collection which includes many of the books assigned for Postgraduate Taught courses. The rest of the Library collections are on the upper floors. There are plenty of study areas and bookable rooms to carry out group work, as well as many areas to work on your own. The Library contains a large number of PCs and has laptops to borrow on the ground floor to use in other study areas.

The Information Consultant for Geography is Dr. Mike Dolton, who can be contacted at M.Dolton@rhul.ac.uk.

11.3 Photocopying and Printing

The department have a PG photocopier (QB163). You will require a photocopying code which can be obtained from Liz Hamilton or Karen Oliver. Full time students will be allocated 750 copies for the year and 400 copies for part time students or if the programme is delivered across two departments. You can use copier-printers (MFDs) located in the Library, the Computer Centre and many PC labs, which will allow you to make copies in either black and white or colour. Further information is available online: https://www.royalholloway.ac.uk/it/printing/home.aspx

There are computers and copier-printers available for your use in the Library and Computer Centre and many PC labs, which will allow you to make copies in either black and white or colour. Further information is available here:

The photocopier in QB163 also has a print function and students can print from the Geospatial & Visual Methods Lab (QB146) and retrieve the printed documents from the PG photocopier. All Full-time master students are eligible for £75, part time and joint department students are eligible for £40 per year. Any unused credit will not be carried over, but if students use their free credit and pay to top up their credit this can be carried over to the following year. There is also use of a scanner in the Geography GVML (Q146).

Departmental staff are unable, in any circumstances, to print anything out on your behalf.

Copier-printers (MFDs) for students are located in the Library, and the Computer Centre.

Binding

Once your work is printed binding is available in QB137 with Jenny Thornton or Ray Aung. One bound piece of work will cost 50p inclusive of the comb and covers. Binding is on a first come first served basis and is available Monday to Friday 09.00 – 11.00hrs, 11.30 – 13.00hrs and 14.00 – 17.00hrs. Please ensure you allow plenty of time ahead of your deadline as during busy periods there may be a queue.

11.4 Computing

There are ten open access PC Labs available on campus which you can use, including three in the Computer Centre. For security reasons access to these PC Labs is restricted at night and at weekends by a door entry system operated via your College card.

How to find an available PC
There is a Geospatial & Visual Methods Lab (GVML) in the department Q146. The GVML is a post-graduate human and physical geography research space and facility. It provides hardware and software for: Geographic information Systems (GIS), including ArcGIS and QGIS; digital earth and geospatial analysis; qualitative research (video and audio editing); illustration; cartography; and quantitative data analysis.

Familiarisation with the laboratory facilities and its associated field equipment will be provided as part of MA/MSc research training programmes.
12 Assessment Information

12.1 Anonymous marking and cover sheets

It is a College requirement that in respect to individual written coursework, all assignments remain anonymous until marking has been completed. You should only write your candidate numbers on individual written work, not your name. Candidate numbers will be issued to you in the first weeks of the degree programme. All summatively assessed written work is double marked.

12.2 Submission of work

It is normally expected that you will word-process all assessed written work, unless a prior agreement has been made with the course leader. All assessed work should be handed in at the School Helpdesk (Wolfson 118) in person by 4.15pm on the specified deadline date for each course. Dependent on your programme, the dissertation may have an earlier deadline and other notified elements may have separate arrangements (Please refer to the Programme Module Handbook).

Please ensure your work is anonymous (i.e. do not put your name anywhere on it) but do include your candidate number. Please note your candidate number (7 digits) is different to your student number (which begins 100xxxxxx).

You can view your candidate number by going to the "My studies" tab in Campus Connect and then "My exams info".

Your candidate number is normally allocated around mid-October. Postgraduate students get just one candidate number for the duration of your programme. If for any reason you start later in the academic year you’ll be assigned a candidate number shortly after you start your programme.

If you need submit a piece of work and you haven’t yet been allocated a candidate number then please email the Student Services Centre and we’ll create one for you.

We use candidate numbers to ensure that your assessments are marked anonymously. That means it’s important that you don’t use your candidate number with anything that identifies you, like your name or student ID number. All members of staff who are authorised to see your candidate number will already be able to look it up so you should never have to give it to anyone.

Coursework in most cases will be submitted electronically on Turnitin. Some pieces of coursework (namely the Dissertation and the A3 Poster for GG5293) have separate submission requirements.

Please check with course convenors if coursework should be submitted in any other way.

12.3 Stepped Marking

Work submitted for assessment will be graded by using a set of marks with the pattern X2, X5 or X8, with a value ranging from 0 to 100%. This means that a piece of work awarded Merit would be awarded 62%, 65% or 68%. This approach, which is called stepped marking, has been found to help in better aligning grades with marking criteria and for providing greater clarity to students about the standard of their work and how close they are to lower and upper grade boundaries. For example, a 62% represents a low Merit, while a 68% indicates a high Merit.

Assessed work which is quantitative (e.g. numerical or multiple-choice tests), where there are ‘right or wrong’ answers, e.g. language tests/exercises and/or where there is a detailed mark scheme under which each question is allocated a specific number of marks will be exempt from stepped marking.
12.4  Research ethics

All MA and MSc students should complete a research ethics form before embarking on their dissertation research. The ethics form can be found on the Departmental webpage at:
https://www.royalholloway.ac.uk/geography/currentstudents/home.aspx

Completed forms (including signature of dissertation supervisor) should be emailed to the Chair of the Ethics Committee (GeographyEthics@rhul.ac.uk) at least two weeks before research is due to commence. You can also contact the Ethics Committee on the email address if you have any queries about the ethical aspects of your research which your supervisor is unable to answer.

12.5  Policy on the return of marked student work and feedback

The full policy on the return of marked student work and feedback is available here.

**Return of marked student work and feedback**

All assessed work (other than formal examinations) should be returned with feedback within 20 working days of the submission deadline, except in cases where it is not appropriate to do so for exceptional and/or pedagogic reasons. These may include the assessment of dissertations, final year projects, taped case studies, audiovisual submissions, where the marking has been delayed due to staff illness and/or where an extension to the submission deadline has been granted.

The deadline for the return of the marked work with feedback will be made clear to students when they receive their assignments. In the event that the intended deadline cannot be met for reasons such as those listed, the revised deadline will be communicated to students as soon as possible.

*Working days are Mondays to Fridays inclusive when the College is open for normal business. This includes periods outside of College term dates (vacation periods). Weekends, Bank holidays and College closure days around Easter and Christmas/New Year are not regarded as working days (even if the Library is open on some of these days for study purposes).*

Please note that even if annual leave is being taken the requirement to return assessed work with feedback within 20 working days of the submission deadline applies. This will mean that when taking annual leave, colleagues may have to manage return of assessments with feedback within a shorter period than 20 days.

**Forms of feedback**

Feedback should be available for all assessments/assignments, including dissertations, projects and examinations (see guidance below).

Feedback can be provided in a variety of formats. In addition to written/typed/on-line feedback on assignments, feedback can be audio/video recorded, provided verbally in classes/tutorials, etc. Feedback is typically provided by teachers on individual assignments, but can be an overview of the attainment of a group of students, for dissemination to students and possibly to Personal Tutors. Feedback can take the form of both comments relating to specific issues (e.g. marginal comments on written work), and general comments bringing the main points together.

Peer feedback can be a valuable activity for both provider and recipient in developing reflection and

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understanding.

Opportunities to compare feedback across a number of assessments should be provided to students periodically, e.g. through the Personal Tutor system.

**Feedback should be clear about academic performance**

The language used in feedback should explicitly match the assessment/marking criteria and attainment level descriptors, which should be provided to the students in advance of completing the assignment. Marking ‘rubrics’ can be helpful in many circumstances, while also recognising that it will not always be appropriate to deduce a mark mathematically from performance in each of the criteria.

Activities that help students to understand the assessment criteria in advance of being assessed can be extremely helpful. This might include self-assessment, peer-assessment, or assessing ‘model’ work. Activities that help students to understand the feedback, for example group discussions, can also be extremely valuable.

**Feedback should be constructive**

Feedback should carry a respectful tone, and contain a balance of both affirmative and developmental comments. Affirmative comments foster confidence and identify good practices that should be continued. Developmental (feed-forward) comments should always be provided, and clearly identify attainable goals to improve performance in future assignments.

Feedback proformas etc. should be designed to ensure that ‘feed-forward’ comments, and other good practices, are included. The structure of the feedback might constitute a ‘feedback sandwich’. Potentially negative feedback can be framed in a constructive way, for example by commenting on the merits of features that nonetheless warrant further development.

There should be careful consideration of the number of developmental comments in a piece of feedback, avoiding over-long lists, and identifying an attainable number of targeted actions to raise attainment from the current level in a structured feedback section. Comments on less central issues could be made elsewhere (e.g. marginal comments on written work).

Where an assignment has multiple markers, there should be explicit mechanisms to promote consistency in academic expectations, and in feedback approaches/volume.

**Feedback timing**

Assessment/feedback timings should be planned such that students receive feedback soon enough after the task for it to retain its relevance, and sufficiently in advance of upcoming related assignments to allow students to act upon the feedback. Feedback should be returned within the College’s stipulated maximum feedback deadline (with the exception of specifically exempted assignments), see first section above.

**Students’ use of feedback**

Students should engage with the feedback provided on their assignments at the earliest possible opportunity, to ensure that they understand its relevance to their work, and that they can apply it to their subsequent assignments. Students should take all of the opportunities provided to obtain and benefit from feedback on their work, and be aware that it may take many forms (e.g. written, verbal, recorded, on line, from peers).

**12.6 Referencing & bibliography**

You are expected to reference your sources in the text, and produce a bibliography (list of your sources) at the end of your work. All assessed coursework should be properly referenced and have a bibliography. There are a range of referencing and bibliographic conventions, examples of which may be seen in current academic
journals (e.g. Transactions of the Institute of British Geographers, Progress in Human Geography). The most important rule is to be consistent.

The following is suggested as an appropriate standard format, based on the so-called ‘Harvard system’:-

1. References in the text should give the surname of the author and the year of publication in brackets, for example, Collins (1970) or (Smith & Jones, 2001), followed by a, b, etc. when two or more references to work by one author are given for the same year - e.g. (Harris, 1996c).

2. Page numbers should be given for quotes, for example, (Collins, 1970: 42).

3. At the end of the text the references should be listed in a single bibliographical list, in alphabetical order of authors’ names and in chronological order for each author.

4. The format of references listed in the bibliography should be as follows. Please note that the bibliography should not be divided according to these categories (i.e. with sub-sections for journal articles, books, chapters etc). The following list merely indicates the appropriate format for each kind of reference.

**Example of a Journal Article**

**Example of a Book**

**Example of a Chapter in Edited Book**

**Example of an Unpublished Working Paper**

**Example of an Article in On-line Journal** (e.g. a journal that only exists online)

**Example of an Unpublished Thesis**

**Example of an Official Publication**

**Example of an Unpublished Conference Paper**

**Example of a Newspaper Article**

Without author cited:

**Example of a WWW page with obvious author and clear date of last update**

**Example of a WWW page from an organisation, no clear date of last update**

SDSU Department of Geography, n.d. The Geography of Film Theatre [online]. Available from: http://typhoon.sdsu.edu/Film/Geography@SDSU.html [Accessed 18 Jan 2009].

Archival material should be cited and referenced in much the same way as the above, with the inclusion of the archival catalogue number and name and location of the archive at the end of the reference. E.g. Name, Year, Title, Place of Publication and Publisher if available, Archival details (e.g. INF/51/89H, The National Archives, Kew (thereafter TNA)).

### 12.7 Illustrations

Figures and tables should be used to support the text. Maps and diagrams may be of any size, but preferably within A4 and should be drawn using proper cartographic pens or produced using a computer graphics application. Photographic materials should not exceed A4 size. Be sure that illustrations are adequately explained, e.g. include such essentials as scales, orientation, etc., as well as captions. You must not download figures from the Internet and use them where copyright is held on them. Similar constraints apply to figures and tables in academic journals, books or reports. To use them you must obtain permission from the authors and/or publishers. If you re-draw the figure or adapt a table, thus significantly altering them, you can use the caption ‘based on/modified from’ giving the author and reference.

