GG3205 Developing a Geography Research Proposal

<table>
<thead>
<tr>
<th>SCOTCAT Credits:</th>
<th>10</th>
<th>SCQF level 9</th>
<th>Semester</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic year:</td>
<td>2021-2022</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Planned timetable:**

9am to 11am Mon

This module supports students in all aspects of developing a research proposal. It explains the principles of project design and the linkages between conceptualisation and methodology. It will also introduce students to the practical aspects of research including ethics and health and safety. This module will inspire students to conceive research projects that are innovative, highly independent, structured around clear and informed scientific principles/theoretical positions and methodological procedures, and which are critically engaged with the appropriate literature and based on outstanding data. It will give students the skills and opportunity to prepare a robust research proposal that will guide their 4000-level independent dissertation project in Geography.

**Pre-requisite(s):**

Before taking this module you must pass GG2012

**Learning and teaching methods of delivery:**

**Weekly contact:** 2 hours of lectures (x 6 weeks) 1 hour of tutorials (x 3 weeks)

**Scheduled learning:** 20 hours  
**Guided independent study:** 81 hours

**Assessment pattern:**

As defined by QAA:  
Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%

As used by St Andrews:  
Coursework = 100%

**Module coordinator:**  
Professor J P Sharp

**Module teaching staff:**  
Prof Jo Sharp, Dr Ian Lawson

---

GG3206 Quantitative Methods for Social Scientists

<table>
<thead>
<tr>
<th>SCOTCAT Credits:</th>
<th>10</th>
<th>SCQF level 9</th>
<th>Semester</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic year:</td>
<td>2021-2022</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Planned timetable:**

10 am to 11 am Tues & 9 am to 11 am OR 11 am to 1 pm Fri

This module is an introduction to undertaking quantitative data analysis in the social sciences and covers core statistical topics, and substantive topics in human geography and health geography. Human geography research often involves collecting data from people, commonly in the form of surveys, and this module teaches you how about how to use fundamental statistical tools to analyse the data. We introduce core statistical concepts of likelihood, inference, hypothesis testing and regression modelling. The course uses the software R Studio, and you will learn to write your own code. We also introduce you to a range of freely available secondary data on contemporary human geography topics (some of which may be useful for your dissertation). Teaching is delivered through a combination of lectures on theoretical concepts, and (online) IT practicals.

**Pre-requisite(s):**

Before taking this module you must pass GG2012

**Learning and teaching methods of delivery:**

**Weekly contact:** 1 lecture (x 7 weeks) 2 practicals (x 10 weeks)

**Scheduled learning:** 27 hours  
**Guided independent study:** 75 hours

**Assessment pattern:**

As defined by QAA:  
Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%

As used by St Andrews:  
Coursework = 100%

**Module coordinator:**  
Dr K L Keenan

**Module teaching staff:**  
Dr Katherine Keenan, Dr Francesca Fiori
### GG3207 Qualitative Methods for Human Geographers

<table>
<thead>
<tr>
<th>SCOTCAT Credits:</th>
<th>10</th>
<th>SCQF level 9</th>
<th>Semester</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Academic year:</strong></td>
<td>2021-2022</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Planned timetable:</strong></td>
<td>11 am to 1 pm Mon</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

This module will focus on the design and conduct of qualitative research. It will explore the epistemological foundations on which different strands of qualitative research rest, introduce you to a range of techniques for collecting qualitative data, and help you consider methodological questions related to the conduct of qualitative research. The unit will encourage critical thinking about what constitutes the field and data, as well as about issues of ethics, positionality, voice, representation, and the hermeneutic location of records and data.

**Pre-requisite(s):** Before taking this module you must pass GG2012

**Learning and teaching methods of delivery:**

- **Weekly contact:** 2 lecture (x 7 weeks)
- **Scheduled learning:** 30 hours
- **Guided independent study:** 70 hours

**Assessment pattern:**

- As defined by QAA:
  - Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%
- As used by St Andrews:
  - Coursework = 100%

**Re-assessment pattern:** Coursework = 100%

**Module coordinator:** Dr M G Kesby

**Module teaching staff:** Dr Mike Kesby

### GG3208 Survey Design

<table>
<thead>
<tr>
<th>SCOTCAT Credits:</th>
<th>10</th>
<th>SCQF level 9</th>
<th>Semester</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Academic year:</strong></td>
<td>2021-2022</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Planned timetable:</strong></td>
<td>Lectures: 2.00 pm Fri, Practical: 3.00 pm Fri</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

This module is designed to provide students with experience of analyzing data from main UK social science surveys, reflecting on surveys from a methodological perspective and designing their own survey to address specific research questions.

**Pre-requisite(s):** Before taking this module you must pass GG2012

**Learning and teaching methods of delivery:**

- **Weekly contact:** 1 lecture (X6 weeks) and 1 practical (X6 weeks)
- **Scheduled learning:** 12 hours
- **Guided independent study:** 84 hours

**Assessment pattern:**

- As defined by QAA:
  - Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%
- As used by St Andrews:
  - Coursework = 100%

**Re-assessment pattern:** Coursework = 100%

**Module coordinator:** Dr D McCollum

**Module teaching staff:** Dr David McCollum
GG3210 Remote Sensing

**SCOTCAT Credits:** 10  
**SCQF level:** 9  
**Semester:** 2  
**Academic year:** 2021-2022  
**Planned timetable:** 2 pm to 5 pm Tues  

This module focuses on using satellite remote sensing data and techniques to quantify and study characteristics and changes at the Earth surface. Multi-temporal satellite data analysis will allow students to investigate key geographic topics such as direction and magnitude of urban development, land-use change, changes of coastal waters, vegetation changes or cryospheric changes. Besides the physical background and basic principles of remote sensing, students will specifically learn how to analyse and classify optical satellite remote sensing data in order to be able to apply remote sensing data and methods in their area of interest. Teaching is delivered through a combination of lectures and practical IT lab work.

**Pre-requisite(s):** Before taking this module you must pass GG2012

**Learning and teaching methods of delivery:**  
**Weekly contact:** 1 lecture (x 8 weeks), 2 practicals (x 9 weeks)  
**Scheduled learning:** 26 hours  
**Guided independent study:** 72 hours

**Assessment pattern:**  
As defined by QAA:  
Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%  
As used by St Andrews:  
Coursework = 100%

**Re-assessment pattern:** Coursework = 100%

**Module coordinator:** Dr T Bolch

**Module teaching staff:** Dr Tobias Bolch

GG3211 Research Design and Methods for Physical Geography

**SCOTCAT Credits:** 10  
**SCQF level:** 9  
**Semester:** 2  
**Academic year:** 2021-2022  
**Planned timetable:** 11 am to 1 pm Tues  

This module is an introduction to undertaking data collection and analysis in physical geography. Geographical research often involves finding out about the physical and biological environment around us. The module focuses on teaching to students to plan a research project, make accurate and meaningful measurements in the field, and use fundamental statistical tools to display and analyse the data. Teaching is delivered through a combination of fieldwork, IT practicals, laboratory work, and lectures/seminars. Assessment is by coursework, in the form of a scientific write-up of data collected during field and lab work.

