



**The University of Edinburgh
School of GeoSciences**

BSc / MEarthPhys

Geophysics

Geophysics and Meteorology

Geophysics and Geology

Year 4 - Senior Honours

2017/18 Course Information

Introduction

This handbook describes the courses taught in the fourth (Senior Honours) year of the BSc and MEarthPhys Geophysics Degree programmes. Many of the courses are common to other Earth Science-related degree programmes.

Prof David Stevenson
Degree Programme Convenor
Geophysics degrees

Key Dates

The table below details key University and School dates throughout the 2017/18 academic year. These dates are correct at the time of publishing and may be subject to change.

2017

11 th – 15 th September	Welcome Week (http://www.ed.ac.uk/students/new-students/events)
13 th September	Welcome talks (http://www.ed.ac.uk/geosciences/teaching-organisation/ug-students/inductions/geosciences-induction/es-induction)
18 th September	Start of Teaching Block 1
TBC	Student Staff Liaison Committee meeting
20 th October	End of Teaching Block 1
23 rd October	Start of Teaching Block 2
26 th October	Winter Exam diet timetable published
TBC	Student Staff Liaison Committee meeting
1 st December	End of Teaching Block 2
4 th – 7 th December	Revision
8 th December	Examinations start
22 nd December	End of Semester 1/End of Examinations

2018

10 – 14 th January	January Welcome
15 th January	Start of Teaching Block 3
TBC	Student Staff Liaison Committee meeting
16 th February	End of Teaching Block 3
19 – 23 rd February	Flexible learning week
26 th February	Start of Teaching Block 4
5 th March	Spring Exam diet timetable published
TBC	Student Staff Liaison Committee meeting
6 th April	End of Teaching Block 4
9 th April	Spring Teaching Vacation starts
20 th April	Spring Teaching Vacation ends
23 rd -27 th April	Revision week
30 th April	Examinations start
25 th May	End of Semester 2/End of Examinations
28 th May	Summer Teaching Vacation starts
June/July	School of GeoSciences graduation ceremony (date TBC)

Geophysics degrees: Year 4.

The fourth year of the BSc programme is the second of the two Honours years and carries the same assessment weighting as the third year. Therefore, the results of your fourth-year assessment will contribute 50% of the marks used in deciding your Honours Degree result. The third year of the MEarthSci programme attributes 20% to your final Honours Degree mark, with fourth and fifth year counting for 40% each. The same courses are taken for the BSc and MEarthPhys year 4 programmes

In the fourth year of your degree you will study a number of advanced courses; these are different for each of the three geophysics streams. You will choose a number of option courses and you will all participate in the course “Geophysics International Field Course”, most of which is the field trip in week 2 of the first semester. As in previous years you will be assessed using a mixture of continuous assessment and formal examinations.

A large part of your work (40 credits or one third of the year) will be project work. You will choose project topics from a list circulated in induction week or before. You will either do two 20-credit projects; one in each semester OR one 40-credit project spread across the whole year. 20-credit projects are assessed by means of a final written report. 40-credit projects are assessed by a final report due at the end of semester 2 (30 credits) AND an interim report due at the start of semester 2 (10 credits).

Geophysics and Geology students may have chosen to do projects as above. But they may also have chosen to do a geology-style mapping dissertation. If you made this choice last year, you do not have any further project work to carry out, but you do need to write up your mapping dissertation.

Please note that the 4th year has been significantly re-organised this year (2017/18), with several new courses. These changes may throw up a few problems – please let me know of any and we will try and rapidly sort these out.

Your course choices

In your SH year you are required to take a number of optional courses. If you come across another course that you would like to take, and which does not clash in the timetable with a compulsory course, you should discuss with your PT whether it is possible to take that course. The Degree Program Tables on PATH should exhaustively list all the possible course options – but this doesn't necessarily mean they will produce a timetable without clashes. We will endeavour to make the most popular combinations of courses work, but inevitably there will be some impossible combinations. If you find unfortunate timetable clashes please let us know as they may be fixable.

Geophysics

You must do the field course (10 credits), Geomagnetism (10 credits) and 40 credits of projects. You must do *at least two* of the three courses (each 20 credits): ‘Geophysical Investigation of Earth Resources’, ‘Natural Hazards and Risk’ and ‘Planetary Interiors’. Doing all three and is the most obvious set of courses, however, there are many options for the remaining 20 credits. These are exhaustively documented in PATH: <https://path.is.ed.ac.uk/degrees/UTGEOPY/4>

Compulsory:			
EASC10111	Geophysics International Field Course (10 credits)	S1	Hugh Pumphrey
EASC10036	Geomagnetism (10 credits)	S2	TBC
Choose 40 credits of projects:			
EASC10065	Geophysics Project (40 credits)	Full year	Simon Tett
EASC10052	Geophysics Project 1 (20 credits)	S1	Simon Tett

EASC10053	Geophysics Project 2 (20 credits)	S2	Simon Tett
Choose at least two of these:			
EASC10116	Geophysical Investigation of Earth Resources (20 credits)	Full year	Anton Ziolkowski
EASC10117	Natural Hazards and Risk (20 credits)	Full Year	Ian Main
EASC10115	Planetary Interiors (20 credits)	Full Year	Kathy Whaler
If not all three of the above taken, choose 20 credits from level 10/11 GeoScience courses.			

