School of Geography & Geosciences

Important Degree Information:

B.Sc./M.A. Honours
The general requirements are 480 credits over a period of normally 4 years(and not more than 5 years) or part-time equivalent; the final two years being an approved honours programme of 240 credits, of which 90 credits are at 4000 level and at least a further 120 credits at 3000 and/or 4000 (H) levels. Refer to the appropriate Faculty regulations for lists of subjects recognised as qualifying towards either a B.Sc. or M.A. degree.

B.Sc./M.A. Honours with Integrated Year Abroad
The general requirements are 540 credits over a period of normally 5 years (and not more than 6 years) or part-time equivalent; the final three years being an approved honours programme of 300 credits, of which 60 credits are gained during the integrated year abroad, 90 credits are at 4000 level and at least a further 120 credits at 3000 and/or 4000 (H) levels. Refer to the appropriate Faculty regulations for lists of subjects recognised as qualifying towards either a B.Sc. or M.A. degree.

Other Information: In the case of students who spend part of the Honours Programme abroad on a recognised Exchange Scheme, the Programme Requirements will be amended to take into account courses taken while abroad.

Degree Programmes	Programme Requirements at:
(M.A. Honours or B.Sc. Honours): **Geography**	**Single Honours Geography:** **Level 1:** 40 credits comprising passes in GE1001 and GE1002 **Level 2:** 60 credits comprising passes in all of GE2001, GE2002, GG2003, GG2004, including passes at 11 or better in 40 credits worth of these modules. Entry to Honours with passes at 11 or better in GE2001 and GE2002 only may be permitted at the discretion of the Head of School. **Level 3:** Level 3 & Level 4 (Single Honours Degree) Requirements: GE3001, GE3002, GE3004 and GE3005; *plus* either GE3006 or GE3007; *plus* either GE3008 or GG3011; *plus* GE4014, GE4018 and GE4019; *plus* 120 additional 3000 and 4000 level credits of which at least 90 credits must be from GE3025-GE3073, GE4026-GE4072 and/or GG3021-GG3089, GG4042-GG4073. Of the 240 credits required for an Honours degree, 90 credits must be at 4000 level. **Level 4(H):** see above

Degree Programmes	Programme Requirements at:
(M.A. Honours): **Geography and Art History, Economics, English*, French^, Hebrew, International Relations, Italian^, Management~, Mediaeval History, Middle East Studies, Modern History, Psychology, Scottish History, Social Anthropology, Spanish^, Theological Studies.** (B.Sc. Honours): **Geography and Management~, Management Science, Mathematics, Statistics.** ^ available also as 'with Integrated Year Abroad Degrees' ~Timetable clash exists, therefore this combination is subject to arrangement with both Departments. * Timetable clash means that 2000 level English must be taken in the First year to do this combination	**Geography element of Joint Honours Degrees:** **Level 1:** 40 credits comprising passes in GE1001 and GE1002 **Level 2:** 60 credits comprising passes in all of GE2001, GE2002, GG2003, GG2004, including passes at 11 or better in 40 credits worth of these modules. Entry to Honours with passes at 11 or better in GE2001 and GE2002 only may be permitted at the discretion of the Head of School. **Level 3:** Level 3 & Level 4 (Joint Honours Degree) Requirements: 30 credits from GE3001, GE3002, GE3004, GE3005, either GE3006 or GE3007, GE3008, GG3011, GE4014; *plus* GE4018; *plus* 60 additional 3000 and 4000 level credits from GE3025-GE3073, GE4026-GE4072 and/or GG3021-GG3089, GG4042-GG4073. Of the 240 credits required for an Honours degree, 90 credits from Joint Honours subjects must be at 4000 level. **Level 4(H):** see above
(B.Sc. Honours): **Geography and Environmental Biology**	**Geography element of Joint Degree:** **Level 1:** 40 credits comprising passes in GE1001 and GE1002 **Level 2:** 60 credits comprising passes in all of GE2001, GE2002, GG2003, GG2004, including passes at 11 or better in GE2002, GG2003, GG2004. **Level 3:** Level 3 & Level 4 (Joint Honours Degree) Requirements: 30 credits from GE3001, GE3002, GE3004, GE3005, either GE3006 or GE3007, GE3008, GG3011, GE4014; *plus* GE4018; *plus* 60 additional 3000 and 4000 level credits from GE3025 – GE3073, GE4026 – GE4072 and/or GG3021 – GG3089, GG4042 – GG4073, GG4082. Of the 240 credits required for an Honours degree, 90 credits from Joint Honours subjects must be at 4000 level. **Level 4(H):** see above
(M.A. Honours): **Geography with Social Anthropology or Spanish^** (B.Sc. Honours): **Geography with French^** ^available also as 'with Integrated Year Abroad Degree'	**Geography element of Major Degrees:** **Level 1:** 40 credits comprising passes in GE1001 and GE1002 **Level 2:** 60 credits comprising passes in all of GE2001, GE2002, GG2003, GG2004, including passes at 11 or better in 40 credits worth of these modules. Entry to Honours with passes at 11 or better in GE2001 and GE2002 only may be permitted at the discretion of the Head of School. **Level 3:** Level 3 & Level 4 (Major Honours Degree) Requirements: GE3004, GE4014; *plus* any four of : GE3001, GE3002, GE3005, either GE3006 or GE3007, GE3008, GG3011; *plus* GE4018; *plus* 90 additional 3000 and 4000 level credits from GE3025-GE3073, GE4026-GE4072 and/or GG3021-GG3089, GG4042-GG4073. Of the 240 credits required for an Honours degree, 90 credits from major and/or minor subjects must be at 4000 level. **Level 4(H):** see above

