

Art Majors offered by other Faculties

School of Resources, Environment and Society

Head: Professor Peter Kanowski, BScFor(Hons) ANU, DPhil Oxon

The School of Resources, Environment and Society focuses on the relationships between people and the environment: how societies shape and are shaped by the environment, how societies manage natural resources, and how people impact on the environment. The School's particular strengths are represented by its Program areas: Environmental Studies, Forestry, Geography, Human Ecology, Human Sciences, and Resource and Environmental Management.

Four of SRES' Programs — Environmental Studies, Geography, Human Ecology and Human Sciences — are affiliated with the Faculty of Arts, and each of the four is offered as an Arts Faculty major. Dr Richard Baker and Mr David Dumaresq convene these Programs, and students seeking advice on structuring their individual programs are encouraged to consult them or their SRES colleagues.

School of Resources, Environment & Society

Proposed courses 2002

[(course name): unlikely to be offered in 2002]

Semester 1	Semester 2	Summer or Winter Session
SRES1001 Resources, Environment & Society	GEOG1008 Australia & Its Neighbours	
ECOS2001 Human Ecology (GEOG2011 Atmosphere, Weather & Climate) GEOG2014 Population & Resources GEOG2015 Introduction to GIS and Remote Sensing	ECOS2004 Urban Ecology SRES2001 Agroecology & Soil Management GEOG2013 People & Environment GEOG2016 Introduction to Greenhouse	GEOG2009 Geographic Information and Intelligence
(ECOS3005 Sustainable Systems) ECOS3006 Ecology & Social Change (GEOG3013 Climatology) GEOG3016 Geography of South-East Asia GEOG3017 Readings in Environmental History GEOG3028 Environmental Politics, Policy & Planning GEOG3029 Palaeo-Environmental Reconstruction SRES3005 Water Resource Management SRES3010 Independent Research Project SRES3011 Independent Studies 1 SRES3012 Independent Studies 2	GEOG3001 Rivers & Catchments GEOG3009 Applied Geographic Information Systems GEOG3011 Landscape Ecology SRES3001 Cities, Animals & Trees SRES3006 Recycling & Renewable Materials SRES3007 Participatory Resource Management SRES3010 Independent Research Project SRES3011 Independent Studies 1 SRES3012 Independent Studies 2	GEOG3015 South-East Asian Field School (GEOG3019 Northern Australian Field School)

Geography

See also:

School of Resources, Environment and Society, Faculty of Science Population Studies, (School of Social Sciences section of this chapter)

Convener: Richard Baker, BA (Hons) ANU, PhD Adel

Introduction

The Geography program is an associate member of the Faculty of Arts. All undergraduate Geography courses are available to Arts students (subject to prerequisites) and can be used to form an Arts Faculty major in either the Bachelor of Arts or Bachelor of Arts in combined programs.

Geography deals with human-environment interactions. Geography is about Earth's diversity, its resources, and humankind's survival on the planet. Geographers analyse the associations of things and events that give special character to particular places; the interconnections between different areas; and the working of complex systems through time. Geography is the only academic discipline in which an integrative perspective focusing on spatial relationships and processes is a fundamental concern. Geography takes an integrative approach to environmental problems and their solution, including the study of economic and social goals and processes that determine strategies of resource use and ecosystem management.

The importance of literacy and numeracy, graphical, verbal and analytical skills, and competence in report preparation and presentation, are stressed in the Program's educational objectives. The Program has a particular focus on the practical application of GIS and computational methods. Tutorials, laboratory work and field work are an integral part of most courses. Fieldwork usually involves weekend trips or a period of up to one week during the teaching breaks. Students will be expected to meet costs for meals, accommodation and some travel costs during fieldwork. Wherever practicable these costs are kept to a minimum by camping.

Each of the programs begins with an innovative first-year, first semester course taught jointly by staff of SRES and the Faculty of Arts — SRES1001 Society, Environment and Resources. Each of the Programs emphasises experiential and problem-based learning; the importance of literacy and numeracy; analytical, graphical and oral skills; and competence in report preparation and presentation. Tutorials, laboratory work and/or field work are an integral part of most courses. Examples of course material are available at http://sres.anu.edu.au/course_examples.

Fieldwork usually involves weekend trips or a period of up to one week during the teaching breaks. Students will be expected to meet costs for meals and accommodation, and make a contribution towards travel costs, during fieldwork. These costs are kept to a minimum by use of inexpensive accommodation. The School also offers independent research courses to later year students, and Honours projects.

Assessment: The pattern of assessment in all courses will be decided in consultation with students.

The Major

For the BA degree, a major in geography consists of a prescribed sequence of no less than 42 units. This sequence consists of SRES1001 and GEOG1008 followed by five GEOG2000 or 3000 level courses; or 2000 and 3000 level courses to a minimum of 42 units provided that one of the 1000 level courses has also been completed. The major may, with the permission of the Head of School, include courses to the value of not more than 12 units from the following courses in Human Ecology: ECOS2001, 2004, 3005 and 3006; Population Studies: POPS2001, 2002, 3002 and 3003; or Resources, Environment and Society SRES 2005, 3002, 3004, 3007.

BA students may incorporate Geography courses in the following multi-disciplinary majors in the Faculty of Arts: Human Sciences, Population Studies, Development Studies, and Environmental Studies. Staff from Geography jointly administers the Population Studies program. A major in Human Sciences or Population Studies is a valuable complement to a major in Geography.

Students seeking advice on appropriate course structures are invited to consult staff in the Program.

For details of ECOS, GEOG, & SRES courses, see below in this listing.

For details of POPS courses see: Population Studies, School of Social Sciences, Faculty of Arts

Human Ecology

Convener: Mr Dumaresq, BA Qld

Introduction

Human Ecology focuses on the health and well-being of the environment using an ecosystems approach. The individual courses apply ecological principles to the study of the ecosystems that supply us with biospheric services and renewable resources, as well as the essentially non-renewable resources that we have come to depend upon. The

human use of biospheric systems is examined in the certain knowledge that the long term health and well being of people depends upon the continued healthy functioning of prehuman ecosystems.

Human Ecology takes an integrative and explicitly transdisciplinary approach to environmental problems and their solution, including the study of cultural, economic and social goals and processes that determine strategies of resource use and ecosystem management.

The Major

For the BA degree, a major in human ecology consists of a prescribed sequence of no less than 42 units. This sequence consists of 12 units selected from SRES1001, GEOG1008, BIOL1003,1005, 1008, ANTH1002, 1003, ARCH1111, 1112 followed by ECOS2001 and a further 24 units selected from ECOS2004, 3005, 3006, and SRES2001, 3007, 3010. The major may include one 6 unit course from any GEOG2000 or 3000 level courses.

BA students may incorporate Human Ecology courses in the following multi-disciplinary Programs in the Faculty of Arts: Human Sciences, Population Studies, Development Studies, and Environmental Studies (see entries in the section on Programs). A major in Agroecology, Geography, Human Sciences or Environmental Resources is a valuable complement to a major in Human Ecology.

Students seeking advice on appropriate course structures are invited to consult staff in the Program.

For details of ECOS, GEOG, & SRES courses see below in this listing.

For details of ANTH and ARCH courses see the School of Archaeology and Anthropology, Faculty of Arts.

For details of BIOL courses see Biological and Medical Sciences, Faculty of Science.

The degree with Honours in Geography and Human Ecology

Honours Coordinators: Mr Johnson, Mr Dumaresq

Entry to the fourth (Honours) year is at the discretion of the Head of School. Faculty requirements for the pass degree must be met. In addition,

- (1) Group B and C courses to the value of at least 48 units. These courses, at least 24 units of which must be from Group C, should be appropriate to the field of Geography or Human Ecology to be studied in the Honours year, and may include up to two courses from a cognate discipline;
- (2) Performance in the later year courses should be at Credit level or better.
- (3) Admission is subject to the availability of an appropriate supervisor.

The Honours program for each student is arranged to include a combination of reading, formal course work and research for a thesis. Students contemplating Honours in Geography or Human Ecology should contact the Honours coordinator early in their degree.

Course Outline

The fourth-year Honours class meets in the first week of February. Prior consultation with members of staff should take place to determine a potential thesis topic and supervisor(s). A thesis proposal is presented in March. It is also possible to commence Honours mid-year.

Honours students in the Geography and Human Ecology Programs are required to allocate 30% of their work in the Honours year to course work, and 70% to work directly associated with the thesis. In their first semester, course work consists of a seminar in the philosophy and practice of scientific research and a course oriented to the thesis topic. The latter may be an appropriate 3000-level course or a reading/essay course. Coursework must be completed by the end of their first semester. For the course work component of the Honours year, a grade of CRS (Course Requirement Satisfied) is required before a student may submit the Honours thesis. Failure to complete course work satisfactorily may lead to termination of Honours candidature.

Honours students present a thesis progress report at the beginning of their second semester. The Honours thesis has a limit of 15,000

words and is due for those who commenced in February at the end of the first week of November. Expenses incurred in field work and presentation of the thesis are borne by the student.

The final grade for the Honours year is determined by an examination panel of academic staff of the relevant Program including, at least, the supervisor, the Head of School, the Honours Convener and one other staff member. The decision is made on the basis of advice given to the panel by two examiners, and by the supervisor. The examination panel may seek additional advice if necessary.

Human Sciences Program

Convener: Mr Dumaresq

Introduction

The Human Sciences program is founded on two beliefs — first, that the search for a relationship between humans and their global environment that will prove sustainable in perpetuity has become a matter of critical urgency, and second, that because of the systemic nature of the problem, information and discoveries provided by means of the reductionist analysis used by specialist disciplines must be balanced by an emphasis on whole systems. Only by using a holistic framework to integrate data and analyses from different academic disciplines and other sources can citizens and policymakers gain the insights and general understanding of local and global problems that they need and now actively seek.

The program has two closely related foci, the health and well being of the environment and the health and well being of people. Each of the core courses deals with specific aspects of these interdependent problem areas, draws theoretical ideas and factual information from several disciplines (exposing underlying assumptions) and integrates analyses and conclusions by means of case studies.

Human Sciences' integrative approach complements a wide variety of specialist disciplinary studies in the Faculty of Arts and in other faculties. This approach, as well as the organisation of the undergraduate courses, gives considerable rein to the interests of individual students and assists the development of coherence across the range of disciplines within the degree as a whole.

The education provided by Human Sciences is an excellent preparation for a wide number of generalist positions in many fields of employment, including the Commonwealth and State public services, as well as providing a valuable complement to the specialist training of students intending to pursue professional practice.