Some text may be used as illustrative, such as a selection of quotes from interviews, or a long excerpt from a focus group, for example. By illustrative it is meant that the detailed content of the text may not be referred to directly or in-detail within the body of the dissertation as you would a quote. If that is the case they should be placed within a ‘box’ and will not be counted towards the word-count. More substantive support material, for example an interview topic-guide or schedule, may form the appendices (see below).

### 12.8 Appendices

Appendices should only contain supporting material; all substantive material germane to the core discussion should be included in the main body of text. Where appropriate the following may be included within the appendices: illustrations of the tools used in the data collection process, correspondence items including letters, a sample of (blank) questionnaires, data collection pro formas, summary data, information pamphlets. All other items to be considered for inclusion in the appendices should have the prior approval of the supervisor.

### 12.9 Word count

All pieces of course work have maximum word lengths, and you will be informed of these when assessment information is given to you. You should be aware that the Department, in line with College policy, penalises over length work (Please see Penalties section 12.13 below).

### 12.10 Progression and award requirements

The Regulations governing progression and award requirements are set out in your Programme Specification Programme Specification Repository (and also more generally in the Postgraduate Taught Regulations).

Summer resits are available for those on the MSc Quaternary or MSc Sustainability & Management. Unless there are relevant mitigating circumstances, these are usually capped at the passmark (50%).

For details on the requirements governing the level of award please see the section on the Consideration and
Classification of Candidates for the Award in the Postgraduate Taught Regulations.

12.11 Examination results

Please see the Examinations & Assessments website for details of how you will be issued with your results.

The Examinations & Assessments website is the place where you can access the "Instructions to Candidates" and details of the examinations appeals procedures.


12.12 Penalties for late submission of work

Work submitted after the published deadline will be penalised in line with Section 13, paragraph (5) of the College's Postgraduate Taught Regulations.

Section 13 (5)

'In the absence of acceptable extenuating cause, late submission of work will be penalised as follows:

- for work submitted up to 24 hours late, the mark will be reduced by ten percentage marks;*
- for work submitted more than 24 hours late, the mark will be zero.'

*eg. an awarded mark of 65% would be reduced to 55% and a mark of 42% would be reduced to 32%.

If you believe that you will be unable to submit coursework on time because of illness or other acceptable causes then you should apply for an extension to allow you to submit the work late without suffering a penalty. If you did not request an extension but then miss a deadline due to factors which have affected your ability to submit work on time, then you may submit a request for extenuating circumstances to be considered. Please note however that if you do so, you will have to provide convincing reasons why you had been unable to request an extension.

12.13 Penalties for over-length work

Work which is longer than the stipulated length in the assessment brief will be penalised in line with Section 13, paragraph (6) of the College's Postgraduate Taught Regulations:

Section 13 (6)

Any work (written, oral presentation, film, performance) which exceeds the upper limit set will be penalised as follows

(a) for work which exceeds the upper limit by up to and including 10%, the mark will be reduced by ten percent of the mark initially awarded;

(b) for work which exceeds the upper limit by more than 10% and up to and including 20%, the mark will be reduced by twenty percent of the mark initially awarded;

(c) for work which exceeds the upper limit by more than 20%, the mark will be reduced by thirty percent of the mark initially awarded.

The upper limit may be a word limit in the case of written work or a time limit in the case of assessments such as oral work, presentations or films.
12.14 What to do if things go wrong – Extensions to deadlines

You are expected to manage your time appropriately and hand in your coursework assessments on time. However, occasionally unforeseeable or unpreventable circumstances arise which prevent you from submitting your work on time. If this is the case you may be able to apply for an extension to your submission deadline without suffering a penalty.

Please refer to the Extensions Policy and guidance on the College’s webpage about Applying for an Extension.

Please note: Not every assessment is eligible for an extension.

12.15 What to do if things go wrong – the “Extenuating Circumstances” process.

If you are unable to submit coursework because of unforeseeable or unpreventable circumstances please refer to section 12.14 ‘What to do if things go wrong – Extensions to Deadlines’. If an extension is not possible, you may be able to apply for extenuating circumstances.

The policy is explained in full in the Extenuating circumstances – Guidance for students.

What is an Extenuating Circumstance?

Extenuating circumstances are defined as unforeseen circumstances which are outside a student’s control and which may temporarily prevent a student from undertaking an assessment or have a marked/significant detrimental/adverse impact on their ability to undertake assessment by coursework or examination to the standard normally expected. You can read more about them here.

This means that such circumstances rarely occur. They are outside your control if they are:

- Unforeseeable - you would not have prior knowledge of the event (e.g. you cannot foresee whether you will be involved in a car accident);
- Unpreventable – you could not reasonably do anything in your power to prevent such an event (e.g. you cannot reasonably prevent a burst appendix.)

It is these short-term (temporary) circumstances that the College normally regards as extenuating circumstances.

Absence from an examination

Section 5 above explains what to do on the day you miss an examination if it was due to extenuating circumstances.

Applying for extenuating circumstances

Before going ahead, you should check that your circumstances meet the criteria. These are explained in full in the Extenuating circumstances – Guidance for students. You should also read the section Illness & absences from an examination and departmental assessments and extenuating circumstances in the Instructions to Candidates issued by Student Administration.

If you apply for extenuating circumstances, you will need to supply a full explanation of your situation together with any supporting documentation.
Deadlines for submission of extenuating circumstances

Extenuating circumstances applications should be submitted as close to the affected piece of assessment/exam as possible.

The deadlines for submitting extenuating circumstances are listed in the Instructions to Candidates and the College webpages for Exams, Assessments and Results.

Ongoing circumstances

If you have ongoing circumstances that you believe are adversely affecting your performance during the year, these should be raised with your department and with the College’s Student Advisory & Wellbeing teams as soon as possible. This will allow us to consider strategies that will help you manage the situation. Examples might be that you have an illness that does not constitute a disability, a close family member is ill and needs your support, or you have suffered an adverse life event.

It may be that the circumstances are severely affecting your ability to study by causing you to repeatedly miss scheduled teaching and/or affecting your ability to complete assessments. If this is the case and there is no reasonable way to help you to manage the situation, then you may need to consider, in consultation with your department and Student Advisory & Wellbeing, if it would be in your best interests to interrupt until the issues have been resolved and you are able to fully commit to and benefit from your academic studies.

Ongoing adverse circumstances do not normally constitute extenuating circumstances as they are not unforeseen and in some cases may be preventable. As such, it is unlikely that the Extenuating Circumstances Committee will be able to take action to mitigate such circumstances. For further information, please read the Extenuating circumstances – Guidance for students.

12.16 Support and exam access arrangements for students requiring support

Some students at the College may have a physical or mental impairment, chronic medical condition or a Specific Learning Difficulty (SpLD) which would count as a disability as defined by the Equality Act (2010) that is, “a physical or mental impairment which has a long-term and substantial effect on your ability to carry out normal day-to-day activities”. It is for such conditions and SpLDs that Disability and Dyslexia Services (DDS) can put in place adjustments, support and exam access arrangements. Please note that a “long-term” impairment is one that has lasted or is likely to last for 12 months or more.

If you have a disability or SpLD you must register with the Disability and Dyslexia Services Office for an assessment of your needs before adjustments, support and exam access arrangements (*) can be put in place. There is a process to apply for special arrangements for your examinations – these are not automatically put in place. Disability and Dyslexia Services can discuss this process with you when you register with them. Please see section 2 above for further guidance about registering with the Disability and Dyslexia Services Office.

Please note that if reasonable adjustments, including exam access arrangements, have been put in place for you during the academic year, the Sub-board will not make further allowance in relation to your disability or SpLD.

12.17 What to do if you have difficulty writing legibly

It is College policy not to mark scripts which are illegible. If you anticipate that you may have difficulty in writing by hand which would lead to your scripts being illegible you should contact Disability and Dyslexia Services. Please note the deadline for making an application for Examination Access Arrangements is in January each year. Therefore it is in your interest to contact DDS as soon as you are able in the Autumn Term in order that you have time to get any necessary evidence required for the application.
12.18 Academic Misconduct

The College regulations on academic misconduct (also known as assessment offences) can be found on the Attendance and Academic Regulations page of the student intranet.

Academic misconduct includes, but is not limited to plagiarism (see below), commissioning, duplication of work, (that is, submitting work for assessment which has already been submitted for assessment for the same or another course), falsification, impersonation, deception, collusion, (for example, group working would constitute collusion where the discipline or the method of assessment emphasises independent study and collective ideas are presented as uniquely those of the individual submitting the work), failure to comply with the rules governing assessment, including those set out in the ‘Instructions to candidates’.

The Regulations set out some of the types of academic misconduct in more detail, the procedures for investigation into allegations of such offences and the penalties. Students are strongly encouraged to read these Regulations and to speak with their Personal Tutors or other members of staff in their department should they have any queries about what constitutes academic misconduct. The College treats academic misconduct very seriously and misunderstanding about what constitutes academic misconduct will not be accepted as an excuse. Similarly, extenuating circumstances cannot excuse academic misconduct.

What is Plagiarism?

'Plagiarism' means the presentation of another person's work in any quantity without adequately identifying it and citing its source in a way which is consistent with good scholarly practice in the discipline and commensurate with the level of professional conduct expected from the student. The source which is plagiarised may take any form (including words, graphs and images, musical texts, data, source code, ideas or judgements) and may exist in any published or unpublished medium, including the internet. Plagiarism may occur in any piece of work presented by a student, including examination scripts, although standards for citation of sources may vary dependent on the method of assessment.

Identifying plagiarism is a matter of expert academic judgement, based on a comparison across the student's work and on knowledge of sources, practices and expectations for professional conduct in the discipline. Therefore it is possible to determine that an offence has occurred from an assessment of the student’s work alone, without reference to further evidence.
### 13.1 Coursework essays and reports