**Pre-requisite(s):** Before taking this module you must pass GG2012

**Learning and teaching methods of delivery:**  
**Weekly contact:** 1 lecture (x 8 weeks) 1 x 6 hour fieldclass, 1 hour practical (x 10 weeks)  
**Scheduled learning:** 24 hours  
**Guided independent study:** 80 hours

**Assessment pattern:**  
As defined by QAA:  
Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%  
As used by St Andrews:  
Coursework = 100%

**Re-assessment pattern:** Coursework = 100%

**Module coordinator:** Dr I T Lawson

**Module teaching staff:** Dr Ian Lawson
GG3212 Data Analysis for Physical Geography

**SCOTCAT Credits:** 10  
**SCQF level:** 9  
**Semester:** 2  
**Academic year:** 2021-2022  
**Planned timetable:** 11 am to 1 pm Wed

This module provides training in a suite of data analysis methods used in physical and environmental geography. It builds on material covered in GG3211, aiming to give students additional experience and confidence in quantitative techniques. Teaching is delivered mainly through IT practicals and lectures/seminars.

**Pre-requisite(s):** Before taking this module you must pass GG2012  
**Co-requisite(s):** You must also take GG3211

**Learning and teaching methods of delivery:**  
**Weekly contact:** Lectures: 1 (x10 hours)  
**Scheduled learning:** 20 hours  
**Guided independent study:** 78 hours

**Assessment pattern:**  
As defined by QAA:  
Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%  
As used by St Andrews:  
Coursework = 100%

**Re-assessment pattern:** Coursework = 100%

**Module coordinator:** Dr I T Lawson  
**Module teaching staff:** Dr Ian Lawson

GG3213 Physical Geography Fieldclass

**SCOTCAT Credits:** 20  
**SCQF level:** 9  
**Semester:** 2  
**Academic year:** 2021-2022  
**Planned timetable:** 10 am to 12 pm Thur

Fieldwork lies at the heart of much of the research undertaken in physical and environmental geography. This module provides students with training in fieldwork research skills, including how to plan fieldwork and collected and utilise field data to address research questions. Classroom-based teaching is followed by a residential fieldtrip that allows students to gain first-hand experience of fieldwork and develop these core skills with the support of experienced staff members.

**Co-requisite(s):** You must also take GG3212

**Learning and teaching methods of delivery:**  
**Weekly contact:** 1x 2 hr lecture (x8 weeks), 1x 1 week fieldtrip  
**Scheduled learning:** 72 hours  
**Guided independent study:** 121 hours

**Assessment pattern:**  
As defined by QAA:  
Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%  
As used by St Andrews:  
Coursework = 100%

**Re-assessment pattern:** Coursework = 100%

**Module coordinator:** Dr T R Cowton  
**Module teaching staff:** Dr Lydia Cole, Dr Tobias Bolch
## GG3214 Human Geography Field Course

<table>
<thead>
<tr>
<th>SCOTCAT Credits:</th>
<th>20</th>
<th>SCQF level 9</th>
<th>Semester</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic year:</td>
<td>2021-2022</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Planned timetable:</td>
<td>10 am to 12 pm Thurs</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

In this module students (with the close supervision and support of staff) will design and implement a research project in an unfamiliar environment. Students will identify a viable project, complete ethics clearance applications, undertake a secondary qualitative and/or quantitative data review and gather primary quantitative and/or qualitative data in the field. Some provisional analysis and presentation of research findings will take place, but the emphasis will be on broader learning related to the design and implementation of a research project. This module provides an excellent academic and practical grounding for the dissertation research proposal.

**Pre-requisite(s):**
Before taking this module you must pass GG2012

**Learning and teaching methods of delivery:**
- **Weekly contact:** 1 lecture (x 1 week), 6 practicals (x 6 weeks) 1 week in the Field

**Scheduled learning:** 61 hours
**Guided independent study:** 138 hours

**Assessment pattern:**
- **As defined by QAA:**
  - Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%

**As used by St Andrews:**
- Coursework = 100%

**Re-assessment pattern:**
- Coursework = 100%

**Module coordinator:**
Dr M B Sothern

**Module teaching staff:**
Dr Matt Sothern, Dr Mike Simpson, Dr Charlotte Lee, Dr Jo Mhairi Hale

## GG3221 Geographies of Identity and Power

<table>
<thead>
<tr>
<th>SCOTCAT Credits:</th>
<th>20</th>
<th>SCQF level 9</th>
<th>Semester</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic year:</td>
<td>2021-2022</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Availability restrictions:</td>
<td>Offered on a two-year cycle</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Planned timetable:</td>
<td>9.00 am - 11.00 am Wed</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

This module, Geographies of Identity and Power, does not seek to introduce struggles for political equality as an empirical project (although this is the context within which the module is situated); rather, the objective is to use the history of thinking geographically about questions of identity and difference—principally through an exploration of work from feminist and queer theory—to chart more complex geographies of power. The module will be structured around weekly interactive seminar sessions, with a mini-lecture introducing the topic followed by a student-led discussion. In groups, students will sign up to a topic and produce some initial points and questions to stimulate discussion. The assigned groups will also select a video/media/film clip associated with the week’s topic and reading to aid discussion. Each week there will be two readings - the first an original work of a key theorist; the second reading will be more empirical and written by and for an explicitly geographic audience, to give you some idea of how Geographers’ have responded to the challenges of theory. In the assessment, you will need to integrate both these kinds of readings with your wider reading/background in geography.

**Pre-requisite(s):**
Before taking this module you must pass GG2012 or pass SD2002

**Learning and teaching methods of delivery:**
- **Weekly contact:** 1 x 2-hour lecture (x 10 weeks) and 1 x 2-hour revision session.