It is not possible to offer all courses every year.

The major

The major consists of a prescribed sequence of courses comprising no fewer than 42 units as set out below. Normal prerequisites apply.

- (a) Two 1000 level units selected from ANTH1002, ANTH1003, ARCH1111 and 1112, SRES1001, GEOG1008, BIOL1003, 1005, 1008.
- (b) ECOS2001,
- (c) A further two 2000 or 3000 level courses from Human Sciences core courses: any two of ECOS2004, 3005, 3006, SRES2001, 3010, SCCO2103, 3102.
- (d) One course selected from:
 1. A fourth Human Sciences core course, or
 2. A course related to Human Ecology selected from, for example:

ANTH2125	Technology, Culture and Evolution
ARCH2039	The Origins and Dispersal of Agricultural Populations
ECHI2003	Development, Poverty and Famine
GEOG2013	People and Place
GEOG2014	Population and Resources
GEOG3028	Environmental Politics, Policy and Planning
LAWS3103	Law and the Environment
POLS2011	Development and Change
POLS2043	Pressure Groups and Australian Public Policy
POLS2087	Green Governance
POPS2001	Population and Society
SOCY2022	Environment and Society

SRES3007 Participatory Resource Management

3. Or a course related to human well being selected from, for example:

- ANTH2026 Medical Anthropology
- ANTH2127 Genes, Memes and Cultural Difference
- BIAN2013 Human Evolution
- BIAN2115 'Race' and Human Genetic Variation
- BIAN2119 Nutrition, Disease & the Human Environment
- BIAN2120 Culture, Biology and Population Dynamics
- LANG2015 Language and Culture
- PSYC2002 Developmental Psychology
- PSYC2007 Biological Basis of Behaviour
- PSYC3020 Health Psychology
- SOCY3021 Sociology of Health and Illness

The major may consist entirely of 2000 and 3000 level courses, but if so, it must include at least four core courses and the remaining units must come from those listed under (d).

Other majors: Particular Human Sciences core courses can be counted towards several other majors, eg Human Ecology, Geography, Development Studies, Environmental Studies, and Population Studies.

The degree with Honours

Intending Honours students in Human Sciences who are enrolled in the Faculty of Arts should first read the general statement 'The degree with Honours' in the introductory section of the Faculty of Arts entry.

The program for students in the Faculty of Arts extends over four years and normally consists of —

Completion of BA degree requirements to include:

- (a) major in Human Sciences, together with another course to a value of 6 units from among those listed for the major.
- (b) Another major in a cognate area of study. The school, department or program responsible for that major may require completion of an additional course to a value of 6 units.

Intending Honours students in Human Sciences should normally contact the convener of the Human Sciences program no later than the beginning of the third year of the degree. They should plan the third and fourth years of their degree in consultation with the convener of Human Sciences and with the head of the school, department or program responsible for their cognate major.

Admission to Human Sciences IV(H) is approved by Faculty on the recommendation of the Head of the School of Resources, Environment and Society acting on the advice of the Convener of Human Sciences. The normal requirements for entry are:

- (a) ECOS2001 at Credit level or better, and one Human Sciences core 3000 level course, and
- (b) Two other Human Sciences courses or one other Human Sciences course and one of the optional courses listed for the Human Sciences major (see above). Two at least of the Human Sciences core courses must be passed at Distinction level.
- (c) Later-year courses to a value of at least 30 units (5 courses) from a cognate major.

Admission is possible only if a suitable supervisor is available.

The course for Human Sciences IV(H) will normally consist of —

- (a) Human Sciences Honours and Graduate Seminar, together with an associated reading program and/or course work.
- (b) Course work approved by the cognate department.

An original investigation, presented in a seminar and as a subthesis of approximately 15,000 words, due in the first week of November.

Environmental Studies

Convener: Mr Dumaresq

Introduction

Environmental Studies has the broad objective of developing understanding of the interrelationships between human societies and their environment. The areas of study vary from natural ecological and earth processes through environmental management and resource use to cultural ecology and the history of environmental change, perception and philosophy.

At present the programs incorporate courses from the biological and earth sciences, geography, human ecology, forestry, prehistory and anthropology as well as the environmental aspects of law, economics, history, philosophy and sociology.

The three programs naturally involve overlap, but have different emphasis and associated majors. There are several recommended sequences for the programs but some combinations between sequences are permissible, and a program can be formed from later-year courses if prerequisites are met. Prerequisites for some courses, particularly in science, may require additional courses to be taken in earlier years, and these should be checked carefully.

A major is a prescribed sequence of courses comprising no fewer than 42 units.

Details of SRES, ECOS and GEOG courses can be found at the end of this entry.

Agroecology

The program brings together the study of traditional and modern agricultural systems. Relevant courses are taught in the Faculties of Arts and Science. The focus of the program is on how human societies have provided and can continue to provide food, fibre and water for their members. The core courses provide an integrated multidisciplinary understanding of the ecology of agricultural systems.

Science students should use the following groupings as a guide only, bearing in mind the minimum number of science units needed for their degree.

Arts students should select appropriate courses from the following lists and are reminded that a major may consist entirely of 2000 and 3000 level courses.

Normal prerequisites apply to all courses unless the student obtains exemption from the lecturer in charge of that course.

Courses should be selected as follows (ECOS2001 and SRES2001 are compulsory core courses):

First-year courses (only 12 units may be counted)

- SRES1001 Resources, Environment & Society
- ANTH1002 Introduction to Anthropology
- ANTH1003 Global and Local
- ARCH1111 Archaeology: an Introduction
- ARCH1112 From Origins to Civilisations
- BIOL1003 Evolution, Ecology & Genetics
- BIOL1006 Plant Evolution and Ecology
- BIOL1005 Animal Evolution and Ecology

Core courses to the value of 12 units

- ECOS2001 Human Ecology
- SRES2001 Agroecology and Soil Management

Normally, a further 18 units from the following (or, where the major consists entirely of 2000/3000 level courses, not more than 30 units):

- ARCH2039 The Origins and Dispersals of Agricultural Populations
- ARCH2108 Animals, Plants and People
- ECOS3005 Sustainable Systems
- FSTY3056 Farm Forestry
- GEOG3028 Environmental Politics, Policy and Planning
- HIST2129 Country Lives: Australian Rural History
- SRES2005 Australian Soils
- SRES3010 Independent Research Project

Environmental Resources

The fundamental nature of environmental resources, essential to life and increasingly subject to conflict over ends and means, makes their study necessarily broad. Relevant courses are taught in four faculties, Arts, Economics and Commerce, Law, and Science. Grouping these courses appropriately, three separate majors provide different coherent approaches and areas of focus. Common to all of them is the interactive process between humans and their environment at the individual and societal levels.

Students enrolled in the Faculty of Science should use these as a guide only, bearing in mind the minimum number of science units required in their degree.

Students enrolled in the Faculty of Arts should make their selections as indicated under each major below but are reminded that, if desired, a major may consist entirely of 2000 and 3000 level courses.

Normal prerequisites apply to all such courses unless the student obtains exemption from the lecturer in charge of that course.

Natural Resources concentrates on those resources that provide the essential economic foundation for society, uses Human Ecology and Urban Ecology as integrating core courses and covers economic, legal and management aspects. Courses should be selected as follows: no more than 12 units from Group 1, 18 units from Group 2 of which ECOS2001 and 2004 are compulsory, and at least 12 more units from Group 2 or Group 3.

Group 1

SRES1001	Resources, Environment & Society
ECHI1006	Australian Economy
ECON1101	Microeconomics I
ECON1102	Macroeconomics 1
ECHI1005	Business and Economy in the Asia-Pacific Region

Group 2

ECOS2001	Human Ecology
ECOS2004	Urban Ecology
ECOS3005	Sustainable Systems
ECOS3006	Ecology and Social Change
GEOG2014	Population and Resources
GEOG3028	Environmental Politics, Policy and Planning

Group 3

BUSN3017	Environmental Accountability and Reporting
ECHI2102	Australian Economic History
ECON2128	Resource and Environmental Economics
FSTY2102	Natural Resource Economics
FSTY3151	Economics of Forestry and the Environment
LAWS3103	Law and the Environment
SOCY2022	Environment and Society
SOCY2032	Population and Australia
POLS2011	Development and Change
POLS2087	Green Governance

Supporting courses in statistics would be an advantage.

Conservation and Recreation combines ecological and social approaches in the study of more general aspects of the environment affecting the quality of life. Geography and Human Ecology provide the integrating themes. Courses should be selected as follows: no more than 12 units from Group 1, 18 units from Group 2 of which ECOS2001 is compulsory, and at least 12 more units from Group 2 or Group 3.

Group 1

SRES1001	Resources, Environment and Society
BIOL1003	Evolution, Ecology and Genetics
BIOL1008	Human Biology
GEOG1008	Australia and Its neighbours: A Region in Change
SOCY1002	The Self and Society
SOCY1003	Contemporary Society
SOCY1004	Introduction to Social Psychology

Group 2

ECOS2001	Human Ecology
ECOS2004	Urban Ecology
ECOS3005	Sustainable Systems

ECOS3006	Ecology and Social Change
GEOG2013	People and Environment

Group 3

SRES3007	Participatory Resource Management
SRES3001	Cities, Animals and Trees
GEOG3017	Readings in Environmental History
LAWS3103	Law and the Environment
SOCY2022	Environment and Society
SOCY2035	Urban Society

School of Resources, Environment and Society courses**Resources, Environment and Society SRES1001 (6 units) Group A**

First semester

SRES1001 may not be combined in a degree with previously offered Geography first year courses.

Four hours of contact a week comprising lectures, workshops and tutorials plus a weekend field trip

Course Coordinator: Dr Richard Baker

Arts Faculty Liaison: Dr Alastair Greig, Sociology, School of Social Sciences

Syllabus: This course critically analyses the relationships between people and their environments. It focuses on the big issue facing the globe — the equitable and sustainable use of this planet's resources. The course is suitable for both Science or Arts students. It is also an introductory course for later year courses in the School of Resources, Environment and Society.

The course will examine different ways of conceptualising the nature of resources, the environment and society. The contrasts and connections between scientific and social science theory and methods will be examined. Key factors mediating the inter-relationships between society and environment will be explored including resource use, population and technological change. Other key concepts critically explored will include social justice, equity and sustainability. These issues will be explored through case studies of the international dimension of global climatic change, water and land degradation and biodiversity conservation.