<table>
<thead>
<tr>
<th>Class</th>
<th>%</th>
<th>Grade description for Coursework essays and reports</th>
<th>Marking criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distinction</td>
<td></td>
<td>Deep understanding; near-comprehensive knowledge; significant originality in interpretation or analysis; coherent structure (may show significant innovation in organisational form); intensive, detailed and critical reading with independent reading beyond reading lists; excellent presentation; referencing and bibliography of publishable standard; incisive and fluent style with no or very minor errors of spelling, punctuation or grammar; high levels of ability in analysis of quantitative or qualitative information (where appropriate)</td>
<td>Worthy of retention for future reference in teaching or research.</td>
</tr>
<tr>
<td>High</td>
<td>100</td>
<td>Outstanding performance in most criteria 1-7</td>
<td></td>
</tr>
<tr>
<td></td>
<td>98</td>
<td>Evidence of excellence in most criteria 1-7</td>
<td></td>
</tr>
<tr>
<td></td>
<td>95</td>
<td>Evidence of excellence in some criteria, particularly 1-4</td>
<td></td>
</tr>
<tr>
<td></td>
<td>92</td>
<td>A good performance in some criteria, particularly 1-3</td>
<td></td>
</tr>
<tr>
<td>Mid</td>
<td>88</td>
<td>Deep understanding; very detailed knowledge; substantial originality in interpretation or analysis; coherent structure (may show some innovation in organisational form); in-depth and detailed reading (with either independent reading beyond any reading list given or intensive, detailed and critical reading of suggested material); excellent presentation; referencing and bibliography close to publishable standard; incisive and fluent style with no significant errors of spelling, punctuation or grammar; high levels of ability in analysis of quantitative or qualitative information (where appropriate).</td>
<td></td>
</tr>
<tr>
<td>Low</td>
<td>82</td>
<td>Evidence of excellence in some criteria, particularly 1-4</td>
<td></td>
</tr>
<tr>
<td></td>
<td>78</td>
<td>Deep understanding; detailed knowledge; may show some originality in interpretation or analysis; coherent structure (may show some innovation in organisational form); in-depth reading (with either independent reading beyond any reading list given or intensive, detailed and critical reading of suggested material); excellent presentation; referencing and bibliography close to publishable standard; incisive and fluent style with no significant errors of spelling, punctuation or grammar; high levels of ability in analysis of quantitative or qualitative information (where appropriate).</td>
<td></td>
</tr>
<tr>
<td></td>
<td>75</td>
<td>A good performance in some criteria, particularly 1-3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>72</td>
<td>Does sufficiently well in criteria 1-4 to show evidence of good understanding</td>
<td></td>
</tr>
<tr>
<td>High</td>
<td>68</td>
<td>Good understanding; wide-ranging knowledge; direct focus on subject; coherent structure; evidence of in-depth reading; well-presented with detailed referencing and properly-formatted bibliography; fluent style, few errors of spelling, punctuation or grammar, generally effective analysis of quantitative or qualitative information (where appropriate)</td>
<td>A good performance in most criteria 1-7</td>
</tr>
<tr>
<td>Mid</td>
<td>65</td>
<td>A good performance in some criteria, particularly 1-3</td>
<td></td>
</tr>
<tr>
<td>Low</td>
<td>62</td>
<td>Usually an adequate performance in most criteria</td>
<td></td>
</tr>
<tr>
<td>High</td>
<td>58</td>
<td>Basic understanding and awareness of the main issues, concepts, underlying principles and of some key literature but lacking in-depth reading; maintains focus on question; satisfactory organisation and presentation but may have some errors of spelling, punctuation or grammar; familiarity with correct strategies for analysis of quantitative or qualitative data (where appropriate) but possibly with errors in process of analysis; analysis and/or synthesis not well developed</td>
<td>A good attempt but insufficient critical analysis (criteria 2-4) for a Merit</td>
</tr>
<tr>
<td>Mid</td>
<td>55</td>
<td>May be weaknesses but sufficient evidence of understanding for a pass</td>
<td></td>
</tr>
<tr>
<td>Low</td>
<td>52</td>
<td>PASSMARK 50%</td>
<td></td>
</tr>
<tr>
<td>High</td>
<td>48</td>
<td>Some general understanding and knowledge; weakness in detail; may lack clear focus on the assignment; simple structure; content drawing exclusively on lecture material; no or very limited evidence of outside reading; significant weakness in presentation; little or no referencing; inadequate or missing bibliography; simple style; significant errors in grammar, spelling, and punctuation; familiarity with correct strategies for analysis of quantitative data, but significant errors in the process of analysis.</td>
<td>Likely to be a lack of focus on the assignment (criteria 1) with insufficient evidence in criteria 2-4 to merit a Pass</td>
</tr>
<tr>
<td>Mid</td>
<td>45</td>
<td>Weak performance in some criteria, particularly 1-4</td>
<td></td>
</tr>
<tr>
<td>Low</td>
<td>42</td>
<td>Likely to be weak in all criteria</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Limited general understanding; sketchy coverage, with some significant errors in factual details; lack of clear focus on question; poor structure, drawing exclusively on direct teaching, but with significant weaknesses; no evidence of further reading; poorly presented; little or no referencing; inadequate or absent bibliography; sketchy style; significant errors of spelling, punctuation or grammar; bare familiarity with correct strategies for analysis of quantitative data, with substantial errors in the process of analysis.</td>
<td></td>
</tr>
</tbody>
</table>

Contd. On next page
### Marking criteria for coursework essays and reports:

1. Focus on the question/assignment  
2. Level of critical understanding  
3. Extent to which arguments are supported by further reading  
4. Evidence of independent thought in argument or analysis  
5. Appropriate bibliography and referencing style  
6. Effective communication  
7. Presentation of work

<table>
<thead>
<tr>
<th>Grade</th>
<th>Description</th>
<th>Criteria 1-4 not addressed to a satisfactory level.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fail</td>
<td>35</td>
<td>No understanding of the subject; fails to address the topic in any meaningful way; information largely erroneous or has little or no relevance to the question; inadequate structure, with no sense of logical argument; no evidence of further reading; poorly presented; no referencing; inadequate or absent bibliography; inadequate style; significant errors of spelling, punctuation or grammar; significant confusion over appropriate analysis of quantitative data; analytical work incomplete and erroneous.</td>
</tr>
<tr>
<td>25</td>
<td>Work is unacceptable for the level. No understanding of the subject; fails to address the topic in any meaningful way; information erroneous or has no relevance to the topic; incomplete, fragmentary or chaotic structure; no evidence of further reading; poorly presented; no referencing; inadequate or absent bibliography; inadequate style; substantial errors of spelling, punctuation or grammar; substantial error and confusion over appropriate analysis of quantitative data; complete inability to analyse information.</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>No work submitted within 24 hours of deadline</td>
<td></td>
</tr>
</tbody>
</table>

Non-condonable Fail

**Marking criteria for coursework essays and reports:**

1. Focus on the question/assignment  
2. Level of critical understanding  
3. Extent to which arguments are supported by further reading  
4. Evidence of independent thought in argument or analysis  
5. Appropriate bibliography and referencing style  
6. Effective communication  
7. Presentation of work
# 13.2 Web presentations

<table>
<thead>
<tr>
<th>Class</th>
<th>%</th>
<th>Grade description for Website presentations</th>
<th>Marking criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>100</td>
<td>An exceptionally effective presentation. Deep understanding of the task and topic; near-comprehensive knowledge; extremely clear structure, with ideas linked coherently; aims presented clearly and evidence of comprehensive research; intensive, detailed and critical use of literature; excellent use of language, structure and design, written with an incisive and fluent style; excellent and inventive use of limited space to communicate complex ideas; sophisticated understanding of audience and purpose; considerable novelty in construction and design; pages visually well balanced with appropriate font, size and use of colour; excellent use of illustrations; excellent functionality with links all working; perfectly pitched to promote public understanding of science (authoritative yet accessible); absence of jargon and/or comprehensive glossary provided. Excellent spelling and grammar; referencing and bibliography appropriate to the task (e.g. use of hyperlinks) and of an exemplary standard. <strong>Produced to a professional standard.</strong></td>
<td>An exemplary piece of work</td>
</tr>
<tr>
<td></td>
<td>98</td>
<td>A highly effective presentation. Deep understanding of the task and topic; detailed knowledge; very clear insight into purpose; very clear structure, with ideas linked coherently; in-depth and critical reading of the literature or appropriate sources; language, structure and design of a very high standard; aims presented clearly and evidence of comprehensive research on show; clear insight into audience and their needs; may show novelty in construction and design; very high standards of visual presentation, pages very visually well-balanced with appropriate font, size and use of colour, limited space and words used effectively to communicate complex ideas; excellent use of illustrations; excellent functionality with links all working; ideally pitched to promote public understanding of science (authoritative yet accessible); absence of jargon or comprehensive glossary provided. Excellent spelling and grammar; referencing and bibliography appropriate to the task (e.g. use of hyperlinks) and of an exemplary standard. <strong>Produced to an excellent and close to professional standard.</strong></td>
<td>Outstanding performance in most criteria 1-7</td>
</tr>
<tr>
<td>Mid</td>
<td>88</td>
<td>An effective presentation. Deep understanding of the task and topic; detailed knowledge; very clear structure, with ideas linked coherently; aims presented clearly and evidence of comprehensive research on show; clear understanding of audience and their needs; limited space and words used to communicate complex ideas effectively; may show some novelty in construction and design; pages visually well-balanced with appropriate font, size and use of colour; very good use of illustrations; excellent functionality with links all working; very well pitched to promote public understanding of science (authoritative yet accessible); absence of jargon or comprehensive glossary provided. Website produced to a very high standard. Excellent spelling and grammar; referencing and bibliography appropriate to the task (e.g. use of hyperlinks) and of a high standard.</td>
<td>Evidence of excellence in most criteria 1-7</td>
</tr>
<tr>
<td>Low</td>
<td>78</td>
<td>An effective presentation. Deep understanding of the task and topic; detailed knowledge; very clear structure, with ideas linked coherently; aims presented clearly and evidence of comprehensive research on show; clear understanding of audience and their needs; limited space and words used to communicate complex ideas effectively; may show some novelty in construction and design; pages visually well-balanced with appropriate font, size and use of colour; very good use of illustrations; excellent functionality with links all working; very well pitched to promote public understanding of science (authoritative yet accessible); absence of jargon or comprehensive glossary provided. Website produced to a very high standard. Excellent spelling and grammar; referencing and bibliography appropriate to the task (e.g. use of hyperlinks) and of a high standard.</td>
<td>Evidence of excellence in some criteria, particularly 1-5</td>
</tr>
<tr>
<td></td>
<td>75</td>
<td>A good presentation. Clear understanding of the task and topic; logical structure, with ideas mostly linked coherently; aims generally clear and research presented with a good level of detail; in-depth reading with evidence of critical analysis of literature and appropriate sources; clear identification of audience and shows clear understanding of their needs; pages visually well balanced with appropriate font, size and use of colour; good use of illustrations; good use of space and limited words to communicate complex ideas effectively; may be some minor errors in functionality of links; generally achieves objective of promoting public understanding of science but may occasionally lapse into jargon or be too simplistic in places. Good spelling and grammar; referencing and bibliography appropriate to the task.</td>
<td>A good performance in most criteria 1-7</td>
</tr>
<tr>
<td>Merit</td>
<td>68</td>
<td>A good presentation. Clear understanding of the task and topic; logical structure, with ideas mostly linked coherently; aims generally clear and research presented with a good level of detail; in-depth reading with evidence of critical analysis of literature and appropriate sources; clear identification of audience and shows clear understanding of their needs; pages visually well balanced with appropriate font, size and use of colour; good use of illustrations; good use of space and limited words to communicate complex ideas effectively; may be some minor errors in functionality of links; generally achieves objective of promoting public understanding of science but may occasionally lapse into jargon or be too simplistic in places. Good spelling and grammar; referencing and bibliography appropriate to the task.</td>
<td>A good performance in some criteria, particularly 1-4</td>
</tr>
<tr>
<td></td>
<td>65</td>
<td>A good presentation. Clear understanding of the task and topic; logical structure, with ideas mostly linked coherently; aims generally clear and research presented with a good level of detail; in-depth reading with evidence of critical analysis of literature and appropriate sources; clear identification of audience and shows clear understanding of their needs; pages visually well balanced with appropriate font, size and use of colour; good use of illustrations; good use of space and limited words to communicate complex ideas effectively; may be some minor errors in functionality of links; generally achieves objective of promoting public understanding of science but may occasionally lapse into jargon or be too simplistic in places. Good spelling and grammar; referencing and bibliography appropriate to the task.</td>
<td>Does sufficiently well in criteria 1-5 to show evidence of good understanding</td>
</tr>
<tr>
<td></td>
<td>62</td>
<td>A good presentation. Clear understanding of the task and topic; logical structure, with ideas mostly linked coherently; aims generally clear and research presented with a good level of detail; in-depth reading with evidence of critical analysis of literature and appropriate sources; clear identification of audience and shows clear understanding of their needs; pages visually well balanced with appropriate font, size and use of colour; good use of illustrations; good use of space and limited words to communicate complex ideas effectively; may be some minor errors in functionality of links; generally achieves objective of promoting public understanding of science but may occasionally lapse into jargon or be too simplistic in places. Good spelling and grammar; referencing and bibliography appropriate to the task.</td>
<td>A good attempt but insufficient critical analysis (criteria 2-4) for a Merit</td>
</tr>
<tr>
<td></td>
<td>58</td>
<td>An adequate but basic presentation. General understanding and knowledge of the task and topic; limited wider reading and writing is largely descriptive; limited awareness of wider debates; structure may be confused in places; simple statement of research aims; research findings presented adequately but may lack detail; some attempt to identify audience and identify their needs, but understanding of audience and purpose may not be clear; design is simple but presentation could be improved in terms of attractiveness and legibility; some useful illustrations; may be some minor errors in functionality of links; adequate attempt to promote public understanding of science but may lapse into jargon or be too simplistic in places. May be some errors in spelling or grammar, bibliography and referencing.</td>
<td>Usually an adequate performance in most criteria</td>
</tr>
<tr>
<td></td>
<td>55</td>
<td>An adequate but basic presentation. General understanding and knowledge of the task and topic; limited wider reading and writing is largely descriptive; limited awareness of wider debates; structure may be confused in places; simple statement of research aims; research findings presented adequately but may lack detail; some attempt to identify audience and identify their needs, but understanding of audience and purpose may not be clear; design is simple but presentation could be improved in terms of attractiveness and legibility; some useful illustrations; may be some minor errors in functionality of links; adequate attempt to promote public understanding of science but may lapse into jargon or be too simplistic in places. May be some errors in spelling or grammar, bibliography and referencing.</td>
<td>May be weaknesses but sufficient evidence of understanding for a pass</td>
</tr>
<tr>
<td></td>
<td>52</td>
<td>An adequate but basic presentation. General understanding and knowledge of the task and topic; limited wider reading and writing is largely descriptive; limited awareness of wider debates; structure may be confused in places; simple statement of research aims; research findings presented adequately but may lack detail; some attempt to identify audience and identify their needs, but understanding of audience and purpose may not be clear; design is simple but presentation could be improved in terms of attractiveness and legibility; some useful illustrations; may be some minor errors in functionality of links; adequate attempt to promote public understanding of science but may lapse into jargon or be too simplistic in places. May be some errors in spelling or grammar, bibliography and referencing.</td>
<td>PASSMARK 50%</td>
</tr>
</tbody>
</table>