**Scheduled learning:** 0 hours
**Guided independent study:** 0 hours

**Assessment pattern:**
- **As defined by QAA:**
  - Written Examinations = 0%, Practical Examinations = 0%, Coursework = 0%

**As used by St Andrews:**
- 2-hour Written Examination = 50%, Coursework = 50%

**Re-assessment pattern:**
- 2-hour Written Examination = 100%

**Module coordinator:**
Dr C E Lee

**Module teaching staff:**
Dr M B Sothern
# GG3224 HIV/AIDS in sub-Saharan Africa

<table>
<thead>
<tr>
<th>SCOTCAT Credits:</th>
<th>20</th>
<th>SCQF level 9</th>
<th>Semester</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic year:</td>
<td>2021-2022</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Availability restrictions:</td>
<td>Offered on a two-year cycle</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Planned timetable:</td>
<td>9.00 am - 11.00 am Thurs</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

This module makes the case for a social-scientific, not merely biomedical understanding of health in sub-Saharan Africa. It addresses the geographies of this phenomenon, exploring the politics of scaling, uneven global distributions, social contexts that facilitate disease transmission and the situatedness of health decision-making. The module investigates the role that social relations play in producing contemporary health crises including HIV/AIDS but also attempts to attend carefully to the materiality of such crises. The module is reading- and seminar-based. It utilises action-based assessment that challenges students to take their learning out of the classroom and apply/disseminate it to other ‘real-world’ contexts.

**Pre-requisite(s):** Before taking this module you must pass GG2012 or pass SD2002

**Learning and teaching methods of delivery:**
- Weekly contact: Weekly contact: 1-hour lecture (x 9 weeks), 1-hour seminar (x 8 weeks), 2-hour practical classes (x 2 weeks).
- Scheduled learning: 0 hours
- Guided independent study: 0 hours

**Assessment pattern:**
- As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%
- As used by St Andrews: Coursework = 100%

**Re-assessment pattern:** Coursework = 100%

**Module coordinator:** Dr M G Kesby

---

# GG3227 Colonial and Postcolonial Geographies

<table>
<thead>
<tr>
<th>SCOTCAT Credits:</th>
<th>20</th>
<th>SCQF level 9</th>
<th>Semester</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic year:</td>
<td>2021-2022</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Availability restrictions:</td>
<td>Offered on a two-year cycle</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Planned timetable:</td>
<td>2:00 - 4:00 pm Friday</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

This module traces the historical geography of modern colonialism from its sixteenth-century beginnings in Spain's discovery and conquest of the New World, through to the break-up of European colonial empires after World War II, and up to what has been called 'the colonial present' and the 'new imperialism' (revolving around the USA and the 'war on terror'). Emphasis will be placed on how colonialism, past and present, operates as a logic of displacement and dispossession, and as both a conceptual space (imaginative geography) and physical space (material geography) of encounter and conflict and resistance involving a wide array of projects of colonisation and resistance.

**Pre-requisite(s):** Before taking this module you must ( pass GG2011 and pass GG2012 ) or ( pass SD2001 and pass SD2002 )

**Learning and teaching methods of delivery:**
- Weekly contact: 1hr x 11 weeks online lectures - interactive (Teams, recorded) - in the designated class hour. Content pre-recorded in 15 minute segments, 3 x 15 min segments per session (30 in total). 1 x 11 week tutorials - interactive (Teams, recorded) with group work - in designated class hour
- Scheduled learning: 24 hours
- Guided independent study: 176 hours

**Assessment pattern:**
- As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%
- As used by St Andrews: 100% continual assessment.

**Re-assessment pattern:** 100% continual assessment.

**Module coordinator:** Professor D W Clayton

**Module teaching staff:** Dr D W Clayton
GG3237 Political and Cultural Geographies of the Border

| SCOTCAT Credits: | 20 | SCQF level 9 | Semester | 1 |
| Academic year: | 2021-2022 | |
| Availability restrictions: | Offered on a two-year cycle | |
| Planned timetable: | 3:00 pm - 5:00 pm Tues | |

This module focuses on a critical analysis and empirical reflection on the border and its functions, to better appreciate borders' paradoxical cultural and political roles. It will provide a framework for understanding contemporary bordering practices, their role in processes of identity-building and the constitution of belonging and difference within the fields of political and cultural geography. It will provide an introduction to the multi-disciplinary arenas of border studies, critical geopolitics, and biopolitics. An understanding of the over-arching power of discourse will be central to this course; the examples used will provide students with a deeper appreciation of how discourses work in the transmission of knowledge and the legitimisation of action. This module will challenge students to think about the complex functions of the border and their deeply political nature.

Pre-requisite(s): Before taking this module you must pass GG2012 or pass SD2002

Learning and teaching methods of delivery: Weekly contact: 1 x 1-hour lecture (x 10 weeks) 1 x 1-hour seminar (x 10 weeks) 2 hours feedback and additional exam prep sessions

Assessment pattern: As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%

As used by St Andrews: Coursework = 100%

Re-assessment pattern: Coursework = 100%

Module coordinator: Dr S Leahy

Module teaching staff: Dr S Leahy, Dr Antonis Vradis, Dr David McCollum

GG3239 European Population Trends

| SCOTCAT Credits: | 20 | SCQF level 9 | Semester | 1 |
| Academic year: | 2021-2022 | |
| Availability restrictions: | Offered on a two year cycle | |
| Planned timetable: | 10.00 am - 1.00 pm Mon | |

This module focuses on long-term European population trends. The fertility, mortality and migration dynamics of a representative cross-section of European countries are examined and competing explanations for demographic changes are discussed. The specific challenges that current population changes pose to public policy are also discussed.

Pre-requisite(s): Before taking this module you must take GG2012 or take SD2002

Learning and teaching methods of delivery: 2 hour lecture (x 11 weeks). 4 tutorials (x 4 weeks)

Assessment pattern: As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%

As used by St Andrews: Coursework = 100%

Re-assessment pattern: Coursework = 100%

Module coordinator: Dr F Fiori

Module teaching staff: Prof H Kulu
The growth and decay of the Earth’s glaciers and ice sheets is one of the most dramatic consequences of climatic variability. Over the course of the Quaternary period (2.6 Ma ago to the present), vast ice sheets have regularly expanded to cover much of Europe and North America before rapidly wasting away in just a few thousand years. Understanding the causes and effects of these past changes is of great importance at present as anthropogenic climate change pushes the Earth into a new phase of major deglaciation. This module will begin by looking at the evidence for past glaciación and its influence on landscape development and modern land use. It will then look at what these past glacial periods can tell us about the threat to present day glaciers and ice sheets, including the likely rate and magnitude of deglaciation, the key mechanisms and feedbacks controlling these changes, and the critical interactions between the Earth’s ice, oceans and climate.
### GG3241 Quaternary Palaeoecology

<table>
<thead>
<tr>
<th>SCOTCAT Credits:</th>
<th>20</th>
<th>SCQF level 9</th>
<th>Semester</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic year:</td>
<td>2021-2022</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Availability restrictions:</td>
<td>Offered on a two year cycle</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Planned timetable:</td>
<td>11.00 am - 1.00 pm Tue</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

This module examines the behaviour of organisms in response to climate changes on timescales of millenia and longer. Possible responses can be categorised as (i) evolution (by lineage splitting, or speciation, the source of biological diversity), (ii) extinction, or (iii) changes in distribution and abundance. The relative importance of these responses, and their relative frequency, are crucial for understanding the origin of biological diversity, its regionalisation (biogeography), and as a foundation for how organisms will respond with climate change in the future. The module will show the development of ideas in these areas, from the early nineteenth century onwards, through to current understanding, including recent developments in geography, Earth sciences and biology.

