

Durham University Faculty Handbook Online www.durham.ac.uk/faculty.handbook/

These programme regulations should be read in conjunction with the University's <u>core regulations for undergraduate programmes</u>, and the <u>marking and classification conventions for undergraduate programmes</u>.

BSc Natural Sciences (CFG0)

- 1. This programme is available at Durham City, in a full-time mode of study.
- 2. The BSc in Natural Sciences allows candidates to take modules from two or more subjects in a three year programme. The range of subjects is limited.
- 3. All module selections must be approved by the Deputy Head of Faculty (Natural Sciences) by his or her nominee and be compatible in the timetable.
- 4. Candidates studying for a BSc Natural Sciences degree must take modules to the value of at least 180 credits from the Faculty of Science over the three years of study. The subjects within the Faculty of Science are: Biology, Chemistry, Computer Science, Earth Sciences, Mathematics, Physics and Psychology.
- The degree certificate issued to successful candidates who have taken a BSc Natural Sciences degree shall list in alphabetical order all subjects in which they have taken at least 40 credits during Levels 2 and 3 of the degree programme.
- 6. Candidates may take no more than 40 credits delivered by Modern Language and Cultures (Languages) across Levels 1, 2 and 3.

Level 1 (Certificate)

- 7. Candidates take modules from at least two and no more than four subjects, to a maximum of 80 credits per subject.
- 8. Candidates may take no more than 20 credits each year of language modules delivered by Modern Language and Cultures (Languages).

Level 2 (Diploma)

- 9. Students take modules from at least two and no more than three subjects, to a maximum of 80 credits per subject.
- 10. In accordance with the core regulations, candidates are normally permitted to study Level 1 modules up to the value of 30 credits; however, an exemption to the core regulations has been granted by the PVC Education, permitting Natural Sciences candidates who started in 2012-2013 or earlier to undertake Level 1 modules up to the value of 40 credits which will be reviewed for candidates starting in 2013-14.
- 11. Candidates may take no more than 20 credits modules delivered by Modern Language and Cultures (Languages).

Level 3 (Degree)

- 12. Candidates take modules from at least two and no more than three subjects, to a maximum of 100 credits per subject.
- 13. In accordance with the core regulations, candidates are normally permitted to study Level 2 modules up to the value of 30 credits:
- 14. Candidates are required to take Capstone modules to the value of at least 20 credits and no more than 40 credits which must be approved by the Deputy Head of Faculty (Natural Sciences) or by his or her nominee.
- **15.** Candidates may take no more than 20 credits each year of language modules delivered by Modern Language and Cultures (Languages).

Joint Honours

16. Within the Natural Sciences programme certain combinations of modules are known as "Joint Honours degrees". Candidates who follow these combinations of modules will be awarded a specific title for their degree.

- 17. Candidates studying for a Joint Honours degree are exempt from the requirement requiring them to take modules to the value of at least 180 credits from the Faculty of Science over the three years of study.
- 18. Candidates who follow an approved Joint Honours degree will be awarded a BSc Honours in A and B within the Natural Sciences programme, where A and B are replaced by the approved subject titles.
- 19. In order to qualify for the degree BSc Honours in A and B within the Natural Sciences programme, candidates in Levels 2 and 3 must select modules from the same two subjects and the number of credits in either subject cannot exceed 80 in each of Levels 2 and 3.
- 20. The table below shows the Joint-Honours combinations that are currently available where a indicates that combining these two subjects is possible:

| | An | Ar | Bi | Bs | Ch | CS | ES | Ec | Gg | Ма | Ph | Ру | Ps |
|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| An | | | • | | | | | | | | | | • |
| Ar | | | | | | | • | | | | | | |
| Bi | • | | | | • | | • | | • | • | | • | • |
| Bs | | | | | | • | | | | | | | |
| Ch | | | • | | | | • | | | • | | • | |
| CS | | | | • | | | | | | • | | • | |
| ES | | • | • | | • | | | | • | • | | | |
| Ec | | | | | | | | | | • | | | • |
| Gg | | | • | | | | • | | | • | | | • |
| Ma | | | • | | • | • | • | • | • | | • | • | • |
| Ph | | | | | | | | | | • | | • | |
| Ру | | | • | | • | • | | | | • | • | | |
| Ps | • | | • | | | | | • | • | • | | | |