The course will have a strong skills-based focus with the aim of giving students the research and communication skills required to successfully complete later year courses. Particular attention will be given to critical thinking and writing skills. Staff from the ANU Libraries and the Academic Skills and Learning Centre will be involved in this element of the course. The course will be taught by staff from the Science and Arts Faculties and key researchers from the ANU Research Schools.

Proposed assessment: An essay, oral presentation, learning portfolio, and a group webpage design.

Preliminary Reading

- Explore the links from the course webpage
 - http://sres.anu.edu.au/course_examples/SRES1001 — including
 - <http://www.wri.org/wr2000/> for People and Ecosystems: The Fraying Web of Life, United Nations Development Programme, United Nations Environment Programme, World Bank, World Resources Institute, 2000.
- Yencken, D & Wilkinson, D., *Resetting the Compass: Australia's Journey towards Sustainability*, CSIRO Publishing, Collingwood, Victoria, 2000

Agroecology and Soil Management SRES2001 (6 units) Group B

Second semester

65 contact hours comprising a combination of lectures, seminars, fieldwork laboratory sessions.

Course Coordinators: Dr R Greene, Mr D Dumaresq and Dr J Field

Prerequisite: ECOS2001 or SRES2005. Incompatible with SREM2006 and ECOS2002

Syllabus: The course explores the development of sustainable farming systems and landscape management through the study of agroecosystems processes that underlie all agriculture. The emphasis will be on the application of a thorough understanding of basic physical, chemical and biological properties and ecological processes involving soils, crop plants and livestock to the design and implementation of improved farming systems. A wide range of land management issues will be addressed including soil conservation, restoration and rehabilitation; agrichemicals and pest and disease management; biotechnologies and alternative farming systems. The course will use a wide range of examples to compare different strategies to achieve sustainability in differing regions: from humid to temperate climates, pastoral to intensive horticultural production and irrigated to dryland areas.

Proposed Assessment: This may include a field based research project, an essay, performance in a range of field and laboratory activities, and/or an examination. Regular attendance and participation in class work is required. Students who fail to submit set work by the due date or fail to participate in laboratory classes or field excursions may be excluded from examination.

Preliminary reading

□ Gliessman, S.R., *Agroecology: Ecological Processes in Sustainable Agriculture*, Ann Arbour Press, 1997.

□ Charman, P.V. and Murphy, B.W. (eds.), *Soils: Their Properties and Management*, 2nd Edition, Oxford University press, Melbourne, 2000.

□ Jordan, C.F., *Working with Nature*, Harwood Academic Publishers, 1998.

Cities, Animals and Trees

**SRES3001
(6 units) Group C**

Second semester

Five hours per week of lectures and practicals

Course Coordinators: Dr C Brack and Mr K Johnson

Prerequisite: 36 units of later year courses. Incompatible with SREM3052.

Syllabus: The course goal is to promote an understanding of the inter-relationships between urban trees and people, of trees and the physical and chemical environment of the urban landscape, and of trees with native and exotic fauna.

Specifically, the course examines the uniqueness of the urban forest and the physical and social roles and functions of trees in urban landscapes. Topics discussed include matching species to the urban environment and assessing their performance and capacity to ameliorate that environment; the role of urban trees to provide for local fauna; and the methodologies used in urban tree management and the social values and valuations applied to the urban tree and treed landscapes.

Proposed assessment: To be agreed in consultation with students in the first week of semester

References: http://sres.anu.edu.au/course_examples/SRES3001

Water Resource Management

**SRES3005
(6 units) Group C**

First semester

Two hours of lectures, two hours of practical work and a one hour tutorial per week

Course coordinators: Dr Sara Beavis

Prerequisites: 24 units of later year courses. Incompatible with SREM3005.

Syllabus: The aim of this course is to provide an understanding of issues and methods in water resources management, and is set espe-

cially within the framework of total, or integrated, catchment management. The course gives an introduction to the unique hydrology of Australia, major issues of water resource management, the principles of integrated catchment management and sustainability, and the hydrological cycle. Topics will include: the components of the hydrological cycle; droughts and floods; temporal and spatial variability; impacts of land management on quantity and quality; water demand and allocation among users, including the environment; the institutional and policy aspects; economics of water resource management; and integrated modelling of water and land resources. The course emphasises the interdisciplinarity of water resource management and focuses on integrated assessment, which is a method that seeks to solve water management problems by investigating the physical, economic, social and institutional components of a problem, also known as systems management. At the conclusion of the course, students should be able to: understand the interaction between physical and socio-economic components of hydrologic systems, and basic methods for assessing allocation tradeoffs among stakeholders in management decisions.

Proposed assessment: To be agreed in consultation with students

Preliminary reading

□ Smith, D.I., *Water in Australia*, OUP, 1998

Recycling & Renewable Materials

**SRES3006
(6 units) Group C**

Second semester

1 lecture per week, five day field trip in the term break and an afternoon of presentations

Course Coordinator: Dr P Evans (University of British Columbia)

Prerequisites: No formal requirements except 48 units towards a degree. Incompatible with SREM3058.

Syllabus: The increasing scarcity and cost of natural resources such as oil, gas, mineral ores and trees and the environmental problems associated with the disposal of waste has led to great interest in recycling. For similar reasons there is a resurgence of interest in materials that can be manufactured from renewable (plant-based) resources or waste products. In this course these subjects will be examined. Topics covered in lectures include introduction to the solid waste materials disposed at landfill (wood and paper; plastics, glass; ferrous and non ferrous metals); reuse and recycling of each material type including identification, segregation and recycling of plastics; salvage of scrap metal; internal salvage of waste wood in timber industries and reuse and reprocessing of untreated and preservative treated timber; deinking and manufacture of recycled paper; reprocessing of nuclear waste; biobased composites and manufacture of new materials from renewable (plant-based) resources or waste products. A 5 day field trip will be undertaken in the term break visiting MRCs (materials recycling centres) and industries reprocessing waste materials.

Proposed assessment: Powerpoint presentation and learning journal

Preliminary reading

Available from the School.

Participatory Resource Management

**SRES3007
(6 units) Group C**

Second semester

Four hours of lectures and one hour tutorial per week

Course Coordinator: To be advised

Prerequisite: 96 units towards a degree including 24 units of later-year courses. Incompatible with FSTY3059.

Syllabus: Based on a collaborative learning approach, this course aims to provide a comprehensive overview of the complexity of participatory resource management; to foster a critical attitude to professional practice to develop informed views about resource management, based on an integration of skills, knowledge and understanding and to develop and foster reflective practice.

Students are expected to engage actively in an interactive teaching approach, to contribute to group work, and to carry out specific

tasks before attending tutorials. The quality of the learning is greatly determined by each individual's input.

Proposed assessment: To be agreed in consultation with students.

Preliminary reading

□ Buchy, M., Hoverman, S. and Averill, C., *Understanding public participation in forest planning in Australia*, ANU, 1999, Working Paper 99:2, available on the web at www.anu.edu.au/Forestry/staff/index-frame.html

Independent Research Project **SRES3010** **(6 units) Group C**

Either semester, subject to the availability of a suitable supervisor. Students are expected to devote at least eight hours a week to a research topic.

Course Coordinator: Dr R Baker

Prerequisite: Credit average performance in 2000 and 3000 level courses in the School. Concurrent enrolment in 3000 level courses in the School. The completion of at least 30 units at 2000/3000 level. Admission to this course is at the discretion of the Head of School and normally will be open to prospective Honours students who have obtained a Credit or better in relevant areas of study. Admission of Arts students requires the approval of an Arts Faculty Sub-Dean.

Syllabus: The course involves the student, in collaboration with their supervisor, devising a special program of study designed to enable the student to gain skills in self-directed research. Students are also expected to participate in 14 hours of seminars and to regularly meet with the supervisor of their research project. The seminar series examines research methodology in the context of projects being undertaken by the class. Both the quantitative and qualitative traditions are included. Issues dealt with include measurement and data analysis, and the presentation of results in written and oral reports. The aim is to establish the basis of ethical professional practice.

Proposed assessment: By arrangement, but likely to include an extended essay or research report and the presentation of a seminar.

Independent Studies 1 and 2 **SRES3011/3012** **(3 units) Group C**

Either semester, subject to the availability of a suitable supervisor.

Course Coordinator: Dr R Baker

Students are expected to devote at least five hours a week to a program of study that builds on a 6 unit course offered by the School of Resources, Environment and Society that the student has completed or in which they are concurrently enrolled. The course allows for further reading and research and offers an opportunity to extend and focus the work of a 6 unit course.

Prerequisite: Admission to this course is at the discretion of the Head of School and the lecturer teaching the linked 6 unit course. Admission of Arts students requires the approval of an Arts Faculty Sub-Dean.

Syllabus: The courses give students the opportunity to explore issues raised in an existing 6 unit course in more detail. Extra seminar work and independent study will be required.

Proposed assessment: By arrangement, but likely to include a short essay and presenting evidence of learning to students in the 6 unit class via an oral presentation, poster and/or webpage.

Note: students can take up to 2 Independent Studies courses in one semester by simultaneously enrolling in SRES3011 and SRES3012.

Human Ecology **ECOS2001** **(6 units) Group B**

First semester

65 hours of class contact work throughout the semester, comprising 26 hours of lectures, 12 hours of tutorials, 12 hours of practical sessions, and 15 hours in field classes.

Course Coordinator: Mr D Dumaresq

Prerequisites: 12 units of courses selected from GEOG1005, 1006, 1007, 1008, SREM1002, 1003, SRES1001, 1002, BIOL1001, 1002, 1003, 1008, ANTH1002, 1003, PREH1111, 1112, or with the approval of the course coordinator based on approved qualifications in the biological and social sciences, eg a course of biology with PSYC1001 or a social science or humanities course.

Syllabus: The course applies the principles of evolutionary biology and ecosystems analysis to the study of the human environment. The emphasis is on the significance and function of natural ecosystems, and how humans have affected these systems over time. The theories covered are exemplified by case studies which include a critical assessment of the human-nature interactions which have occurred over human history, including hunter gatherer societies in Australia, early agricultural societies in the Pacific and Central America, and modern industrial societies in the Asia-Pacific region. Fundamental ecological principles are used in an examination of the problems of, and the policies affecting, resource use associated with farmland, forests, wilderness and urban areas. Field trips are used to allow students to see first hand, the complexity of managing these areas sustainably. This course lays the foundations for later year courses in human ecology.

Proposed assessment: This may include an essay, a field report, and an examination. Regular attendance and participation in class work is required. Students who fail to submit set work by the due date or fail to participate in classes and field excursions may be excluded from examination.