**Pre-requisite(s):** Before taking this module you must take GG2012 or take SD2002. Entry with SD2002 requires the permission of the module coordinator.

**Learning and teaching methods of delivery:**
- **Weekly contact:** 1 x 1-hour lecture and 1 x 2-hour seminar.
- **Scheduled learning:** 0 hours
- **Guided independent study:** 0 hours

**Assessment pattern:**
- As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 0%
- As used by St Andrews: Coursework = 100%

**Re-assessment pattern:** 4,000-word essay on a subject to be decided between the student and the module co-ordinator = 100%

**Module coordinator:** Professor K D Bennett

**Module teaching staff:** Prof K Bennett

### GG3262 Climate and Weather Systems

<table>
<thead>
<tr>
<th>SCOTCAT Credits:</th>
<th>20</th>
<th>SCQF level 9</th>
<th>Semester</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic year:</td>
<td>2021-2022</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Availability restrictions:</td>
<td>Availability TBC - Offered on a two-year cycle</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Planned timetable:</td>
<td>9:00 am - 11:00 am Tues</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Weather affects every aspect of life, and is a fundamental control on many environmental systems. This module explores the workings of the atmosphere at a wide range of scales, from the formation of clouds and raindrops, through thunderstorms and cyclones, up to large-scale circulation of the atmosphere. Beginning from first principles, key physical processes are introduced and used to develop a deep understanding of the earth's weather and climate. The module concludes with a critical examination of the climate change debate.

**Pre-requisite(s):** Before taking this module you must pass GG2011 and pass GG2012.

**Learning and teaching methods of delivery:**
- **Weekly contact:** 2 hours lectures and 2 hours seminars (x 5 weeks) + 2 x 1-hour essay feedback and exam revision sessions
- **Scheduled learning:** 0 hours
- **Guided independent study:** 0 hours

**Assessment pattern:**
- As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%
- As used by St Andrews: Coursework = 100%

**Re-assessment pattern:** Coursework = 100%

**Module coordinator:** Professor D I Benn

**Module teaching staff:** Prof D I Benn
---

### GG3271 Coastal Processes

<table>
<thead>
<tr>
<th>SCOTCAT Credits:</th>
<th>20</th>
<th>SCQF level 9</th>
<th>Semester</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic year:</td>
<td>2021-2022</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Availability restrictions:</td>
<td>Offered on a two year cycle</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Planned timetable:</td>
<td>2.00 pm - 4.00 pm Thurs</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The majority of the world’s population live in close proximity to the coastal zone. Coastal processes are highly dynamic and sensitive to external drivers, including long-term climate change and anthropogenic activities. Understanding these systems is important for developing appropriate coastal management strategies. Coasts (and coastal processes) therefore represent an excellent opportunity to study the interactions between humans and their physical environment. The module aims to enhance students' understanding of environment-shaping processes and to offer advanced field-based training in the coastal environment. Including practical classes and an obligatory, reasonably priced, weekend field excursion, it encourages students to think about the ways in which process knowledge can inform coastal management.

**Pre-requisite(s):**

Before taking this module you must pass GG2012 or pass SD2002

**Learning and teaching methods of delivery:**

- **Weekly contact:** Weekly lectures will be provided as pre-recorded content, with time-tabled weekly meetings (in-person) at 2:00-3:00 pm and (online) at 3:00-4:00 pm (the latter will be held on Teams and a recording available online afterwards).

**Assessment pattern:**

- **As defined by QAA:**
  - Written Examinations = 0%, Practical Examinations = 0%, Coursework = 0%
- **As used by St Andrews:**
  - 100% = Continual Assessment

**Re-assessment pattern:**

- 2-hour Written Examination = 100%

**Module coordinator:**

Professor W E N Austin

**Module teaching staff:**

Prof W E N Austin

---

### GG3276 Volcanic ash: dispersal, impacts and applications

<table>
<thead>
<tr>
<th>SCOTCAT Credits:</th>
<th>20</th>
<th>SCQF level 9</th>
<th>Semester</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic year:</td>
<td>2021-2022</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Planned timetable:</td>
<td>2.00pm to 4.00pm Mon</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Volcanic ash, or tephra, is one of the most visible and widespread hazards created by volcanic activity and has affected large parts of the Earth’s surface. In addition, volcanic ash is widely used for reconstructing volcanic hazards and as a geochronological marker to understand environmental change. This module provides an introduction to tephra in both its role as an agent of change, and as a marker of change. It presents key concepts and theories necessary to understand the dispersal of tephra, its preservation in the environment, and its use as a tool to date environmental change. This module begins by considering the production, dispersal and preservation of tephra in the environment. It will then consider how tephra impacts on both natural systems and human societies, before looking at how tephra can be used as a powerful chronological tool to date environmental change.

**Pre-requisite(s):**

Before taking this module you must pass SD2001 and pass SD2002 or pass GG2011 and pass GG2012

**Learning and teaching methods of delivery:**

- **Weekly contact:** 1 lecture (X8 weeks), 1 seminar (X8 weeks), 1 practical (X2 weeks)

**Assessment pattern:**

- **As defined by QAA:**
  - Written Examinations = 0%, Practical Examinations = 0%, Coursework = 0%
- **As used by St Andrews:**
  - Coursework = 100%

**Re-assessment pattern:**

- Coursework = 100%

**Module coordinator:**

Dr R T Streeter

---
Module teaching staff: Dr Richard Streeter

GG3301 Special Topic for Joint or Major Honours in Geography (Junior Honours)

<table>
<thead>
<tr>
<th>SCOTCAT Credits:</th>
<th>10</th>
<th>SCQF level 9</th>
<th>Semester</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic year:</td>
<td>2021-2022</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Availability restrictions:</td>
<td>Entry to a Joint or Major Honours programme in Geography</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Planned timetable:</td>
<td>Various times dependent on chosen option module</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

This module is designed to allow Joint or Major Honours students in their Junior Honours year to engage with the subject matter of a selected 20-credit optional module in Geography (GG3221 - GG3289) yet balance the workload across the four semesters of their Honours programme. Students complete the contact hours of their chosen module but undertake a separate assessment.

