

These programme regulations should be read in conjunction with the University's <u>core regulations for</u> <u>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.
- 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 <u>Centre for Foreign Language Study</u>.
- 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 <u>Centre for Foreign Language Study</u>.
- 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 <u>Centre for Foreign Language Study</u> 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	Ма	Ph	Ру	Ps
An			•										•
Ar							•						
Bi	•				•		•		•	•		•	•
Bs						•							
Ch			•				•			•		•	
CS				•						•		•	
ES		•	•		•				•	•			
Ec										•			•
Gg			•				•			•			•
Ма			•		•	•	•	•	•		•	•	•
Ph										•		•	
Ру			•		•	•				•	•		
Ps	•		•			1	1	٠	•	•	1		

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	Py	Physics
CS	Computer Science	Ps	Psychology
ES	Earth 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	<u>ANTH1091</u>	20
	People and Cultures	<u>ANTH1061</u>	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	<u>ANTH2011</u>	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	<u>ARCH1121</u>	20
	Ancient Civilisations of the East	<u>ARCH1111</u>	20
	ARCH1071 Introduction to Archaeology.		
Level 2	Scientific Methods in Archaeology 2	<u>ARCH2041</u>	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	<u>ARCH3051</u>	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)	<u>ARCH3371</u>	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	<u>BIOL1171</u>	20
	Organisms and Environment	<u>BIOL1161</u>	20
Level 2	Evolution	BIOL2451	20
	Ecology	<u>BIOL2461</u>	20
	Molecular Biology	<u>BIOL2441</u>	20
Level 3	Conservation Biology	<u>BIOL3551</u>	20
	Global Change Biology	<u>BIOL3541</u>	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

	Genetics	BIOL1171	20
Level 2	Molecular Biology	<u>BIOL2441</u>	20
	Development	BIOL2471	20
	Human Physiology	BIOL2521	20
Level 3	Genes and Development	BIOL3521	20
	Ageing and Age-related Diseases	BIOL3591	20

30. 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	<u>BIOL1171</u> <u>BIOL1281</u>	Credit value 20 20
Level 2	Candidates following a BSc Joint Honours degree with Chemistry: Molecular Biology Biochemistry Cell Signalling	<u>BIOL2441</u> <u>BIOL2491</u> <u>BIOL2501</u>	20 20 20
	Candidates following a BSc Joint Honours degree with Physics: Molecular Biology Development Cell Structure and Function	BIOL2441 BIOL2471 BIOL2481	20 20 20
Level 3	Candidates following a BSc Joint Honours degree with Chemistry: Biochemistry and Biotechnology Stress and Responses to the Environment And either Crops for the Future Or Literature Review Or Cell Architecture	BIOL3601 BIOL3491 BIOL3611 BIOL3451 BIOL3481	20 20 20 20 20
	Candidates following a BSc Joint Honours degree with Physics: Cell Architecture Genes and Development And either Stem Cells and Tissue Engineering Or Literature Review Or Stress and Responses to the Environment Or Biochemistry and Biotechnology	BIOL3481 BIOL3521 BIOL3531 BIOL3451 BIOL3491 BIOL3601	20 20 20 20 20 20 20

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

			Credit value
Level 1	People, Management and Organisations	<u>BUSI1141</u>	20
	Elements of Economics	ECON1011	20
Level 2	Modules taken from the Level 2 Business		

- **Level 3** Modules taken from the Level 3 Business
- 32. Candidates studying for BSc Joint Honours degrees involving Chemistry are required to take the following modules:

Level 1	Core Chemistry 1A Practical Chemistry 1A	<u>CHEM1078</u> CHEM1087	Credit value 30 10
Level 2	Core Chemistry 2 Candidates taking 60 credits or more at Level 2 must take at least 20 credits of the following modules:	<u>CHEM2012</u>	40
	[Chemistry of the Elements AND	CHEM2077	10
	Practical Chemistry 2 – Inorganic]	CHEM2107	10
	[Structure and Reactivity in Organic Chemistry AND	<u>CHEM2087</u>	10
	Practical Chemistry 2 – Organic]	<u>CHEM2117</u>	10

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

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

	Level 1	Computer Systems	<u>COMP1071</u>	Credit value 20
	Level 2	Plus at least 20 credits from the following: Introduction to Programming Computational Thinking Software Engineering And at least 20 credits and no more than 60 credits from Level 2 Computer Science.	COMP1011 COMP1051 COMP2191	20 20 20
	Level 3	Modules selected from Level 2 and Level 3 Computer Science.		
34	 Candidates following m 	s studying for BSc Joint Honours degrees involving Earth Sciences are rec nodules:	quired to take th	e
				Credit value
	Level 1	Principles of Earth Sciences At least one 20 credit module from:	<u>GEOL1091</u>	20
		Understanding Earth Sciences	<u>GEOL1101</u>	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	. Candidate: modules:	s studying for BSc Joint Honours degrees involving Economics are require	ed to take the fo	llowing
				Credit value
	Level 1	Elements of Economics	ECON1011	20
		Economic Methods	ECON1021	20
		<u>ECON1021</u> :		
		The World Economy		20
	Level 2	Economic Principles I: Macroeconomics	ECON1071 ECON2011	20 20
		Economic Principles II: Microeconomics	ECON2011 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 Level 2	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 the 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 the 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 the 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	<u>GEOG3432</u> <u>GEOG3491</u> <u>GEOG3261</u> <u>GEOG3621</u> <u>GEOG3621</u> <u>GEOG3641</u> <u>GEOG3461</u> <u>GEOG3191</u> <u>GEOG3521</u> <u>GEOG3521</u> <u>GEOG3817</u> <u>GEOG3887</u> <u>GEOG3897</u> <u>GEOG3947</u> <u>GEOG3177</u>	40 20 20 20 20 20 20 20 20 20 20 20 10 10 10 10 10
	GEOG2472 in Year 2 must select no less than 40 credits from the 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 20 10 10

Geographies of Contemporary Unfree Labour Geographies of Everyday Life Geographies of Memory: Power, Place, Identities Geographies of Money and Finance Postcolonialism and Development Spaces of Health and Well-Being Urban Governance WaterWorlds and Well-Being	<u>GEOG3787</u> <u>GEOG3367</u> <u>GEOG3857</u> <u>GEOG3957</u> <u>GEOG3867</u> <u>GEOG3967</u> <u>GEOG3177</u>	10 10 10 10 10 10 10
WaterWorlds and Well-Being	<u>GEOG3177</u>	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	<u>MATH1071</u>	20
	Calculus and Probability I	<u>MATH1061</u>	20
	Analysis I	<u>MATH1051</u>	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		
	medulae to the velve of CO anadite on more taken and CO anadit		

- 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)	<u>MATH1571</u>	
Level 2	For a Joint Honours degree not involving Mathematics, the		
	following modules must be taken:		
	Foundations of Physics 2A	<u>PHYS2581</u>	20
	Mathematical Methods in Physics	<u>PHYS2611</u>	20
	Discovery Skills in Physics (if not taken previously)	<u>PHYS1101</u>	20
	For a Joint Honours degree with Mathematics, the following		
	modules must be taken:		
	Foundations of Physics 2A	<u>PHYS2581</u>	20
	Theoretical Physics 2	PHYS2631	20
	AND (Discovery Skills in Physics (if not taken previously) OR	<u>PHYS1101</u>	20
	Foundations of Physics 2B (must be taken at Level 2 or Level 3))	<u>PHYS2591</u>	20

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

			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:
 - a. 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.

Credit

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.