Preliminary reading

□ McMichael, A. J., *Planetary Overload*, Cambridge 1993

□ Odum, E.P., *Ecology: A Bridge Between Science and Society*, Sinauer 1997.

Urban Ecology **ECOS2004** **(6 units) Group B**

Second semester

65 contact hours including 26 hours of lectures, 22 hours of workshops/tutorials, 16 hours of field work.

Course Coordinator: To be advised

Prerequisite: ECOS 2001

Syllabus: The course applies the core human ecology concepts developed in ECOS2001 to the urban environment. The emphasis is on how human activities affect ecological processes and human well being in urban areas. Students will study the effect different policies and urban planning practices have on energy and material flows through the city. Case studies covered by the course include: urban water management, urban waste management, and urban planning processes affecting transport and settlement patterns. For each of these topics, different human interventions such as regulations, pricing, education and government expenditures will be considered.

Proposed assessment: This will include a reflective field trip report, a poster with summary pamphlet, and an exam or essay. Regular attendance and participation in workshops are required. Every student will be expected to take an active role in organising and leading one workshop. Students who fail to submit set work by the due date or fail to participate in workshops/field trips may be excluded from examination.

Preliminary reading

□ Girardet, H., *The Gaia Atlas of Cities: New directions for sustainable urban living*, London, Gaia Books (revised edition), London, 1996

□ White, R., *Urban Environmental Management: Environmental change and urban design*, Brisbane, John Wiley and sons, Brisbane, 1994

Sustainable Systems **ECOS3005** **(6units) Group C**

Not offered in 2002

65 contact hours comprising a combination of lectures, seminars, fieldwork laboratory sessions.

Course Coordinator: Mr D Dumaresq

Prerequisite: Two ECOS courses, or an ECOS course combined with SRES2001 or FSTY3059. Incompatible with ECOS3002.

Syllabus: This course will apply the principles of human ecology to the study of the problems of industrial society and its ecological viability and long-term sustainability. The emphasis is on linking social and ecological processes within production to consumption chains in modern industrial systems. The focus will be on developing whole system approaches using tools and techniques such as global commodity chain analysis, material and energy flows, and life cycle assessment. The course will include the practical application of these systems based approaches to an existing industry. Examples may include food and fibre production, transport, residential and commercial building, waste management, energy generation, and materials extraction.

Proposed assessment: This may include a technical report of a case study, an essay or research project, performance in a range of class activities, and an examination.

Preliminary reading

□ Venning, J. and Higgins, J. (eds), *Towards Sustainability*, UNSW Press, 2001

Recommended text

□ Clayton, A. and Radcliffe, N., *Sustainability: A Systems Approach*, Earthscan, 1996

Ecology and Social Change **ECOS3006**
(6 units) Group C

First semester

65 contact hours comprising a combination of lectures, seminars and workshop/tutorials.

Course Coordinator: Mr D Dumaresq

Prerequisite: Two ECOS courses, or an ECOS course combined with SRES2001 or FSTY3059.

Syllabus: This course will focus on the relationships between ecological and social changes in the context of changing natural resources use and management practices from local to global levels. The course will concentrate on the construction of multi-disciplinary analytical frameworks to understand the relationships between social actions and management decision-making processes and environmental changes. A focus will be placed on the implications of participatory approaches as a tool for social change in human managed ecosystems; and an understanding of these relationships within a historical context. The course will develop an integrated analysis of the interactions between social, cultural and ecological systems.

Proposed assessment: Students will be required to prepare a literature review on a relevant topic 50% and a subsequent essay answering a question emerging from the literature review 50%

Preliminary reading

□ Berkes, F. and Folke, C. (eds), *Linking Social and Ecological Systems*, CUP, 1998

**Australia and its Neighbours:
a Region in Change** **GEOG1008**
(6 units) Group A

Second semester

Sixty-five hours of contact, comprising lectures, tutorial, practicals, and fieldwork.

Course Coordinator: to be advised in 2002

Prerequisite: None. Incompatible with GEOG1005 and GEOG1006

Syllabus: At the start of the new millennium, Australia and its neighbours in the region are undergoing dramatic changes both in the physical environment and in human systems. The complex and diverse inter-relationships between the physical and human components of these regional changes are inextricably entwined with the causes and consequences of global change. This course is designed to

provide a geographical perspective on the origins, nature and implications of change in human-environment relationships, using a systematic and integrated biophysical and social analysis of issues of significant contemporary change. Topics include: the Australian regional physical environment and relationships with humans (e.g. human settlement, the development of agriculture, human impacts on vegetation change, and land degradation in Australia); 'natural' disasters; human impacts on regional carbon and hydrological cycles; the El Niño Southern Oscillation and its impacts on Australia; Australia's place in a globalising economy, and the impacts of technology (e.g. the impacts of genetically modified organisms on agriculture and society, and the role of IT in societal change); and contemporary development issues in SE Asia and the Pacific, including Australia's geopolitical relationships. Practicals will focus on developing an understanding of the complexity of environmental issues, and analysis and management tools and options; there is a particular focus on integrated problem-solving approaches, and on the practical application of GIS and computational methods. Tutorials, practical and field work are an integral part of the course.

Proposed assessment: A combination of tutorial/practical preparation and participation, essay/report and examination.

Preliminary reading

□ Aplin, G, et al, *Global Environmental Crises — an Australian perspective*, Oxford University Press, Melbourne, 1999

Geographic Information and Intelligence **GEOG2009**
(6 units) Group B

Summer School, February — X1

Sixty-five hours of contact comprising thirty-nine hours of lectures and twenty-six hours of practicals spread over four weeks.

Course Coordinator: Mr K Johnson

Prerequisite: 18 first year units.

Syllabus: The course examines ways of creating and communicating information from data using exploratory methodology involving the interpretation of graphical representations of the output of analysis. The properties of intelligence essential for such analysis and graphic interpretation, and visualisation in particular, are explored in the class. Understanding integrated comprehensive analyses of spatial and temporal data commonly encountered in geography and environmental science is developed. The modelling of change over time and in space is a fundamental issue of the course. Interactive information technology systems support learning along with the analysis and graphical representation of data. The skills developed are of great value in other courses and the wider community.

Proposed assessment: To be agreed in consultation with students. This may include an essay, a field report, and an examination. Regular attendance and participation in class work is required. Students who fail to submit set work by the due date or fail to participate in classes and field excursions may be excluded from examination.

Preliminary reading

□ Hay, I, *Communicating in Geography and the Environmental Sciences*, Oxford University Press, 1996

□ The annotated listing of Internet sites on the GEOG2009 Net-site.

Atmosphere, Weather and Climate **GEOG2011**
(6 units) Group B

Not offered in 2002

Sixty-five hours contact comprising lectures, practicals and fieldwork.

Course Coordinator: Dr J Lindesay

Prerequisite: 18 Science Group A units.

Syllabus: This course is concerned with developing understanding of the atmospheric components of the Earth system, and the interactions among all parts of the system that influence weather and climate on global, regional and local scales. The course covers energy in the system; the structure, composition and physics of the atmosphere; atmospheric circulation on macro and meso scales; an intro-

duction to boundary layer climates and air pollution meteorology; weather processes and systems; the climates of the Earth, particularly the southern hemisphere and Australasia; ocean-atmosphere interactions; the nature, causes and impacts of climatic variability and change; and current issues in climatology (including increasing climatic variability, the El Niño Southern Oscillation, the enhanced greenhouse effect and ozone depletion). A primary focus of the course is on the relationship between humans and the atmosphere, particularly in the context of climatic change. Practical work is directed towards understanding atmospheric data collection, processing and interpretation.

Proposed assessment: To be agreed in consultation with students.

Preliminary reading

Consult School for details.

People and Environment **GEOG2013** **(6 units) Group B**

Second semester

Sixty-five hours contact comprising twenty-six hours of lectures, twenty-four hours of practicals and two days in the field.

Course Coordinator: Mr K Johnson

Prerequisite: 18 first year units. Incompatible with GEOG2004

Syllabus: The course studies human beings and their environment; how we make places, and how we are influenced by the places where we live. The course reviews ideas and theories from the social sciences to develop an understanding of the allocation of space, through studying patterns and processes. Reading the landscape is an integral part of the study. Attention is centered on Australia in its global setting, looking particularly at the complex interconnections of the global economy. Debate is generated about the nature and implications of contemporary trends in society. The disparities people experience in different places and times are a central concern. The course addresses problems of different scales of view. Study of the formulation and effect of policy and planning and management systems integrates work in the course. The practical part of the course studies the creation of information from quantitative and qualitative sources as well as field work.

Proposed assessment: To be agreed in consultation with students. This may include an essay, a field report, and an examination. Regular attendance and participation in class work is required. Students who fail to submit set work by the due date or fail to participate in classes and field excursions may be excluded from examination.

Preliminary reading

□ Fagan, R H and Webber, M, *Global Restructuring: The Australian experience*, 2nd edn, Oxford, 1999

Population and Resources **GEOG2014** **(6 units) Group B**

First semester

65 hours of contact comprising 26 hours of lectures, 26 hours of tutorials and 2 days of fieldwork.

Course Coordinator: Dr P van Diermen

Prerequisite: Completion of at least 24 units or with the written approval of the Course Coordinator. Incompatible with GEOG2005.

Syllabus: The concern in this course is to account for the distribution of the human population and its relation to the resources of the Earth. Particular attention is given to the geographical aspects of the demography of populations and contemporary trends. The development of nations in their particular environments provides perspectives on the relationship between population and resources. Attention is focused on the Australian-Asian hemisphere. The limitations of resources, the role of technology, affluence and social policy are central topics. The methodology for understanding population dynamics supports the discussion of issues and problems. The course also studies policy and how it seeks to keep pace with rapid socio-economic change.

Proposed assessment: To be agreed in consultation with students. This may include an essay, a field report, and an examination. Reg-

ular attendance and participation in class work is required. Students who fail to submit set work by the due date or fail to participate in classes and field excursions may be excluded from examination.

Preliminary reading

□ Sarre, P and Blunden, J. (Eds.), *An Overcrowded World? Population, resources and the environment*, United Kingdom: The Open University/Oxford, 1995

Associated Program: Population Studies in Faculty of Arts

Introduction to GIS and Remote Sensing **GEOG2015** **(6 units) Group B**

First semester

Sixty-five hours contact comprising twenty-six hours of lectures, twenty-two hours of practicals and two days in the field (equivalent to three practicals). Students are expected to spend two hours each week in the lab outside set practical times.

Course Coordinator: Dr B Lees

Prerequisites: 18 Group A Science units.

