Sustainable Development

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 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 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 Programme:	Programme Requirements at:
(B.Sc. Honours or M.A. Honours): **Sustainable Development**	**Single Honours Sustainable Development:** **Level 1:** 20 credits comprising passes in SD1002; *plus* 100 credits from other 1000 modules appropriate to chosen B.Sc./M.A. path. **Level 2:** 60 credits comprising passes at 11 or better in SD2001 and SD2002; *plus* 60 credits from two or more other modules, these normally being from a partner discipline appropriate to the chosen B.Sc./M.A. path, and in modules suitable to allow the further study of that subject at Honours level. Entry to Honours with passes at 11 or better in SD2001 or SD2002 and only one other suitable 2000 level module may be permitted at the discretion of the Head of School. **Level 3 & Level 4:** 120 credits comprising passes in SD3001, SD3002, SD4001 and SD4002; *plus* 120 additional 3000 and 4000 level credits appropriate to chosen B.Sc./M.A. pathway. Of the 240 credits required for an Honours degree, 90 credits must be at 4000 level and there must be no more than 30 credits at sub-honours level.

Alongside the core SD modules students will normally select modules mainly from one other discipline area. For example, for a B.Sc. Single Honours Degree, modules will typically be selected from partner disciplines such as geography and /or biology and/or chemistry and/or maths & statistics. For an M.A. Single Honours Degree, modules will typically be selected from management and/or philosophy and/or economics and/or modern history and/or international relations and/or social anthropology. While many students will identify a principal partner discipline to accompany SD, it is possible for a student to select modules from more than one other disciplinary area to develop their sustainable development pathway so long as their overall selection conforms with the regulations laid down for M.A./B.Sc Honours degrees, their choice meets with the approval of the Head of Schools in question, and appropriate prerequisites for their selected modules are in place.

Sustainable Development (SD) Modules

SD3001 Case Studies in Sustainable Development

Credits: 20 Semester: 1

Prerequisite: SD2001

Description: The purpose of this module is to introduce students to the multi-disciplinary nature of approaches used to address global sustainability concerns. Students will be taken through a series of real world examples that demonstrate the broader issues associated with sustainable development. The module is taught collaboratively by staff from four Schools (Geography & Geosciences, Biology, Chemistry and Mathematics & Statistics). Key themes such as resources, population and health, energy, land use and decision making will be explored and case studies from around the world will provide students with both fundamental insights and the essential analytical skills required for understanding and critically analysing research reports and other textual information associated with sustainable development.

Class Hour: To be arranged.

Teaching: Three lectures and 2 two hour practicals per week

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

SD3002 Review Essay in Sustainable Development I

Credits: 20 Semester: 2

Prerequisite: SD2001 or SD2002

Description: This module involves the student in isolating a particular sustainable development topic (not directly involved in a selected option module), conducting a bibliographic search on that topic and then presenting a critical review of the content of the material obtained from a reading of the relevant books and journal articles. The topic chosen arises from a student's own particular interests but is finalised in discussions with a tutor. The final report is a maximum of 7,000 words in length.

Class Hour: To be arranged.

Teaching: One introductory lecture and tutorial and then meetings as required with supervisor.

Assessment: Continuous Assessment = 100%

SD4001 Case Studies in Sustainable Development II

Credits: 20 Semester: 1

Prerequisite: SD3001

Description: This module builds upon the knowledge and skills students acquired in SD3001. Like SD3001, the module is taught collaboratively by staff from several Schools. Broad themes such as resources, climate change, food and energy will be used in conjunction with further real-world case studies to examine in detail issues of concern to all peoples of the world. Students will draw upon the multi-disciplinary skills they acquired in SD3001 but these skills will be enhanced to deal with examples that demand more advanced quantitative, modelling and qualitative analysis techniques. It is intended that these skills will serve students in their research dissertation.

Class Hour: To be arranged.

Teaching: Three lectures and 2 two hour practicals per week

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

SD4002 Dissertation in Sustainable Development

Credits: 60 Semester: Whole Year

Prerequisite: Available only to students who intend an Honours Degree in Sustainable Development.

Description: Students select a research question in Sustainable Development, mount a research programme to investigate the topic, and write a dissertation on the work. The topic is selected during the second semester of the junior honours year; data can be collected during the following vacation with data analysis and the writing of the dissertation taking place over both semesters of the second year of the Honours Programme. Each student is supervised by a member of the teaching staff from an appropriate disciplinary area who will ensure that the topic chosen is viable and advise students on data collection and analysis. The dissertation is a maximum of 15,000 words in length.

Class Hour: To be arranged.

Teaching: One introductory lecture and tutorial and then meetings as required with supervisor.

Assessment: Continuous Assessment = 100%

GG3096 Earth System Science: Terrestrial Ecosystems and Environmental Change

Credits: 15 Semester: 2

Prerequisites: GE2011/ GE2012 or GS2011/GS2012 or SD2001 or BL2105. Familiarity with basic chemistry and mathematics is desirable, but not essential.

Description: Terrestrial ecosystems play a central role in modulating the flow of energy and materials in the Earth system, regulating trace gas exchange with the atmosphere, the transfer of carbon and nutrients with rivers and oceans, and the natural attenuation of pollutants. Understanding how terrestrial ecosystems function is crucial to addressing problems such as climate change, stratospheric ozone loss, and environmental pollution. This module will develop principles of ecosystems ecology and biogeochemistry, focusing on major elemental cycles, soil processes, and human activity. In addition to students in Geography and Geosciences, this module also welcomes students from Sustainable Development, Biology and Chemistry.

Class Hour: To be arranged.

Teaching: Two lectures and occasional tutorials.

Assessment: Continuous Assessment = 30%, 2 Hour Examination = 70%