Table 1: Joint Honours Combinations available in the A and B degree

The abbreviations represent the subjects in the above list:

| An | Anthropology | Ec | Economics |
|----|------------------|----|-------------|
| Ar | Archaeology | Gg | Geography |
| Bi | Biology | Ma | Mathematics |
| Bs | Business | Ph | Philosophy |
| Ch | Chemistry | Ру | Physics |
| CS | Computer Science | Ps | Psychology |

taken, 20 credits may be at Level 2.

21. ES Earth Sciences Candidates studying for BSc Joint Honours degrees involving Anthropology are required to take the following modules:

| Level 1 | Human Origins and Diversity | ANTH1071 |
|---------|---|----------|
| | People and Cultures | ANTH1061 |
| Level 2 | All candidates are required to take at least: | |
| | Evolutionary Anthropology | ANTH2061 |
| | AND/ OR Human Ecology, Genetics and Health | ANTH2011 |
| Level 3 | All candidates can take up to eighty credits from the Level 3 | |
| | Anthropology modules. If 60 or more credits of Anthropology are | |

22. Candidates studying for BSc Joint Honours degrees involving Archaeology are required to take the following modules:

| Level 1 | Scientific Methods in Archaeology 1 | ARCH1041 |
|---------|--|----------|
| | Plus at least 20 credits from the following: | |
| | Discovering World Prehistory | ARCH1121 |
| | Ancient Civilisations of the East | ARCH1111 |
| | If modules to the value of 60 credits or more in Archaeology are | |
| | taken, the third 20 credit module must be ARCH1071 Introduction to | |
| | Archaeology. | |
| Level 2 | Scientific Methods in Archaeology 2 | ARCH2041 |
| | AND modules up to the value of 60 credits from the Level 2 | |
| | Archaeology modules available. If modules to the value of 60 | |
| | | |

credits or more are taken, one 20 credit module can be at Level 1, unless Level 1 modules to the value of 80 credits have been taken

Scientific Methods in Archaeology 3 Level 3 ARCH3051

AND modules up to the value of 60 credits from the Level 3 Archaeology modules available. If modules to the value of 60

credits or more are taken then Archaeology Dissertation (20 credits) ARCH3371

must be taken, unless a dissertation module is being taken in the

other subject

- 23. There are three Joint Honours routes through modules offered by the School of Biological and Biomedical Sciences: the Whole Organisms route, Biomedical and the Cell Biology route.
- 24. Candidates studying for BSc Joint Honours degrees in the Ecological/Whole Organisms route are required to take the following modules:

| Level 1 | Genetics | BIOL1171 |
|---------|--|-----------------|
| | Organisms and Environment | BIOL1161 |
| Level 2 | Evolution | BIOL2451 |
| | Ecology | BIOL2461 |
| | Candidates taking three Level 2 modules must also take: | |
| | Behaviour | BIOL2511 |
| Level 3 | If two modules are taken they must be picked from: | |
| | Behavioural and Evolutionary Biology | BIOL3561 |
| | Conservation Biology | BIOL3551 |
| | Global Change Biology | BIOL3541 |
| | If three or more modules are taken they must be picked from: | |
| | Behavioural and Evolutionary Biology | BIOL3561 |
| | Biology into Schools | BIOL3431 |
| | Conservation Biology | BIOL3551 |
| | Global Change Biology | BIOL3541 |
| | Literature Review | BIOL3451 |
| | If three modules are taken then BIOL3451 Literature Review and | |
| | | |