Pre-requisite(s): Before taking this module you must pass GG2011 and pass GG2012

Learning and teaching methods of delivery:
- **Weekly contact:** Students undertake the lecture/seminar contact hours associated with any 3000-level GG, SG or SD coded option module, but do a separate assessment (4000-word essay). Weekly contact hours vary (with the option module taken), but the average scheduled learning across the range of modules available is 23 hours.

<table>
<thead>
<tr>
<th>Scheduled learning:</th>
<th>23 hours</th>
<th>Guided independent study:</th>
<th>77 hours</th>
</tr>
</thead>
</table>

Assessment pattern:
- **As defined by QAA:**
  - Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%
- **As used by St Andrews:**
  - Coursework = 100%

Re-assessment pattern: Coursework Essay = 100%

Module teaching staff: Various

GG3302 Special Topic for Honours in Geography (Senior Honours)

<table>
<thead>
<tr>
<th>SCOTCAT Credits:</th>
<th>10</th>
<th>SCQF level 9</th>
<th>Semester</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic year:</td>
<td>2021-2022</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Availability restrictions:</td>
<td>Entry to a Joint or Major Honours programme in Geography</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Planned timetable:</td>
<td>timetable to be confirmed.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

This module is designed to allow Honours students in their Senior Honours year to engage with the subject matter of a selected 20-credit optional module in Geography (GG3221 - GG3289) yet balance the workload across the four semesters of their Honours programme. Students complete the contact hours of their chosen module but undertake a separate assessment.

Pre-requisite(s): Before taking this module you must pass GG2011 and pass GG2012

Learning and teaching methods of delivery:
- **Weekly contact:** Students undertake the lecture/seminar contact hours associated with any 3000-level GG or SD coded option module, but do a separate assessment (4000-word essay). Weekly contact hours vary (with the option module taken), but the average scheduled learning across the range of modules available is 23 hours.

<table>
<thead>
<tr>
<th>Scheduled learning:</th>
<th>23 hours</th>
<th>Guided independent study:</th>
<th>77 hours</th>
</tr>
</thead>
</table>

Assessment pattern:
- **As defined by QAA:**
  - Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%
- **As used by St Andrews:**
  - Coursework = 100%

Re-assessment pattern: Coursework Essay = 100%

Module coordinator: Dr R T Streeter
Module teaching staff: Various

GG4201 Advanced Debates in Geography

<table>
<thead>
<tr>
<th>SCOTCAT Credits:</th>
<th>10</th>
<th>SCQF level: 10</th>
<th>Semester</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic year:</td>
<td>2021-2022</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Availability restrictions:</td>
<td>Core - available every year. Not automatically available to General Degree students</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Planned timetable:</td>
<td>11 am to 1 pm Tues</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

This module extends and provides a summation of work undertaken in the geography Honours programme, providing students with an opportunity to reflect on the scope and diversity of geography as a discipline and to think holistically about their own learning. The module is structured around a set of readings and seminars that encourage student to study and debate important contemporary issues and debates within geography (e.g. climate change, globalisation, the nature of social inequality, the interface between nature and culture). It is examined with one essay from a choice of six. The seminars address the nature of geography as a discipline and the way in which geographical reasoning has or might be applied to significant contemporary issues.

Pre-requisite(s): Before taking this module you must pass GG3201 or pass GG3202 or pass GG3203 or pass GG3204

Learning and teaching methods of delivery: Weekly contact: 6 x 2-hour seminars during the semester.

Scheduled learning: 12 hours

Guided independent study: 88 hours

Assessment pattern:

As defined by QAA:
Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%

As used by St Andrews:
Coursework = 100%

Re-assessment pattern: Coursework = 100%

Module coordinator: Dr R T Streeter

Module teaching staff: Team taught

GG4221 Review Essay

<table>
<thead>
<tr>
<th>SCOTCAT Credits:</th>
<th>20</th>
<th>SCQF level: 10</th>
<th>Semester</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic year:</td>
<td>2021-2022</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Availability restrictions:</td>
<td>Core - available every year</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Planned timetable:</td>
<td>5.00 pm - 6.00 pm Thu</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

This elective requires students, working independently, to identify and critically review a body of literature, giving an account of its substantive content, and critically assessing the evidence on which it is based. Students can either identify an intellectual field that lies outside those addressed in available 3000-level options modules, or build on a field covered in the programme, pursuing it at greater depth. In addition to supervisory sessions and module tutorials, students may also attend sessions in a relevant 3000-level option module running in the same semester.

Pre-requisite(s): Before taking this module you must pass GG3201 or pass GG3202 or pass GG3203

Learning and teaching methods of delivery: Weekly contact: Introductory lecture and seminar (2 hours) followed by guided independent study (one-to-one supervision)

Scheduled learning: 2 hours

Guided independent study: 198 hours

Assessment pattern:

As defined by QAA:
Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%

As used by St Andrews:
Coursework = 100%

Re-assessment pattern: Review Essay = 100%

Module coordinator: Dr R T Streeter

Module teaching staff: Team taught
## GG4222 Advanced Qualitative Analysis

<table>
<thead>
<tr>
<th>SCOTCAT Credits:</th>
<th>20</th>
<th>SCQF level: 10</th>
<th>Semester</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic year:</td>
<td>2021-2022</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Availability restrictions:</td>
<td>Not automatically available to General Degree students</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Planned timetable:</td>
<td>2.00 pm - 4.00 pm Thu</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

This module offers advanced training in methods of qualitative analysis that facilitate dissertation work and develop transferable skills for future careers. Learning is project/problem-based, students gain practical experience of working with a range of qualitative data (e.g. archives, media, visual and textual documents and/or interview transcripts) using a range of analytical and coding approaches (e.g. discourse analysis, deconstruction, grounded theory). Research data are drawn from a range of areas within geography.

**Pre-requisite(s):** Before taking this module you must pass GG3201 or pass GG3202 or pass GG3203

**Learning and teaching methods of delivery:**

- **Weekly contact:** 3 hour seminar/lecture/workshop x 10 weeks
- **Scheduled learning:** 18 hours
- **Guided independent study:** 182 hours

**Assessment pattern:**

- **As defined by QAA:**
  - Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%
- **As used by St Andrews:**
  - 100% continual assessment.

**Re-assessment pattern:**

- 100% continual assessment.