Incompatible with GEOG3009 completed prior to 1999.

Syllabus: There has been a rapid growth in the use of digital spatial data in many areas of resource management and the environmental sciences. This course aims to develop both a solid theoretical understanding and a comprehensive practical introduction to the use of geographic information systems and remote sensing in the analysis of digital spatial data, simple modelling using digital spatial data and in decision support. The practical exercises take the form of an Environmental Impact Study in a small coastal catchment. On the satisfactory completion of this course, students will have processed and field checked digital analyses of remotely sensed data, integrated the results into a geographic information system, and completed realistic hydrological, erosion, conservation, wildlife habitat, forest, agriculture, fire and building economic models within the geographic information system. The integration of these components will be carried out using Multi-criteria Evaluation and Multiple Objective Land Use Allocation models within the GIS.

Proposed assessment: To be agreed in consultation with students. This may include an essay, a field report, and an examination. Regular attendance and participation in class work is required. Students who fail to submit set work by the due date or fail to participate in classes and field excursions may be excluded from examination.

Preliminary reading

□ Richards, J.A., *Remote Sensing Digital Image Analysis*, Springer, 1993.

□ Burrough, P. & McDonnell, R., *Principles of Geographic Information Systems*, Oxford, 1998.

Introduction to Greenhouse **GEOG2016** **(6 units) Group B**

Second semester

Sixty-five hours contact, comprising lectures, practicals and fieldwork.

Course Coordinators: Dr J Lindesay and Dr B Mackey

Prerequisite: 18 first year units

Syllabus: Global environmental change, and particularly climate change, as a result of human activities is now generally accepted as reality. The 'enhanced greenhouse effect' is the term currently used to describe a wide range of climatic processes and impacts in the global system that are affected by anthropogenic activities. This course provides an introduction to 'greenhouse' science, impacts and policy implications. The fundamentals are provided in an overview of 'greenhouse' science, focussing on the atmospheric processes that drive climatic variability and change, and the roles of the terrestrial biosphere and the oceans in the global carbon cycle. The likely impacts of 'greenhouse' change on ecosystems and human activities are also considered, including biodiversity, system buffering and resilience, and regional inequality and vulnerability. Finally, possible response strategies are investigated, focussing on international

environmental treaties, international and Australian policy approaches to 'greenhouse' change, and management and adaptation strategies. Practical work is directed towards an understanding of carbon budgets and carbon accounting.

Proposed assessment: To be agreed in consultation with students.

Preliminary reading

Consult School for details.

Rivers and Catchments

**GEOG3001
(6 units) Group C**

Second semester

Sixty-five hours contact comprising twenty-six hours of lectures, twenty-four hours of practicals and two days in the field.

Course Coordinator: Mr S Laffan

Prerequisite: 18 Science Group B units.

Syllabus: Rivers and catchments cover most of the land surface of the Earth, and are natural entities for natural resource management. The course is based on a geomorphic understanding of rivers and catchments. Topics include: major theories of Geomorphology; spatial organisation of rivers and hillslopes; responses to tectonic, climatic and land use change; global patterns of sediment transport; catchments as cascading systems; and a geomorphic basis for catchment management. Examples are drawn from Australia, South East Asia, and the Indian Subcontinent. The course is useful for physical geographers, geologists, catchment managers, archaeologists, and forest managers.

Proposed assessment: To be agreed in consultation with students. This may include an essay, a field report, and an examination. Regular attendance and participation in class work is required. Students who fail to submit set work by the due date or fail to participate in classes and field excursions may be excluded from examination.

Preliminary reading

- Summerfield, M.A., *Global Geomorphology*, Longman, 1991
- Knighton, D., *Fluvial Forms and Processes, a New Perspective*, Arnold, 1998

**Applied Geographic Information Systems GEOG3009
(6 units) Group C**

Second semester

Sixty-five hours contact comprising twenty-six hours of lectures, twenty-four hours of practicals and two days in the field.

Course Coordinator: Mr S Laffan

Prerequisite: Completion of one of GEOG2015, GEOG2009, GEOL2011, GEOL3020, FSTY4001, FSTY4003, or permission of the Course Coordinator

Syllabus: Geographic Information Systems have improved considerably over the past decade and geography has become very much richer in digital information. The requirement to build complex applications and simulations has become more urgent with the need to plan for a changing climate, to feed an increasing population and to provide pinpoint marketing analysis for business. This course explores a toolbox of conceptual approaches and methods to model and analyse a range of highly complex, often non-deterministic problems. It provides a true enabling technology for the natural sciences and a rich source of computational and representational challenges for the computer sciences.

Proposed assessment: To be agreed in consultation with students. This may include an essay, a field report, and an examination. Regular attendance and participation in class work is required. Students who fail to submit set work by the due date or fail to participate in classes and field excursions may be excluded from examination.

Preliminary reading

- Burrough, P.A. & R McDonnell, *Principles of Geographical Information Systems for Land Resources Assessment*, Oxford, 1998
- Richards, J.A., *Remote Sensing Digital Analysis*, Springer, 1993

Landscape Ecology

**GEOG3011
(6 units) Group C**

Second semester

Sixty-five hours contact comprising twenty-six hours of lectures, twenty-four hours of practicals and two days in the field.

Course Coordinators: Dr B Mackey and Dr D Lindenmayer

Prerequisites: 18 Science Group B units. Incompatible with SREM3011.

Syllabus: Landscape Ecology is concerned with the analysis and modelling of ecological phenomena on a landscape-wide basis. The advent of GIS, remote sensing and environmental modelling enable ecological process and pattern to be analysed at hitherto unavailable scales. A particular focus of the course is the role played by the primary environmental regimes in determining the composition, structure and productivity of terrestrial ecological systems. The course covers theory dealing with ecological hierarchy theory. The concepts of niche and habitat are examined from a landscape perspective. Practical work is based on the application of GIS to various ecological and landscape management issues. These computer-based practicals are complemented by field-based investigations.

Proposed assessment: This will include technical reports, performance in a range of class activities, and an examination. Students who fail to submit work by the due date or fail to participate in classes and field trips may be excluded from examination.

Preliminary reading

- Cox C., Barry and Moore P.D., *Biogeography — an ecological and evolutionary approach*, Blackwell Scientific Publications, Oxford, 1980
- Forman, R.T.T. and Gordon, M., *Landscape Ecology*, Wiley and Sons, New York, 1986
- Turner, M.G. and Gardner, R.H., *Quantitative Methods in Landscape Ecology*, Springer-Verlag, New York, 1992

Climatology

**GEOG3013
(6 units) Group C**

Not offered in 2002.

Sixty-five hours contact, comprising lectures, practicals and field-work.

Course Coordinator: Dr J Lindesay

Prerequisite: 18 Science Group B units or GEOG2011

Syllabus: The atmosphere and climate are a critical part of the earth system, and climatic variability and change are central to the issue of future global environmental change. This course is directed towards developing deeper understanding of climatic variability and change, and their importance to the management of the global system. The course focuses on three related topics that highlight the functioning of the climate system, and the interactions between humans and the atmosphere, at a range of temporal and spatial scales.

Beginning at the mesoscale, human-atmosphere interactions in urban environments are investigated, including characteristics and impacts of urban climate modifications, air pollution potential and related issues, and the role of complex terrain in modifying the climate near the ground. The second topic explores the larger-scale interactions between the oceans and atmosphere that are a critical link in the functioning of the climate system, from regional to global scales. Ocean atmosphere dynamics and interaction processes and their role in inter-annual and low frequency climate variability are considered in the context of current research on the El Niño Southern Oscillation and its impacts. Finally, the ways in which conceptual and dynamical models are used to develop our understanding of the climate system and climate change at all scales are studied. The focus is on understanding the uses and limitations of such models, and on interpreting their output in ways that are useful for policy formulation, decision making and management.

Practical work is focused on the manipulation and interpretation of climatological data in the context of climatic variability and change, including observational data and model-generated future climate scenarios.

Proposed assessment: To be agreed in consultation with students.

Preliminary reading

Consult School for details.

South-East Asia Field School **GEOG3015**
(6 units) Group C

Four weeks in-country field school
Offered every second year (next offered early January 2002).

Course Coordinator: Dr P van Diermen

Prerequisite: GEOG3016 taken together with SRES3011 and/or SRES3012 and/or with the written agreement of the Course Coordinator.

Syllabus: This course explores the development of South East Asia through an intensive 4-week field school. Students are exposed first hand to the economic, social and environmental conditions in several South-East Asian countries, including Indonesia, Singapore and Thailand. By intensive teaching in the field, visits to projects and institutions and contact with local cultures, students will develop an understanding of development in the region. In addition to the in-country lectures students are expected, during the four weeks, to research a topic chosen in consultation with their lecturer.

Note: Because the course is offered only every second year it can be taken either in second or third year. The cost of the fieldwork will be charged directly to students.

Proposed assessment: to be agreed in consultation with the students.

Preliminary reading

- Taylor, C. et al., *South-East Asia on a Shoestring*, Melbourne, Lonely Planet, 1997
- Vervoorn, A., *Re-Orient: Change in Asian Societies*, Singapore, Oxford, 1998

Associated Program: Development Studies in Faculty of Arts.

Geography of South-East Asia **GEOG3016**
(6 units) Group C

First semester
65 hours of contact comprising 39 hours of lectures and 26 hours of tutorials.

Course Coordinator: Dr P van Diermen

Prerequisite: Completion of at least 48 units or with the written approval of the Course Coordinator.

Syllabus: This course explores the geography of South East Asia. It is a region of remarkable economic growth and more recently financial turmoil. These developments have associated problems of economic inequity, migration, pollution, ethnic tensions, institutional corruption and political instability. All of these and other issues will be explored within the context of the relationship between cultural, economic, political and environmental factors and processes. The underlying aim of the course is to explore how far we can explain patterns of human activity in this region, using both spatial and temporal analyses. This course will provide an advanced level synthesis of issues within human geography, and will be useful for geographers, consultants, business people, policy makers, and anyone interested in the region.

Proposed assessment: To be agreed in consultation with students. This may include an essay, a field report, and an examination. Regular attendance and participation in class work is required. Students who fail to submit set work by the due date or fail to participate in classes and field excursions may be excluded from examination.

Preliminary reading

- Rimmer, P.J., *Pacific Rim Development: Integration and globalisation in the Asia-Pacific economy*, Canberra, Allen and Unwin, 1997
- Rodan, G, et al, *The Political Economy of South-East Asia*, Melbourne, Oxford University Press, 1997

Associated Program: Development Studies in the Faculty of Arts

Readings in Environmental History **GEOG3017**
(6 units) Group C

First semester

A weekly seminar of 1.5 hours, consisting of research seminars and class discussion. Assessment is based around reading reports and a major essay.

