

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), BSc Natural Sciences with Year Abroad (CFG1)

- 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 for candidates entering in October 2016 to those shown in the table under paragraph 23, Sport, Education and modules with an MLAN code which are delivered by the University's Centre for Foreign Language Study.
- 3. All module selections must be approved by the Deputy Head of Faculty (Natural Sciences) or by their nominee and be compatible in the timetable.
- 4. 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.
- 5. Candidates entering on or after October 2015 may take no more than 20 credits delivered by the University's Centre for Foreign Language Study in Levels 1 and 2. For candidates entering on or before October 2014 may take no more than 40 credits delivered by the University's Centre for Foreign Language Study across Levels 1, 2 and 3.

Level 1 (Certificate)

- 6. Candidates take modules: from at least two subjects; from not more than four subjects; to a maximum of 80 credits per subject.
- 7. Candidates may take no more than 20 credits of appropriate credit-bearing language modules offered by the University's Centre for Foreign Language Study.
- 8. Candidates must take at least 60 credits from the Faculty of Science.

Level 2 (Diploma)

- 9. Candidates take modules: from at least two subjects; from not more than three subjects; with at least 40 credits each in at least two 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.
- 11. Candidates may take no more than 20 credits of appropriate credit-bearing language modules offered by the University's Centre for Foreign Language Study.
- 12. Candidates studying for a BSc Natural Sciences degree must take modules to the value of at least 120 credits from the Faculty of Science across Levels 2 and 3. The subjects within the Faculty of Science are: Biology, Chemistry, Computer Science, Earth Sciences, Mathematics, Physics and Psychology.
- 13. Candidates entering in October 2015 who wish to take modules from outside the Joint-Honours combinations, shown in the table under Regulation 23, must take a minimum of 40 credits.

Level 3 (Degree)

- 14. Candidates take modules: from at least two subjects; from not more than three subjects; to a maximum of 100 credits per subject.
- 15. In accordance with the core regulations, candidates are normally permitted to study Level 2 modules up to the value of 30 credits;
- 16. Candidates are required to take Capstone modules to the value of at least 20 credits and no more than 60 credits from at most two Departments/Schools which must be approved by the Deputy Head of Faculty (Natural Sciences) or by their nominee.
- 17. Candidates may take no more than 20 credits each year of appropriate credit-bearing language modules offered by the University's Centre for Foreign Language Study which follows on from previously completed

- credit-bearing language modules at an earlier level of study.
- 18. Candidates studying for a BSc Natural Sciences degree must take modules to the value of at least 120 credits from the Faculty of Science across Levels 2 and 3. The subjects within the Faculty of Science are: Biology, Chemistry, Computer Science, Earth Sciences, Mathematics, Physics and Psychology.
- 19. Candidates entering in October 2015 who wish to take modules from outside the Joint-Honours combinations, shown in the table under Regulation 23, must take a minimum of 40 credits.

Joint Honours

- 20. 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.
- 21. 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.
- 22. Candidates studying for a Joint Honours degree are bound by the regulations above except 12. and 18. that relate to the number of credits of Science being taken in any given Level. 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.
- 23. 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	Ma	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
FS	Farth Sciences		

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

			Credit value
Level 1	Human Evolution and Diversity	ANTH1091	20
	People and Cultures	ANTH1061	20
Level 2	Methods and Analysis	ANTH2031	20
	Plus at least 20 credits from the following:		20

	Evolutionary, Variation and Adaptation	ANTH2061	20
	Human Ecology, Genomics and Health	ANTH2011	20
Level 3	If 60 or more credits are taken, 20 credits may be at Level 2.		

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

			Credit value
Level 1	Scientific Methods in Archaeology 1	ARCH1041	20
	Plus at least 20 credits from the following:		
	Discovering World Prehistory	ARCH1121	20
	Ancient Civilisations of the East	ARCH1111	20
	ARCH1071 Introduction to Archaeology.		
Level 2	Scientific Methods in Archaeology 2	ARCH2041	20
	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		
Level 3	Scientific Methods in Archaeology 3	ARCH3051	20
	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	20
	must be taken, unless a dissertation module is being taken in the other subject		

- 26. There are four Joint Honours routes through modules offered by the School of Biological and Biomedical Sciences: the Ecological route, Biology and Mathematics, Biology and Psychology route and the Cell Biology route.
- 27. Candidates studying for BSc Joint Honours degrees in the Ecological route are required to take the following modules:

			Credit value
Level 1	Genetics	BIOL1171	20
	Organisms and Environment	BIOL1161	20
Level 2	Evolution	BIOL2451	20
	Ecology	BIOL2461	20
	Behaviour	BIOL2451	20
Level 3	40 credits taken from the list:		
	Conservation Biology	BIOL3551	20
	Global Change Biology	BIOL3541	20
	Behaviourial and Evoluntionary Ecology	BIOL3561	20

28. Candidates studying for BSc Joint Honours degrees in the Biology and Mathematics route are required to take the following modules:

			Credit value
Level 1	Genetics	BIOL1171	20
	Organisms and Environment	BIOL1161	20
Level 2	Evolution	BIOL2451	20
	Ecology	BIOL2461	20
	Molecular Biology	BIOL2441	20
Level 3	Conservation Biology	BIOL3551	20
	Global Change Biology	BIOL3541	20
	Evolution Ecology Molecular Biology Conservation Biology	BIOL2451 BIOL2461 BIOL2441 BIOL3551	20 20 20 20 20

29. Candidates studying for BSc Joint Honours degrees in the Biology and Psychology route are required to take the following modules:

			Credit value
Level 1	Physiology	<u>BIOL1151</u>	20

	Level 2	Genetics Molecular Biology	BIOL1171 BIOL2441	20 20
		Development	BIOL2471	20
	Level 3	Human Physiology	BIOL2521 BIOL3521	20 20
	Level 3	Genes and Development Ageing and Age-related Diseases	BIOL3521	20
30.	Candidates modules:	s studying for BSc Joint Honours degrees in the Cell Biology route are requ	uired to take the	e following
				Credit value
	Level 1	Genetics Molecules and Cells	BIOL1171 BIOL1281	20 20
	Level 2	Candidates following a BSc Joint Honours degree with Chemistry:		
		Molecular Biology	BIOL2441	20
		Biochemistry	BIOL2491	20
		Cell Signalling	BIOL2501	20
		Candidates following a BSc Joint Honours degree with Physics:		
		Molecular Biology	BIOL2441	20
		Development	BIOL2471	20
		Cell Structure and Function	BIOL2481	20
	Level 3	Candidates following a BSc Joint Honours degree with Chemistry:		
		Biochemistry and Biotechnology	BIOL3601	20
		Stress and Responses to the Environment	BIOL3491	20
		And either Crops for the Future	BIOL3611	20
		Or Literature Review	BIOL3451	20
		Or Cell Architecture	BIOL3481	20
		Candidates following a BSc Joint Honours degree with Physics:	51010404	00
		Cell Architecture	BIOL3481	20
		Genes and Development And either Stem Cells and Tissue Engineering	BIOL3521 BIOL3531	20 20
		Or Literature Review	BIOL3451	20
		Or Stress and Responses to the Environment	BIOL3491	20
		Or Biochemistry and Biotechnology	BIOL3601	20
31.	Candidates modules:	s studying for BSc Joint Honours degrees involving Business are required	to take the follo	wing
				Credit value
	Level 1	People, Management and Organisations	BUSI1141	20
		Elements of Economics	ECON1011	20
	Level 2 Level 3	Modules taken from the Level 2 Business Modules taken from the Level 3 Business		
32.	Candidates modules:	s studying for BSc Joint Honours degrees involving Chemistry are required	to take the foll	owing
				Credit value
	Level 1	Core Chemistry 1A	CHEM1078	30
		Practical Chemistry 1A	CHEM1087	10
	Level 2	Core Chemistry 2	CHEM2012	40
		Candidates taking 60 credits or more at Level 2 must take at least		

20 credits of the following modules:

[Chemistry of the Elements AND
Practical Chemistry 2 – Inorganic]
[Structure and Reactivity in Organic Chemistry AND
Practical Chemistry 2 – Organic]

10 10

10

10

CHEM2077 CHEM2107

CHEM2087

CHEM2117

	[Properties of Molecules AND	CHEM2097	10
	Practical Chemistry 2 – Physical]	CHEM2127	10
Level 3	Core Chemistry 3	CHEM3012	40

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

			Credit value
Level 1	Computer Systems	COMP1071	20
	Plus at least 20 credits from the following:		
	Introduction to Programming	COMP1011	20
	Computational Thinking	COMP1051	20
Level 2	Software Engineering	COMP2191	20
	And at least 20 credits and no more than 60 credits from Level 2		
	Computer Science.		
Level 3	Modules selected from Level 2 and Level 3 Computer Science.		