**Module coordinator:** Dr M P Simpson

**Module teaching staff:** Team taught module

---

## GG4223 Advanced Quantitative Analysis

<table>
<thead>
<tr>
<th>SCOTCAT Credits:</th>
<th>20</th>
<th>SCQF level: 10</th>
<th>Semester</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic year:</td>
<td>2021-2022</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Availability restrictions:</td>
<td>Not automatically available to General Degree students</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Planned timetable:</td>
<td>Lecture Tue 1-3 Practical Tue 3-5</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Students taking this module will learn some of the core research skills necessary to be a professional quantitative social science researcher and then to carry out a typical consulting project. It will allow them to explore a substantive policy issue, carry out their own quantitative research and then make recommendations based on these findings. They will be presented with a 'real world' scenario and be expected to take on the role of a researcher who is advising policy makers; in simulations of various policy forums, they will then learn how to defend their recommendations and advice. They will first be taught the relevant quantitative research skills and introduced to potentially useful research resources. They will then be expected to construct their own research strategy, carry out the necessary research and present this in various formats, working independently of the teaching staff.

**Pre-requisite(s):** Before taking this module you must pass GG3201 or pass GG3202 or pass GG3203

**Learning and teaching methods of delivery:**

- **Weekly contact:** 2 hour lecture x 7 weeks, 2 hour lab x 7 weeks, 4 hour drop in session x 2 weeks, 4 hour class presentation session x 1 week.
- **Scheduled learning:** 40 hours
- **Guided independent study:** 160 hours

**Assessment pattern:**

- **As defined by QAA:**
  - Written Examinations = 0%, Practical Examinations = 13%, Coursework = 87%
- **As used by St Andrews:**
  - Coursework project = 100%

**Module coordinator:** Dr F Fiori

**Module teaching staff:** Team taught: Dr Francesca Fiori, Dr Katherine Keenan
GG4224 Advanced Topics in Physical Sciences

<table>
<thead>
<tr>
<th>SCOTCAT Credits:</th>
<th>20</th>
<th>SCQF level</th>
<th>Semester</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic year:</td>
<td>2021-2022</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Availability restrictions:</td>
<td>Not automatically available to General Degree students</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Planned timetable:</td>
<td>10 am to 1 pm Mon</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

This module introduces students to a range of advanced and cutting edge topics in Physical Geography and other physical sciences relevant to geography and sustainable development. Three topics are offered each year that build on material explored in 3000-level Honours modules, and which expand and deepen students’ practical skill set. Students choose two of the three topics. Each topic includes in-depth study of the primary literature, combined with advanced training in analytical, technical or methodological approaches, thus integrating hands-on applied learning with critical reading of the primary literature. The module complements and expands the learning acquired in GG3201-GG3204, and provides additional resources for the development of students’ individual dissertation projects.

Pre-requisite(s): Before taking this module you must pass GG3201 or pass GG3202 or pass GG3203

Learning and teaching methods of delivery: Weekly contact: 3-hour lecture/seminar/practical sessions (x 10 weeks) and one half-day field trip or virtual equivalent (subject to COVID restrictions)

Assessment pattern: As defined by QAA:
- Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%

As used by St Andrews:
- Coursework = 100%

Re-assessment pattern: Coursework project = 100%

Module coordinator: Dr K H Roucoux

Module teaching staff: Dr Katherine Roucoux, Dr Lydia Cole, Dr Tom Cowton
GG4228 Advanced Topics in Geographic Information Science (GIsc)

<table>
<thead>
<tr>
<th>SCOTCAT Credits:</th>
<th>20</th>
<th>SCQF level 10</th>
<th>Semester</th>
<th>1</th>
</tr>
</thead>
</table>

**Academic year:** 2021-2022

**Availability restrictions:** Core - available every year. Not automatically available to General Degree students

**Planned timetable:** Lecture Days - Monday 13:00 to 15:00. Practical Class Days - Monday 15:00 to 17:00. Additional practical Wed 11-1 WKS 8 and 9

The first part of the course explores advanced spatial analysis techniques for use with geographic datasets. Students will gain theoretical and applied knowledge to study and describe spatial patterns in geographic data. Theoretical understanding will be emphasized through lectures and readings. Labs will be designed to provide students with hands-on experience applying theory and techniques to datasets spanning human and environmental geography in applications such as crime, forestry, health and environmental change. In the second part of the course, students will engage in a small research project of their choosing to showcase their new advanced GIS skills. The project will allow students to use GIS and spatial analysis techniques to address a chosen problem in either of the social, physical, or environmental sciences. Students with domain knowledge in human geography or physical geography will be able to tailor GIS projects to their own interests.

**Pre-requisite(s):** Before taking this module you must pass GG3201 or GG3202 or GG3203 and have taken and passed Unit 6 (GIS) in one of these modules.

**Learning and teaching methods of delivery:**

**Weekly contact:** 2hr x 6 weeks online lectures, 2hr x 1 week online career event (GIS Day), 2hr x 6 weeks labs (online via remote access to university labs), 2hr x 4 weeks help sessions for projects (online via remote access to university labs and/or in person)

**Scheduled learning:** 36 hours  
**Guided independent study:** 164 hours

**Assessment pattern:**

As defined by QAA:  
Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%

As used by St Andrews:
1. IT Practicals (50%) - 2 x 25% IT lab assignments based on Analysing Spatial Point data, Spatial Autocorrelation Analysis, and/or Geographically Weighted Regression.
2. GIS project (50%) - Students will work on a topic/dataset of their own choosing. Perform an analysis using the skills learned in this course. Students will submit a written report in the form of a scientific article.

**Re-assessment pattern:** 100% GIS Project

**Module coordinator:** Dr U Demsar

**Module teaching staff:** Dr Urska Demsar, Dr Tobias Bolch
### GG4297 Joint Honours Research Dissertation in Geography

<table>
<thead>
<tr>
<th>SCOTCAT Credits:</th>
<th>30</th>
<th>SCQF level 10</th>
<th>Semester</th>
<th>Both</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic year:</td>
<td>2021-2022</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Availability restrictions:</td>
<td>Core - available every year. Not automatically available to General Degree students</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Planned timetable:</td>
<td>2 pm to 4 pm Fri</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The research dissertation is the fundamental piece of independent work upon which the Geography degree is based. It provides students with the opportunity to design and undertake an independent, original piece of empirical research under the supervision of a member of staff. The dissertation is a substantial, independent piece of research that represents the culmination of both substantive and core training in Geography. (Guidelines for printing and binding dissertations can be found at: [http://www.st-andrews.ac.uk/printanddesign/dissertation/](http://www.st-andrews.ac.uk/printanddesign/dissertation/)).