Course Coordinator: Dr S Dovers

Prerequisite: Entry requires the written approval of the Course Coordinator. As this is a reading course, student numbers in this course are limited, and early enrolment encouraged.

Syllabus: Environmental History explores the changing relationship between people and their environment through time, taking account of shifts in value systems, knowledge and economic context. This course will familiarise students with the literature, methods, content and likely future development of this emerging transdisciplinary field. The course is structured around student readings, reviews and essays, and weekly seminars. Likely seminar topics are: environmental history, focusing on Australia, past institutions and the role of history in current debates, covering issues such as forestry, biodiversity, fire management, indigenous lands and water resources.

Proposed assessment: To be agreed in consultation with students.

Preliminary reading

- Dovers, S, (ed.), *Australian Environmental History*, OUP, Melbourne, 1994
- Dovers, S, (ed), *Environmental History and policy: settling Australia*, OUP Melbourne, 2000.

Northern Australian Field School **GEOG3019**
(6 units) Group C

Four weeks field school
Offered every second year (July 2003 next offered).

Course Coordinator: Dr B Lees

Prerequisite: Entry with the written agreement of the Course Coordinator.

Syllabus: This course explores the environments of Central and Northern Australia. Students are exposed first hand to the vegetation, landforms, land uses and environmental problems of these two important regions. By intensive teaching in the field, visits to projects and institutions and contact with local people, students will develop an understanding of the important issues facing these regions. In addition to the in-field lectures, students are expected during the four weeks to research a topic chosen in consultation with their lecturer.

Note: Because the course is offered only every second year it can be taken either in second or third year. The cost of the field work will be charged directly to students.

Proposed assessment: To be agreed in consultation with the students.

Preliminary reading

To be advised

Environmental Politics, Policy and Planning **GEOG3028**
(6 units) Group C

First semester

Sixty-five hours contact comprising lectures, tutorials, a two-hour workshop and a five-day field class.

Course Coordinators: Dr R Baker and Professor P Kanowski

Prerequisite: At least 96 units towards a degree, or the written approval of a Course Coordinator. Incompatible with GEOG3010 and FSTY4106.

Syllabus: The course considers environmental politics, policy and planning theory and practice at scales from the local to the global. Field classes and workshops provide students with opportunities to analyse specific environmental politics, planning and policy issues in theoretical frameworks and over different time scales. Case studies

explored include Landcare, forest politics, policy and planning, the Murray-Darling Basin Agreement and the role of indigenous people in environmental policy and planning.

Proposed assessment: Tutorial paper, facilitation of tutorial, learning portfolio and field trip report or end of course exam. Regular attendance and participation in class work is required. Students who fail to submit set work by the due date or fail to participate in classes may be excluded from examination.

Preliminary reading

- Conacher, A., and Conacher, J., *Environmental Planning and Management in Australia*, Oxford, 2000.
- Dargavel, J., *Fashioning Australia's Forests*, Oxford, 1995
- Walker, K.J., Crowley, K, *Australian Environmental Policy 2 — studies in decline and devolution*, UNSW Press, Australia, 1999

Palaeo-Environmental Reconstruction GEOG3029
(6 units) Group C

First semester

One lecture and one two-hour class throughout semester and attendance at selected seminars. Up to 26 hours additional project work by arrangement. One field day.

Course Coordinator: To be advised

Prerequisite: At least 96 units in a degree including 12 later-year units of BIOL, SREM, SRES, ANTH, PREH or PRAN courses or written approval of the Course Coordinator. Incompatible with GEPR3001.

Syllabus: The course reviews techniques commonly used to provide a reconstruction of the past ecology, climate, and surface processes of a region with an emphasis on the potential resources and constraints that may have affected human populations. Biological techniques to be studied include analyses of pollen, charcoal, wood, seeds, isotopic biochemistry and biogenic silica and a range of geomorphological and chronological methods will also be considered. The contribution of these techniques to particular prehistoric problems such as the role of human activity in environmental change is assessed.

Proposed assessment: To be agreed in consultation with students.

Associated programs: Environmental and Human Histories, Geoecology.

Music

Dr Jonathan Powles, BMus(Hons) *Syd.*, DPhil *Oxon.*
Head of Department of Musicology

Introduction

The School of Music offers study in music through the Faculty of Arts by means of an innovative and flexible curriculum approach that aims to develop students' independent and creative thinking about music, a comprehensive knowledge of the musician's craft, and an understanding of music and of the musical profession as an integral part of world culture. Study emphasises the ability to research, analyse, discuss and critically reflect upon music in a range of different musical, cultural and technological contexts. Students may undertake music courses leading to an Arts major in music, an honours program in Musicology, or individual semester courses in European music or in music of other cultural traditions. Studies in world musics may also form part of the Indigenous Australian Studies major. A course of study of an instrument/voice or of composition may be undertaken as part of the Arts major, (or as approved non-Arts courses), subject to audition and resources.

All students undertaking Music courses are strongly encouraged to participate independently in some form of music performance, whether choral, chamber, orchestral, or individual instrumental or vocal study.

Music Major

In those programs leading to an Arts major, study is integrated around four themes per year over a three-year cycle, rather than through a prescribed syllabus. Within these themes students explore a variety of musical styles, historical periods, repertoire, approaches and concepts, through project-based learning in both critical thought and music language and techniques. These projects involve a choice of topics and activities designed to develop a range of skills and knowledge in music. The courses are vertically streamed; students commence learning at a level appropriate to their prior ability and experience in music, and progress through the courses in the major at increasing levels of complexity. Learning is primarily within small flexibly organised groups, and students should be aware that the timetable operates flexibly across 6 week blocks. The Course Co-

ordinator will guide students in the choice of project topics and learning groups.

Students must complete six x 6 unit semester courses (each 6 units) in Music Literature, Techniques and Critical Thought and one additional 6 unit semester course in music from the list below to complete a major. Students not intending to complete a major may undertake individual 6 unit semester courses in Music Literature, Techniques and Critical Thought. Students enrolling in these courses must have a good reading knowledge of music.

Music in Indigenous Australian Society, Music in Asian Cultures, World Musics A and B, Introduction to Asian performing Arts and Authenticity, Identity and Technology.

Students may undertake these courses without prior reading knowledge of music. These typically involve lectures and tutorials but also include a world music ensemble class in which students seek to understand and experience other cultural traditions through participation in a performance laboratory. These courses may also contribute towards the Indigenous Australian Studies major as well as within Asian Studies.

Instrumental/Vocal Study and Composition

Students may undertake one course of instrumental/vocal study or composition (in either instrumental/vocal or electroacoustic media) as a designated Arts course only when they are completing a major in music. These courses are 6 units taken over the whole year. Other students need to seek permission from the Faculty and the Institute of the Arts to enrol in such courses as non-Arts units. Study is subject to resources and audition. Intending students must contact the relevant Head of Department at the School of Music as early as possible (ideally towards the end of the previous semester) to arrange an audition before finalising their enrolment.

The degree with Honours in Music

Students may undertake the Bachelor of Arts degree with Honours in Music (Musicology) or in combination with another Honours School with the approval of the relevant Heads of Department or School. To qualify for Honours in Music, students must complete at least 60 units in music which must include at least 12 units in Approaches and Methods of Music Research and which may include one cognate course in another relevant discipline.

Summary of Units offered in 2002

<i>First semester</i>	<i>Second semester</i>
Music Literature, Techniques and Critical Thought 1–6 World Musics A Instrumental/Vocal Study 1–3 (Annual course) Composition Studies 1–3 (Annual course) Approaches and Methods in Music Research 1–4	Music Literature, Techniques and Critical Thought 1–6 World Musics B Introduction to Asian Performing Arts: Performance, Genres and Intercultural Translation INDN3007 Instrumental/Vocal Study 1–3 (Annual course) Composition Studies 1–3 (Annual course) Approaches and Methods in Music Research 1–4
Music IV (Musicology): Honours	

COURSE DESCRIPTIONS

Music Literature, Techniques and Critical Thought 1–6 MUSM1125, 1126, 2130, 2131, 3112, 3113 (each 6 units)

First and second semesters, each year
Participation in project activities up to 40 hours per semester.

Coordinator: Deborah Crisp

Prerequisites: Commencing students are expected to have a reading knowledge of music and must have consulted with the course coordinator prior to enrolment.

Students may enroll in the first course in either first or second semester.

Students must achieve a Pass in the preceding level of the course before commencing the next semester.

Syllabus: For information on the variety of specific topics offered under this course heading, contact the Course Coordinator. This course aims to develop the student's ability to research, analyse, discuss and critically reflect on music, informed by historical and con-

temporary cultural concepts and a knowledge of specialist musical language.

In considering past and contemporary musical practice, the student is introduced to issues of criticism, analysis, theory, history, interpretation and cross-cultural understanding. The course will deepen the student's understanding of:

- the historical, social and cultural contexts in which music has developed and is practised
- musical language and techniques.

Emphasis will be placed upon the student's ability to understand and apply knowledge derived from score, sound and a range of other sources

The content of the course is delivered through a range of activities undertaken within thematic blocks of 6 weeks. Students receive feedback at the end of each 6-week block. The themes are planned as a three year cycle and allow a variety of concepts, approaches, methodologies and skills to be explored across a wide range of literature and material. Each theme must be approached from both the-

oretical and critical perspectives, with an emphasis on the relationship between style, analysis and criticism. There is the opportunity to study music across cultures and musical styles. Student learning is progressively extended and consolidated in a planned fashion.

Proposed assessment: Normally two major projects in critical studies and two major projects that focus on music language and techniques per semester. The project requirements and criteria will be determined through consultation with the lecturer and may take the form of written work, oral and audio-visual presentations as appropriate to the activity.

The graded semester result will reflect the level of achievement, academic participation and the increasing level of complexity and expertise with which students undertake the project work.

World Musics A

MUSM0069 (6 units)

First semester

One lecture and two hours of tutorial/workshop each week.

Lecturers: Dr Wild, Gary France

Prerequisites: Two courses to the value of 12 units in the Faculty of Arts or Asian Studies, with the permission of the Head of Department.

Note: Students are not required to have a reading knowledge of music but are expected to have a demonstrated interest in music and a willingness to participate in a workshop situation with other music students.

This course is linked to the courses Music in Indigenous Australian Society (MUSM2088), and Music in Asian Cultures (MUSM2089), which will be offered in alternate years. Students wishing to include these courses in relevant majors should discuss this with the appropriate convener.