Degree Programmes	Programme Requirements at:
(M.A. Honours): **Psychology, Russian^, Social Anthropology or Spanish^ with Geography.** ^ available also as 'with Integrated Year Abroad Degree'	**Geography element of Minor M.A. Degrees:** **Level 1**: 40 credits comprising passes in GE1001 and GE1002 **Level 2**: 60 credits comprising passes in all of GE2001, GE2002, GG2003, GG2004, including passes at 11 or better in 40 credits worth of these modules. Entry to Honours with passes at 11 or better in GE2001 and GE2002 only may be permitted at the discretion of the Head of School. **Level 3**: Level 3 & Level 4 (Minor Honours Degree) Requirements: (Geography element) 80 credits from GE or GG 3000 and 4000 level modules, at least 60 credits of which must be from GE3025-GE3073, GE4026-GE4072 and/or GG3021-GG3089, GG4042-GG4073. Of the 240 credits required for an Honours degree, 90 credits from major and/or minor subjects must be at 4000 level. **Level 4(H):** see above
(B.Sc. Honours): **Mathematics with Geography**	**Geography element of Minor B.Sc. Degree:** **Level 1:** 40 credits comprising passes in GE1001 and GE1002 **Level 2:** 60 credits comprising passes in all of GE2001, GE2002, GG2003, GG2004, including passes at 11 or better in 40 credits worth of these modules. Entry to Honours with passes at 11 or better in GE2001 and GE2002 only may be permitted at the discretion of the Head of School. **Level 3:** Level 3 & Level 4 (Minor Honours Degree) Requirements: (Geography element) 80 credits from GE or GG 3000 and 4000 level modules, at least 60 credits of which must be from GE3025-GE3073, GE4026-GE4072 and/or GG3021-GG3089, GG4042-GG4073. Of the 240 credits required for an Honours degree, 90 credits from major and minor subjects must be at 4000 level. **Level 4(H):** see above
(B.Sc. Honours): **Geoscience**	**Single Honours Geoscience:** **Level 1:** 40 credits comprising passes in GS1001 and GS1002 **Level 2:** 60 credits comprising passes at 11 or better in (GG2003, GG2004, GS2001, and GS2002) or (GS2011 and GS2012) **Level 3:** 90 credits comprising GS3002, GS3003, GS3004, GS3081, GG3082, and GS3090 and 30 credits from the group GG3021, GG3023, GG3036, GG3041, GG4042, GG3052, GG3056, GG3057, GG3058, GG4059, GG3067, GG3068, GG3069, GS4083, GS4084, GG3089*. **Level 4(H):** 60 credits comprising GS4005, GS4006, GS4007, GS4008, and 60 credits from the group GS4085, GS4086, GG4082, GS4088, GG3021, GG3023, GG3036, GG3041, GG4042, GG3052, GG3056, GG3057, GG3058, GG4059, GG3067, GG3068, GG3069, GS4083, GS4084*. *NB in addition to GS4005, GS4006, GS4007, and GS4008, at least 30 credits of other 4000-level modules must be taken over the 2 years of Junior and Senior Honours.