Contd. On next page
| Condensible Fail | High 48 | A poor presentation. Structure is confused, with no clear linkage of ideas; aims are present but not adequately defined; research is presented in cursory fashion or so jargon-heavy as to be of limited use to a non-specialist audience; limited attempt to identify audience and understand their needs; lacks a clear focus and understanding of the task; no or very limited wider reading and awareness of key debates; poor design with page layout jumbled, inappropriate use of fonts and colour; images poorly chosen, unclear, too many or too few; text may have significant errors of spelling, punctuation or grammar; overall functionality poor; makes little attempt to engage with wider public understanding of science | Likely to be a lack of focus on the assignment (criteria 1) with insufficient evidence in criteria 2-4 to merit a Pass |
| Condensible Fail | Mid 45 | An extremely poor presentation, making no attempt to engage with the task; very little understanding of the topic and the task; knowledge may contain significant errors; inadequate and/or illogical structure; aims absent; research findings presented in very cursory fashion or so jargon-heavy as to be completely ineffective to a non-specialist audience; no attempt to identify the audience and understand their needs; serious issues over functionality and technical flaws throughout; colour and illustrations absent or used to very poor effect; substantial errors of spelling, punctuation or grammar; no attempt to make pages accessible or interesting to a non-specialist audience | Criteria 1-4 not addressed to a satisfactory level. |
| Condensible Fail | Low 42 | Poor performance in most criteria |
| Non-condensible Fail | 35 | No work submitted within 24 hours of deadline |
| Non-condensible Fail | 25 | Very poor performance in most criteria |
| Non-condensible Fail | 15 | |
| Non-condensible Fail | 0 | |

**Marking criteria for website presentations:**
1. Focus on the question/assignment
2. Level of critical understanding
3. Effective communication including clarity, succinctness and appropriate language
4. Extent to which the text is supported by wider academic literature or appropriate sources
5. Awareness of wider debates and contexts, both in academic scholarship and beyond
6. Effective presentation and design of blog and posts
7. Appropriate referencing and bibliography style
## Grade description for GG5291 Palaeoclimatology research proposal

<table>
<thead>
<tr>
<th>Class</th>
<th>%</th>
<th>Description</th>
<th>Marking criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>100</td>
<td>Has the potential to make a significant and highly original contribution to Quaternary Science; professional level of understanding of the main issues, concepts, underlying principles and mastery of the relevant literature; significant originality in construction of main research aims; innovative materials and methods used to achieve research objectives; critical commentary on research design and methodology; incisive and fluent style; professionally presented with referencing and bibliography of publishable standard; no or very minor errors of spelling, punctuation or grammar; <strong>no or very limited additional work required to bring to professional standards of research design.</strong></td>
<td>An exemplary piece of work.</td>
</tr>
<tr>
<td>Distinction</td>
<td>98</td>
<td>Deep understanding of subject area; clear originality in construction of research aims; detailed scientific background and research rationale; clear statement of research aims and questions; materials and methods proposed ideally suited to achieving research objectives; critical commentary on research design and methodology; excellent and clear structure; in-depth and detailed critical reading; excellent presentation with referencing and bibliography of publishable standard; no or very minor errors of spelling, punctuation or grammar.</td>
<td>Outstanding performance in most criteria 1-7.</td>
</tr>
<tr>
<td>Mid</td>
<td>95</td>
<td>Deep understanding of subject area; some originality in construction of research aims; detailed scientific background and research rationale; clear statement of research aims and questions; materials and methods proposed ideally suited to achieving research objectives; critical commentary on research design and methodology; coherent structure; in-depth reading; excellent presentation with referencing and bibliography of publishable standard; no or very minor errors of spelling, punctuation or grammar.</td>
<td>Evidence of excellence in most criteria 1-7.</td>
</tr>
<tr>
<td>Low</td>
<td>92</td>
<td>Deep understanding of subject area; some originality in construction of research aims; detailed scientific background and research rationale; clear statement of research aims and questions; materials and methods proposed ideally suited to achieving research objectives; critical commentary on research design and methodology; coherent structure; in-depth reading; excellent presentation with referencing and bibliography of publishable standard; no or very minor errors of spelling, punctuation or grammar.</td>
<td>Evidence of excellence in some criteria, particularly 1-4.</td>
</tr>
<tr>
<td>Merit</td>
<td>78</td>
<td>Deep understanding of subject area; some originality in construction of research aims; detailed scientific background and research rationale; clear statement of research aims and questions; materials and methods proposed ideally suited to achieving research objectives; critical commentary on research design and methodology; coherent structure; in-depth reading; well-presented with referencing in acceptable style and properly-formatted bibliography; fluent style; few errors of spelling, punctuation or grammar.</td>
<td>A good performance in most criteria 1-7.</td>
</tr>
<tr>
<td>Mid</td>
<td>75</td>
<td>Deep understanding of subject area; some originality in construction of research aims; detailed scientific background and research rationale; clear statement of research aims and questions; materials and methods proposed ideally suited to achieving research objectives; critical commentary on research design and methodology; coherent structure; in-depth reading; well-presented with referencing in acceptable style and properly-formatted bibliography; fluent style; few errors of spelling, punctuation or grammar.</td>
<td>A good performance in some criteria, particularly 1-3.</td>
</tr>
<tr>
<td>Low</td>
<td>72</td>
<td>Deep understanding of subject area; some originality in construction of research aims; detailed scientific background and research rationale; clear statement of research aims and questions; materials and methods proposed ideally suited to achieving research objectives; critical commentary on research design and methodology; coherent structure; in-depth reading; well-presented with referencing in acceptable style and properly-formatted bibliography; fluent style; few errors of spelling, punctuation or grammar.</td>
<td>Does sufficiently well in criteria 1-4 to show evidence of good understanding.</td>
</tr>
<tr>
<td>Pass</td>
<td>68</td>
<td>Good understanding of subject area; appropriate research aims; good scientific background and research rationale; clear statement of research aims and questions; scientific objectives achievable using the materials and methods proposed; commentary on research design and methodology; coherent structure; in-depth reading; well-presented with referencing in acceptable style and properly-formatted bibliography; fluent style; few errors of spelling, punctuation or grammar.</td>
<td>A good attempt but insufficient critical analysis (criteria 2-4) for a Merit.</td>
</tr>
<tr>
<td>Mid</td>
<td>65</td>
<td>Basic understanding of subject area; simple or unoriginal research aims and questions; basic scientific background and research rationale, possibly containing minor factual errors; basic statement of research aims and questions; familiarity with appropriate materials and methods (some errors in application); basic account of methods; adequate structure; some evidence of reading; adequately presented; some referencing and short bibliography; straightforward style; some errors of spelling, punctuation or grammar.</td>
<td>Usually an adequate performance in most criteria.</td>
</tr>
<tr>
<td>Low</td>
<td>62</td>
<td>Basic understanding of subject area; simple or unoriginal research aims and questions; basic scientific background and research rationale, possibly containing minor factual errors; basic statement of research aims and questions; familiarity with appropriate materials and methods (some errors in application); basic account of methods; adequate structure; some evidence of reading; adequately presented; some referencing and short bibliography; straightforward style; some errors of spelling, punctuation or grammar.</td>
<td>May be weaknesses but sufficient evidence of understanding for a pass.</td>
</tr>
<tr>
<td><strong>PASSMARK 50%</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High</td>
<td>58</td>
<td>Basic understanding of subject area; simple or unoriginal research aims and questions; basic scientific background and research rationale, possibly containing minor factual errors; basic statement of research aims and questions; familiarity with appropriate materials and methods (some errors in application); basic account of methods; adequate structure; some evidence of reading; adequately presented; some referencing and short bibliography; straightforward style; some errors of spelling, punctuation or grammar.</td>
<td>A good attempt but insufficient critical analysis (criteria 2-4) for a Merit.</td>
</tr>
<tr>
<td>Mid</td>
<td>55</td>
<td>Basic understanding of subject area; simple or unoriginal research aims and questions; basic scientific background and research rationale, possibly containing minor factual errors; basic statement of research aims and questions; familiarity with appropriate materials and methods (some errors in application); basic account of methods; adequate structure; some evidence of reading; adequately presented; some referencing and short bibliography; straightforward style; some errors of spelling, punctuation or grammar.</td>
<td>Usually an adequate performance in most criteria.</td>
</tr>
<tr>
<td>Low</td>
<td>52</td>
<td>Basic understanding of subject area; simple or unoriginal research aims and questions; basic scientific background and research rationale, possibly containing minor factual errors; basic statement of research aims and questions; familiarity with appropriate materials and methods (some errors in application); basic account of methods; adequate structure; some evidence of reading; adequately presented; some referencing and short bibliography; straightforward style; some errors of spelling, punctuation or grammar.</td>
<td>May be weaknesses but sufficient evidence of understanding for a pass.</td>
</tr>
</tbody>
</table>

Contd. On next page
<table>
<thead>
<tr>
<th>Criteria</th>
<th>Marking</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>35</td>
<td>Non-condonable Fail</td>
<td>No understanding of subject area; no clear research aims or questions; no or largely erroneous scientific background and research rationale; serious confusion over techniques; no serious discussion of methods; inadequate structure; no further reading; poorly presented, with no referencing of sources and an inadequate or absent bibliography; inadequate style; significant errors of spelling, punctuation or grammar.</td>
</tr>
<tr>
<td>25</td>
<td>0</td>
<td>No understanding of subject area; no clear research aims or questions; no or entirely erroneous scientific background and research rationale; techniques inappropriate; inadequate structure — fragmentary; incoherent or incomplete; no further reading; poorly presented, with no referencing of sources and an inadequate or absent bibliography; inadequate style; substantial errors of spelling, punctuation or grammar.</td>
</tr>
<tr>
<td>15</td>
<td>0</td>
<td>No work submitted within 24 hours of deadline.</td>
</tr>
</tbody>
</table>

**Marking criteria for research proposal:**

1. Clear research design: clear research aims, appropriate methodology
2. Justification for original fieldwork or other independent research
3. Use of appropriate analytical methods
4. Analysis and engagement with wider literature on the topic
5. Structure and presentation of the work
6. Appropriate bibliography and referencing style
7. Effective communication
## 13.4  Poster presentations