As this is the first year of the new SH course structure, requests to take alternative courses will be reviewed on a case by case basis, and if deemed reasonable will be agreed as a concession. Approach the DPC (David Stevenson) and your PT with any such requests as early as possible.

Geophysics and Meteorology

You must do the field course (10 credits), Atmospheric Physics, Atmospheric Dynamics, and Physics of Climate (all 10 credits) and 40 credits of projects. You must also do two of the three courses (each 20 credits): 'Geophysical Investigation of Earth Resources', 'Natural Hazards and Risk' and 'Planetary Interiors'. These are documented in PATH: <https://path.is.ed.ac.uk/degrees/UTGEOME/4>

Compulsory:			
EASC10111	Geophysics International Field Course (10 credits)	S1	Hugh Pumphrey
METE10001	Atmospheric Dynamics (10 credits)	S2	Massimo Bolasina
METE10002	Atmospheric Physics (10 credits)	S1	David Stevenson
METE10003	Physics of Climate (10 credits)	S2	Simon Tett
Choose 40 credits of projects:			
EASC10065	Geophysics Project (40 credits)	Full year	Simon Tett
EASC10052	Geophysics Project 1 (20 credits)	S1	Simon Tett
EASC10053	Geophysics Project 2 (20 credits)	S2	Simon Tett
Choose two of these:			
EASC10116	Geophysical Investigation of Earth Resources (20 credits)	Full year	Anton Ziolkowski
EASC10117	Natural Hazards and Risk (20 credits)	Full Year	Ian Main
EASC10115	Planetary Interiors (20 credits)	Full Year	Kathy Whaler

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Geophysics and Geology

You must do the field course (10 credits), and 40 credits of Geophysics projects/Geology dissertation. You must do two of the four courses (each 20 credits): 'Geophysical Investigation of Earth Resources', 'Natural Hazards and Risk', 'Planetary Interiors' and 'Geophysical Imaging and Inversion'. The remaining 30 credits must be made up from the courses listed in the table below.

These are documented in PATH: <https://path.is.ed.ac.uk/degrees/UTGEOGEO/4>

Compulsory:			
EASC10111	Geophysics International Field Course (10 credits)	S1	Hugh Pumphrey
Choose 40 credits of Geophysics projects/Geology dissertation:			
EASC10065	Geophysics Project (40 credits)	Full year	Simon Tett
EASC10052	Geophysics Project 1 (20 credits)	S1	Simon Tett
EASC10053	Geophysics Project 2 (20 credits)	S2	Simon Tett
EASC10011	Geology Dissertation (40 credits)	S2	Florian Füsseis
Choose two of these:			
EASC10116	Geophysical Investigation of Earth Resources (20 credits)	Full year	Anton Ziolkowski
EASC10117	Natural Hazards and Risk (20 credits)	Full Year	Ian Main
EASC10115	Planetary Interiors (20 credits)	Full Year	Kathy Whaler
EASC10109	Geophysical Imaging and Inversion (20)	S2	Andrew Curtis
Choose 30 credits of these:			
EASC10089	Frontiers in Research (10 credits)	Full Year	Andrew Bell
EASC10121	Evolution of the Modern Earth and Cyprus Excursion for Geologists (20 credits)	Full Year	Alastair Robertson
EASC10106	Palaeontology and Sedimentology (20)	S1	Alastair Robertson
EASC10101	Applied Hydrogeology and Near Surface Geophysics (20)	S1	Chris McDermott
EASC10015	Hydrocarbon Reservoir Quality (10)	S2	Stuart Haszeldine
EASC10036	Geomagnetism (10 credits)	S2	TBC
EASC10107	Igneous, Metamorphic and Ore Processes (20)	S2	Kate Saunders

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Additional information

This section details any further information that may be helpful to you during the fourth (SH) year of your degree programme

Project talks

You will be required to give an assessed 15-minute presentation at the end of S2. The subject of your presentation should be one of your projects.

Useful links

The below links are for pages which give details of policies and guidance within and outside of the School of GeoSciences, including Special Circumstances, Assessments and Examination diets.

School of GeoSciences Teaching Organisation:

<http://www.ed.ac.uk/schools-departments/geosciences/teaching-organisation>

School of GeoSciences policies and forms:

<http://www.ed.ac.uk/schools-departments/geosciences/teaching-organisation/to-form-policy>

College of Science and Engineering:

<http://www.ed.ac.uk/schools-departments/science-engineering>

Academic Services:

<http://www.ed.ac.uk/schools-departments/academic-services>