

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), BSc Natural Sciences with Placement (CFG2)

- 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 to those shown in the table under paragraph 20, Sport, languages offered by the University's Centre for Foreign Language Study and Education which excludes any History of Art module and Harry Potter and the Age of Illusion (EDUC2381).
- 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.

## Level 1 (Certificate)

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

## Level 2 (Diploma)

- 7. 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.
- 8. In accordance with the core regulations, candidates are normally permitted to study Level 1 modules up to the value of 30 credits.
- 9. Candidates may take no more than 20 credits of language modules offered by the University's Centre for Foreign Language Study.
- 10. 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.
- 11. Candidates who take 60 credits of Level 2 Earth Sciences are required to take additional tutorials as determined by the Department of Earth Sciences.

### Level 3 (Degree)

- 12. Candidates take modules: from at least two subjects; from not 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 60 credits from at most two Departments/Schools that must be approved by the Deputy Head of Faculty (Natural Sciences) or by their nominee.
- 15. Candidates are **unable** to take any Centre for Foreign Language Study modules at Level 3.
- 16. 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.

# Joint Honours

- 17. 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.
- 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. Candidates studying for a Joint Honours degree are bound by the paragraphs above except 10. and 16. 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.
- 20. The table below shows the Joint-Honours combinations that are currently available where a indicates that combining these two subjects is possible:

	An	Bi	Bs	Ch	CS	ES	Ec	Gg	Ма	Ph	Ру	Ps
An		•										•
Bi	•			•		•		•	•		•	•
Bs					•							
Ch		•				•			•		•	
CS			•						•		•	
ES		•		•				•	•			
Ec									•			•
Gg		•				•			•			•
Ма		•		•	•	•	•	•		•	•	•
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
Bi	Biology	Gg	Geography
Bs	Business	Ma	Mathematics
Ch	Chemistry	Ph	Philosophy
CS	Computer Science	Ру	Physics
ES	Earth Sciences	Ps	Psychology

21. 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
	If 60 credits are taken then		
	Doing Anthropological Research	<u>ANTH1101</u>	20
Level 2	At least 40 credits of Level 2 Anthropology to include at		
	least one of:		
	Evolutionary, Variation and Adaptation	<u>ANTH2061</u>	20
	Our Place in Nature	<u>ANTH2071</u>	20
	ANTH1101) was not taken at Level 1, then the following		
	module must be taken		
	Doing Anthropological Research	<u>ANTH1101</u>	20
Level 3	At least 40 credits of Level 3 Anthropology. If 60 or more		
	credits are taken, 20 credits may be at Level 2.		

22. There are five Joint Honours routes through modules offered by the School of Biological and Biomedical Sciences: Ecological; Biology and Mathematics; Biology and Psychology; Biology and Chemistry; Biology and Physics route;

23. Candidates studying for BSc Joint Honours Biology degrees following 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	BIOL2511	20
Level 3	40 credits taken from the list:		
	Conservation Biology	BIOL3551	20
	Ecology of the Anthropocene	BIOL3541	20
	Advanced Topics in Ecology, Evolution and Behaviour	BIOL3561	20

- \* The Ecological route is designed to go with Anthropology, Earth Sciences and Geography.
- 24. Candidates studying for the BSc Joint Honours degree in Biology and Mathematics 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
	Ecology of the Anthropocene	BIOL3541	20

25. Candidates studying for the BSc Joint Honours degree in the Biology and Psychology are required to take the following modules:

			Credit value
Level 1	Genetics	BIOL1171	20
	Physiology	<b>BIOL1151</b>	20
	Organisms and Environment	<b>BIOL1161</b>	20
Level 2	Molecular Biology	<b>BIOL2441</b>	20
	Applied Physiology	<b>BIOL2521</b>	20
	20 credits at Level 2 from those offered by the Department of Biosciences		
Level 3	Advanced Topics in Development	BIOL3521	20
	Ageing	<b>BIOL3591</b>	20

26. Candidates studying for the BSc Joint Honours degree in Biology and Chemistry are required to take the following modules:

			Credit value
Level 1	Genetics	<u>BIOL1171</u>	20
	Molecules and Cells	BIOL1281	20
Level 2	Molecular Biology	BIOL2441	20
	Biochemistry	BIOL2491	20
	Cell Signalling	BIOL2501	20
Level 3	Biochemistry and Biotechnology	BIOL3601	20
	Stress and Responses to the Environment	<u>BIOL3491</u>	20
	And either Crops for the Future	BIOL3611	20
	Or Literature Review	BIOL3451	20
	Or Cell Architecture	<u>BIOL3481</u>	20

27. Candidates studying for the BSc Joint Honours degree in Biology and Physics are required to take the following modules:

			Credit value
Level 1	Genetics	<u>BIOL1171</u>	20
	Molecules and Cells	<u>BIOL1281</u>	20
Level 2	Molecular Biology	BIOL2441	20
	Development	BIOL2471	20
	Cell Biology	<u>BIOL2481</u>	20
Level 3	Cell Architecture	BIOL3481	20

Genes and Development	BIOL3521	20
And either Stem Cells and Tissue Engineering	BIOL3531	20
Or Literature Review	BIOL3451	20
Or Stress and Responses to the Environment	BIOL3491	20
Or Biochemistry and Biotechnology	BIOL3601	20

28. Candidates studying for the BSc Joint Honours degree in Business and Computer Science 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
- 29. Candidates studying for BSc Joint Honours degrees in Chemistry are required to take the following modules:

			Credit value
Level 1	Core Chemistry 1	CHEM1078	30
	Practical Chemistry 1A	CHEM1087	10
	Plus EITHER		
	(Linear Algebra I AND	<u>MATH1071</u>	20
	Calculus and Probability I)	MATH1061	20
	OR		
	(Single Mathematics A AND	<u>MATH1561</u>	20
	Single Mathematics B)	MATH1571	20
	OR		
	Mathematical And Experimental Tools Required In	CHEM1111	20
	Chemistry		
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	<u>CHEM2077</u>	10
	Practical Chemistry 2 – Inorganic*]	<u>CHEM2107</u>	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 ¥]	<u>CHEM2127</u>	10
Level 3	Core Chemistry 3	CHEM3012	40

Modules marked with: \* should be taken with Earth Sciences; # should be taken with Biology; ¥ should be taken with Mathematics/Physics.

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

Level 1	Computational Thinking	COMP1051	Credit value 20
	Computer Systems	<u>COMP1071</u>	20
Level 2	Modules selected from the Level 2 modules available. If modules to the value of 60 credits or more are taken, 20 credits can be at Level 2.		
Level 3	Modules selected from Level 2 and Level 3 Computer Science.		

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

			Credit value
Level 1	Understanding Earth Sciences	GEOL1101	20
	Plus at least 20 credits from:		
	Earth Materials	GEOL1021	20
	Environment and Resources	GEOL1111	20
	To obtain accreditation the following modules must		
	be taken at either Level 1 or Level 2:		
	Field Studies	GEOL1051	20

Level 2	At least 60 credits of Level 2 Earth Sciences. To obtain accreditation the following modules must be taken (the latter module may be taken at level 1):		
	Fieldwork (Geological)	<u>GEOL2191</u>	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, 20 credits 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

32. Candidates studying for the BSc Joint Honours in Economics and Mathematics are required to take the following modules:

-			Credit value
Level 1	Elements of Economics	ECON1011	20
	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, 20		

credits can be at Level 2

33. Candidates studying for BSc Joint Honours in Economics and Psychology are required to take the following modules:

			Credit value
Level 1	Elements of Economics	ECON1011	20
	Economic Methods	ECON1021	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 taken,		

20 credits can be at Level 234. Candidates studying for the BSc Joint Honours degree in Geography and Psychology are required to take the following modules:

			Credit value
Level 1	Introduction to Geographical Research (BA)	GEOG1222	40
Level 2	Social Research in Geography	<b>GEOG2472</b>	40
	Plus at least 20 credits from:		
	Theory and Concepts in Contemporary Human	GEOG2621	20
	Geography		
	The modules on offer in Level 2 List B in the BA		
	Geography (L702) programme regulations		
Level 3	Modules selected from:		
	Dissertation A	<u>GEOG3232</u>	40
	The modules on offer in the Level 3 Lists D and E in the		
	BA Geography (L702) programme regulations		

35. Candidates studying for BSc Joint Honours degrees involving Geography (with the exception of the BSc Joint Honours degree in Geography and Psychology) are required to take the following modules:

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Level 1	Introduction to Geographical Research (BSc)	<u>GEOG1232</u>	40
Level 2	Scientific Research in Geography	GEOG2462	40
	Plus at least 20 credits from:		
	Handling Geographic Information	GEOG2591	20
	The modules on offer in the Level 2 List B in the BSc		
	Geography (F800) programme regulations		
Level 3	Modules selected from:		
	Dissertation B	<u>GEOG3432</u>	40
	The modules on offer in the Level 3 Lists D and E in the		
	BSc Geography (F800) programme regulations		

36. Candidates studying for the BSc Joint Honours degree in Mathematics and Physics 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	Analysis in Many Variables II	MATH2031	20
	Complex Analysis II	MATH2011	20
	AND (Theoretical Physics 2	PHYS2631	20
	OR Mathematical Physics II)	MATH2071	20
	AND 20 credits of Level 2 Mathematics modules which		
	may include Mathematical Physics II		
Level 3	Modules selected from the Level 3 modules available. If		
	modules to the value of 60 credits or more are taken, 20		
	credits can be at Level 2.		

37. Candidates studying for BSc Joint Honours degrees involving Mathematics (with the exception of the BSc Joint Honours degree in Mathematics and Physics) are required to take the following modules:

		Credit value
Linear Algebra I	<u>MATH1071</u>	20
Calculus and Probability I	<u>MATH1061</u>	20
Analysis I	MATH1051	20
At least 60 credits of Level 2 Mathematics.		
	Calculus and Probability I Analysis I	Calculus and Probability I MATH1061 Analysis I MATH1051

- **Level 3** Modules selected from the Level 3 modules available. If modules to the value of 60 credits or more are taken, 20 credits can be at Level 2.
- 38. Candidates studying for the BSc Joint Honours in Mathematics and Philosophy are required to take the following modules:

			Credit value
Level 1	Knowledge and Reality	<u>PHIL1021</u>	20
	Introduction to the History and Philosophy of Science	<u>PHIL1081</u>	20
Level 2	Modern Philosophy I	PHIL2031	20
	Philosophy of Sciences	PHIL2151	20
Level 3	Modules selected from the Level 3 Philosophy modules		
	available. If modules to the value of 60 credits or more are		

- taken, 20 credits can be at Level 2.
- 39. Candidates studying for the BSc Joint Honours in Philosophy and Physics are required to take the following modules:

			Credit value
Level 1	Knowledge and Reality	<u>PHIL1021</u>	20
	Introduction to the History and Philosophy of Science	<u>PHIL1081</u>	20
Level 2	Modules selected from the Level 2 Philosophy modules available.		
Level 3	Modules selected from the Level 3 Philosophy modules		

- **Level 3** Modules selected from the Level 3 Philosophy modules available. If modules to the value of 60 credits or more are taken, 20 credits can be at Level 2.
- 40. Candidates studying for the BSc Joint Honours in Mathematics and Physics are required to take the following modules:

			Credit value
Level 1	Foundations of Physics 1	PHYS1122	40
	Discovery Skills in Physics	PHYS1101	20
Level 2	Foundations of Physics 2A	PHYS2581	20
	Foundations of Physics 2B	PHYS2591	20
	AND (Theoretical Physics 2	PHYS2631	20
	OR Mathematical Physics II)	MATH2071	20
	AND 20 credits of Level 2 Physics modules which may		
	include Theoretical Physics 2		