Degree Programmes	Programme Requirements at:
(B.Sc. Honours): **Geoscience and Chemistry**	**Geoscience-Chemistry Joint Degree:** **Level 1:** 40 credits comprising passes in GS1001 and GS1002 and 40 credits comprising Pass or bypass for CH1001, pass in CH1004 **Level 2:** 60 credits comprising passes at 11 or better in (GG2003, GG2004, GS2001, and GS2002) or (GS2011 and GS2012) and 60 credits comprising passes at 11 or better in CH2101, either CH 2102 or CH2103 **Level 3:** 120 credits comprising CH4512, CH3711, CH3521, CH3511, CH3721, CH3431 and GS3004, normally GS3081* and 1 from (GS4083 or GS4084). **Level 4(H):** 120 credits comprising 3 from (CH4511, CH4611, H4711, CH4712 and CH5711), CH4448§, CH5515, normally GS4083 or GS4084**, GS4005, GS4010, GS4009, 1 from (GS4088, GG3067, GG3068, GG3069 and GG3082) * With the approval of the Geoscience Adviser of Studies, a student may replace GS3081 and (GS4083 or GS4084) by 2 from GG3067, GG3068, GG3069, GG3082 in semester 2. ** With the approval of the Geoscience Adviser of Studies, a student may replace GS4083 or GS4084 by a second module from the list GS4088, GG3067, GG3068, GG3069 and GG3082 §With the approval of the Directors of Teaching, under some circumstances, students might conduct an integrated 35 credit project, ID4441, combining CH4448 with GS4009 and presenting a single, extended report.
(B.Sc. Honours): **Geoscience and Environmental Biology.**	**Geoscience element of Joint Degree:** **Level 1:** 40 credits comprising passes in GS1001 and GS1002 **Level 2:** 60 credits comprising passes at 11 or better in (GG2003, GG2004, GS2001, and GS2002) or (GS2011 and GS2012) and Honours entry in the other subject **Level 3:** 30 credits from GS3004, and 30 credits from the group GG3023, GG3067, GG3068, GG3069, GG3082. **Level 4(H):** 30 credits from GS4005, GS4009, GS4010, and 30 credits from the group GG4082, GS4088, GG3023, GG3067, GG3068, GG3069, at least 15 credits of which must be at level 4000.
(B.Sc. Honours): **Geoscience and Management, Management Science.** **Geoscience and Computer Science** (not available to students entering the University after 2002)	**Geoscience element of Joint Degree:** **Level 1:** 40 credits comprising passes in GS1001 and GS1002 **Level 2:** 60 credits comprising passes at 11 or better in (GG2003, GG2004, GS2001, and GS2002) or (GS2011 and GS2012) and Honours entry in the other subject **Level 3:** 30 credits from GS3004, and 30 credits from the group GG3023, GG3067, GG3068, GG3069, GG3082. **Level 4(H):** 30 credits from GS4005, GS4009, GS4010, and 30 credits from the group GG4082, GS4088, GG3023, GG3067, GG3068, GG3069, at least 15 credits of which must be at level 4000.

Degree Programmes	Programme Requirements at:
(B.Sc. Honours): **Geoscience with French^ or Spanish^** ^ available also as 'with Integrated Year Abroad Degree'	**Geoscience element of Major Degree:** **Level 1:** 40 credits comprising passes in GS1001 and GS1002 **Level 2:** 60 credits comprising passes at 11 or better in (GG2003, GG2004, GS2001, and GS2002) or (GS2011 and GS2012) and Honours entry in French **Level 3:** 60 credits from GS3002, GS3003, GS3004, GS3090 and 30 credits from the group GG3021, GG3023, GG3036, GG3041, GG4042, GG3052, GG3056, GG3057, GG3058, GG4059, GG3067, GG3068, GG3069, GS3081, GG3082, GS4083, GS4084, GG3089 **Level 4(H):** 60 credits from GS4005, GS4006, GS4007, GS4008, and 30 credits from the group GS4085, GS4086, GG4082, GS4088, GG3021, GG3023, GG3036, GG3041, GG4042, GG3052, GG3056, GG3057, GG3058, GG4059, GG3067, GG3068, GG3069, GS3081, GS3082, GS4083, GS4084

Modules

Interdisciplinary (ID) Modules

This School co-ordinates and contributes to an inter-disciplinary module – **ID1002 Sustainability: ensuring our common future** This appears in the Interdisciplinary Section of the Catalogue (Section 20)

Geography (GE) Modules

GE1001 The Foundations of Geography

Credits: 20.0 Semester: 1

Description: This module provides a general introduction to Human and Physical Geography. Some basic concepts of Human Geography - space and place, location and scale, distance and difference - are introduced and used to examine the nature of the human environment. Both contemporary and historical examples allow an exploration of these issues in a British setting, in an urban setting and in relation to world geographies. The Physical Geography component introduces the characteristics of global environmental systems: the lithosphere, atmosphere, hydrosphere and biosphere. These components are illustrated in the course of two one-day field trips.