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

			Credit value
Level 1	Principles of Earth Sciences At least one 20 credit module from:	<u>GEOL1091</u>	20
	Understanding Earth Sciences	GEOL1101	20
	Environment and Resources	<u>GEOL1111</u>	20
	To obtain accreditation the following modules must be taken at either Level 1 or Level 2:		
	Field Studies	GEOL1051	20
Level 2	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)	GEOL2191	20
	Environment and Resources (if not already taken)	GEOL1111	20
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.		
	To obtain accreditation modules to the value of 80 credits or more		
	must be taken and must include:		
	Dissertation	GEOL3022	40

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

			Credit value
Level 1	Elements of Economics	ECON1011	20
	Economic Methods	ECON1021	20
	ECON1021:		
	The World Economy		
	•	ECON1071	20
Level 2	Economic Principles I: Macroeconomics	ECON2011	20
	Economic Principles II: Microeconomics	ECON2021	20
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		

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

Credit value

Level 1	Introduction to Geographical Research (BSc) OR Introduction to Geographical Research (BA) Scientific Research in Geography OR Social Research in Geography	GEOG1232 GEOG1222 GEOG2462 GEOG2472	40 40 40 40
	GEOG2462 must select between 20 and 40 credits from following: Environmental Processes and Governance Fluvial Systems Glaciers and Glaciation Global Environmental Change Mountain Landscapes Climate Change: Gegraphical Perspectives Geochemistry of the Environment Handling Spatial Data	GEOG2551 GEOG2521 GEOG2531 GEOG2571 GEOG2611 GEOG2661 GEOG2651 GEOG2591	20 20 20 20 20 20 20 20 20
	GEOG2472 must select between 20 and 40 credits from following: Climate Change: Gegraphical Perspectives Geographies of Development Environmental Processes and Governance Political Geography Social and Cultural Geography Urban Geography Theory and Concepts in Contemporary Human Geography Economic Geography	GEOG2661 GEOG2541 GEOG2551 GEOG2581 GEOG2561 GEOG2511 GEOG2621 GEOG2641	20 20 20 20 20 20 20 20 20
Level 3	GEOG2462 in Year 2 must select no less than 40 credits from following: Dissertation Environmental Processes of Change: Field Case Studies Environmental Remote Sensing Field Research in Glacial Environments: Iceland Case Study Natural Hazards in a Vulnerable World Mountain Hazards * Oceans Past and Present River Dynamics Sea-Level Change and Coastal Erosion The Arctic The Quaternary of Glaciated Regions Antarctic Environments Geochemical Applications: Across Continents and Oceans Integrated Catchment Modelling for Catchment Management Landslides Martian Landscapes Peatland Geomorphology WaterWorlds and Well-Being	GEOG3432 GEOG3491 GEOG3261 GEOG3691 GEOG3621 GEOG3621 GEOG3701 GEOG3641 GEOG3461 GEOG3521 GEOG3521 GEOG3511 GEOG3817 GEOG3827 GEOG3807 GEOG3897 GEOG3897 GEOG3947 GEOG3947	40 20 20 20 20 20 20 20 20 10 10 10 10
	GEOG2472 in Year 2 must select no less than 40 credits from following: Dissertation Geographies of Difference and Identity Geographies of Energy Transition: Cape Town Natural Hazards in a Vulnerable World People, Participation and Place Philosophy and Geography Politics/ Space: Drawing Lines, Writing the World Territory and Geopolitics The Arctic Urban Change in Europe Cities and the Governing of Climate Change Everyday Economies	GEOG3232 GEOG3931 GEOG3971 GEOG3621 GEOG3671 GEOG3661 GEOG3581 GEOG3521 GEOG3501 GEOG3887 GEOG3777	40 20 20 20 20 20 20 20 20 20 10

Geographies of Contemporary Unfree Labour	GEOG3787	10
Geographies of Everyday Life	GEOG3367	10
Geographies of Memory: Power, Place, Identities	GEOG3857	10
Geographies of Money and Finance	GEOG3957	10
Postcolonialism and Development	GEOG3877	10
Spaces of Health and Well-Being	GEOG3867	10
Urban Governance	GEOG3967	10
WaterWorlds and Well-Being	GEOG3177	10

^{*} GEOG3701 will not be available in the 2015/16 academic year.