Level 3	Foundations of Physics 3A	PHYS3621	20
	Theoretical Physics 3	PHYS3661	20

41. Candidates studying for the BSc Joint Honours degrees involving Physics (with the exception of the BSc Joint Honours degree in Mathematics and Physics) are required to take the following modules:

			Credit value
Level 1	Foundations of Physics 1	PHYS1122	40
	(Linear Algebra I AND	<u>MATH1071</u>	20
	Calculus and Probability I) OR	<u>MATH1061</u>	20
	(Single Mathematics A AND	<u>MATH1561</u>	20
	Single Mathematics B)	<u>MATH1571</u>	20
Level 2	Foundations of Physics 2A	<u>PHYS2581</u>	20
	Mathematical Methods in Physics	<u>PHYS2611</u>	20
	Discovery Skills in Physics	<u>PHYS1101</u>	20
Level 3	Foundations of Physics 3A	PHYS3621	20
	Foundations of Physics 2B	<u>PHYS2591</u>	20
	Laboratory Skills and Electronics 3	<u>PHYS3681</u>	20

42. 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	PSYC1071	20
	Psychology OR		
	Introduction to Psychology II: Developmental, Social and	PSYC1081	20
	Abnormal Psychology)		
Level 2	Cognitive Psychology	PSYC2177	10
	Biological Psychology	<b>PSYC2187</b>	10
	Historical and Conceptual Issues in Psychology	<b>PSYC2167</b>	10
	Developmental Psychology	<b>PSYC2207</b>	10
	Individual Differences	PSYC2157	10
	Social Psychology	PSYC2147	10
Level 3	Psychology Project and Statistics ~	<b>PSYC3041</b>	20
	Abnormal Psychology (if not taken previously)	<b>PSYC2197</b>	10
	Individual Differences	PSYC2157	10
	At least 20 credits from the Level 3 Psychology modules		
	available		

#### Assessment, progression and award

43. Modules marked 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.

# 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 Deputy Head of Faculty (Natural Sciences) or their nominee 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) or their nominee to be admitted to the BSc Natural Sciences (with Year Abroad) (CFG1) and have their application approved by the Deputy Head of Faculty (Natural Sciences) or by their nominee; 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.

# Placement

- 47. Students admitted to the BSc Natural Sciences (CFG0) are able to apply to transfer to the BSc Natural Sciences with Placement (CFG2). Students undertaking the BSc Natural Sciences with Placement programme (CFG2) will undertake an approved placement chosen in consultation with the Deputy Head of Faculty (Natural Sciences) or their nominee and the host partner.
- 48. Candidates wishing to transfer to the BSc Natural Sciences with Placement (CFG2) must:
  - a. Have successfully completed Level 1 of the BSc Natural Sciences (CFG0) and progressed to Level 2 of the Honours or Ordinary programme; and
  - b. During the first term of Level 2 study the student must discuss their intention to apply with the Deputy Head of Faculty (Natural Sciences) or their nominee in order to be admitted to the BSc Natural Sciences with Placement (CFG2) and receive approval by the Deputy Head of Faculty (Natural Sciences) or their nominee; and
  - c. Secure a year-long placement opportunity (40 weeks or more) approved by the Deputy Head of Faculty (Natural Sciences) or their nominee with an approved partner of the University; and
  - d. Successfully complete Level 2 of the BSc Natural Sciences (CFG0) programme so as to be eligible to progress to Level 3 of the BSc Natural Sciences (CFG0) Honours programme.
- 49. Students who the Board of Examiners for Natural Sciences deem to have made satisfactory progress on the placement will continue to Level 3 of the BSc Natural Sciences with Placement (CFG2). Students who have not made satisfactory progress on the placement will not be permitted to continue on the BSc Natural Sciences with Placement (CFG2) programme, but must instead proceed to Level 3 of the BSc Natural Sciences (CFG0) programme.

# **Professional accreditation**

- 50. 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 2016.
- 51. 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.
- 52. The specified Joint-Honours approved pathways through Physics within Natural Sciences have been recognised by the Institute of Physics as a degree with a physics component until February 2019.