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.

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<th>Degree Programme: (B.Sc. Honours or M.A. Honours): Sustainable Development</th>
<th>Programme Requirements at:</th>
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| Single Honours Sustainable Development:  
**Level 1:** 40 credits comprising passes in SD1001 and SD1003; plus 80 credits from other 1000-level 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 SD3002, SD3003, SD4002 and SD4003; 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

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%

SD3003 Policy, People and Participation: Case Studies in Sustainable Development
Credits: 30  Semester: 1
Prerequisites: SD2001 and SD2002
Anti-requisite: SD3001
Description: In this module, students explore a series of case studies relating to sustainable development. Each case study addresses a contemporary issue for sustainable development, from a particular disciplinary perspective or perspectives and is designed to allow students to develop a different skill. The interdisciplinary approach includes input normally from the Schools of Chemistry, Geography and Geosciences, Management and Mathematics and Statistics. Key themes such as decision making (including participation and scenario development), climate change predictions and energy options, health and the production and transfer of knowledge in society will be explored using local and global examples. The module 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: 1.00 pm Monday and Tuesday, 1.00 - 4.00 pm Thursday.
Teaching: Two lectures and one practical/tutorial
Assessment: Continuous Assessment = 50%, 3 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. Students also attend further class sessions, including a dissertation weekend, on research design, data analysis and dissertation writing. The dissertation will normally be based in the disciplinary area of the student’s partner subject, but in recognition of the interdisciplinary nature of the field of study of sustainable development and of the SD Programme, the dissertation will itself be interdisciplinary to some extent. The dissertation is a maximum of 15,000 words in length. Students present their findings at a dissertation conference and write an abstract to convey their results to an academic audience.
Class Hour: To be arranged.
Teaching: One introductory lecture and tutorial and then meetings as required with supervisor.
Assessment: Continuous Assessment = 100%
SD4003 Designing Sustainable Systems: Case Studies in Sustainable Development

Credits: 30  
Prerequisite: SD3003  
Anti-requisite: SD4001  
Description: This module builds upon the knowledge and skills students acquired in SD3003. Like SD3003, this interdisciplinary module is taught collaboratively by staff from several Schools. Each of the case studies in this module is taught by staff from more than one academic discipline. Issues covered normally include agriculture and food production, distribution and consumption; sustainable fisheries; mining and sustainable development; and conclude with a detailed analysis of a regional case study to permit analysis of the complexity of sustainable development in practice. Examples from around the world will be used to illustrate theory and field visits will assist students to understand practical aspects of sustainability. Design thinking is used to link theory and practice. Students will draw upon the interdisciplinary skills they acquired in SD3003 but these skills will be enhanced to deal with examples that demand more advanced quantitative and qualitative analysis techniques. These skills will serve students in their research dissertation.

Class Hour: 10.00 am Tuesday and Wednesday, 1.00 - 4.00 pm Thursday.  
Teaching: Two lectures and one practical/tutorial  
Assessment: Continuous Assessment = 50%, 3 Hour Examination = 50%

GG3096 Earth System Science: Terrestrial Ecosystems and Environmental Change

Credits: 15  
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%