<table>
<thead>
<tr>
<th>Class</th>
<th>%</th>
<th>Grade description for Poster presentations</th>
<th>Marking criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>High</strong></td>
<td>100</td>
<td>The aim of the poster is very apparent from immediate impressions; there is considerable originality in the formatting of the poster and exceptional and effective presentation of complex themes; excellent summary of main ideas demonstrating deep awareness of key debates; significant evidence of further reading, with well synthesised supporting information; text excellently presented, quantity and font size extremely effective; clear, relevant illustrations that enhance purpose and interest of poster through synthesis of large datasets and/or ideas; excellent spelling and grammar; fluent style; innovative poster design, allows rapid communication of message; very neat and presentable; good source of further information and excellently presented bibliography. <strong>Poster produced to first-rate conference poster session standard.</strong></td>
<td><strong>An exemplary piece of work</strong></td>
</tr>
<tr>
<td></td>
<td>98</td>
<td>The aim of the poster is immediately apparent; excellent summary of main ideas demonstrating deep awareness of key debates; significant evidence of further reading, with well synthesised supporting information; text excellently presented, quantity and font size extremely effective; clear, relevant illustrations that enhance purpose and interest of poster through synthesis of large datasets and/or ideas; excellent spelling and grammar; fluent style; innovative poster design, allows rapid communication of message; very neat and presentable; good source of further information and excellently presented bibliography. <strong>Poster presented to high quality conference poster session standard.</strong></td>
<td><strong>Evidence of excellence in most criteria 1-7</strong></td>
</tr>
<tr>
<td></td>
<td>95</td>
<td>The aim of the poster is very apparent from immediate impressions; excellent summary of main ideas demonstrating deep awareness of key debates; significant evidence of further reading, with well synthesised supporting information; text excellently presented, quantity and font size very effective; clear, relevant illustrations that enhance purpose and interest of poster through synthesis of large datasets and/or ideas; excellent spelling and grammar; fluent style; innovative poster design, allows rapid communication of message; very neat and presentable; good source of further information and excellently presented bibliography. <strong>Poster presented to conference poster session standard.</strong></td>
<td><strong>Evidence of excellence in some criteria, particularly 1-4</strong></td>
</tr>
<tr>
<td><strong>High</strong></td>
<td>78</td>
<td>The aim of the poster is very clear; provides a good summary of main ideas demonstrating awareness of key debates; evidence of further reading, with good supporting information given; text well presented, quantity and font size effective; clear, relevant illustrations that add to purpose and interest of poster and provide a synthesis of key data or ideas; good spelling, grammar and written style; very good poster design, allows communication of message; neat and presentable; further information and bibliography well presented.</td>
<td><strong>A good performance in most criteria 1-7</strong></td>
</tr>
<tr>
<td></td>
<td>75</td>
<td>The poster has a title, but it is unclear immediately what the poster concerns; the main ideas are appropriate to the topic; little evidence of further reading, little supporting information given; text reasonably presented, quantity and font size adequate; there are few illustrations, some appropriate with an attempt to synthesis data or ideas; numerous errors in spelling, grammar or written style; reasonable poster design, allows communication of message; basically presentable; little further information and inadequate bibliography.</td>
<td><strong>Does sufficiently well in criteria 1-4 to show evidence of good understanding</strong></td>
</tr>
<tr>
<td><strong>High</strong></td>
<td>58</td>
<td>The main ideas behind the poster are inappropriate to topic with evidence of error and confusion; no evidence of further reading, little supporting information given; text may be ineffective, too small, unclear; few or no illustrations, uninformative or irrelevant; significant errors in spelling or grammar; sketchy style; poor poster design, hinders communication of message; untidy, messy; no bibliography or further information included</td>
<td><strong>A good attempt but insufficient critical analysis (criteria 2-4) for a Merit</strong></td>
</tr>
<tr>
<td><strong>Pass</strong></td>
<td>55</td>
<td>The aim of the poster is very clear; provides a good summary of main ideas demonstrating awareness of key debates; evidence of further reading, with good supporting information given; text well presented, quantity and font size effective; clear, relevant illustrations that add to purpose and interest of poster and provide a synthesis of key data or ideas; good spelling, grammar and written style; very good poster design, allows communication of message; neat and presentable; further information and bibliography well presented.</td>
<td><strong>Usually an adequate performance in most criteria</strong></td>
</tr>
<tr>
<td></td>
<td>52</td>
<td>The poster has a title, but it is unclear immediately what the poster concerns; the main ideas are appropriate to the topic; little evidence of further reading, little supporting information given; text reasonably presented, quantity and font size adequate; there are few illustrations, some appropriate with an attempt to synthesis data or ideas; numerous errors in spelling, grammar or written style; reasonable poster design, allows communication of message; basically presentable; little further information and inadequate bibliography.</td>
<td><strong>May be weaknesses but sufficient evidence of understanding for a pass</strong></td>
</tr>
<tr>
<td><strong>Low</strong></td>
<td>48</td>
<td>The main ideas behind the poster are inappropriate to topic with evidence of error and confusion; no evidence of further reading, little supporting information given; text may be ineffective, too small, unclear; few or no illustrations, uninformative or irrelevant; significant errors in spelling or grammar; sketchy style; poor poster design, hinders communication of message; untidy, messy; no bibliography or further information included</td>
<td><strong>Likely to be a lack of focus on the assignment (criteria 1) with insufficient evidence in criteria 2-4 to merit a Pass</strong></td>
</tr>
<tr>
<td><strong>Distinction</strong></td>
<td>45</td>
<td>The aim of the poster is very clear; provides a good summary of main ideas demonstrating awareness of key debates; evidence of further reading, with good supporting information given; text well presented, quantity and font size effective; clear, relevant illustrations that add to purpose and interest of poster and provide a synthesis of key data or ideas; good spelling, grammar and written style; very good poster design, allows communication of message; neat and presentable; further information and bibliography well presented.</td>
<td><strong>Likely to be weak in all criteria</strong></td>
</tr>
<tr>
<td></td>
<td>42</td>
<td>The poster has a title, but it is unclear immediately what the poster concerns; the main ideas are appropriate to the topic; little evidence of further reading, little supporting information given; text reasonably presented, quantity and font size adequate; there are few illustrations, some appropriate with an attempt to synthesis data or ideas; numerous errors in spelling, grammar or written style; reasonable poster design, allows communication of message; basically presentable; little further information and inadequate bibliography.</td>
<td><strong>Weak performance in some criteria, particularly 1-4</strong></td>
</tr>
</tbody>
</table>

**PASSMARK 50%**

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<table>
<thead>
<tr>
<th>Score</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>No work submitted within 24 hours of deadline</td>
</tr>
<tr>
<td>15</td>
<td>Very poor performance in most criteria</td>
</tr>
<tr>
<td>25</td>
<td>Poor performance in most criteria</td>
</tr>
<tr>
<td>35</td>
<td>Criteria 1-4 not addressed to a satisfactory level</td>
</tr>
</tbody>
</table>

The poster may lack a title and makes little attempt to engage with the task, such as the main ideas being inappropriate to the topic; there are numerous errors and ineffective communication of ideas. No supporting information provided and illustrations are either uninformative, poorly reproduced or irrelevant. Text is ineffective, too small, unclear; significant errors in spelling, grammar or written style; poor poster design, hinders communication of message; untidy, messy; no bibliography or further information included.

Marking criteria for poster presentations:
1. Focus on the assignment
2. Level of critical understanding
3. Evidence of wider reading
4. Aim of poster clear from first impressions
5. Design and layout of the poster
6. Use of illustrative material enhances poster
7. Clarity and succinctness of text.
### Marking criteria