BIOL3431 Biology into Schools cannot be taken together

25. Candidates studying for BSc Joint Honours degrees in the Biomedical route are required to take the following modules:

| Level 1 | Physiology | BIOL1151 |
|---------|---|----------|
| | Molecules and Cells | BIOL1281 |
| Level 2 | Cell Structure and Function | BIOL2481 |
| | Human Physiology | BIOL2521 |
| | Modules to the value of no less that 20 credits taken from: | |
| | Immunology | BIOL2421 |
| Level 3 | Cell Architecture | BIOL3481 |
| | Modules to the value of no less that 20 credits taken from: | |
| | Ageing and Age-related Diseases | BIOL3591 |
| | Literature Review | BIOL3451 |
| | Stem Cells and Tissue Engineering | BIOL3531 |

26. Candidates studying for BSc Joint Honours degrees in the Cell Biology route are required to take the following modules:

| Level 1 | Genetics Molecules and Cells | BIOL1171 BIOL1281 |
|---------|---|----------------------|
| Level 2 | Candidates following a BSc Joint Honours degree with Chemistry: | <u> </u> |
| | Molecular Biology | BIOL2441 |
| | Biochemistry | BIOL2491 |
| | Cell Signalling | BIOL2501 |
| | Candidates following a BSc Joint Honours degree with Physics: | |
| | Molecular Biology | BIOL2441 |
| | Development | BIOL2471 |
| | Cell Structure and Function | BIOL2481 |
| Level 3 | Candidates following a BSc Joint Honours degree with Chemistry: | BIOL2441 |
| | Molecular Biology | |
| | Stress and Responses to the Environment | BIOL3491 |
| | And either Biotechnology | BIOL 3511 |

| | | Or Literature Review Other candidates taking two Level 3 modules: Ageing Cell Architecture Other candidates taking three or more Level 3 modules should pick from: Ageing Biology into Schools Cell Architecture | BIOL3451 BIOL3501 BIOL3501 BIOL3431 BIOL3481 |
|---------|-------------------------|--|--|
| | | Genes and Development Literature Review Stress and Responses to the Environment Stem Cells and Tissue Engineering If three modules are taken then BIOL3451 Literature Review and BIOL3431 Biology into Schools cannot be taken together | BIOL3521 BIOL3451 BIOL3491 BIOL3531 |
| | ndidates dules: | s studying for BSc Joint Honours degrees involving Business are required | to take the following |
| Lev | vel 1 vel 2 vel 3 | People, Management and Organisations Elements of Economics Modules taken from the Level 2 Business Modules taken from the Level 3 Business | BUSI1141 ECON1011 |
| | ndidates dules: | s studying for BSc Joint Honours degrees involving Chemistry are required | I to take the following |
| Lev | vel 1 | Core Chemistry 1A Practical Chemistry 1A | CHEM1078 CHEM1087 |
| | vel 2 | Core Chemistry 2 Candidates taking 60 credits or more at Level 2 must take at least one of the following modules: Chemistry of the Elements Structure and Reactivity in Organic Chemistry Properties of Molecules Core Chemistry 3 | CHEM2012 CHEM2021 CHEM2031 CHEM2041 CHEM3012 |
| 29. Car | | s studying for BSc Joint Honours degrees involving Computer Science are | |
| Lev | vel 1 | Introduction to Programming Computer Systems | COMP1011 COMP1071 |
| | vel 2 vel 3 | Modules selected from Level 2 Computer Science. Modules selected from Level 2 and Level 3 Computer Science. | <u> </u> |
| | | s studying for BSc Joint Honours degrees involving Earth Sciences are recondules: | juired to take the |
| Lev | vel 1 | Principles of Earth Sciences Earth Materials To obtain accreditation the following modules must be taken at either Level 1 or Level 2: | GEOL1091 GEOL1021 |
| Lev | vel 2 | Field Studies Modules selected from the Level 1 and Level 2 Earth Sciences modules available. To obtain accreditation modules to the value of 60 credits or more must be taken and must include (the latter module may be taken at level 1): Fieldwork (Geological) Environment and Resources (if not already taken) | GEOL2191 GEOL1111 |
| Lev | vel 3 | Modules selected from the Level 3 modules available. If modules to the value of 60 credits or more are taken, one 20 credit module can be at Level 2. To obtain accreditation modules to the value of 80 credits or more | |

must be taken and must include:

