Sustainable Development at University of St Andrews

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SD Undergraduate Programme: Interdisciplinary curriculum

Research: St Andrews Sustainability Institute (SASI)

Estates: Sustainable Development Strategy

Postgraduate teaching: MSc and PhD

Student groups and initiatives

Senior Management: A University goal

Outreach: teachers and schools
Rationale for Sustainable Development

Meet needs of future generations

Social justice

Environmental issues
Principles of degree

1. Interdisciplinarity plus single discipline excellence
2. Local to global focus
3. Contemporary issues framework
4. Critical perspectives
5. Linking theory to practice and developing range of skills

A unique approach to education for sustainable development
1. Interdisciplinarity

The three legged stool of sustainability

- Social
- Environmental
- Economic

Liveable
Viable
Equitable

WORLDVIEW

The three legged stool of sustainability
Interdisciplinarity: Schools contributing to teaching

- Management
- International Relations
- Chemistry
- Mathematics and Statistics
- History
- Biological Sciences
- Geography and Geosciences (coordinator)
- External experts
- Economics and Finance
- Film Studies, Philosophy and Social Anthropology
- Divinity
- Medicine
- Estates

Interdisciplinarity: Schools contributing to teaching
2. Local to global focus

Examples of issues covered:
- HIV Aids in Ethiopia
- European Water Framework Directive
- UK Sustainable Development Indicators
- Scotland’s Sustainable Development Commission
- Fife Council Waste Management
3. Contemporary issues framework

UN’s five priority areas:

- Water and sanitation
- Energy
- Health
- Agriculture
- Biodiversity

Cross cutting themes:

- Research and education
- Policy, decision making and governance
- Markets and institutions
- Changing behaviour
- Values, philosophies and ethics
- Gender and equity
4. Critical perspectives

Allowing for different perspectives of SD

Recognising contested nature of concepts
5. Linking theory to practice and developing range of skills

- Essays
  - Educational display
  - Marketing

- Dissertation
  - Independent research

- Exams
  - Reports

- Popular articles
  - Design
  - Time management

- Group work
  - Group work

- Group work
  - Spiral learning

- Presentations
  - Reflective assignments

- Careers support

- Visiting speakers

- Debate

- External linkages

- Fieldtrips
How is the SD Programme taught?

SD Interdisciplinary core modules + specialism modules

At every level students combine core SD modules with modules from other disciplines (both MA and BSc)

e.g. geography, biology, management, modern history, social anthropology, economics, philosophy, chemistry.

This allows students to tailor individual SD Pathways linked to disciplines or topics that match their skills, interests and career goals.
SD Pathways

• Climate change
• International development
• Environmental management
• Sustainable technologies
• Social justice
• Knowledge and education for sustainability
• Business and corporate social responsibility
• Policy for sustainable development
Sustainable Development Programme

Year

Semester

SD1001 Sustainable Development: challenges and approaches (20)
SD1002 Sustainability: ensuring our common future (20)
SD2001 Sustainable Development: ecological and environmental aspects (30)
SD2002 Sustainable Development: social and economic aspects (30)
SD3001 Case studies in Sustainable Development I (20)
SD3002 Review Essay in Sustainable Development (20)
SD3003 Research for sustainable development (20)
SD3004 Case studies in Sustainable Development II (20)
SD4001 Dissertation in Sustainable Development (60 / 45)

Planned

Ecological
Worldview
SD
Social
Economic

Honours

SD1001 Sustainable Development: challenges and approaches (20)
SD1002 Sustainability: ensuring our common future (20)
SD2001 Sustainable Development: ecological and environmental aspects (30)
SD2002 Sustainable Development: social and economic aspects (30)
SD3001 Case studies in Sustainable Development I (20)
SD3002 Review Essay in Sustainable Development (20)
SD3003 Research for sustainable development (20)
SD3004 Case studies in Sustainable Development II (20)
SD4001 Dissertation in Sustainable Development (60 / 45)
A student perspective

• Current Third Year student
• Interests in Sustainable development and Management
• *Business and Corporate Social Responsibility* Pathway
Module choices

1st year
• MN1001 Organisations and Society
• GE1001 The Foundations in Geography
• EC1002 Microeconomics
• SD1002 Sustainability: Ensuring our common future
• MN1002 Organisations and Analysis
• EC1001 Macroeconomics

2nd Year
• SD2001 Sustainable Development: Ecological and Environmental Aspects
• MN2001 Management & Society
• EC2004 Quantitative Methods - Mathematics
• SD2002 Sustainable Development: Social and Economic Aspects
• MN2002 Management and Analysis
• EC2003 Quantitative Methods - Statistics

3rd Year
• SD3001 Case Studies in Sustainable Development 1
• MN4227 Corporate Social Responsibility, Accountability and Reporting
• MN3102 Organisation Studies
• SD3002 Review Essay in Sustainable Development
• MN4238 Sustainable Development and Management
• MN3101 Corporate Finance and Control

4th Year (anticipated)
• SD4001 Case Studies in Sustainable Development 2
• MN4203 Dynamic Strategic Management
• SD4002 Dissertation in Sustainable Development
• MN4267 Creative Industries
Sustainable Development Programme
Willow weaving
Sustainable Development Programme
Scenarios project
Sustainable Development Programme
SD4002 Sustainable Development: dissertations

**Example titles:**
Biodiversity Action Plans: the business response to the sustainability agenda

People & Power: A case study of health & health care in an Indian Tea Garden

Barriers and opportunities for domestic microrenewables to contribute to reduction in carbon emissions

Green house gas accounting: can and how should it contribute to a sustainable farming policy in Scotland?

Education for sustainability: the potential for mentoring to enhance learning
Student career prospects:

Graduates will be highly literate and numerate with a capacity to synthesise across a broad range of issues and disciplines.

Employability in:

• National, State and Local government
• NGOs
• Conservation
• Impact assessment
• Natural Resource Management
• Business strategy
• Management
• Technology development
• Teaching
• Post-graduate research
Why is the SD Programme at the University of St Andrews?

‘For almost six centuries, we have proudly upheld the tradition of academic excellence, attracting scholars of international repute and students from all over the world. Today, we continue to offer the latest in teaching and research, all within a superbly picturesque mediaeval setting.’

• ‘Elite’, traditional institution
• What lessons can we learn?
Development of the University of St Andrews SD Undergraduate Programme

- Initiated after Forum for the Future meetings
- driven partly by student demand
- practical development led by the Dean of Science
- enthusiastic staff reactions
- supported by Principal’s Office
- full time Degree Coordinator appointed in 2005
Challenges...

• Interdisciplinarity...

• Innovative, transformative teaching can be limited within the neoliberal education system

• Individual changes in management can enhance tension between traditional conservatism and pioneering interdisciplinarity

• Issues raised around resources, governance and academic pathways
Strengths of the SD Programme at St Andrews:

• Integrated & holistic approach spanning wide range of disciplines and expertise.

• Permits interdisciplinary learning alongside development of specialisation.

• Explores contemporary issues across range of scales

• Encourages critical perspective

• Provides training in both analytical and transferable skills

• Unique, pioneering format

• Teaching and learning on campus aiming for enhanced sustainability
Successes so far…

✓ Times Higher Education Award for Outstanding Contribution to Sustainable Development 2006

✓ First class status for People and Planet Green League Environmental Performance 2007

✓ Green Tourism award

✓ One of the fastest growing academic areas at the University

✓ Leader in campus sustainability initiatives and student led initiatives