<table>
<thead>
<tr>
<th>Class</th>
<th>%</th>
<th>Grade description for Fieldwork Report</th>
<th>Marking criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>100</td>
<td>Exemplary formulation of the project aims and structure; very clear scientific and regional context provided that underlie the project’s rationale; extensive reference to relevant literature concerning the project setting is succinct and incisive; the appropriate methods and their limitations are clearly explained; the data are presented in a cogent manner, and represent an excellent body of work within the time allowed; Excellent presentation of figures, tables, text, reference list and appendices (where appropriate), including spelling and grammar; the report shows significant critical awareness of the limitations in (i) the methods adopted, (ii) the data collected and (iii) interpretations of the data throughout the report; a set of succinct and well-conceived conclusions are provided that summarise in a cogent manner the overall achievements of the project. For an A+ grade, all of these criteria should be met.</td>
<td>An exemplary piece of work</td>
</tr>
<tr>
<td></td>
<td>98</td>
<td>Highly effective formulation of the project aims and structure; very clear scientific and regional context provided that underlie the project’s rationale; extensive reference to relevant literature concerning the project setting is succinct and incisive; the appropriate methods and their limitations are clearly explained; the data are presented in a cogent manner, and represent an excellent body of work within the time allowed; Excellent presentation of figures, tables, text, reference list and appendices (where appropriate), including spelling and grammar; the report shows significant critical awareness of the limitations in (i) the methods adopted, (ii) the data collected and (iii) interpretations of the data throughout the report; a set of succinct and well-conceived conclusions are provided that summarise in a cogent manner the overall achievements of the project. For an A grade, most of these criteria should be met.</td>
<td>Evidence of excellence in most criteria 1-7</td>
</tr>
<tr>
<td></td>
<td>95</td>
<td>Clear formulation of the project aims and structure; clear scientific and regional context that underlie the project’s rationale; adequate reference to relevant literature concerning the project setting is succinct and incisive; the appropriate methods and their limitations are clearly explained; the data are presented in a cogent manner, and represent an excellent body of work within the time allowed; the standard of presentation of figures, tables, text, reference list and appendices (where appropriate) are of excellent quality, including spelling and grammar; some critical awareness of limitations in (i) the methods adopted, (ii) the data collected and (iii) interpretations of the data throughout the report; a set of succinct and well-conceived conclusions are provided that summarise in a cogent manner the overall achievements of the project. For a B+ grade, all of these criteria should be met; for a B or B- grade, several of these criteria should be met, the grade awarded depending on the overall balance.</td>
<td>Evidence of excellence in some criteria, particularly 1-4</td>
</tr>
<tr>
<td>Low</td>
<td>78</td>
<td>Project aims and structure are adequate, but could be fuller and clearer; scientific and regional context that underlie the project’s rationale are addressed, but could be better explained; limited reference to relevant literature concerning the project setting; appropriate methods and their limitations are not fully explained; data are presented, but could be organised better or explained more clearly; the amount of data presented are less than might reasonably be expected in the time available; the standard of presentation of figures, tables, text, reference list and appendices (where appropriate) are of variable quality, including spelling and grammar; the report lacks critical awareness of the limitations in (i) the methods adopted, (ii) the data collected and (iii) interpretations of the data; no clear conclusions are provided, or they may not adequately reflect the data and the project’s rationale; Where all or the majority of these criteria apply, a C- grade will be awarded; where performance exceeds some of these criteria, a C or C+ will be awarded, depending on the overall balance of performance.</td>
<td>A good performance in most criteria 1-7</td>
</tr>
<tr>
<td></td>
<td>75</td>
<td>Project aims and structure are adequate, but could be fuller and clearer; scientific and regional context that underlie the project’s rationale are addressed, but could be better explained; limited reference to relevant literature concerning the project setting; appropriate methods and their limitations are not fully explained; data are presented, but could be organised better or explained more clearly; the amount of data presented are less than might reasonably be expected in the time available; the standard of presentation of figures, tables, text, reference list and appendices (where appropriate) are of variable quality, including spelling and grammar; the report lacks critical awareness of the limitations in (i) the methods adopted, (ii) the data collected and (iii) interpretations of the data; no clear conclusions are provided, or they may not adequately reflect the data and the project’s rationale; Where all or the majority of these criteria apply, a C- grade will be awarded; where performance exceeds some of these criteria, a C or C+ will be awarded, depending on the overall balance of performance.</td>
<td>A good performance in some criteria, particularly 1-3</td>
</tr>
<tr>
<td></td>
<td>72</td>
<td>Project aims and structure are adequate, but could be fuller and clearer; scientific and regional context that underlie the project’s rationale are addressed, but could be better explained; limited reference to relevant literature concerning the project setting; appropriate methods and their limitations are not fully explained; data are presented, but could be organised better or explained more clearly; the amount of data presented are less than might reasonably be expected in the time available; the standard of presentation of figures, tables, text, reference list and appendices (where appropriate) are of variable quality, including spelling and grammar; the report lacks critical awareness of the limitations in (i) the methods adopted, (ii) the data collected and (iii) interpretations of the data; no clear conclusions are provided, or they may not adequately reflect the data and the project’s rationale; Where all or the majority of these criteria apply, a C- grade will be awarded; where performance exceeds some of these criteria, a C or C+ will be awarded, depending on the overall balance of performance.</td>
<td>Usually an adequate performance in most criteria</td>
</tr>
<tr>
<td>Mid</td>
<td>68</td>
<td>Project aims and structure are adequate, but could be fuller and clearer; scientific and regional context that underlie the project’s rationale are addressed, but could be better explained; limited reference to relevant literature concerning the project setting; appropriate methods and their limitations are not fully explained; data are presented, but could be organised better or explained more clearly; the amount of data presented are less than might reasonably be expected in the time available; the standard of presentation of figures, tables, text, reference list and appendices (where appropriate) are of variable quality, including spelling and grammar; the report lacks critical awareness of the limitations in (i) the methods adopted, (ii) the data collected and (iii) interpretations of the data; no clear conclusions are provided, or they may not adequately reflect the data and the project’s rationale; Where all or the majority of these criteria apply, a C- grade will be awarded; where performance exceeds some of these criteria, a C or C+ will be awarded, depending on the overall balance of performance.</td>
<td>Usually an adequate performance in most criteria</td>
</tr>
<tr>
<td></td>
<td>65</td>
<td>Project aims and structure are adequate, but could be fuller and clearer; scientific and regional context that underlie the project’s rationale are addressed, but could be better explained; limited reference to relevant literature concerning the project setting; appropriate methods and their limitations are not fully explained; data are presented, but could be organised better or explained more clearly; the amount of data presented are less than might reasonably be expected in the time available; the standard of presentation of figures, tables, text, reference list and appendices (where appropriate) are of variable quality, including spelling and grammar; the report lacks critical awareness of the limitations in (i) the methods adopted, (ii) the data collected and (iii) interpretations of the data; no clear conclusions are provided, or they may not adequately reflect the data and the project’s rationale; Where all or the majority of these criteria apply, a C- grade will be awarded; where performance exceeds some of these criteria, a C or C+ will be awarded, depending on the overall balance of performance.</td>
<td>Usually an adequate performance in most criteria</td>
</tr>
<tr>
<td></td>
<td>62</td>
<td>Project aims and structure are adequate, but could be fuller and clearer; scientific and regional context that underlie the project’s rationale are addressed, but could be better explained; limited reference to relevant literature concerning the project setting; appropriate methods and their limitations are not fully explained; data are presented, but could be organised better or explained more clearly; the amount of data presented are less than might reasonably be expected in the time available; the standard of presentation of figures, tables, text, reference list and appendices (where appropriate) are of variable quality, including spelling and grammar; the report lacks critical awareness of the limitations in (i) the methods adopted, (ii) the data collected and (iii) interpretations of the data; no clear conclusions are provided, or they may not adequately reflect the data and the project’s rationale; Where all or the majority of these criteria apply, a C- grade will be awarded; where performance exceeds some of these criteria, a C or C+ will be awarded, depending on the overall balance of performance.</td>
<td>Usually an adequate performance in most criteria</td>
</tr>
<tr>
<td>Low</td>
<td>58</td>
<td>Project aims and structure are adequate, but could be fuller and clearer; scientific and regional context that underlie the project’s rationale are addressed, but could be better explained; limited reference to relevant literature concerning the project setting; appropriate methods and their limitations are not fully explained; data are presented, but could be organised better or explained more clearly; the amount of data presented are less than might reasonably be expected in the time available; the standard of presentation of figures, tables, text, reference list and appendices (where appropriate) are of variable quality, including spelling and grammar; the report lacks critical awareness of the limitations in (i) the methods adopted, (ii) the data collected and (iii) interpretations of the data; no clear conclusions are provided, or they may not adequately reflect the data and the project’s rationale; Where all or the majority of these criteria apply, a C- grade will be awarded; where performance exceeds some of these criteria, a C or C+ will be awarded, depending on the overall balance of performance.</td>
<td>Usually an adequate performance in most criteria</td>
</tr>
<tr>
<td></td>
<td>55</td>
<td>Project aims and structure are adequate, but could be fuller and clearer; scientific and regional context that underlie the project’s rationale are addressed, but could be better explained; limited reference to relevant literature concerning the project setting; appropriate methods and their limitations are not fully explained; data are presented, but could be organised better or explained more clearly; the amount of data presented are less than might reasonably be expected in the time available; the standard of presentation of figures, tables, text, reference list and appendices (where appropriate) are of variable quality, including spelling and grammar; the report lacks critical awareness of the limitations in (i) the methods adopted, (ii) the data collected and (iii) interpretations of the data; no clear conclusions are provided, or they may not adequately reflect the data and the project’s rationale; Where all or the majority of these criteria apply, a C- grade will be awarded; where performance exceeds some of these criteria, a C or C+ will be awarded, depending on the overall balance of performance.</td>
<td>Usually an adequate performance in most criteria</td>
</tr>
<tr>
<td></td>
<td>52</td>
<td>Project aims and structure are adequate, but could be fuller and clearer; scientific and regional context that underlie the project’s rationale are addressed, but could be better explained; limited reference to relevant literature concerning the project setting; appropriate methods and their limitations are not fully explained; data are presented, but could be organised better or explained more clearly; the amount of data presented are less than might reasonably be expected in the time available; the standard of presentation of figures, tables, text, reference list and appendices (where appropriate) are of variable quality, including spelling and grammar; the report lacks critical awareness of the limitations in (i) the methods adopted, (ii) the data collected and (iii) interpretations of the data; no clear conclusions are provided, or they may not adequately reflect the data and the project’s rationale; Where all or the majority of these criteria apply, a C- grade will be awarded; where performance exceeds some of these criteria, a C or C+ will be awarded, depending on the overall balance of performance.</td>
<td>Usually an adequate performance in most criteria</td>
</tr>
</tbody>
</table>

PASSMARK 50%
<table>
<thead>
<tr>
<th>Condonable Fail</th>
<th>High 48</th>
<th>Likely to be a lack of focus on the assignment (criteria 1) with insufficient evidence in criteria 2-4 to merit a Pass</th>
</tr>
</thead>
<tbody>
<tr>
<td>Condonable Fail</td>
<td>Mid 45</td>
<td>Weak performance in some criteria, particularly 1-4</td>
</tr>
<tr>
<td>Condonable Fail</td>
<td>Low 42</td>
<td>Likely to be weak in all criteria</td>
</tr>
<tr>
<td>Non-condonable Fail</td>
<td>Mid 35</td>
<td>Criteria 1-4 not addressed to a satisfactory level.</td>
</tr>
<tr>
<td>Non-condonable Fail</td>
<td>25</td>
<td>Poor performance in most criteria</td>
</tr>
<tr>
<td>Non-condonable Fail</td>
<td>15</td>
<td>Very poor performance in most criteria</td>
</tr>
<tr>
<td>Non-condonable Fail</td>
<td>0</td>
<td>No work submitted within 24 hours of deadline</td>
</tr>
</tbody>
</table>

**Marking criteria for poster presentations:**
1. Clarity of aims and research questions
2. Clarity and appropriateness of methodology
3. Quantity and quality of data
4. Analysis and engagement with wider literature on the topic
5. Structure and presentation of the work
6. Appropriate referencing and bibliography style
7. Effective communication
### Marking criteria

<table>
<thead>
<tr>
<th>Class</th>
<th>%</th>
<th>Grade description for Oral Presentations</th>
<th>Marking criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>High</strong></td>
<td>100</td>
<td>Original and thought-provoking presentation, identifying subtleties in detail of research presented; clear and original structure of content and conclusions; ideas linked coherently; evidence of original thought with respect to structure of content or conclusions; explicit, well-structured and relevant analysis; consultation and evaluation of a broad range of relevant sources; clearly audible presentation; audio-visual aids used to very effectively; appropriately paced and ran close to time; eye contact and body language excellent; gauged the needs of the audience and encouraged appropriate involvement and questioning, answering with authority and/or originality. <strong>Standard of a first-rate conference presentation</strong></td>
<td>An exemplary piece of work</td>
</tr>
<tr>
<td></td>
<td>98</td>
<td>Presentation addresses explicitly the topic, identifying subtleties in detail of research presented; clear and appropriate structure of content or conclusions; ideas linked coherently; evidence of original thought with respect to structure of content or conclusions; explicit, well-structured and relevant analysis; consultation and evaluation of a broad range of relevant sources; clearly audible presentation; audio-visual aids used to increase effectiveness; almost entirely appropriately paced and ran close to time; eye contact and body language used for most of the presentation; obvious attempt to gauge audience needs; encouraged appropriate involvement and questioning, demonstrating extensive knowledge and understanding in answers. <strong>Standard of a professional conference presentation</strong></td>
<td>Outstanding performance in most criteria 1-7</td>
</tr>
<tr>
<td><strong>Mid</strong></td>
<td>88</td>
<td>Presentation addresses explicitly the topic, identifying subtleties in detail of research presented; clear and appropriate structure of content or conclusions; ideas linked coherently; evidence of original thought with respect to structure of content or conclusions; explicit, well-structured and relevant analysis; consultation and evaluation of a broad range of relevant sources; clearly audible presentation; audio-visual aids used to increase effectiveness; almost entirely appropriately paced and ran close to time; eye contact and body language used for most of the presentation; obvious attempt to gauge audience needs; encouraged appropriate involvement and questioning, demonstrating extensive knowledge and understanding in answers</td>
<td>Evidence of excellence in most criteria 1-7</td>
</tr>
<tr>
<td></td>
<td>78</td>
<td>Presentation addresses explicitly the topic, identifying subtleties in detail of research presented; clear and appropriate structure of content or conclusions; ideas linked coherently; evidence of original thought with respect to structure of content or conclusions; explicit, well-structured and relevant analysis; consultation and evaluation of a broad range of relevant sources; clearly audible presentation; audio-visual aids used to increase effectiveness; almost entirely appropriately paced and ran close to time; eye contact and body language used for most of the presentation; obvious attempt to gauge audience needs; encouraged appropriate involvement and questioning, demonstrating extensive knowledge and understanding in answers</td>
<td>Evidence of excellence in some criteria, particularly 1-4</td>
</tr>
<tr>
<td><strong>Low</strong></td>
<td>68</td>
<td>Explicitly addresses the topic, structure evident but could be more focussed; evidence of coherent links between ideas; commenced and concluded appropriately; included relevant analysis; evidence of a broad range of relevant sources, and evidence of some evaluation; clearly audible and audio-visual aids used to increase effectiveness; almost entirely appropriately paced and ran close to time; eye contact and body language used for most of the presentation; obvious attempt to gauge audience needs; encouraged appropriate involvement and questioning, demonstrating knowledge and understanding in answers</td>
<td>A good performance in most criteria 1-7</td>
</tr>
<tr>
<td></td>
<td>65</td>
<td>Addresses the topic; evidence of structure but could be improved; evidence of coherent links between most ideas; commencement and conclusion could have been more appropriate; included some analysis; evidence that some relevant sources were consulted but could have been evaluated more effectively; audible for all of the presentation and audio-visual aids were used, although some lack of planning; pace not always appropriate and ran over/under time; more use of eye contact and body language could have been made; audience needs not well gauged and limited encouragement to participate/question; answers with basic understanding or hesitancy</td>
<td>A good performance in some criteria, particularly 1-3</td>
</tr>
<tr>
<td><strong>Pass</strong></td>
<td>58</td>
<td>Only partially addresses the topic; some evidence of appropriate structure but presentation is partially rambling or uncoordinated; ideas could have been linked more coherently; commenced and concluded with some hesitation or confusion; included little or no analysis; few relevant sources presented and little evaluation made; presentation ran over/under time; presentation paced too fast or too slow to be effective; presenter slightly inaudible; audio-visual aids not very effective (including having too many slides); little use of eye contact or body language; audience needs not taken into account in design of the presentation; no attempt to encourage appropriate audience involvement and questioning, and some weaknesses in basic understanding indicated in answers</td>
<td>A good attempt but insufficient critical analysis (criteria 2-4) for a Merit</td>
</tr>
<tr>
<td></td>
<td>55</td>
<td>Likely to be a lack of focus on the assignment (criteria 1) with insufficient evidence in criteria 2-4 to merit a Pass</td>
<td>Usually an adequate performance in most criteria</td>
</tr>
<tr>
<td><strong>Conditable Fail</strong></td>
<td>48</td>
<td>Likely to be a lack of focus on the assignment (criteria 1) with insufficient evidence in criteria 2-4 to merit a Pass</td>
<td>Weak performance in some criteria, particularly 1-4</td>
</tr>
<tr>
<td></td>
<td>45</td>
<td>Weak performance in some criteria, particularly 1-4</td>
<td>Likely to be weak in all criteria</td>
</tr>
<tr>
<td></td>
<td>42</td>
<td>Weak performance in some criteria, particularly 1-4</td>
<td>Likely to be weak in all criteria</td>
</tr>
</tbody>
</table>