Dissertation **GEOL3022**

31. Candidates studying for BSc Joint Honours degrees involving Economics are required to take the following modules:

| Level 1 | Elements of Economics Economic Methods | ECON1011 ECON1021 |
|---------|---|----------------------|
| | If any Level 1 Maths modules are taken the following module should be taken in place of ECON1021: | |
| | The World Economy | ECON1071 |
| Level 2 | Economic Principles I: Macroeconomics | ECON2011 |
| | Economic Principles II: Microeconomics | ECON2021 |
| Level 3 | Modules selected from the Level 3 Economics modules available. If | |

modules to the value of 60 credits are take, one 20 credit module can

be at Level 2

32. Candidates studying for BSc Joint Honours degrees involving Geography are required to take the following modules:

| Level 1 | Introduction to Geographical Research (BSc) OR Introduction to Geographical Research (BA) | GEOG1232 GEOG1222 |
|---------|--|----------------------|
| Level 2 | Scientific Research in Geography OR Social Research in Geography | GEOG2462 GEOG2472 |
| | Candidates who take GEOG2462 must select between 20 and 40 credits from the following: | |

| Environmental Processes and Management | GEOG2551 |
|--|----------|
| Fluvial Systems | GEOG2521 |
| GIS and Remote Sensing | GEOG2591 |
| Glaciers and Glaciation | GEOG2531 |
| Global Climate Change | GEOG2571 |
| Mountain Landscapes | GEOG2611 |
| Reconstructing Environmental Change | GEOG2601 |
| Geochemistry of the Environment | GEOG2651 |

Candidates who take GEOG2472 must select between 20 and 40 credits from the following:

| Development, Society and the Environment | GEOG2541 |
|---|-----------------|
| Environmental Processes and Management | GEOG2551 |
| GIS and Remote Sensing | GEOG2591 |
| Political Geography | GEOG2581 |
| Social and Cultural Geography | GEOG2561 |
| Urban Geography | GEOG2511 |
| Theory and Concepts in Contemporary Human Geography | GEOG2621 |
| Economic Geography | GEOG2641 |

Candidates who took GEOG2462 in Year 2 must select modules Level 3 from the following:

| Dissertation (40 credits) in Geography B | GEOG3432 |
|---|-----------------|
| Environmental Processes of Change: Field Case Studies (Switzerland) | GEOG3491 |
| Environmental Remote Sensing | GEOG3261 |
| Hazard and Risk | GEOG3621 |
| River Dynamics | GEOG3461 |
| Sea-Level Change and Coastal Erosion | GEOG3191 |
| Specialised Aspects of Physical Geography | GEOG3431 |
| The Quaternary of Glaciated Regions | GEOG3511 |
| Field Research in Glacial Environments: Iceland Case Study | GEOG3691 |
| Mountain Hazards | GEOG3701 |
| Dynamic Mountain Environments | GEOG3731 |
| Oceans Past and Present | GEOG3641 |

Candidates who took GEOG2472 in Year 2 must select from the

| I CHI | owing: | |
|-------|--------|--|
| | | |

| GEOG3232 |
|-----------------|
| GEOG3261 |
| GEOG3631 |
| GEOG3741 |
| GEOG3621 |
| GEOG3661 |
| GEOG3431 |
| GEOG3581 |
| GEOG3501 |
| <u>GEOG3721</u> |
| <u>GEOG3671</u> |
| <u>GEOG3481</u> |
| |

33. Candidates studying for BSc Joint Honours degrees involving Mathematics are required to take the following modules:

| Level 1 | Linear Algebra I | <u>MATH1071</u> |
|---------|----------------------------|-----------------|
| | Calculus and Probability I | <u>MATH1061</u> |
| | Analysis I | <u>MATH1051</u> |

Level 2 For a Joint Honours degree not involving Physics, any modules

selected from the Level 2 Mathematics modules available

For a Joint Honours Degree with Physics, three 20 credit modules must be taken and must include:

Analysis in Many Variables II

Complex Analysis II

MATH2031

MATH2011

Level 3 Modules selected from the Level 3 modules available. If modules to the value of 60 credits or more are taken, one 20 credit module can be at Level 2.

