

Geography and environmental studies

The subjects offered by the Department of Geography and Environmental Studies introduce students to modern concepts and methods in this major area of environmental science. The subjects emphasise the principles of physical geography, provide examples of their operation in Australia and elsewhere, and give field experience putting those principles into practice. They also emphasise the interactions between the human population and the natural and built environments and the impacts of human activities on processes operating in the natural environment.

Geography is for those who are interested in exploring the following kinds of issues. How do physical and biological processes give form to the recognisable landscapes which we see around us? Have we mismanaged the Australian landscape? Why is stream flow more variable in Australia than elsewhere? Why is biodiversity higher in some places than in others, and why is conservation of biodiversity important to us? Are famines made by drought or by people? Can developmental and environmental concerns co-exist?

Suggested subjects

The Department of Geography and Environmental Studies offers a major in Geography, and many subjects offered by the department are available to students wishing to complete a co-major/major in environmental science. In order to be able to successfully complete a major it is essential to plan so as to have the appropriate prerequisite subjects at each year level.

Bachelor of Science students wishing to obtain a major in geography should take 25 points or more of first year geography (science) subjects; and second and third year geography subjects totalling 87.5 points, of which at least 50 points must be at the third year level.

There is great scope for flexibility when planning your geography (science) course. It is nevertheless essential to ensure that you fulfil the requirements of the Bachelor of Science degree as set out in the Faculty of Science section of this Handbook.

Students majoring in geography are encouraged to consider applying for entry into the BSc (Hons) program.

The Department of Geography and Environmental Studies also offers a range of subjects which are not available as Science subjects but can be included within the BSc non-Science allowance of 62.5 points.

Course advice is available from academic staff of the department during the course planning period and throughout the year. You are welcome to make an appointment for course advice by contacting the Department office [Tel. +61 3 8344 6339]. You are also welcome to contact individual subject lecturers for course advice during consultation hours.

Below is a list of recommended subjects for students undertaking a Geography major within the Bachelor of Science.

First year subjects

Two or more of the following three geography (science) subjects offered by the Department of Geography and Environmental Studies at first year level.

| <i>This table lists the first year geography subjects available for Science credit.^a</i> | | |
|---|-----------------------|----------|
| Subject code and title | Science credit points | Semester |
| 121-010 Famine in the Modern World (p.180) | 12.5 | 1 |
| 121-012 Environmental Change (p.180) | 12.5 | 1 |
| 121-013 Global Ecology and Biogeography (p.180) | 12.5 | 2 |

a. Note: Geography subjects count toward the Bachelor of Arts component of both the Bachelor of Arts/Bachelor of Science combined course and Bachelor of Arts and Sciences course. Refer to the Arts section of this Handbook for points details.

One or more of the following subjects is also recommended:

- 600-111 Biology of Australian Flora and Fauna; 600-141 Biology of Cells and Organisms; 600-142 Genetics and the Evolution of Life; 625-101 Earth Sciences - The Global Environment; 625-102 Geology. Students taking 121-013 Global Ecology and Biogeography are strongly recommended to take Biology 600-141 and 600-142.

- 620-160 Experimental Design and Statistical Analysis; and additional 100-level subjects from mathematics and statistics.

Second year subjects

Two or more of the following geography (science) subjects offered by the Department of Geography and Environmental Studies at the second year level.

| <i>This table lists the second year Geography subjects available for Science credit.^a</i> | | |
|--|-----------------------|-------------------|
| Subject code and title | Science credit points | Semester of offer |
| 121-018 Geomorphology (p.181) | 12.5 | 2 |
| 121-021 Environmental Politics and Management (p.181) | 12.5 | 1 |
| 121-022 Urban Environments (p.181) | 12.5 | 2 |
| 121-024 GIS and Remote Sensing in Geography (p.182) | 12.5 | 2 |
| 121-025 Biodiversity (p.182) | 12.5 | 1 |

a. Note: Geography subjects count toward the Bachelor of Arts component of both the Bachelor of Arts/Bachelor of Science combined course and Bachelor of Arts and Sciences course. Refer to the Arts section of this Handbook for points details.

One or more of the following subjects is also recommended: 606-202 Plant Biodiversity; 606-204 Plant Ecology; 606-207 Flora of Victoria; 610-280 Environmental Chemistry; 600-201 Physical Environment; 600-203 Environmental Measurement; 654-214 Animal Ecology.

Third year subjects

50 points of geography (science) subjects offered by the Department of Geography and Environmental Studies at third year level.

| <i>This table lists the third year geography subjects available for Science credit.^a</i> | | |
|---|-----------------------|-------------------|
| Subject code and title | Science credit points | Semester of offer |
| 121-028 Sustainable Development (p.182) | 12.5 | 2 |
| 121-029 Environmental Hydrology B (p.183) | 12.5 | 1 |
| 121-030 Ecological Biogeography (p.183) | 25.0 | 2 |
| 121-031 Ecological Biogeography (Theory) (p.183) | 12.5 | 2 |
| 121-032 Australian Quaternary Environments (p.184) | 25.0 | 2 |
| 121-033 Environmental Hydrology A (p.183) | 25.0 | 1 |
| 121-034 Environmental Field Class (p.184) | 25.0 | 1 |
| 121-039 Environmental Management Systems (p.184) | 12.5 | 1 |
| 121-071 Coastal Geomorphology (p.184) | 12.5 | 2 |

- a. Note: Geography subjects count toward the Bachelor of Arts component of both the Bachelor of Arts/Bachelor of Science combined course and Bachelor of Arts and Sciences course. Refer to the Arts section of this Handbook for points details.

One or more of the following subjects are also recommended: 606-301 Community and Ecosystem Ecology; 600-301 Problem-solving in Environmental Science; 451-312 GIS and Remote Sensing for Environmental Science; 654-308 Conservation Biology; 421-373* Physical Hydrology; 421-321* Engineering Hydrology and 421-374* Techniques in Field Investigation (subjects marked with * are non-Science subjects).

Non-Science subjects offered by the Department of Geography and Environmental Studies

In addition to the subjects listed here, the Department offers the following subjects which may be taken as non-Science subjects within the single Bachelor of Science course:

First Year

- 121-011 Australia in Asia

Second/third year

- 121-006 Urban Economic Geography
- 121-015 Development and the Third World
- 121-017 Society and Environments
- 121-019 Urbanisation and Urban Development
- 121-023 China in Transition
- 121-026 The Mobile World: Migration and Tourism
- 121-045 Native Title
- 121-046 Garma Field Trip

Third Year

- 121-036 China Field Class
- 121-037 Fieldwork Research Project

See *Geography (p.179)* in the Arts section of this Handbook for subject details.

Bachelor of Science (Honours)

For information about the Faculty and departmental entry requirements for Honours, please refer to *Bachelor of Science (Honours) and Bachelor of Information Systems (Honours) (p.883)*. These requirements should be considered when planning your course.

Further Information

For further information please contact:

The Department of Geography and Environmental Studies

The University of Melbourne

Tel: +61 3 8344 6339

Fax: +61 3 8344 4972

WWW: <http://www.geography.unimelb.edu.au/>