**Pre-requisite(s):** Before taking this module you must pass GG3202

**Anti-requisite(s):** You cannot take this module if you take GG4298

**Learning and teaching methods of delivery:**

- **Weekly contact:** Up to 8 hours of guided study per student over the semester (one-to-one supervision, by arrangement with supervisor)
- **Scheduled learning:** 8 hours
- **Guided independent study:** 292 hours

**Assessment pattern:**

- **As defined by QAA:** Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%
- **As used by St Andrews:** Dissertation = 100%

**Re-assessment pattern:** Oral Examination = 100%

**Module coordinator:** Dr R T Streeter

**Module teaching staff:** Team taught

### GG4298 Single Honours Research Dissertation in Geography

<table>
<thead>
<tr>
<th>SCOTCAT Credits:</th>
<th>50</th>
<th>SCQF level 10</th>
<th>Semester</th>
<th>Both</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic year:</td>
<td>2021-2022</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Availability restrictions:</td>
<td>Core - available every year. Not automatically available to General Degree students</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Planned timetable:</td>
<td>2 pm to 4 pm Fri</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The research dissertation is the fundamental piece of independent research work upon which the Geography degree is based. It provides students with the opportunity to design and undertake an independent, original piece of empirical research under the supervision of a member of staff. The dissertation is a substantial, independent piece of research that represents the culmination of substantive and core training in Geography.

**Pre-requisite(s):** Before taking this module you must pass GG3201 or pass GG3203

**Anti-requisite(s):** You cannot take this module if you take GG4297

**Learning and teaching methods of delivery:**

- **Weekly contact:** Up to 8 hours of guided study per student over the semester (one-to-one supervision, by arrangement with supervisor), plus a 1 day (8-hour) conference
- **Scheduled learning:** 16 hours
- **Guided independent study:** 490 hours

**Assessment pattern:**

- **As defined by QAA:** Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%
- **As used by St Andrews:** Dissertation = 100%

**Re-assessment pattern:** Oral Examination = 100%

**Module coordinator:** Dr R T Streeter

**Module teaching staff:** Team taught
### GG4301 Advanced Study for Joint or Major Honours in Geography

<table>
<thead>
<tr>
<th>SCOTCAT Credits:</th>
<th>10</th>
<th>SCQF level 10</th>
<th>Semester</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic year:</td>
<td>2021-2022</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Availability restrictions:</td>
<td>Core - available every year. Not automatically available to General Degree students</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Planned timetable:</td>
<td>timetable to be arranged.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

This module is designed to allow Joint or Major Honours students in their Senior Honours year to engage with the subject matter of a selected 20-credit optional module in Geography (GG3221 - GG3289) yet balance the workload across the four semesters of their Honours programme. Students complete the contact hours of their chosen module but undertake a separate assessment, at 4000-level (an advanced essay).

**Pre-requisite(s):**
Entry to a Joint or Major Honours programme in Geography. Before taking this module you must (pass GG3202 and pass GG3203) or (pass SG3202 and pass SG3203).

**Learning and teaching methods of delivery:**

**Weekly contact:** Students undertake the lecture/seminar contact hours associated with any 3000-level GG, SG or SD coded option module, but do a separate assessment (4000-word essay). Weekly contact hours vary (with the option module taken), but the average scheduled learning across the range of modules available is 23 hours.

**Scheduled learning:** 23 hours  
**Guided independent study:** 77 hours

**Assessment pattern:**

As defined by QAA:  
Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%

As used by St Andrews:  
Coursework = 100%

**Re-assessment pattern:**  
Coursework Essay = 100%

**Module coordinator:** Dr R T Streeter

**Module teaching staff:** Various
SD3100 Methodologies for Sustainable Development

<table>
<thead>
<tr>
<th>SCOTCAT Credits:</th>
<th>30</th>
<th>SCQF level 9</th>
<th>Semester</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic year:</td>
<td>2021-2022</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Planned timetable:</td>
<td>Lectures - 14:00 - 17:00 Tuesdays</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

This module prepares students to plan and carry out research in relation to Sustainable Development. This module builds on the research methods explored in other SD honours modules. Students will learn how to design and execute a research project, how to situate research questions in the broader agenda of Sustainable Development and within appropriate interdisciplinary literatures. A group research project provides the opportunity to apply this learning in a real world setting. Students taking this module will understand the wider epistemological debates surrounding interdisciplinarity, know how to define problems and form tractable research questions as well as how to design rigorous methodologies to answer these questions. By the end of the module each student will have developed a research proposal, which would be suitable for a final year dissertation project.

Pre-requisite(s): Students require 30 credits in SD modules at 3000- or 4000-level. Before taking this module you must take SD2002

Anti-requisite(s) You cannot take this module if you take SG3201 or take SG3202 or take SG3203 or take SG3204 or take GG3201

Learning and teaching methods of delivery: Weekly contact: 1 x 3-hour seminar (x 7 weeks); 1 x 3-hour practical (x 3 weeks); real world investigation (x 3 days)

Scheduled learning: 57 hours Guided independent study: 252 hours

Assessment pattern: As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%

As used by St Andrews: 100% continual assessment.

Re-assessment pattern: 100% continual assessment.

Module teaching staff: Team taught
SD4110 Transitioning to sustainability: community, nature and governance

<table>
<thead>
<tr>
<th>SCOTCAT Credits:</th>
<th>30</th>
<th>SCQF level 10</th>
<th>Semester</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic year:</td>
<td>2021-2022</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Availability restrictions:</td>
<td>Offered on a two year cycle</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Planned timetable:</td>
<td>Tuesday 10am-1pm</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

A transition towards sustainability will be multifaceted, requiring novel forms of governance and acknowledging the roles and perspectives of different actors. State intervention alone will not suffice; local and grassroots initiatives and movements are critical. In this module we will explore how communities of place, interest, practice and value can contribute to multi-level governance for sustainability, but can also question dominant assumptions manifested at national or international levels. We will examine how community interacts with other sectors, explore learning, adaptation and resilience in communities and pursue the trend for alternative economies. We will draw on examples from the global north and south. In addition, we will critique the contested concept of community itself, acknowledging issues relating to heterogeneity, representation and relationality.

Pre-requisite(s): Before taking this module you must pass SD2002

| Learning and teaching methods of delivery: | Weekly contact: 1 hour lecture (x11 weeks), 1 hour seminar (x11 weeks), 3 hour practical class (x2 weeks), 4hr field-trip (x6 weeks) |
| Scheduled learning: | 57 hours |
| Guided independent study: | 244 hours |

Assessment pattern:
- As defined by QAA: Written Examinations = 40%, Practical Examinations = 0%, Coursework = 60%
- As used by St Andrews: 2-hour Written Examination = 40%, Coursework = 60%

Re-assessment pattern: 2-hour Written Examination = 100%

Module coordinator: Dr R M White
Module teaching staff: Dr R White

SD4117 The Blue Economy and Maritime Security Intersections and Interdependence

<table>
<thead>
<tr>
<th>SCOTCAT Credits:</th>
<th>30</th>
<th>SCQF level 10</th>
<th>Semester</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic year:</td>
<td>2021-2022</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Planned timetable:</td>
<td>2 pm to 4 pm Tues</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The Blue Economy concept mirrors the green economy and entails the utilization of ocean resources in a way that takes economic growth, social equity and ecological conservation into account, equally, without prioritizing one over the other. The coasts sustain livelihoods for billions of people in a range of activities from fisheries and aquaculture, tourism, shipping and transport, offshore hydrocarbon, mining, and blue energy. However, threats of degradation, resulting from overexploitation, fisheries crime, pollution, climate change, and extension of port infrastructure undermine the sustainability of the marine ecosystem.