Syllabus: A study of music of different world traditions, in both their traditional and contemporary contexts, and an exploration of the fusion of world musics as currently used in contemporary music. This course explores musical ideas and ideas about music as practised in various cultures. This first semester course includes a theoretical introduction to the principles and practices of the anthropology of music, and focuses on the relationships between music and other aspects of culture. Different traditions are studied through selected repertoire from a variety of cultures, especially indigenous Australian, Native American, African and South Pacific cultures. Students also participate in a weekly workshop that develops their inter-cultural understanding through the experience of playing and singing music from other cultures.

Proposed assessment: One major written assignment, tutorial presentation, and class tests as directed by the lecturer.

Preliminary reading

- Shelemay, Kay, ed., *History, Definitions and Scope of Ethnomusicology*, New York and London: Garland Publishing, 1990
- Nettl, Bruno, *The Study of Ethnomusicology: Twenty nine Issues and Concepts*, Urbana and Chicago: University of Illinois Press, 1983
- Merriam, Allan P, *The Anthropology of Music*, Evanston, Illinois: Northwest University Press, 1964/1989

This course can be counted towards a Music or Indigenous Australian Studies major.

World Musics B

MUSM0070 (6 units)

Second semester

One lecture and two hours of tutorial/workshop each week

Lecturers: Dr Hall, Gary France

Prerequisites: Two courses to the value of 12 units in the Faculty of Arts or Asian Studies, with the permission of the Head of Department.

Note: Students are not required to have a reading knowledge of music but are expected to have a demonstrated interest in music and a willingness to participate in a workshop situation with other music students.

This course is linked to the courses Music in Indigenous Australian Society (MUSM2088), and Music in Asian Cultures (MUSM2089), which will be offered in alternate years. Students wishing to include these courses in relevant majors should discuss this with the appropriate convener.

Syllabus: A further study of music of different world traditions, in both their traditional and contemporary contexts, and a further exploration of the fusion of world musics as currently used in contemporary music. This course explores musical ideas, styles and techniques as well as ideas about music as practised in various cultures. The second semester course focuses on developing understanding through a more detailed analysis of the structures and styles of music of different traditional and contemporary musics, including such aspects as the fundamentals of linear and polyphonic music, rhythmic organisation, vocal and instrumental styles, relevant scales and modes, ornamentation, performance styles. Different traditions are studied through selected repertoire from a variety of cultures, especially Eastern Mediterranean, Asian and Latin American cultures. Students also participate in a weekly workshop that develops their inter-cultural understanding through the experience of playing and singing music from oral cultures.

Proposed assessment: One major written assignment, tutorial presentation, and class tests as directed by the lecturer.

Preliminary reading

- May, Elizabeth, ed, *Musics of Many Cultures. An Introduction*, Berkeley, Los Angeles, London: University of California Press, 1980.
- Myers, Helen, ed, *Ethnomusicology: An Introduction*, The New Grove Handbooks in Music, London: Macmillan, 1992.
- Titon, Jeff Todd, ed, *Worlds of Music: An Introduction to the Music of the World's Peoples*, New York: Schirmer Books, 1984.

Music in Indigenous Australian Society

MUSM2088 (6 units)

Not offered in 2002

One lecture, one tutorial and one workshop each week.

Lecturer: Dr Wild

Prerequisite: None.

Syllabus: A study of music in Aboriginal society, in both traditional tribal and contemporary contexts. Although this study of music in its social context will examine some technical aspects of Aboriginal music, the course has a broadly humanistic perspective and may be studied without musical prerequisites. The study will examine the relationship of music to spiritual beliefs, ceremonies, social structures, dance and art, in music of the Aborigines from Central Australia and Arnhem Land, and will examine issues relating to changing contexts in Aboriginal society. Students also participate in a weekly workshop, which develops their intercultural understanding through the experience of playing and singing music from oral cultures.

Proposed assessment: As below, or as agreed at the first meeting. One major written project or its equivalent, of 2,500–3,000 words; tutorial assignments as required by the lecturer.

Preliminary reading

- Ellis, C, *Aboriginal Music, Education for Living: Cross Cultural Experiences from South Australia*, Uni of Queensland, 1985
- Breen, M, ed, *Our Place, Our Music*, Aboriginal Studies, 1989
- Required and recommended reading and listening as directed by the lecturer

This course can be counted towards a Music or Indigenous Australian Studies major.

Music in Asian Cultures

MUSM2089 (6 units)

Not offered in 2002

One lecture, one tutorial, and one workshop each week.

Lecturer: Dr Hall

Prerequisites: None.

Syllabus: A study of music in selected Asian cultures. Although this study of music in its social context will examine some technical aspects of Asian music, the course has a broadly humanistic perspective and may be studied without musical prerequisites. The course may include a systematic, historical and ethnographic survey of principles of ethnomusicology, its prominent writers and their theories. Within a comparative approach to music of different Asian cultures, there will be a focus upon the relationship of music to the religion, dance, literature and rituals of one specific Asian culture. Students also participate in a weekly workshop, which develops their intercultural understanding through the experience of playing and singing music from oral cultures.

Proposed assessment: As below, or as agreed at the first meeting. One major written project or its equivalent, of 2,500–3,000 words; tutorial assignments as required by the lecturer.

Preliminary reading

- Malm, W P, *Music of the Pacific, the Near East and Asia*, Prentice Hall, 1977
- Nettl, B, *Twenty Nine Issues and Concepts in Ethnomusicology*, University of Illinois, 1983
- Required and recommended reading and listening as directed by the lecturer

Introduction to Asian Performing Arts: Performance, Genres and Intercultural Translation **INDN3007**
(6 units)

Second semester
Up to 39 hours per semester

Coordinator: Amrih Widodo

Prerequisites: One year of tertiary Asian language study or equivalent; or any later-year ITA course; or any later-year course from the Faculty of Arts.

Aim: To introduce students to issues in the study of Asian performance and a representative sample of Asian performance genres as well as the cultural aesthetics that inform them.

Syllabus: Case studies and 'experiences' of attending or performing particular genres in the performance laboratory will be discussed and analysed in the context of intercultural translation. This will include issues such as: What is 'performance'? How do we read, understand and experience performances from other cultures? How do we translate performances? What are issues of inter-cultural performances?

It is planned to include lectures and workshops by visiting artists as well as by lecturers in ITA, FAS and the Faculty of Arts.

The semester will conclude with a public performance by students based on their work in the performance laboratory.

Assessment: To be based on a 60–40% ratio of written and performance components.

Majors: It is envisaged that this course would contribute to a major in Contemporary Asian Societies, the Asian Literature major and possibly relevant language majors.

Preliminary reading

- Miller, T E. and Williams, S (eds), *The Garland Encyclopedia of World Music: Southeast Asia*, 1998
- Lindsay, J, *Javanese Gamelan: Traditional orchestra in Indonesia*, 1992

Incompatibility: SEAI3007 Introduction to Asian Performing Arts: Performance, Genres and Intercultural Translation

Authenticity, Identity and Technology: The Poetics and Politics of Arts as Performance in Asia **INDN3008**
(6 units)

Not offered in 2002
Up to 39 hours per semester

Coordinator: Amrih Widodo

Prerequisite: Introduction to Asian Performing Arts: Performance, Genres and Intercultural Translation

Aim: To focus on theoretical debates concerning the construction of the performance genres studies in the first semester. Study will focus on four topics: authenticity, identity, polity and technology.

Syllabus: Government policies in choosing and directing the development of certain genres, popularisation and commercialisation of certain genres, and the role of technologies in mediatization of performing arts will be examined together with debates on authenticity and identity. The course will examine questions such as: how are our identities relevant to certain genres of performing arts? What is a nation or an ethnic group? In what sense can we 'own' a certain artistic tradition? What do we know of the past and what claims can its performing arts make on our lives?

Weekly participation in performance laboratory sessions will be a feature of the unit leading to an end-of semester public performance.

Assessment: To be based on a 60–40% ratio of written and performance components.

Preliminary reading

- Trilling, L, *Sincerity and authenticity*, 1972
- Sumarsam, *Gamelan: cultural interaction and musical development in central Java*, 1995

Incompatibility: SEAI3008 Authenticity, Identity and Technology: The Poetics and Politics of Arts as Performance in Asia

Instrumental/Vocal Study 1–3 **MUSM1127A/B***,
2132A/B*, 3114A/B*
(6 units)

Full year course

Offered each year subject to audition and resources

Weekly individual instrumental/vocal tuition - half hour per week over 26 weeks.

Coordinator: David Nuttall

Prerequisites: Students must have already attained a high level of proficiency prior to enrolment. Admission will be by audition, and students are advised to contact the relevant Head of Department towards the end of the semester prior to anticipated enrolment. Academic progress to the next year level is not automatic and is dependent upon both a pass in the unit and continued availability of teaching resources. Although this unit cannot count towards a music major in first year, students intending to pursue a music major are encouraged to take the unit as an elective.

Syllabus: Study of an instrument/voice is undertaken through individual tuition. The study encourages the development of technical and musical proficiency as well as allowing exploration of a diverse range of repertoire. This course of study is sequenced according to individual ability and discipline-specific demands. Participation in a range of ensemble activities is not mandatory or assessed but is possible depending on student's level of ability.

Assessment: A graded result will be given at the end of the year on the basis of a departmental examination. The assessment requirements and criteria for evaluation vary according to the demands of the instrumental discipline and will be defined in guidelines distributed to students at the beginning of the year.

*N.B. If you who wish to take this course you must enrol in both MUSM1172A or 2132A or 3114A (First Semester) and MUSM1127B or 2132B or 3114B (Second Semester). This course continues over a full-year and is not divisible into semesters. There is no formal assessment at the end of the first semester. You will not receive a final grade until the completion of Part B at the end of the year. If you drop Part A in First Semester, you must also drop Part B.

Composition Studies 1–3 **MUSM1128A/B***,
2133A/B*, 3115A/B*
(6 units)

Full year course

Offered each year subject to audition and resources

Small group classes up to 26 hours per semester

Coordinator: Professor Larry Sitsky

Prerequisites: Admission will be by audition, interview and folio of work. Students are advised to contact the Head of Department at least 2 weeks before the anticipated enrolment. Academic progress to the next year level is not automatic and is dependent upon both a pass in the course and on the continued availability of teaching resources. Although this course cannot count towards the music major in first year, students intending to pursue a music major are encouraged to take the course as an elective.