Class Hour: 11.00 am

Teaching: Five lectures, one laboratory each week and 2 field days during the semester.

Assessment: Continuous Assessment = 67%, 2 Hour Examination = 33%

Re-Assessment: 2 Hour Examination = 33%, Oral Examination if continuous assessment is seriously deficient.

GE1002 Global Environmental Problems

Credits: 20.0 Semester: 2

Description: This module explores the interrelationships between human activity and the physical environment in the context of the examination of some pressing global problems. The scientific, political, social and economic dimensions of such issues as population growth, global warming, desertification, food supply and the exploitation of natural resources are examined, and the potential for sustainable development is considered. The module illustrates the close interrelationship between human and physical geography and the need for a broad knowledge of both if we are to understand the nature of the global environmental problems that currently confront society.

Class Hour: 11.00 am

Teaching: Five lectures and one laboratory.

Assessment: Continuous Assessment = 67%, 2 Hour Examination = 33%

Re-Assessment: 2 Hour Examination = 33%, Oral Examination if continuous assessment is seriously deficient.

GE2001 Geographical Change in the Modernising World

Credits: 20.0 Semester: 1

Prerequisites: GE1001 (or GG1001) and GE1002 (or GG1002)

Anti-requisites: GG2001 and GG2002

Description: This module explores the extraordinary character of the modern world from a broadly geographical perspective. It aims to show that the varied and uneven transition from the 'traditional' world to the 'modern' world, and the complex make-up of the twentieth century world, cannot be properly understood without an understanding of its geography. The module tackles cultural, economic and political processes of change spanning the last 500 years, and it focuses on the human geography of capitalism, imperialism, modernisation and globalisation.

Class Hour: 9.00 am Wednesday, Thursday and Friday (lectures), 2.00 - 3.00 pm *or* 3.00 - 4.00 pm, *or* 4.00 - 5.00 pm, *or* 5.00 - 6.00 pm Monday (seminar)

Teaching: Three lectures per week, plus three seminars and a field course during the semester

Assessment: Continuous Assessment = 60%, 2 Hour Examination = 40%

Re-Assessment: 2 Hour Examination = 40%, Oral Examination if continuous assessment is seriously deficient.

GE2002 Ideas and Approaches in Geography

Credits: 20.0 Semester: 2

Prerequisite: Either GE2001 or GG2003

Co-requisite: (Only for students without GE2001) GG2004

Anti-requisite: GG2002

Description: This module investigates ways in which geographical ideas and approaches can be used to understand the complexities of the contemporary world. Using regional and applied approaches, it investigates the complex interdependencies between human and physical environments at various scales. It also situates these ideas and approaches within contemporary thought by examining some enduring themes which have fascinated geographers for centuries.

Class Hour: 9.00 am Wednesday, Thursday and Friday (lectures), 2.00 - 3.00pm *or* 3.00 - 4.00 pm, *or* 4.00 - 5.00 pm, *or* 5.00 - 6.00 pm Monday (seminar)

Teaching: Three lectures per week, plus two seminars and a practical during the semester

Assessment: Continuous Assessment = 50%, 2 Hour Examination = 50%

Re-Assessment: 2 Hour Examination = 50%, Oral Examination if continuous assessment is seriously deficient.

Geography – Geoscience (GG) Modules

GG2003 Earth Surface Processes I : Environmental Systems

Credits: 10.0 Semester: 1

Prerequisites: Either GE1001 (or GG1001) and GE1002 (or GG1002), or GS1001 and GS1002

Anti-requisite: GG2001

Description: This module focuses on the fundamental physical and chemical processes operating at the earth's surface and near subsurface. The course presents the environmental context of earth surface processes in terms of the major components of atmospheric, hydrospheric and biospheric processes. Topics covered include units and basic concepts, hydrometeorology, surface and groundwater hydrology, rock weathering and soil formation, biogeographical processes, physical oceanography and the causes and consequences of environmental change.

Class Hour: 9.00 am Monday & Tuesday, and 2.00 - 4.00pm *or* 4.00 - 6.00 pm Monday

Teaching: Two lectures each week, plus practical work.

