### EG3020 Global Climate Change

<table>
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<th>SCOTCAT Credits:</th>
<th>15</th>
<th>SCQF Level</th>
<th>Semester</th>
<th>1</th>
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<tr>
<td>Academic year:</td>
<td>2018/9</td>
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<tr>
<td>Planned timetable:</td>
<td>9.00 am - 10.00 am Wed and Thu, 2.00 pm - 5.00 pm Tue</td>
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Climate change is one of the most challenging environmental problems currently facing society. Recent global warming likely lies outside the range of natural variability when compared to the last 1000 or even 2000 years. However, over geological time-scales, global temperatures have been significantly warmer than today. This module addresses how this consensus view has been derived and considers the scientific evidence and arguments that underpin our current understanding of climate change. The module examines both strengths and limitations of long-term proxy climate records, historical datasets based upon direct observation, models of the climate system, and areas of greatest uncertainty within current knowledge. Particular emphasis is also placed on the dynamical processes and varying factors that drive short and long-term climate along with related feedbacks within the system.

**Pre-requisite(s):** Before taking this module you must pass ES2002 or pass ES2003 or (pass GG2011 and pass GG2012)

**Anti-requisite(s):** You cannot take this module if you take GG3268 or take GG3265

**Learning and teaching methods of delivery:**

**Weekly contact:** 2 x 1-hour lectures and 1 x 2-hour practical.

**Scheduled learning:** 44 hours  
**Guided independent study:** 106 hours

**Assessment pattern:**

As defined by QAA:  
Written Examinations = 50%, Practical Examinations = 0%, Coursework = 50%

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

**Re-assessment pattern:** 2-hour Written Examination = 80%, Coursework = 20%, No Re-assessment if Coursework mark is less than 4

**Module coordinator:** Dr R J S Wilson

**Module teaching staff:** Dr R Wilson, Dr J Rae, Dr A Burke

### EG3031 Special Topic for Physical Geography

<table>
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<tr>
<th>SCOTCAT Credits:</th>
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<td>Academic year:</td>
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<td>Availability restrictions:</td>
<td>Available only to Geography students</td>
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This module provides support and guidance for geography students taking EG3020 as a 5 credit top-ip. In addition Geography MA and BSc students taking 15-credit modules from the Science Faculty may find themselves 5 credits short and this module provides the necessary credit top-up.

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

**Co-requisite(s):** Undergraduate geography students must also take EG3020 with this module.

**Learning and teaching methods of delivery:**

**Weekly contact:** Occasional tutorials.

**Scheduled learning:** 8 hours  
**Guided independent study:** 42 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:** No Re-assessment available

**Module coordinator:** Dr R J S Wilson

**Module teaching staff:** Dr R Wilson, Dr J Rae, Dr A Burke