Pre-requisite(s): Before taking this module you must pass SD2002

| Learning and teaching methods of delivery: | Weekly contact: One Hour Lecture x 11 weeks |
| Scheduled learning: | 44 hours |
| Guided independent study: | 242 hours |

Assessment pattern:
- As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%
- As used by St Andrews: Coursework = 100%

Re-assessment pattern: Coursework = 100%

Module coordinator: Dr I M Okafor-Yarwood
Module teaching staff: Dr Ife Okafor-Yarwood
### SD4118 Extractive Environments

<table>
<thead>
<tr>
<th>SCOTCAT Credits:</th>
<th>30</th>
<th>SCQF level</th>
<th>Semester</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic year:</td>
<td>2021-2022</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Planned timetable:</td>
<td>10 am to 12 pm Mon</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The module aims to introduce SD honours students to resource extraction, as a conflictive arena for determining trajectories of sustainability and as inextricably tied to dynamics of colonialism, knowledge, development and citizenship. With a primary focus on fossil fuels and energy resources, this module will use theories and debates from political ecology, political ontology and critical development studies to explore and evaluate the contested claims and experiences of resource extraction across the global North and South.

**Pre-requisite(s):** Before taking this module you must pass SD2002

**Learning and teaching methods of delivery:**
- **Weekly contact:** 1 lecture x 10 weeks
- **Scheduled learning:** 49 hours
- **Guided independent study:** 248 hours

**Assessment pattern:**
- As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%
- As used by St Andrews: Coursework = 100%

**Re-assessment pattern:** Coursework = 100%

**Module teaching staff:** To be arranged

### SD4225 Green Politics: theory and practice

<table>
<thead>
<tr>
<th>SCOTCAT Credits:</th>
<th>30</th>
<th>SCQF level</th>
<th>Semester</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic year:</td>
<td>2021-2022</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Planned timetable:</td>
<td>9 am to 12 pm Thurs</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

This module explores the theory & practice of environmental politics in issues of Sustainable Development. Drawing on concepts from Politics & International Relations we will critically analyse past & current environmental challenges and discourses. The module pays particular attention to the political actors involved in contemporary Sustainable Development issues as well as their interests and behaviours. It includes a comparative political analysis element as well as a global environmental governance dimension. Distinct features of this module are - the use of policy briefings as written assignments, tutorial discussion papers, and practitioner involvement.

**Pre-requisite(s):** Before taking this module you must ( pass SD2001 and pass SD2002 ) or ( pass IR2005 and pass IR2006 )

**Anti-requisite(s) You cannot take this module if you take IR4552**

**Learning and teaching methods of delivery:**
- **Weekly contact:** 1 lecture x 10 weeks; 1 x 2hr seminar x 10 weeks. 1 x 2hr office hour throughout the semester
- **Scheduled learning:** 33 hours
- **Guided independent study:** 268 hours

**Assessment pattern:**
- As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%
- As used by St Andrews: Coursework = 100%

**Re-assessment pattern:** Coursework = 100%

**Module coordinator:** Dr A C K Brown

**Module coordinator Email:** ackb@st-andrews.ac.uk

**Module teaching staff:** Dr Antje Brown
This module focuses on contemporary global health issues, with emphasis placed on contextualizing global, national, and subnational health disparities. We will study how health, the environment, and sustainable development are interrelated and work to improve our understanding of both policy and practice. Therefore, students will be introduced to important actors and their stated goals, such as the WHO, IMF, OECD, MDGs, and SDGs. We will examine cases from low- and middle-income countries, as well as from high-income countries. We will take an interdisciplinary approach, using various perspectives including sociology, bioethics, epidemiology, anthropology, clinical medicine, and political science. The module will involve lectures, seminars, and practical classes. Assessment will include presentations and coursework.

Pre-requisite(s): Before taking this module you must ( pass SD2001 and pass SD2002 ) or ( pass GG2011 and pass GG2012 )

Learning and teaching methods of delivery: Weekly contact: 1 hour lectures (10 weeks), 2 hour seminars (10 weeks), 3 hour practical (statistical literacy workshop) (1 week)

Scheduled learning: 33 hours Guided independent study: 267 hours

Assessment pattern: As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%

As used by St Andrews: Coursework = 100%

Re-assessment pattern: Coursework = 100%

Module coordinator: Dr J M Hale

Module coordinator Email: jmh32@st-andrews.ac.uk

Module teaching staff: Dr Jo Mhairi Hale
This dissertation builds on 3000-level research methods training and will demonstrate the importance of an interdisciplinary approach to researching key questions of sustainable development. This independent research will involve the review of relevant literature, the application of rigorous methodologies, the collection of data as well as the appropriate analysis and interpretation of data. A final dissertation of not more than 10,000 words will comprise the primary mode of assessment but students will also participate in the Senior Honours Research Conference at which all students will present their work to members of the school. To support this learning students will be supervised by a member of staff and collective workshops on relevant skills such as approaches to scientific writing, and analysing and presenting data will also be offered. Students will also be invited to attend a dissertation away day at the beginning of the semester.

<table>
<thead>
<tr>
<th>Pre-requisite(s):</th>
<th>Before taking this module you must take SD3100 or take SG3204</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anti-requisite(s)</td>
<td>You cannot take this module if you take SD4299</td>
</tr>
</tbody>
</table>

### Learning and teaching methods of delivery:

**Weekly contact:** 1 away day (4 hours in St Andrews OR 8 Hours residential if possible), 4 x 2-hour skills workshops face to face online. (Those in S1 are not tallied here) up to 10 hours individual supervision, by arrangement with supervisor, face to face online or in person. 1 x 4 hours student research conference (4 hours) face to face online

**Scheduled learning:** 30 hours  
**Guided independent study:** 270 hours

### Assessment pattern:

**As defined by QAA:**  
Written Examinations = 0%, Practical Examinations = 10%, Coursework = 90%  

**As used by St Andrews:**  
Coursework (10,000-word dissertation = 90%, oral or poster presentation a student research conference = 10%) = 100%

### Re-assessment pattern:

10,000-word Dissertation = 100%

### Module coordinator:

Dr T A Stojanovic

### Module teaching staff:

Team taught