Assessment: Continuous Assessment = 25%, 2 Hour Examination = 75%

Re-Assessment: 2 Hour Examination = 75%, Oral Examination if continuous assessment is seriously deficient.

GG2004 Earth Surface Processes II : Geomorphological and Sediment Systems

Credits: 10.0 Semester: 2

Prerequisite: GG2003

Anti-requisite: GG2001

Description: This module extends the understanding of the physcial and chemical processes operating at the earth's surface and near subsurface developed in GG2003. The course focuses on the operation of geomorphological processes in the overall context of sediment entrainment, transportation and deposition in a wide range of terrestrial and nearshore environments. Topics covered include earth surface sediment transport systems, physical processes of sedimentation and the operation of these proecesses in systems such as fluvial, glacial, coastal, hill slope and periglacial environments.

Class Hour: 9.00 am Monday & Tuesday, and 2.00 - 4.00pm or 4.00 - 6.00 pm Monday

Teaching: Two lectures each week, plus practical and fieldwork.

Assessment: Continuous Assessment = 25%, 2 Hour Examination = 75%

Re-Assessment: 2 Hour Examination = 75%, Oral Examination if continuous assessment is seriously deficient.

Geoscience (GS) Modules

GS1001 Planet Earth and its Materials

Credits: 20.0 Semester: 1

Description: The module provides an introduction to the fundamentals of the science of geology. The plate tectonic discoveries of the last 25 years provide a framework for the module which covers: (i) Introduction to geology and plate tectonics; (ii) mineralogy; (iii) igneous geology; (iv) metamorphic geology; (v) sedimentary geology; (vi) geological maps; and (vii) introductory information technology in geoscience.

Class Hour: 9.00 am

Teaching: Five lectures and one 3 hour laboratory.

Assessment: Continuous Assessment = 50%, 2 Hour Examination = 50%

Re-Assessment: Coursework = 20%, 2 Hour Examination = 80%

GS1002 Earth Environments & Resources

Credits: 20.0 Semester: 2

Description: The interplay between the Earth's internal processes and external form, the evolution of the Earth and of its life forms, and human uses of Earth materials are the themes of this module. The module covers: (i) Earth structure and interior; (ii) palaeontology; (iii) Earth history; (iv) Earth resources; (v) geological maps; (vi) additional information technology in geosciences; (vii) group project exercise.

Class Hour: 9.00 am

Teaching: Five lectures and one 3 hour laboratory.

Assessment: Continuous Assessment = 50%, 2 Hour Examination = 50%

Re-Assessment: Coursework = 20%, 2 Hour Examination = 80%

Geography and Geosciences

GS2011 Earth Systems I: Evolutionary Geosciences

Credits: 30.0 Semester: 1

Prerequisites: GS1001 & GS1002

Anti-requisite: GS2002

Description: This module aims to provide a broad understanding of some of the natural processes that have interacted through time to shape and modify our planet and its life forms. Methods and insights from the exciting new field of Earth Systems Science will be used to comprehend the hallmark features of Earth history, biospheric and lithospheric evolution and humankind's role in influencing environmental change. Lectures and laboratory classes are integrated with emphasis on recording and analysing geoscience information, fieldwork and presentational skills.

Class Hour: 10.00 am

Teaching: Five lectures and one 3 hour laboratory, and occasional tutorials.

Assessment: Continuous Assessment = 50%, 3 Hour Examination = 50%

Re-Assessment: Coursework = 20%, 3 Hour Examination = 80%

GS2012 Earth Systems II: Materials and Geodynamics

Credits: 30.0 Semester: 1

Prerequisites: GS1001 & GS1002

Anti-requisite: GS2001

Description: This module aims to give a broad understanding of the genesis of materials that comprise Earth and the processes that are involved in creating and modifying Earth's surface and lithosphere. Practical tools for the systematic recognition and accurate identification of solid Earth materials are emphasised. These provide the basis to interpret the physical conditions of formation and geodynamical evolution of the Earth System through time. A residential field course in the Easter vacation provides an opportunity to visit *in situ* many of the features covered in this module and so helps to pull the course together.

Class Hour: 10.00 am

Teaching: Five lectures and one 3 hour laboratory, and occasional tutorials.

Assessment: Continuous Assessment = 60%, 3 Hour Examination = 40%

Re-Assessment: Coursework = 20%, 3 Hour Examination = 80%

The details of the Honours modules – that is 3000 and 4000 level modules – which relate to the programmes listed in this section, are available in the Honours Course Catalogue.