Syllabus: Composition Studies aim to provide the student with an understanding of either the theories and practices of instrumental and vocal writing in the twentieth century or the fundamentals of electroacoustic composition.

The development of the student's creativity and technical knowledge will be encouraged in:

Either

Musical composition, analysis, instrumentation and orchestration in a range of instrumental and vocal styles, genres, approaches and idioms. The student's grasp of compositional foundations is developed systematically through analysing works of increasing complexity and dimensions and applying this knowledge to their own compositional endeavours.

Or

Musical composition in an electroacoustic medium. This introduces the student to the range of digital/analog technologies available for sound and image manipulation and generation of musical data in studio and real-time environments.

Assessment: Presentation of a folio of musical works, either in score or digital medium. A program of study and the folio requirements will be defined at the beginning of each year in consultation with the student. At the end of each year, a graded result will be based on the student's level of achievement in a folio of works and their academic participation and progress, reflecting at each year level the student's capacity and level of expertise to undertake increasingly complex creative and technical tasks.

*N.B. If you wish to take this course you must enrol in both MUSM112A8 or 2133A or 3115A (First Semester) and MUSM1128B or 2133B or 3115B (Second Semester). This course continues over a full-year and is not divisible into semesters. There is no formal assessment at the end of the first semester. You will not receive a final grade until the completion of Part B at the end of the year. If you drop Part A in First Semester, you must also drop Part B.

Approaches and Methods in Music

Research 1–4 MUSM1129, 1130, 2134, 2135 (each 6 units)

First and second semesters, each year

Participation in a weekly musicology seminar, requiring a progressively extended depth of study and level of achievement each semester. Up to 26 hours per semester.

Availability subject to quota

Coordinator: Deborah Crisp

Prerequisites: Students are expected to achieve at least a Credit standard in Music Literature, Techniques and Critical Thought 1 and 2 (MUSM1125 and MUSM1126). Students must achieve a Pass in the preceding level of the course before commencing the next semester.

Syllabus: This course aims to develop the student's ability to research and explore scholarly ideas in music, examining music as cultural and aesthetic practice in historical, contemporary and cross-cultural contexts through a range of approaches and methods.

It introduces the student to the materials, critical, historical and oral sources, conceptual approaches and disciplines of music research and scholarship. It deepens the student's understanding of the historical, social and cultural contexts in which music has developed and is practised. The student is challenged to address issues, practices and methods relating to criticism, style and analysis, artistic interpretation, history, bibliography, biography, archival research, cultural theory, field work and cross-cultural knowledge. The student will develop the vocabulary and tools for speaking and writing critically about the rich traditions of music of many cultures, and

learn to use, synthesise and evaluate primary sources, with an emphasis upon Australian resources.

Assessment: The requirements and criteria will be determined through consultation with the lecturer and will take the form of seminar papers, written work and other presentations as relevant to the practice and applications of musicology, (eg. criticism, editing, arts management, broadcasting, journalism, collections and collection management, field work and oral history). The graded semester result will reflect the level of achievement, academic participation and increasing level of complexity, understanding and expertise with which students undertake the work.

Admission to Musicology IV Honours

**MUSM4105 (full-time)
or MUSM4107 (part-time)**

To be admitted to Musicology IV Honours, the student must complete 60 units in music with at least a credit average, consisting of the Music major (42 units) and a minimum of two courses in Approaches and Methods in Music Research (12 units) and a further 6 unit course. With the permission of the Head of Department students may include one cognate course (eg. a language, anthropology, philosophy, art history) within their 60 units.

Combined Honours

Students wishing to combine study of music with another discipline should consult the Head of Department, Musicology and the relevant Honours Convener within the Faculty of Arts regarding admission requirements, and the combined program of study, and Honours thesis.

Musicology IV Honours

The Honours IV year consists of an individually approved program of study. This would normally consist of presentation of seminar papers within the Musicology seminar program (25%), participation in project activities in the cross-curriculum thematic blocks (25%), and an Honours level thesis of approximately 12,000 words (50%).

Through various types of project work and presentations, commensurate with Honours level, students must demonstrate a comprehensive understanding of the range of approaches and research methods in musicology and a critical knowledge of the sources and literature of music and musicology. Students must also demonstrate an understanding of music across cultures.

Students are encouraged to undertake at least one archival project or field work in Australian music, using collections such as the National Library of Australia, ScreenSound Australia, the Australian Institute of Aboriginal and Torres Strait Islander Studies, and other national collecting institutions.

Spanish

ANU students who wish to study Spanish as part of their degree can do it through the University of Canberra as a cross-institutional student. Bachelor of Arts or Arts combined program students can incorporate Spanish in their studies as an Arts major or as single course/s.

The primary goal of the Spanish major is to develop proficiency in students' communication skills so they can function linguistically in a natural, spontaneous and efficient way in a Spanish-speaking environment. It also gives students the opportunity to become familiar with the main social, political, economic and cultural issues of Latin American and Spanish society. The achievement of this general goal is directly related to the use of a communicative methodology in the teaching of all courses in the major.

The major is intended for learners of Spanish as a foreign language, no previous knowledge is required. New students who already have some knowledge of Spanish, for example from high school and summer courses or overseas exchange programs, are asked to see the Lecturer in Charge before enrolling to determine the level at which they should enter.

University of Canberra — course codes and course names:

<i>Major</i>			<i>ANU units</i>
4874	Spanish 1A: Language and Culture	1st year	6 units
4875	Spanish 1B: Language and Culture	1st year	6 units
4876	Spanish Language 2 (annual unit)	2nd year	16 units
4877	Spanish Language 3 (annual unit)	3rd year	16 units

Other combinations are possible, particularly for students with previous knowledge. Students can complete a major in Spanish by doing Advanced Spanish A and Advanced Spanish B, and/or Special Studies in Modern Languages A and Special Studies in Modern Languages B. These courses are worth 8 units each.

Note: SPANISH 1A and SPANISH 1B (1st year) are currently being taught at ANU (Language Laboratories, Baldessin Precinct Bldg 110.) Subject to sufficient numbers, Spanish Language 2 might be taught as well on the ANU campus. The teaching of the remaining courses is being conducted at the University of Canberra from 4:30pm onwards.

ANU students who wish to do studies in Spanish must:

1. Complete an ANU Application for Cross-Institutional Studies available from the Faculty of Arts Office or the Faculty in which you are enrolled.
2. Complete a University of Canberra — Application for Admission Form (Cross-Institutional Studies) and leave it with the Faculty of Arts during Registration Week. Outside this week students are asked to bring this Admission Form with the above approved Application for Cross-Institutional Studies form to the Student Administration of The University of Canberra or to Oscar Florez, Lecturer in Charge, Bldg. 20 Office C39.

An ANU student enrolled at the University of Canberra as a Cross-institutional student is entitled to a refund of half of the Amenities and Services Fees in both institutions. For further information, contact Oscar Florez at the University of Canberra. Ph. 62012074 — 62012334

Cognate Program Economic History

Convener: Dr H M Boot, BSc (Econ) *Lond.*, PhD *Hull* — School of Economics, Faculty of Economics and Commerce.

Economic History courses may be studied in the Faculty of Economics and Commerce, and as part of an Arts degree. Refer to the Faculty of Economics and Commerce section of the Handbook for details of Economic History courses. The School offers two first-year courses, Understanding Economic Behaviour: Microeconomics for Social Scientists and Understanding Economic Policy: Macroeconomics for Social Scientists, which are designed especially for non-economics students, and emphasise the usefulness of an understanding of economics in such disciplines as history, political science and sociology. These courses are not available to students enrolled in degrees offered by the faculty of Economics and Commerce.

Most later year courses in Economic History require either ECON1101 Microeconomics 1 and ECON1102 Macroeconomics 1 or Understanding Economic Behaviour and Understanding Economic Policy as a prerequisite, therefore BA students taking a major in Economic History should normally take Understanding Economic Behaviour and Understanding Economic Policy as the first courses of the major. Note, however, that many later-year courses in Economic History and Economics specifically require ECON1101 Microeconomics 1 and ECON1102 Macroeconomics 1 as a prerequisite. The other first-year courses offered are Australian Economy and Business and Economy in the Asia-Pacific Region. Both run for one semester but are not normally prerequisites for later-year Economic History courses.

Understanding Economic Behaviour: Microeconomics for Social Scientists and Understanding Economic Policy: Macroeconomics for Social Scientists are the only Economic History courses which count as Arts courses. These first-year courses may be taken alone, or as part of an Economic History major.

Understanding Economic Behaviour: Microeconomics for Social Scientists

ECHI1105
(6 units)

Not offered in 2002

Two lectures and one tutorial a week.

Syllabus: Understanding Economic Behaviour is a course designed to introduce the principles and applications of microeconomic thinking to students in the social sciences, including political science, history and sociology. The course focuses on the concepts of economics and requires no background in mathematics. Its aim is to show how those concepts of economics may be employed to assist social scientists to think more coherently and consistently about a wide range of social problems. Emphasis will be placed on the application of the economic way of thinking to contemporary social issues. It is hoped that students who complete the course will be better equipped to tackle not only questions that are primarily economic, but also questions in other disciplines where a knowledge of the basic tools of economics is most useful.

Preliminary reading

□ Heyne, Paul, *The Economic Way of Thinking*, Prentice Hall, 9th ed. 2000

Proposed assessment: By examination, essay and tutorial participation.

Understanding Economic Policy: Macroeconomics for Social Scientists

ECHI1106
(6 units)

Not offered in 2002

Two lectures and one tutorial a week.

Syllabus: Understanding Economic Policy aims to introduce students to the macroeconomic relationships of a modern capitalist economy. The course is designed for social scientists and requires no background in mathematics. This course is divided into two parts. Eighteen lectures are devoted to an introduction to macroeconomic

theory and policy. Here the focus is on the economy as a whole. Topics include the concept of GDP, unemployment, inflation, economic growth, the business cycle, the exchange rate, the balance of payments, and monetary and fiscal policy. Some attention will also be given to competing systems of ideas, such as Keynesianism and Monetarism. The final eight lectures will provide an introduction to the history of economic thought. Here the ideas of the main contributors to economic thought will be reviewed, including Adam Smith, Thomas Robert Malthus, David Ricardo, Karl Marx, William Stanley Jevons, Alfred Marshall, John Maynard Keynes, Friedrich Hayek, Milton Friedman and Joseph Schumpeter.

Preliminary reading

□ Heyne, Paul, *The Economic Way of Thinking*, Prentice Hall, 9th edn 2000

Proposed assessment: By examination, essay and tutorial participation.