

## **Sustainable Development**

### **Degree Programmes**

M.Sc.: Sustainable Development

### **Programme Requirements**

#### **Sustainable Development**

Postgraduate Certificate: 60 credits from (SD5001 or SD5021), SD5002 and (SD5022 or at least 10 credits from SS5103, SS5104, SD5023-SD5089, ID5010, ID5011, ID5012, and option modules on the MSc in SD) or any other 5000-level modules at the discretion of the Director of the Programme.

Postgraduate Diploma: 70 credits from (SD5001 or SD5021), SD5002, SD5003, plus 15 credits from SS5103 or SS5104, plus a minimum of 35 credits from SD5022-SD5089, ID5005, ID5010, ID5011, ID5012, BL5008, BL5009, BL5012, BL5013, BL5201, BL5104, BL5122, EC5505, GE5051, GG5101, GG5102, GG5103, GG5104, MN5842, MN5603, SA5521 or any other 5000-level module at the discretion of the Director of the Programme.

M.Sc.: 120 credits, as for the Postgraduate Diploma, plus SD5099

### **Modules**

#### **SD5001 Introduction to Sustainable Development Issues**

Credits: 20 Semester: 1

Anti-requisite: SD5021

Programme(s): Compulsory module for Sustainable Development Taught Programme

Description: This module provides an introduction to sustainable development. First, it introduces the history of the concept of sustainable development and the practical issues that sustainable development seeks to address. Second, there is a series of disciplinary-based lectures that describe the nature and functioning of the physical, biological, social and economic systems that combine to create the world that we can observe around us. Specific material will also be presented that links these various aspects together and explores their interactions.

In addition, this module will have a short induction component to it during the pre-sessional week of term which has a three-fold purpose: (i) to introduce students to the shape of the degree program and St Andrews, (ii) allow students to explore their existing skill base and identify what skills require further work and (iii) provide a context (in the form of a field trip) within which to start an investigation of what inter-disciplinarity entails. This will entail two one-day seminars.

Class Hour: To be arranged.

Teaching: Lectures, seminars and tutorials

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

## **Sustainable Development – 5000 Level Modules 2009/10 – September 2009**

### **SD5002 Knowledge and Sustainable Development**

Credits: 30 Semester: 1  
Programme(s): Compulsory module for Sustainable Development Taught Programme

Description: This module explores the particular intellectual challenges that arise in understanding sustainable development problems and seeking solutions to these problems. The module is structured around three streams/elements: (i) a consideration of disciplinary and how knowledge from different disciplines may be brought together to address sustainable development problems, (ii) an exploration of how knowledge is used by policy makers in sustainable development, and (iii) training in deconstructing sustainable development problems. By the end of the module, students will have the intellectual and conceptual skills to address sustainable development problems.

Class Hour: To be arranged.  
Teaching: Lectures, seminars and practicals  
Assessment: Continuous Assessment = 100%

### **SD5003 Master Class in Sustainable Development**

Credits: 20 Semester: 2  
Programme(s): Compulsory module for Sustainable Development Taught Programme

Description: This module has three elements: (i) a series of presentations by experts in their chosen field of sustainable development along with structured reflection and further exploration of these various topic areas, (ii) the development and presentation (in groups) of case studies of sustainable development problems and/or exemplars of excellence in sustainable development, and (iii) two field trips to examine examples of sustainable development in practice. This module is designed to provide you with the tools for making sustainable development possible in a wide range of settings.

Class Hour: To be arranged.  
Teaching: Lectures, seminars, tutorials and field trips  
Assessment: Continuous Assessment = 100%

### **SD5021 Review of Sustainable Development**

Credits: 20 Semester: 1  
Prerequisite: A First Degree in Sustainable Development, a Degree in a subject area cognate to Sustainable Development, or extensive experience in Sustainable Development practice  
Anti-requisite: SD5001  
Programme(s): Optional module for Sustainable Development Taught Programme

Description: This module creates the opportunity for self directed learning by students who already have a sustainable development degree, a degree that is highly cognate to sustainable development or extensive experience in sustainable development practice. The module aims to refresh sustainable development knowledge and requires the submission of a substantive piece of work on a sustainable development issue. The module will be supported by student lead seminars on topics covered by the class.

In addition, this module will have a short induction component to it during the pre-sessional week of term which has a three-fold purpose: (i) to introduce students to the shape of the degree program and St Andrews, (ii) allow students to explore their existing skill base and identify what skills require further work and (iii) provide a context (in the form of a field trip) within which to start an investigation of what inter-disciplinarity entails. This will entail two one-day seminars.

Class Hour: To be arranged.  
Teaching: Lectures, seminars and practicals  
Assessment: Continuous Assessment = 100%

**SD5022 Special Topic in Sustainable Development**

Credits: 10 Semester: Either

Programme(s): Optional module for Sustainable Development MSc Taught Programme and Compulsory module for Postgraduate Certificate in Sustainable Development

Description: This module provides an opportunity for further study in any area of sustainable development (as agreed between the module co-ordinator and the student). This module creates the opportunity for in-depth engagement with a sustainable development topic or serves as preparation for a dissertation in sustainable development where the student wishes to study an area that they do not already have in-depth knowledge of. The module involves a student creating their own course of study (supported by a supervisor) leading to a substantive piece of academic writing about that subject area.

Class Hour: To be arranged.

Teaching: Lectures

Assessment: Continuous Assessment = 100%

**SD5099 Dissertation in Sustainable Development**

Credits: 60

Prerequisites: (SD 5001 or SD5021), SD5002 and SD5003

Programme(s): Compulsory module for M.Sc. Sustainable Development Taught Programme

Description: This module creates the context within which students are able to investigate a substantive sustainable development topic in considerable depth. It is the capstone module of the Master's degree in sustainable development. There are three forms that the dissertation may take: (i) a dissertation in the form of an extended piece of academic work, (ii) a paper of a quality that could (and will be) submitted to a peer-refereed journal or (iii) an extended report that presents the finding of a substantive investigation into a sustainable development related topic of the nature that can be presented to an organization to allow them to take appropriate actions. The form of the dissertation will be negotiated between the module co-ordinator and the student.