- 34. Candidates studying for BSc Joint Honours degrees involving Philosophy are required to take the following modules:
 - **Level 1** Two 20 credits modules selected from the Level 1 Philosophy modules available
 - **Level 2** Modules selected from the Level 2 Philosophy modules available
 - **Level 3** Modules selected from the Level 3 Philosophy modules available. If modules to the value of 60 credits or more are taken, one 20 credit module can be at Level 2.
- 35. Candidates studying for BSc Joint Honours degrees involving Physics are required to take the following modules:

| Level 1 | Foundations of Physics 1 | PHYS1122 |
|---------|---------------------------------------|----------|
| | (Linear Algebra I AND | MATH1071 |
| | Calculus and Probability I) OR | MATH1061 |
| | (Single Mathematics A AND | MATH1561 |
| | Single Mathematics B) | MATH1571 |
| | | |

Level 2 For a Joint Honours degree not involving Mathematics, the following modules must be taken:

Foundations of Physics 2A

Mathematical Methods in Physics

Discovery Skills in Physics (if not taken previously)

PHYS1101

For a Joint Honours degree with Mathematics, the following modules must be taken:

Foundations of Physics 2A
Theoretical Physics 2
AND (Discovery Skills in Physics (if not taken previously) OR
Foundations of Physics 2B (must be taken at Level 2 or Level 3))
PHYS2591

Level 3 For a Joint Honours degree not involving Mathematics, the following modules must be taken:

Foundations of Physics 3A PHYS3621
Foundations of Physics 2B PHYS2591

| Laboratory Skills and Electronics 3 | PHYS3681 |
|--|----------|
| For a Joint Honours degree with Mathematics, the following | |
| modules must be taken: | |
| Foundations of Physics 3A | PHYS3621 |
| Theoretical Physics 3 | PHYS3661 |
| AND (Foundations of Physics 3C (if Foundations of Physics 2B was | PHYS3671 |
| not taken previously) OR | |
| Modules selected from the Level 2 or 3 Physics modules available | |

36. Candidates studying for BSc Joint Honours degrees involving Psychology are required to take the following modules:

| Level 1 | Introduction to Psychological Research AND (Introduction to Psychology I: Cognitive and Biological Psychology OR | PSYC1062 PSYC1071 |
|---------|--|----------------------|
| | Introduction to Psychology II: Developmental, Social and Abnormal | PSYC1081 |
| | Psychology) | |
| Level 2 | Topics in Cognitive Psychology | PSYC2081 |
| | Biological Psychology and Perception | PSYC2111 |
| | Social and Developmental Psychology | PSYC2021 |
| Level 3 | Psychology Project and Statistics ~ | PSYC3041 |
| | Individual Differences and Abnormal Psychology (if not taken previously) | PSYC2071 |
| | Modules to the value of 20-40 credits from the Level 3 Psychology modules available | |

Assessment, progression and award

37. Modules marker with a ~ must be passed at 40% or above or above for the award of an honours degree. A mark of 30-39% cannot be compensated.

Professional accreditation

- 38. The specified Joint-Honours approved pathway through Geological Sciences within Natural Sciences has been accredited by the Geological Society for six years with effect from March 2010.
- 39. The specified Joint-Honours approved pathways through Psychology within Natural Sciences have been accredited from the 2008-09 intake to the 2012-13 intake as conferring eligibility for the Graduate Basis for Chartered Membership of the British Psychological Society. Candidates entering in and after October 2006 need to achieve a minimum of a second class honours degree to gain eligibility.

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