### Passmark 50%

Contd. On next page
### Marking criteria for oral presentations:

1. Focus on the topic/assignment
2. Level of critical understanding
3. Level of detailed knowledge
4. Evidence of wider reading
5. Use of illustrative materials
6. General body language and engagement with literature
7. Pacing and timing of presentation

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>35</td>
<td>Largely fails to address the topic; rambling or unfocussed; commenced and concluded with hesitation or confusion; included little or no analysis; few relevant resources consulted, and little evaluation made of them; partially inaudible; audio-visual aids not used or used ineffectually; ran severely over- or under-time; presentation paced too fast or too slow to be effective; did not engage the audience with eye contact or body language; no attempt to gauge audience needs; no attempt to encourage appropriate audience involvement and questioning; answers largely erroneous or had little or no relevance to the topic</td>
</tr>
<tr>
<td>25</td>
<td>Fails to address the topic; very rambling and unfocussed; commenced and concluded with hesitation or confusion; included no analysis; no resources consulted; presenter was fully or partially inaudible; audio-visual aids not used or used ineffectually; ran severely over- or under-time; presentation paced too fast or too slow to be effective; did not engage the audience with eye contact or body language; no attempt to gauge audience needs; no attempt to encourage appropriate audience involvement and questioning; unable or unwilling to answer questions</td>
</tr>
<tr>
<td>15</td>
<td>Poor performance in all criteria; shows minimal effort</td>
</tr>
<tr>
<td>0</td>
<td>Did not present</td>
</tr>
</tbody>
</table>
## 13.7 Dissertation

<table>
<thead>
<tr>
<th>Class</th>
<th>%</th>
<th>Grade description for Dissertation</th>
<th>Marking criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>100</td>
<td>Significant and highly original contribution to Quaternary Science; professional level of understanding of the main issues, concepts, underlying principles and mastery of the relevant literature; significant originality in construction of main research aims and questions; substantial original fieldwork or other independent research; high ability in appropriate techniques; critical commentary on research design and methodology; incisive and fluent style; professionally presented with referencing and bibliography of publishable standard; no or very minor errors of spelling, punctuation or grammar; publishable as a journal paper with only minor revision.</td>
<td>An exemplary piece of work</td>
</tr>
<tr>
<td>Distinction</td>
<td>98</td>
<td></td>
<td>Outstanding performance in most criteria 1-7</td>
</tr>
<tr>
<td></td>
<td>95</td>
<td></td>
<td>Evidence of excellence in most criteria 1-7</td>
</tr>
<tr>
<td></td>
<td>92</td>
<td></td>
<td>Evidence of excellence in some criteria, particularly 1-4</td>
</tr>
<tr>
<td>Mid</td>
<td>88</td>
<td>Excellent understanding of subject area; originality in construction of main research aims and development of cogent research questions; substantial original fieldwork or some other independent research; excellent ability in appropriate techniques; critical commentary on research design and methodology; coherent structure; in-depth reading; excellent presentation with referencing and bibliography of publishable standard; no or very minor errors of spelling, punctuation or grammar; only minor additional work would be required to bring to publishable standard but demonstrates professional standards of research.</td>
<td>Evidence of excellence in some criteria, particularly 1-4</td>
</tr>
<tr>
<td></td>
<td>85</td>
<td></td>
<td>Evidence of excellence in some criteria, particularly 1-4</td>
</tr>
<tr>
<td></td>
<td>82</td>
<td></td>
<td>Evidence of excellence in some criteria, particularly 1-4</td>
</tr>
<tr>
<td>Low</td>
<td>78</td>
<td>Deep understanding of subject area; some originality in construction of main research aims and questions; substantial original fieldwork or some other independent research; high ability in appropriate techniques; critical commentary on research design and methodology; coherent structure; in-depth reading; excellent presentation with referencing and bibliography of publishable standard; only very minor errors of spelling, punctuation or grammar; some additional work would be required to bring to publishable standard but demonstrates professional standards of research.</td>
<td>Evidence of excellence in some criteria, particularly 1-4</td>
</tr>
<tr>
<td></td>
<td>75</td>
<td></td>
<td>Evidence of excellence in some criteria, particularly 1-4</td>
</tr>
<tr>
<td></td>
<td>72</td>
<td></td>
<td>Evidence of excellence in some criteria, particularly 1-4</td>
</tr>
<tr>
<td>Merit</td>
<td>68</td>
<td>Good understanding of subject area; clear statement of research aims and questions; significant original fieldwork or some other independent research; effective ability in appropriate techniques; commentary on research design and methodology; coherent structure; in-depth reading; well-presented with referencing in acceptable style and properly-formatted bibliography; fluent style; few errors of spelling, punctuation or grammar</td>
<td>A good performance in most criteria 1-7</td>
</tr>
<tr>
<td></td>
<td>65</td>
<td></td>
<td>A good performance in most criteria 1-7</td>
</tr>
<tr>
<td></td>
<td>62</td>
<td></td>
<td>Does sufficiently well in criteria 1-4 to show evidence of good understanding</td>
</tr>
<tr>
<td>Pass</td>
<td>58</td>
<td>Basic understanding of subject area; simple statement of research aims and questions; original fieldwork or some other independent research; familiarity with appropriate techniques (some errors in application); basic account of methods; adequate structure; some evidence of reading; adequately presented, some referencing and short bibliography; straightforward style; some errors of spelling, punctuation or grammar.</td>
<td>A good attempt but insufficient critical analysis (criteria 2-4) for a Merit</td>
</tr>
<tr>
<td></td>
<td>55</td>
<td></td>
<td>Usually an adequate performance in most criteria</td>
</tr>
<tr>
<td></td>
<td>52</td>
<td></td>
<td>May be weaknesses but sufficient evidence of understanding for a pass</td>
</tr>
<tr>
<td>Low</td>
<td>48</td>
<td>Limited understanding of subject area; confused or vague research aims or questions; limited original fieldwork or other independent research; very general familiarity with appropriate techniques (significant errors in application); simple account of methods; very limited further reading; significant weaknesses in presentation; little or no referencing and an inadequate or absent bibliography; simple style; significant errors of spelling, punctuation or grammar.</td>
<td>Likely to be a lack of focus on the assignment (criteria 1) with insufficient evidence in criteria 2-4 to merit a Pass</td>
</tr>
<tr>
<td>Cond. Fail</td>
<td>45</td>
<td></td>
<td>Weak performance in some criteria, particularly 1-4</td>
</tr>
<tr>
<td></td>
<td>42</td>
<td>Very limited understanding of subject area; confused or vague research aims or questions; very limited original fieldwork or other independent research; bare familiarity with appropriate techniques (substantial errors in application); vague or confused discussion of methods; sketchy structure; no further reading; poorly presented; little or no referencing and an inadequate or absent bibliography; sketchy style; significant errors of spelling, punctuation or grammar.</td>
<td>Likely to be weak in all criteria</td>
</tr>
</tbody>
</table>

Contd. On next page
### Marking criteria for Dissertations:

1. Research design: clear aims and appropriateness of methodology
2. Amount of original fieldwork or other independent research
3. Critical analysis of results
4. Analysis and engagement with wider literature on the topic
5. Structure and presentation of the work
6. Appropriate bibliography and referencing style
7. Effective communication

<table>
<thead>
<tr>
<th>Non-condonable Fail</th>
<th>35</th>
</tr>
</thead>
<tbody>
<tr>
<td>No understanding of subject area; no clear research aims or questions; no evidence of original fieldwork or other independent research; serious confusion over techniques; no serious discussion of methods; inadequate structure; no further reading; poorly presented, with no referencing of sources and an inadequate or absent bibliography; no referencing and an inadequate or absent bibliography; inadequate style; significant errors of spelling, punctuation or grammar.</td>
<td></td>
</tr>
</tbody>
</table>

| Criteria 1-4 not addressed to a satisfactory level. |

| Poor performance in all criteria; shows minimal effort |

| Very poor performance in most criteria |

| Did not present |

| No understanding of subject area; no clear research aims or questions; no original fieldwork or other independent research; no analytical work; no discussion of methods; inadequate structure — fragmentary; incoherent or incomplete; no further reading; poorly presented, with no referencing of sources and an inadequate or absent bibliography; no referencing and an inadequate or absent bibliography; inadequate style; substantial errors of spelling, punctuation or grammar. |

| 25 |

| 15 |

| 0 |
Careers information

The College’s Careers & Employability Service is based in the Davison Building. The careers service run a number of industry themed weeks and a range of standalone events during the academic year including a careers fair in October. Our events are open to all students. One to one appointments are available all through the year where you can talk over your career ideas or get your CV, cover letter or application checked. You can also book a practice, in person or video interview.

Our website and Careers Moodle has a wide range of help and information including interview skills, writing CVs and applications, assessment centres & psychometric tests.
For more information about all Careers events and appointments visit their website or come along and speak to their friendly and helpful staff.
Complaints and academic appeals procedure

If you have a complaint relating to any aspect of the Department or its staff or to any academic or College matter, you should first discuss it informally with your Personal Tutor or with another member of staff in the Department. We would hope that the majority of issues of this kind can be resolved by informal discussion. There are, however, procedures that can be invoked in serious cases. These are set out in the College Complaints Procedures for students. You should raise your complaint as soon as possible.

If the complaint concerns an academic decision, there is an academic appeals process. Please note that an academic appeal can only be submitted once you have received your results via the College portal. Details of the appeals procedure and permitted grounds for appeal can be found on the Academic Appeals webpage.
16 Health and Safety Information

The Health and Safety webpage provides general information about our health and safety policies.

16.1 Code of practice on harassment for students

The College is committed to upholding the dignity of the individual and recognises that harassment can be a source of great stress to an individual. Personal harassment can seriously harm working, learning and social conditions and will be regarded and treated seriously. This could include grounds for disciplinary action, and possibly the termination of registration as a student.

The College's Code of Practice on personal harassment for students should be read in conjunction with the Student Disciplinary regulations and the Complaints procedure.

16.2 Lone working policy and procedures

The College has a ‘Lone Working Policy and Procedure’ that can be found here.

Lone working is defined as working during either normal working hours at an isolated location within the normal workplace or when working outside of normal hours. The Department and the type of work conducted by students (other than laboratory work where specific guidance will be issued prior to the commencement of work) is classified as a low risk activity and as such the following advice is relevant.

Working out of hours counts as lone working - and the rule is the usual "If you arrive and leave the department outside of 9-5 then you must call security on 3063 to let them know you are in the building and again to let them know when you leave." There is an open access phone in the Queens foyer to use for this purpose.

Any health and safety concerns should be brought to the attention of the Departmental Health and Safety Coordinator or the College Health and Safety Office.

It is likely that most activities will take place on College premises. However, the principles contained in the above section will apply to students undertaking duties off campus.

16.3 Field trips

Fieldwork is an integral part of the MSc in Quaternary Science; please see Sections 2 and 3.

16.4 Placements

Placements are not currently part of the MSc in Quaternary Science.