These forms of dissertation constitute the same level of effort to generate and an upper limit of 15,000 words for each form of assessment. It is envisaged that while a paper for a journal (depending on the journal target) may be less than 15,000 words a more extended evidence base for the journal article would be required from the student bringing the word count to the maximum specified.

Class Hour: To be arranged.

Teaching: To be arranged with supervisor

Assessment: Dissertation = 100%

**ID5010 Geographic Information Systems for Social Research**

Credits: 15 Semester: 1

Prerequisite: A basic ability in computer skills (Basic word processing, spread sheet analysis) gained through SALTIRE if not demonstrated

Anti-requisite: GE5005, ID5011, ID5012

Programme(s): Optional module for Sustainable Development Taught Programme

Description: This module provides an introduction to Geographic Information systems and their use in health (and related) problem solving. The module will be taught through a series of lectures, tutorials, laboratory classes and individual projects. The module will be assessed through class exercises and the final individual project. Students will be introduced to methods of acquiring, storing, analysing and displaying (2D and 3D) spatial digital data using the ArcGIS data package. An introduction to data manipulation and statistical techniques on a variety of health examples will be given.

Class Hour: To be arranged.

Teaching: Lectures, practicals and occasional tutorials.

Assessment: Continuous Assessment = 50%, Short Project = 50%

## **Sustainable Development – 5000 Level Modules 2009/10 – September 2009**

### **ID5011 Geographic Information Systems for Environmental Management**

Credits:	15	Semester:	1
Prerequisite:	A basic ability in computer skills (Basic word processing, spread sheet analysis) gained through SALTIRE if not demonstrated		
Anti-requisite:	GE5005, ID5010, ID5012		
Programme(s):	Optional module for Sustainable Development Taught Programme		
Description:	This module provides an introduction to Geographic Information systems and their use in environmental problem solving. The module will be taught through a series of lectures, tutorials, laboratory classes and individual projects. The module will be assessed through class exercises and the final, short individual project. Students will be introduced to methods of acquiring, storing, analysing and displaying (2D and 3D) spatial digital data using the ArcGIS data package. An introduction to data manipulation and statistical techniques on a variety of environmental examples will be given. The module is taught within the School of Geography & Geosciences but incorporates datasets and analysis techniques used in earth and environmental science, biology, archaeology, and mathematics.		
Class Hour:	To be arranged.		
Teaching:	Lectures, practicals and occasional tutorials.		
Assessment:	Continuous Assessment = 50%, Short Project = 50%		

### **ID5012 Advanced Geographic Information Systems**

Credits:	20	Semester:	1
Prerequisite:	A basic ability in computer skills (Basic word processing, spread sheet analysis) gained through SALTIRE if not demonstrated		
Anti-requisite:	GE5005, ID5010, ID5011		
Programme(s):	Optional module for Sustainable Development Taught Programme		
Description:	This module provides an advanced training in Geographic Information Systems (GIS) and their use in environmental problem solving. The module will be taught through a series of lectures, tutorials, laboratory classes with emphasis on a final independent GIS project. The module will begin with an introduction to data storage and manipulation, basic analysis of 2D and 3D spatial digital data and methods of display and will conclude with database design and more advanced data analysis using ArcGIS. Assessment will be based on the class exercises and the final project. The module is taught within the School of Geography & Geosciences but incorporates datasets and analysis techniques used in earth science, biology, economics and management and mathematics.		
Class Hour:	To be arranged.		
Teaching:	Lectures, practicals and occasional tutorials.		
Assessment:	Continuous Assessment = 40%, Individual Project = 60%		

### **SA5521 Case-studies in Anthropology, Indigenous Peoples and Resource Extraction**

Credits:	30	Semester:	1
Programme(s):	Optional Module for M.Res. in Social Anthropology and M.Sc. in Sustainable Development		
Description:	Subsurface minerals and other natural resources are often found on land occupied by indigenous peoples. This module has a particular focus on this nexus, examining the social and cultural relations produced by resource extraction projects, and exploring the global and local frames through a series of world-wide case-studies of mining, oil and gas projects. These case-studies are used to examine problems, solutions and the factors making certain agreements and relations more successful and sustainable than others. The aim is to examine the potential for anthropological skills and knowledge to contribute to an industry that has increasingly to account for its social and environmental impacts to a global constituency.		
Class Hour:	To be arranged.		
Teaching:	Two seminars.		
Assessment:	Continuous Assessment = 100%		

## **Sustainable Development – 5000 Level Modules 2009/10 – September 2009**

### **SS5103 Qualitative Methods in Social Research**

Credits: 15 Semester: 2

Programme(s): Optional module for Sustainable Development Taught Programme

Description: This module offers both a theoretical and practical introduction to qualitative research. The diversity of the approaches to qualitative research will be addressed but the focus of the module is primarily practical necessitating the active participation of students.

Class Hour: To be arranged

Teaching: 2 hour, weekly

Assessment: Continuous Assessment = 100%

### **SS5104 Quantitative Research in Social Science**

Credits: 15 Semester: 1

Programme(s): Optional module for Sustainable Development Taught Programme

Description: This module will cover basic concepts and approaches to quantitative research in the social sciences in order to provide students with the basic quantitative tools for collecting, organising and analysing data.

Class Hour: To be arranged

Teaching: Details to follow

Assessment: Continuous Assessment = 100%