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

			Credit value
Level 1	Linear Algebra I	MATH1071	20
	Calculus and Probability I	MATH1061	20
	Analysis I	MATH1051	20
Level 2	For a Joint Honours degree at least 60 credits of Level 2 Mathematics.		
	For a Joint Honours Degree with Physics the following 40 credits		
	must be taken:		
	Analysis in Many Variables II	MATH2031	20
	Complex Analysis II	MATH2011	20
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.		

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

			Credit value
Level 1	Knowledge and Reality	PHIL1021	20
	Introduction to the History and Philosophy of Science	PHIL1081	20
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.		

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

			Credit value
Level 1	Foundations of Physics 1	PHYS1122	40
	(Linear Algebra I AND	MATH1071	20
	Calculus and Probability I) OR	MATH1061	20
	(Single Mathematics A AND	MATH1561	20
	Single Mathematics B)	MATH1571	
Level 2	For a Joint Honours degree not involving Mathematics, the		
	following modules must be taken:		
	Foundations of Physics 2A	PHYS2581	20
	Mathematical Methods in Physics	PHYS2611	20
	Discovery Skills in Physics (if not taken previously)	PHYS1101	20
	For a Joint Honours degree with Mathematics, the following		
	modules must be taken:		
	Foundations of Physics 2A	PHYS2581	20
	Theoretical Physics 2	PHYS2631	20
	AND (Discovery Skills in Physics (if not taken previously) OR	PHYS1101	20
	Foundations of Physics 2B (must be taken at Level 2 or Level 3))	PHYS2591	20

Level 3	For a Joint Honours degree not involving Mathematics, the following modules must be taken:		
	Foundations of Physics 3A	PHYS3621	20
	Foundations of Physics 2B	PHYS2591	20
	Laboratory Skills and Electronics 3	PHYS3681	20
	For a Joint Honours degree with Mathematics, the following modules must be taken:		
	Foundations of Physics 3A	PHYS3621	20
	Theoretical Physics 3	PHYS3661	20
	AND (Foundations of Physics 3C (if Foundations of Physics 2B was not taken previously) OR	PHYS3671	20
	Modules selected from the Level 2 or 3 Physics modules available		

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

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

Assessment, progression and award

41. 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

- 42. 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.
- 43. The specified Joint-Honours approved pathways through Psychology within Natural Sciences have been accredited from the 2012-13 intake on an ongoing basis 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.

Year Abroad

- 44. Students admitted to the BSc Natural Sciences (CFG0) are able to apply to transfer to the BSc Natural Sciences (with Year Abroad) programme (CFG1). Students undertaking the BSc Natural Sciences (with Year Abroad) programme (CFG1) will undertake an approved exchange in an overseas university taking a course of study chosen in consultation with the programme director and the host institution.
- 45. Candidates wishing to transfer to the BSc Natural Sciences (with Year Abroad) (CFG1) must:
 - have successfully completed Level 1 of the BSc Natural Sciences (CFG1) and progressed to Level 2 of the honours or Ordinary programme, and;
 - b. during the first term of Level 2 study, apply to the Deputy Head of Faculty (Natural Sciences) to be admitted to the BSc Natural Sciences (with Year Abroad) (CFG1) and have their application approved by the Director of the Natural Sciences; and
 - c. secure an exchange opportunity with an approved international partner institution of the University; and
 - d. successfully complete Level 2 of the BSc Natural Sciences (CFG0) so as to be eligible to progress to Level 3 of the BSc Natural Sciences (CFG0) Honours programme.

46.	Students who the Board of Examiners for Natural Sciences deem to have made satisfactory progress on the year abroad will continue to Level 3 of the BSc Natural Sciences (with Year Abroad) (CFG1). Students who have not made satisfactory progress on the year abroad will not be permitted to continue on the BSc Natural Sciences (with Year Abroad) (CFG1) programme, but must instead proceed to Level 3 of the BSc Natural Sciences (CFG0) programme.