16.5 Practicals

Practical work is an integral part of many of our MA and MSc programmes, please refer to Sections 2 and 3.

16.6 Specialist equipment

The Geography Department has equipment you might want to borrow for your fieldwork, video cameras, stills cameras, voice recorders and sound recorders. These are held by Ray Aung (QB137). Physical geographers can also borrow core and surveying equipment which are held by Marta Perez & Katy Flowers.
(QB127). All equipment can be booked out and borrowed for research purposes. You will be required to fill in a Field Equipment form held at the School Helpdesk (Wolfson 118) and you will need to pay a £100 deposit refundable on return of the equipment.

Please note there is often a high demand so please book equipment in advance and be ready to share it. Please be aware whilst every effort will be made to allow you to borrow the equipment during your preferred dates, we reserve the right to amend these during peak equipment use. Where necessary this will be discussed in advance of equipment collection.
Equal Opportunities Statement and College Codes of Practice

17.1 Equal opportunities statement

The University of London was established to provide education on the basis of merit above and without regard to race, creed or political belief and was the first university in the United Kingdom to admit women to its degrees.

Royal Holloway, University of London (hereafter ‘the College’) is proud to continue this tradition, and to commit itself to equality of opportunity in employment, admissions and in its teaching, learning and research activities.

The College is committed to ensure that:

- all staff, students, applicants for employment or study, visitors and other persons in contact with the College are treated fairly, have equality of opportunity and do not suffer disadvantage on the basis of race, nationality, ethnic origin, gender, age, marital or parental status, dependants, disability, sexual orientation, religion, political belief or social origins

- both existing staff and students, as well as, applicants for employment or admission are treated fairly and individuals are judged solely on merit and by reference to their skills, abilities qualifications, aptitude and potential

- it puts in place appropriate measures to eliminate discrimination and to promote equality of opportunity

- teaching, learning and research are free from all forms of discrimination and continually provide equality of opportunity

- all staff, students and visitors are aware of the Equal Opportunities Statement through College publicity material

- it creates a positive, inclusive atmosphere, based on respect for diversity within the College

- it conforms to all provisions as laid out in legislation promoting equality of opportunity.
18 Selected recent dissertation topics

18.1 Selected dissertation topics 2018/2019

A late Holocene palaeoenvironmental reconstruction from the annually-laminated sediments of Diss Mere, Norfolk: A multiproxy approach

Using distal Azores tephra to produce the first tephrostratigraphic isochron on the Iberian Peninsula and reveal spatio-temporal climate patterns

The glacial and fluvioglacial geomorphology of the upper Chico catchment in central Patagonia

Understanding Changing Ice Dynamics On Alexander Island, Antarctic Peninsula

Freshwater Availability in North Africa during Marine Isotope Stage 5

A reconstruction of vegetation and land-use change during the late Mesolithic to the late Bronze Age from an archaeological site at Staa Abbey, County Sligo, Ireland

Developing a regional tephrostratigraphic framework for the Ararat Depression, Armenia

Fire responses at the transition to Megadrought conditions (118-114 kyr BP) during the Last Interglacial at Lake Challa, East Africa

Evaluating evidence for environmental instability in early-mid Holocene lacustrine sediments from Loch Balnagowan, western Scotland

Investigating the deglaciation of the Patagonian Ice Sheet: Glacial geomorphology and varve chronology at Lago Blanco, Argentina

An Introductory Study of Visible and Crypto-tephra on Peninsule Courbet, Kerguelen Island

A Late Holocene response of the Gepatsch Glacier to environmental change.

An assessment of environmental variability in response to abrupt climatic change using a high-resolution palaeoenvironmental record from Lismore, north-west Scotland during the Last Glacial-Interglacial Transition.

Integrating the contemporary lake system and late Holocene palaeoenvironment at Diss Mere: a pilot study.

Mapping glaciogeomorphology in Swaledale, Yorkshire, and implications for our understanding of regional glaciation in the Pennines

The mammalian assemblage of Lime Kiln Hill Quarry, Somerset: insights from sedimentological and palaeoecological analyses

Palaeoecology of the red fox Vulpes vulpes L. 1758 in Britain: investigating body mass and diet during the Late Pleistocene and Holocene

Reconstructing the Pleistocene mammalian assemblages of Badger Hole and Rhinoceros Hole caves at Wookey Hole, Somerset, UK

18.2 Selected dissertation topics 2017/18

Trace element analysis of Borrobol-type cryptotephra in Scottish records

Testing the use of 2D modelling to quantify palaeoflood magnitude in Holocene floodplains

Charcoal analysis completed around cryptotephra layers in sediments from Lake Challa to understand the role of volcanism in palaeofire events

A high-resolution Mid-Late Holocene tephrostratigraphic study of Kiteschee Lake, King George Island, Sub-Antarctica

A re-examination of the timing of ice maximum during the Loch Lomond Readvance in Glen Spean, Scotland.

Mapping the glacial dynamic changes in South Georgia
Developing the Eastern Mediterranean tephrasтратigraphy
Testing the potential of the laminated sediments of Lac Pavin (France) for high quality palaeoclimate reconstruction

18.3 Selected dissertation topics 2016/17

Early Holocene climate variability in the British Isles as recorded in the varved sediments of Diss Mere, East Anglia.

A taphonomic analysis of a late Pleistocene pollen and bone assemblage from Gully Cave, Somerset.

Reconstructing North African Monsoon Variability in the Last ~150ka through the use and experimentation of Optical Stimulated Luminescence (OSL) dating methods from marine core ODP658B.

Assessing Isostatic Rebound during the Last Glacial to Interglacial Transition in north-west Scotland: A multi-proxy study of the Ardtoe Isolation basin.

Establishing a conservation evidence base for UK rewinding using long-term archives: the Dalmatian pelican as a case study.

Chironomid inferred temperatures of The White Bog, Co. Down, Northern Ireland: assessing landscape response to short term climatic oscillations during the Last Glacial Interstadial.

Sedimentology and dating of pro-glacial outwash deposits in the Firth of Forth.

Investigating the suitability of Lairigmor and Rannoch Station for restraining the timing of deglaciation at Rannoch Moor during the Loch Lomond Stadial-Holocene transition: A pilot study.

The mammalian assemblage from the 'Bear Den' stratum of Gully Cave, Ebbor Gorge, Somerset: taphonomy, palaeoenvironment and age.

A high-resolution Lateglacial to early Holocene palaeotemperature record from Wykeham Quarry, North Yorkshire.

18.4 Selected dissertation topics 2015/16

A lateglacial interstadial chironomid inferred temperature record from the site of Tirinie, Scotland.

Detailed sedimentological and tephrochronological study of annually-laminated deposits at Swardsklova, Southeastern Sweden.

OSL dating of palaeofired hearths from the western Nefud Desert, Saudi Arabia.

A comparison of chironomid-inferred summer temperatures with a Lateglacial pollen record from Tanera Mor, NW Scotland.

Combined use of high resolution remote sensing and field mapping to determine iceflow dynamics on Rannoch Moor, Scotland, during the Loch Lomond Stadial.

Sedimentology of a new deep-water core from Llangorse covering the Last Termination, helping refine the timing of deglaciation.

Chronology and palaeoenvironments of lacustrine sediments in the western Nefud desert, Saudi Arabia.

18.5 Selected dissertations topics 2013/14

An investigation into the Lateglacial vegetation history of Arisaig, northwest Scotland.

Utilising palynology and tephrochronology to assess the onset of the Holocene and its potential timing from Kingshouse 2, Rannoch Moor, NW Scotland.

Evidence for and timing of polyphase deformation in a multiple till sequence at Balglass Burn, Central Scotland: A micromorphological approach.
An oxygen isotopic investigation of the Flixton area, North Yorkshire: Implications for the human reoccupation of Britain across the Pleistocene-Holocene transition.

A diatom assessment of a lake sequence from Tanera Mor, Scotland.

A geoarchaeological investigation into the Mid- to Late-Holocene Queens Sedgemoor, Somerset Levels: Pollen and micro-charcoal evidence.

The ability of Bayesian age modelling to refine glacial chronologies in the Late Quaternary: A case study from Highland Asia.

A tephrochronology investigation of Straloch Loch, Scotland.

A lateglacial environmental and temperature record from Wykeham, Yorkshire, interpreted from subfossil beetles (Coleoptera)

A microscale sedimentary investigation of annually laminated sediments in Middle Glen Roy: the implications for site varve chronology.

Stable oxygen isotope ratios in chitin from Alaskan fossil water beetles: Palaeoecological implications and development towards a new palaeotemperature proxy.


The Lateglacial mammalian assemblage from Bridged Pot Shelter, Somerset: taphonomy, palaeoenvironment and age.

Vertebrate response to climatic deterioration in Britain during MIS 5a.

18.6 Selected dissertation topics 2012/13

Using the ‘Varian VF-50J’ X-ray source in routine luminescence dating of quartz.

Assessing the evidence for a short-lived environmental disturbance event during the early Holocene at Lake Llangorse, South Wales.

A high resolution isotopic record for the Lateglacial Interstadial from Star Carr, North Yorkshire.

The provenance and transport history of igneous clasts in late Quaternary deposits, Northwest Scotland: A pilot study into the use of geochemical methods to discriminate between glacial deposits of different age.

Chironomid-inferred Lateglacial interstadial temperatures from Muir Park, Southern Scotland.

Identification and correlation of cryptotephras from Lake Kushu on Rebun Island, Japan.

The Late-Glacial palaeoenvironmental record from Tirinie, south-east Grampian Highlands: Assessing the vegetative response to abrupt short term climatic change.

Testing the potential for tephra to time glacial retreat: tephrostratigraphic analyses of four Early Holocene sequences from the Scottish Highland.

The Mammalian Assemblages of The Crypt, Creswell Crags, Nottinghamshire.

The landscape evolution of the View Point area of the Glen Roy valley, NW Scotland, during the Loch Lomond Readvance; A detailed sedimentological and geomorphic analysis.

A tephrostratigraphic investigation of mire deposits associated with Viking occupation sites in Greenland

A macro-scale and micromorphological investigation of the genesis of a glacigenic diamicton complex - an example from Happisburgh, North Norfolk.

Lateglacial Stadial paleoclimate reconstruction for the British Isles using high resolution isotope records from carbonate lake systems.
Various forms relevant to your studies are attached as an appendix to this document. More information can be found on the departmental website:

https://intranet.royalholloway.ac.uk/geography/currentstudents/home.aspx#tabbedareaC
MSc QUATERNARY SCIENCE

Dissertation Approval Form

Name:

Provisional title of dissertation:

Brief outline of aims/objectives:

Location of fieldwork:

Brief outline of principal methods to be adopted:

Field equipment required:

Laboratory equipment/facilities required:
Personnel at RHUL consulted about this proposal:

External personnel consulted about this proposal (specify individuals names and where based):

Personnel who have agreed to supervise +/- advise on the execution of the project:

Has access to field sites been secured? YES / NO
If no, specify the steps required to secure access:

Are all required laboratory materials/facilities available? YES / NO
If no, specify the importance of materials/facilities to the project, and what is needed to obtain them (e.g. purchase of equipment/consumables, access to laboratory facilities in another institution etc.):

Signature of candidate: date:
Statement of Work, MSc Quaternary Science dissertation project

1. Was this a field or laboratory-based study, or a mixture of both elements?

2. How many days did you spend doing fieldwork for this project, if applicable?

3. Did you collect your own samples or were these provided, and if so, by whom?

4. How many days did you spend doing laboratory work for this project?

5. Was your supervisor an active participant in the project, for example by doing field or laboratory work in conjunction with you? If yes, approximately how much time did your supervisor spend on your project?

6. Were you working alone or as part of a group?

Student name________________________________________________________
Student signature_____________________________________________________
Date_______________________________________________________________
Supervisor countersignature___________________________________________
Presentation (textual and graphical):

Evidence of original/incisive research:

OVERALL COMMENTS:

Mark awarded: signed: date:

AGREED MARK (after consultation with second assessor):

Signed (1st assessor): Date:

Signed (2nd assessor): Date: