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How this Handbook is Organised

Part 1: The University, General Education, and You

Provides an overview of the philosophy of, and requirements for, General Education at the University, including its relationship with the rest of undergraduate education. You should read this section before commencing studies in General Education to ensure that you are familiar with the University's objectives and requirements for General Education, as well as your role and contribution.

Part 2: Program Implementation and Administrative Arrangements

Sets out the guidelines for the General Education Program, and the administrative arrangements for 1988.

As the new General Education Program requirements are to be introduced progressively by the University, and a number of special provisions apply for 1988 only, you should read this Section very carefully before planning your General Education program and enrolling.

Part 3: Subject Information

Includes: subject descriptions; listings of subjects by category, area, length; summary of subjects with exclusions.

Refer to this part when planning your General Education program and selecting subjects at enrolment.

The General Education Timetable is published separately and is available from the Centre for Liberal & General Studies office [see below] or at the General Education Enrolment Centre at Unisearch House during the enrolment period.

Contacting the Centre

The Centre for Liberal & General Studies administers the General Education Program under the authority of the Professorial Board's Standing Committee on General Education. The Centre is the subject authority for all subjects offered in the General Education Program, even though many subjects are contributed by various academic units of the University.

All enquiries about the program, including requirements and subject information, should be made in the first instance to the Centre.

Location

Room G.58, Ground Floor, Morven Brown Building. Hours: 9.00am - 5.00pm.

Who to contact

Telephone enquiries should be made to the following Centre staff: Don Heaton, Administrative Assistant, 697.2436 Robert Morrell, Administrative Officer, 697.2438

Correspondence

All correspondence should be addressed to: The Director Centre for Liberal & General Studies The University of New South Wales PO Box 1 Kensington NSW 2033







Contents

1.	The University, General Education and You	
	Introduction	
	The Contemporary Challenge	
	What is University Education?	
	The Structure of Undergraduate Education	
	Why General Education?	
	The Objectives of General Education	
	The General Education Program	
	The Overall Educational Design	
	The General Education Requirements	
	The Learning Process	
	Assessment: Requirements	
	How You Can Help: Student Evaluation of the Program	10
2.	Program Implementation & Administrative Arrangeme	nts
	Program Implementation: Transition Arrangements	
	Courses with a General Studies Requirement Prior to 1988.	
	Courses to Comply with Program Provisions From 1989	
	Subjects	
	Timetabling	
	Enrolments	
	Advanced Standing	
	Miscellaneous Enrolment	
	Assessment: Additional Information	28
	Class Locations	28
	Further Information about Subjects and the Program	29
3.	Subjects in the Program	
•	Summary of Subjects by Category and Area	30
	Summary of Subjects with Exclusions	
	Subject Descriptions (listed by subject number)	36
	Staff of the Centre	48
	Tables	-
	1. Undergraduate Education at the University	2
	2. GEP Compliance Timetable	

1. The University, General Education and You

Introduction

The purpose of this Handbook is to help you to understand the educational objectives of your undergraduate degree program and the role of the General Education Program in helping you attain these objectives.

Neither the objectives nor the educational role of the program is simple. Your education should equip you to deal with a complex world. Hence, you are asked to read this Handbook carefully so that you may develop an understanding of this educational task and make an active contribution to carrying it out.

The Contemporary Challenge

The world into which you will graduate, by all accounts, is becoming more crowded and more complex. It seems to be changing at an accelerating pace. By the time you graduate from the University, the amount of information and knowledge in most fields of study will have almost doubled.

Our knowledge and our technological ingenuity are powerful tools for change. Their application often has far reaching and sometimes unpredictable consequences for both social and ecological systems.

These and many other factors constitute a powerful challenge to our capacity safely, justly and humanely to manage our world in the foreseeable future. This, then, is the fundamental challenge facing education at all levels, but especially at the university level. How can the university develop a curriculum which will equip students to function not only as competent professionals but also as responsible persons and citizens capable of participating in a democratic way in the understanding, design and management of their world?

What Is University Education?

There is no precise and simple answer to this question. Most would agree that it is more than a job training program and more than simply an opportunity to obtain a secure career.

The traditional role of the university has been to serve society in three crucially important ways. In the first place it adds to the treasury of human knowledge. Secondly, it systematically subjects inherited ideas, assumptions, values and practices to analysis and critical scrutiny. Thirdly, it opens up, either directly or indirectly, new possibilities for human thought and action.

The ideal of university education, therefore, has been to open the doors to a

The drift over the last two decades has been to more and more specialised courses and this has been at the expense of general education. What is important is that universities preserve the notion that alongside vocational and professional aims stands an absolutely indispensable commitment to general education. I think that's something the university system in this country hasn't faced up to at all. This university has.

L. Michael Birt, Vice-Chancellor, U.N.S.W.

universe of possibility and, consequently, of responsibility for its students. Hence, while universities, especially in Australia, have been organised for the most part along vocational lines to provide their students with a thorough preparation in the professions of science, arts, medicine, law, engineering and so on, they have also usually attempted to maintain something of the traditional ideal of introducing students to the "universe" of knowledge.

In spite of the knowledge explosion in all areas of professional specialization, the University of N.S.W. is committed to the education of its students, not just as very competent professionals but also as well informed and responsible persons and citizens.

In most modern societies university graduates are educated to exercise some form of leadership in their society and some form of responsibility through the use of their knowledge and technological expertise, for the management of the human future.

This education, therefore, must include both a depth of special understanding and a breadth of general comprehension in order adequately to equip university graduates for the role they are expected to play in society.

The Structure of Undergraduate Education

Each of the undergraduate degree programs in the University tends to have its own structure and characteristics. Nevertheless, the policy of the University governing undergraduate education demands that three broad sets of requirements be satisfied before a program can be approved and an individual degree awarded.

The three sets of requirements are that students:

- 1 Receive a thorough education in the professional or major fields of specialized study which they have chosen - *CORE PROFESSIONAL REQUIRE-MENT.*
- 2 Acquire an adequate understanding of the social context in which they will function as professionals as a result of their developing:
 - (a) An understanding of the modes of critical thought relevant to the evaluation and development of the knowledge base of the profession, that is, of the prevailing "paradigm" of the profession;
 - (b) An appreciation of the ethical responsibilities of the profession;

- (c) A mastery of the communication and other skills relevant to the tasks and purposes of the profession - *PROFESSIONAL CONTEXTUAL RE-QUIREMENT.*
- **3** Develop a comprehensive understanding of, and sense of responsibility for, the general intellectual, cultural and social tradition they have inherited appropriate to university graduates *GENERAL EDUCATION REQUIRE-MENT.*

The integrating component of the undergraduate curriculum is the attempt systematically to address and democratically to answer the question: For what social and human purposes should we deploy the resources of knowledge and technological ingenuity at our disposal and how best can we deploy them?

Why General Education?

There are a number of reasons why a general education requirement is an indispensable component in a modern undergraduate degree program.

- 1 For eight hundred years, the university has been the institution in the western world which has encouraged the asking of fundamental questions. At the most general level is the set of perennial questions articulated by the philosopher Immanuel Kant:
 - What can I know?
 - What ought I do?
 - For what can I hope?

At a more immediate level is a set of questions which we all face as persons in and citizens of the world of the future. This set of questions has been forcefully stated by the educationist Philip Wendell who asked: How do we prepare people for:

Predicting probable futures, Imagining possible futures and Designing preferable futures? It is still the essential task of the u

It is still the essential task of the university of ensure that each generation of students grapples with these questions.

- 2 Each field of study is growing not just in the amount of information it is generating, but also in the intricate patterns of relationships and connections which are being discovered among different fields of study. A well educated graduate needs to be equipped with at least a general and strategic understanding of the major fields and traditions of learning. In this sense, "general" education should be thought of as derived from the Greek term for a military general, "strategos".
- 3 If undergraduates are to be expected to exercise a leadership role in the society of the future, they will need to understand something of the complex

cultural, social and ecological systems in which they will be involved.

4 Australia, in the future, will require a higher degree of creative and innovative thought and action, especially from its university graduates, if it is to flourish in an intensely competitive international environment. The key to fostering creativity in a society is to cultivate minds which have a rich diversity of frames of reference and discourse. Training in a narrow and exclusive range of technical and professional skills, no matter how advanced or sophisticated, is not conducive to the development of creativity in any field.

The Objectives of General Education

The University has identified the following objectives to be pursued in the General Education Program:

- i To ensure that all students address, in cooperative interaction with their peers from other faculties, some of the key questions which face them as persons, citizens and professionals;
- ii To encourage students to develop skills of rational thought, critical analysis, expression and communication in broader cultural terms, complementary to those developed in professional or major disciplinary courses;
- iii To encourage students to gain some appreciation of their general intellectual traditions, by providing a coherent and guided exposure to elements of those traditions; and
- iv To foster among students the competence and the confidence to contribute creatively and responsibly to the development of their society.

The General Education Program

The General Education Program is made up of three categories of subjects and learning.

Category A

Provides an introduction, in non-specialist terms, to an understanding of each of the following environments in which humans function:

- (1) Physical
- (2) Biological
- (3) Technological
- (4) Built and Planned
- (5) Social and Economic
- (6) Information and Communication
- (7) Symbolic and Expressive

The aim of the subjects in each of the areas of this category is to provide students with a basic understanding of the key issues and problems, the

modes of research and reasoning and the current state of learning in each of these fields of study.

Category B

Provides an introduction to and a critical reflection upon the cultural bases of knowledge, belief, language, identity and purpose.

The aim of the subjects in this category is to help students to examine, critically, the many assumptions and values they have inherited with their culture. This capacity for a critical analysis of inherited assumptions is indispensable for responsible and creative thought and action.

Category C

Provides an introduction to the development, design and responsible management of the systems over which human beings exercise some influence and control.

The aim of Category C is to consider, in a systematic way, the key issues of social purpose and social responsibility.

Category C is the culminating phase of the General Education Program and integrates it with the other components of the undergraduate curriculum.

The Overall Educational Design

The overall strategy and structure of undergraduate education at the University is diagrammatically illustrated in Table 1 (page 2 above).

The General Education Requirements

- (I) All undergraduates are required to take:
 - (i) 56 hours of instruction in at least one of the areas of study included in Category (A) according to rules which will ensure that they do not duplicate study done elsewhere in their degree program. This instruction may be part or all of a subject taught by the faculty concerned or another faculty as part of a degree program, i.e. a subject taken by other students for purposes other than to satisfy the General Education requirements.
 - (ii) 56 hours of instruction in an area of study covered by Category (B). This instruction may be part or all of a subject taught by the faculty concerned or another faculty as part of a degree program, i.e. a subject taken by other students for purposes other than to satisfy the General Education requirements.
- (II) All undergraduates enrolled in a major disciplinary or professional degree program are required to take coherent instruction in Category (C) according to the provisions approved for their degree program.

These provisions have not yet been developed. It is expected that they will be finalized during 1988.

- (III) Individual students may make application to the Standing Committee on General Education to substitute subjects which the Standing Committee judges to be appropriate alternatives to those required in the General Education Program.
- (IV) The Standing Committee on General Education may grant exemption from all or part of the General Education requirements, either individually or collectively, to undergraduates entering the University with advanced standing.
- (V) Students who come to the University already possessing a degree accepted as valid by the University would be exempt from the General Education Program, which applies only to first degrees.

Detailed information about requirements for the program, including its implementation in 1988, is set out in Part 2.

The Learning Process

In pursuing the objectives of the General Education Program the process of learning is as important as the structure and content of the program. You should note the following features of the learning process of the program: You will often be asked to draw upon your own experience and that of your family and friends.

You will be expected to listen to and come to grips with the views of your fellow students from other degree programs in the University.

You will be expected to learn not only the content of the subject, but also to learn how to learn in the future, and to develop the capacity to retrieve and ingeniously deploy information from a variety of sources.

You will be expected to look in what may appear to be unexpected places for ideas and information.

You will be expected to be able to relate your ideas and experiences to the various traditions of thought and discourse which you will encounter in the program.

Most importantly, you will be expected to attempt to make connections among the various subjects and fields which you study in your undergraduate education.

You will be expected to reflect on, to write about, and to discuss your ideas. For this reason in most subjects you will be required to keep a journal.

In the last analysis you will be expected to assume considerable responsibility for your learning and for your ability to achieve the intellectual and communication standards required for a General Education subject.

The various teachers in the General Education program will adopt a variety of approaches and use different procedures from subject to subject. As you go through the program, however, you should give some thought not just to what you are learning, but to how you are learning it.

Assessment: Requirements

The standards which you are expected to achieve in your professional and major sequences are also the standards which you are expected to achieve in the subjects of the General Education program.

Although there may be some variation among subjects, as a general rule you will be assessed on the basis of the following requirements: Each student will be expected:

- 1 To develop a paper or a project which explores in depth a specific aspect of the subject;
- 2 To maintain a journal or log book of your ideas, readings, reflections, reactions to lectures, tutorials and field trips, quotations, relevant newspaper and magazine clippings;
- **3** To contribute positively to a consideration of the issues addressed in the subject, especially in tutorials;
- 4 To recapitulate and attempt to synthesize, at the conclusion of the subject, the main questions, issues and conclusions developed. This may take the form of a final examination.

How You Can Help: Student Evaluation of the Program

The General Education Program is designed to help equip you to become an effective person, citizen and professional: responsible for the future well being of the human species and the planet earth.

There are three ways in which you can help in improving the design and implementation of the program.

- 1 A few weeks after the beginning of every subject the teacher will hand out a form on which you will be asked to indicate how effectively the subject matter is being communicated to you. This is a short-term measure to allow teachers to adjust their presentation of the subject to your level of understanding.
- 2 At the conclusion of every subject you will be asked to fill out a form reviewing and assessing the subject you have taken. This form will be kept on file and used as a basis for evaluating the effectiveness of the program, and for adjusting it to changing circumstances.
- 3 If, at any time, you have a suggestion about the program or encounter a problem with it, write a brief note to the Director of the Centre. Your suggestions and comments will be welcome and used to help improve the program.

Table 2: GEP Compliance TimetableRules under which students take General Education subjects

Faculty	Courses	Year first admitted to candidature			
racuity	Courses	Before 1988	1988	From 1989	
Applied Science	All	GS	GEP	GEP	
Architecture	All	GS	GEP	GEP	
Arts	All	Nil Req.	Nil Req.	GEP	
Commerce	All	Rule 7	Rule 7	GEP	
Engineering	All	GS	GEP	GEP	
Law	All except 4790	Nil Req.	Nil Req.	GEP	
Law	4790	Nil Req.	Nil Req.	Nil Req.	
Medicine	All	GS	GEP	GEP	
Professional	4030	GS	GEP	GEP	
Studies	4040	Nil Req.	Nil Req.	GEP	
	3430, 3431	Nil Req.	Nil Req.	GEP	
Board of Studies in Science & Mathematics	3611, 3681, 3701, 3725, 3730	GS	GEP	GEP	
	3950, 3951	GS	GEP	GEP	
	3970	GS	GEP	GEP	

Abbreviations:

GS: General Studies rules established by Board of Studies in General Education

GEP: General Education Program

Nil Req.: No General Education requirement

Rule 7: Humanities subjects rule, as defined for B.Com.

2. Program Implementation and Administrative Arrangements

Overview

This Part sets out the key administrative arrangements for implementing the program, including special arrangements for 1988 only. Please read this Part carefully. Note that different rules apply depending on the guidelines under which students will satisfy their General Education requirement. Also, special provisions apply in 1988 regarding student choice of subjects in Categories A and B of the program. Ensure that you understand which guidelines apply to you. If you have any questions about these matters do not hesitate to contact the Centre for Liberal & General Studies office. See Page 1 for how to contact the Centre.

Program Implementation: Transition Arrangements

	Compliance with the University's policy for General Education is to be achieved in stages for various courses. Table 2 (page 11) sets out the 'timetable' according to which various courses and Faculties will begin to comply with the new provisions.	
Courses with a General Studies requirement prior to 1988	• Students first admitted to candida- ture in these courses before 1988: These students are permitted to com- plete their GS requirement according to the rules for the GS Program admini-	See Table 2 (page 11) for details

for

stered by the Board of Studies in General Education before 1988. In particular, students in this classification will be able to select freely from the subjects to be offered in 1988 in all Categories and Areas, subject to individual subject exclusions. Students are encouraged to select subjects in an area outside their professional specialisations. They may substitute 'outside' subjects for General Studies subjects according to guidelines

established by the Board of Studies in

General Education and previously administered by the Department of General Studies.

Additional information for students who took General Studies subjects before 1983:

The rules defined in 1983 to account for the effect on GS requirements of the change from 42 to 56 hour GS electives in that year will continue to apply. Students must complete subjects totaling the required number of hours specified for their course.

Students first admitted to candidature in these courses from 1988:

These students are required to satisfy their General Education requirement according to the provisions of the new General Education Program as defined by the University. These requirements are set out in Part 2 above. When the new General Education Program is fully introduced* students must. therefore, complete 56 hours of instruction in each of Categories A and B, and in areas of Category A approved for their course by the Standing Committee on General Education.

Students in disciplinary or professional degree programs must also complete coherent instruction in Category C according to guidelines for their degree program.

See list of subjects with exclusions in Part 3 below.

See section on Substitutions below.

*See "Special Arrangements" below for provisions for students taking Category A subiects in 1988

See Part 1 above for information about the development and introduction of Category C studies to the program

PAGE 13

PAGE 14	GENERAL EDUCATION •	HANDBOOK
Special Arrangements	For students first admitted to candidature in these courses in 1988 and who are scheduled to enrol in Category A sub- jects in 1988. The relevant courses are:	
	3330 Building 3380 Landscape Architecture 3740 Surveying 3760 Surveying Science 3800 Medicine 4030 Social Work	
	These students will be able to choose Category A subjects without any area restrictions. Individual subject exclusions will apply however. Students will be required to complete 56 hours of instruction in Category B, and coherent instruction in Category C [students in disciplinary or professional programs], when programmed by their course authority.	See list of subjects with exclusions in Part 3 below.
	Students are strongly encouraged to select subjects in an area in Category A outside their professional specialisation to ensure that they fulfil the objectives for the General Education Program estab- lished by the University.	See Part 1 above for an outline of the Program's objectives.
	Advanced standing and substitution provisions may apply.	See below, "Substitutions" and "Advanced Standing".
Courses to Comply with Program provisions from 1989	These students will be required to satisfy their General Education requirement according to the provisions of the new General Education Program as defined by the University.These requirements are set out in Part 1 above.	See Table 2 (page 11) for details.
	Students must, therefore, complete 56 hours of instruction in each of Categories A and B and, within Category A, in areas approved for their course by the Standing Committee on General Education. Students in disciplinary or professional degree programs must also complete	See Part 1 above for information about the de- velopment and introduction of Category C studies to the program

coherent instruction in Category C according to guidelines specified for their program.

Requirements for
Commerce
studentsIn 1988, continuing students, and commencing first
year students, in the Faculty of Commerce are per-
mitted to enrol in General Education or Arts subjects
to satisfy the Rule 7 ["Humanities"] options for their
degree. From 1989, however, all commencing
Commerce students will be required to comply with
the provisions of the General Education Program as
set out above.

Subjects

	This Section describes how the Program's teaching requirements - expressed in terms of categories and areas of study, and class contact hours - translate into subject offerings, and relate to the unit or elective system of the pre-1988 GS require- ments. The information should be read in conjunction with the subject descriptions and other data in Part 3, and the General Education Program timetable.
What is a subject?	A subject is defined as a unit of instruction ap- proved by the University as being a discrete part of the requirements for a course, including the General Education components of a course, and identified by a distinctive subject number.
Who teaches the subjects?	Subjects offered in the General Education Program have been developed and are offered by many of the academic units of the University, including Schools and Departments in most Faculties. The complement of subjects are presented by staff of the Centre itself. By drawing on the resources and expertise of the University in this way, it is expected that the General Education Program will provide a focus for both the activities of the University, and the educational challenges to be faced in the coming years. All subjects offered have been approved for inclu- sion in the program by the Standing Committee on General Education. The Centre for Liberal & Gen-

PAGE 16	GENERAL EDUCATION •	HANDBOOK
	eral Studies is the subject authority for all General Education subjects and has responsibility for the delivery and man- agement of the program.	
Types of subject offered in the Program	All subjects offered in the General Edu- cation Program include formal tuition. In many cases subjects are taught by a combination of lectures and tutorials or laboratory work. Some subjects are taught by a seminar, usually of 2 hours duration per week. In a few subjects lectures are supplemented by excursions or field trips, usually held on weekends. Students should ensure, when enrolling in General Education subjects, that their timetable and other commitments will permit them to attend classes on the designated days and times.	See 'Assessment' below
'Length' of Subjects	Subjects offered in the program are usually one of two lengths:	
28 hours	This represents 2 hours per week tuition over a 14 week teaching session. These subjects are equivalent to the 1/2 elec- tives of the pre-1988 GS requirements.	
56 hours	May be delivered in 2 forms:	
	Full year	
	This represents 2 hours per week tuition over 2 sessions, ie, the full 28 week teaching year.	
	Compressed	
	This represents 4 hours per week tuition delivered or compressed into one ses- sion. Compressed subjects are usually taught in 2 x 2 hour 'blocks' per week. Students enrolling in compressed sub- jects must be able to attend both blocks each week.	
	These subjects are equivalent to the full or 1 unit electives of the pre-1988 GS re- quirements.	

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Rationale	General Studies subjects are programmed for the most part in 8 designated blocks to ensure that a wide range of subjects are available to students. Course authorities plan timetables so that students have some of these blocks available to them to take General Education subjects.
	The 8 blocks used for General Education teaching are:
	Monday 9-11am Monday 2-4pm Tuesday 9-11am Wednesday 9-11am Wednesday 2-4pm Wednesday 6-8pm Thursday 6-8pm Friday 9-11am
	In addition, in 1988, a number of subjects will be scheduled outside these slots to maximise student access to subjects. Details are in the General Education Program timetable, available from the Centre's office.
At what stage in my studies do I take General Education subjects?	The programs for many courses, as determined by the school or course authority responsible, set out at which stages students usually take General Education. In some courses these stages are closely prescribed, in others students are given a degree of flexibility to determine how and when they take part in the General Education Program. You should consult your course authority or hand- book for further details.
Programming of General Education within course structures	See Table 1 in Part 1 for a diagrammatic represen- tation of how General Education integrates with professional and contextual studies in the under- graduate curriculum at the University.
In what order should I take the subjects?	Students should fulfil their General Education requirements by taking subjects sequentially in Categories A,B and C. By so doing, students will re-

PAGE 18	GENERAL EDUCATION .	HANDBOOK
	ceive an integrated exposure to the concerns addressed by the General Education Program program.	
Sequencing of Subjects	Subject Streams A number of subjects offered in the 1988 timetable are taught more than once, that is, the set of lectures and support teach- ing comprising the subject is offered to more than one unique set of students. Such subjects are said to be taught in 'streams'. Please note that students may only attend the classes for a subject for which they have enrolled and at the times specified on their class card obtained at enrolment.	See "Enrol- ments" below
	Compressed Subjects Some subject offerings are taught as "compressed" subjects. Students taking compressed subjects usually meet in two teaching blocks per week, at times specified in the Timetable and on class cards.	See under "Length of Subjects" above for a definition of a compressed subject.
Enrolments		
Re-Enrolment Procedures 1988 Book	This book, published by the Registrar and available from all school and course authority offices, contains important information about enrolments for all students, including General Education enrolments. Students should obtain a copy of this book and read it in close con- junction with the specific General Educa- tion information provided here.	
When do I enrol in General Education?	You enrol in General Education on the day you complete enrolment with your course authority or School, and before presenting your Enrolment form to the Cashier. For new students, this is the day you first attend the University to enrol, as invited by the Registrar in your offer letter. For later year or re-enrolling	You must complete enrolment in General Education subjects before presenting your enrolment form to the Cashier.

	students, this is the day you complete enrolment for- malities, in late February or early March.
Can I enrol early?	It is not possible to enrol in General Education subjects before the day specified for you to com- plete enrolment in the Re-Enrolment Procedures 1988 Book.
Is there late	While the University specifies that students may
enrolment?	effect enrolment until: •End Week 2, Session 1: Session 1 and Full Year
Please note	 subjects End Week 2, Session 2: Session 2 subjects only, students who fail to enrol in General Education subjects at the times designated for their course and set out in the Re-Enrolment Procedures Book, may apply to the Director of the Centre for Liberal & General Studies to enrol late in the first two weeks of Session. However, students should expect a very limited range of subjects to be available at that time, and accordingly late enrolment is not recommended.
What if I cannot attend to enrol on the designated day?	In the event that you will be away from Sydney or for other reasons not be able to attend the University on the day specified for you to complete enrolment, please contact the Centre at your earliest conven- ience to discuss the possibility of making alternative arrangements.

In the last decade, two important papers were presented to learned societies, one on anthropology and the other on biology. And both these researchers were working completely independently. But it happened by chance that I saw both papers. The biological one was looking into the biological species that have become extinct. The anthropological one looked into all human tribes that had become extinct. Both researchers were trying to find a commonality of causes for extinction. Both of them found the same cause independently - extinction is a consequence of over specialization. As you get more and more over-specialized, you inbreed specialization. It's organic. As you do, you outbreed general adapability.

So here we have a warning that specialization is a way to extinction, and our whole society is thus organised ...

R. Buckminster Fuller.

PAGE

We have physicists, geometricians, chemists, astronomers, poets, musicians and painters in plenty, but we have no longer a citizen among us.

Jean-Jacques Rousseau

Enrolment Dates and Venues	Dates for Enrolment in General Educa- tion are as set out in the Re-Enrolment Procedures Book The General Education Enrolment Centre will operate within: The Unisearch House Enrolment Bureau, Anzac Parade, Kensington <i>Tuesday 2 - Thursday 4 February 1988</i> : New 1st Year students only <i>Monday 22 February - Thursday 3 March</i> <i>1988</i> : Re-enrolments. Outside these times all enrolments in General Education subjects take place at days and times specified in the Re- Enrolment Procedures Book in the Centre for Liberal & General Studies office: Room G.58, Ground Floor, Morven Brown Building
Selecting Subjects: The Enrolment Process	This section outlines the procedures for enrolling in General Education subjects. It includes information on what you should know before attending to enrol and takes you on a tour through the process of choosing subjects and finalis- ing enrolment.
How are places in subjects allocated?	For a number of years the Department of General Studies, which previously had responsibility for the General Studies program at the University, operated a card or ticketing system for the manage- ment of GS enrolments. This system will be used by the Centre in 1988.
	While students are given a free choice of subjects to enrol in [subject to any course

or other restrictions], they must- in order to formally enrol in a subject - obtain a place in that subject, for which a subject or class card is issued.

This system is perhaps analogous to an airline booking service: your destinations are clear, you have your traveling times [timetable allocations!] in mind, but you still have to obtain a seat on the plane [a place in the subject]. Moreover, there may be 400 other people all wanting a seat on that flight [which may only carry 60 passengers]. Finally, the airline company [the Centre] has an interest in ensuring that a representative group of its clients [you, the students!] are carried on each flight.

To manage and balance these considerations, places in subjects are made available according to a quota system.

Places in subjects are **not** allocated on a first-come, first-served basis!

Prior to the enrolment period the Centre seeks information from course authorities concerning the number of students they estimate will take General Education subjects in the coming year, the number and types of subjects these students will be required to take, when these students are released to take General Education subjects [ie timetable availability], and on which day/s they will attend to enrol in the General Education Program.

From this information the Centre allocates a quota of subject places right across the range of its timetable offerings for each enrolling day of the enrolment period. The release of places is tied to the anticipated needs of the students enrolling on that day. As a result of these procedures students enrolling in General Education on the last day of the enrolment period [before the start of session] have the same range of subjects available to them as students enrolling at the start of this period. Bear in mind, however, that a subject offered once only and accepting only 60 students, will never have very many places available in it on any day of the enrolment period. It is for this reason that it may seem that subjects "fill up" quickly, when in fact what has happened is that the quota for that day has been filled.

PAGE 22	GENERAL EDUCATION • HANDBOOK
	An educational imperative in this system is to ensure a mix of students from different specialisations, and therefore encourage students to address the issues raised within the General Education Program in "co- operative interaction with their peers".
Before Enrolment Day	Before attending the Centre for Liberal & General Studies Enrolment Centre you should ensure that:
	 You are familiar with the aims and requirements of the General Education Program at the University. Part 1 of this Handbook gives an overview of these matters.
	 You know what the General Education requirement is for your course, including
	 How many subjects or electives you have completed How many subjects or electives you have yet to complete
	Your course enrolment officer will write down the number of General Education subjects you should take in 1988 on your enrolment form.
	 Any special rules for your course concerning subjects and choice of subjects within the various categories and areas of the program. See "General Education Program Implementation: Transition Arrangements" earlier in this part of the Handbook for information concerning subject availability for 1988. You know what your timetable for your course is for 1988, especially: When you are scheduled to take General Education subjects. See "Timetabling" above for further information about timetabling arrangements. You are familiar with the range of subjects to be offered, including when they are timetabled. You have a reasonable idea of which General Education subjects you would like to enrol in.
Enrolment Procedures on the day	On the day you attend the Centre for Liberal & General Studies Enrolment Centre, either in Unisearch House or the Centre's office, you will most likely be only one of many hundreds of students also enrolling in General Education. It is therefore in your interest to do your

	homework, along the lines suggested in the previous section, to assist you to make the right choice and obtain a place in an appropriate subject.	
Stage One: Information Gathering	On arrival at the Centre for Liberal & General Studies Enrolment Centre, you should obtain from the desk, if not al- ready possessed by you: 1988 General Education Handbook 1988 General Education Timetable Green Subject Preference Form	
	After consulting the timetable and hand- book, you should record your first and second subject preferences for the total number of General Education subjects which you will take in 1988.	
Points to Note:	 Choose subject preferences carefully! When you attend to enrol in General Education you will be making important educational choices not merely com- pleting an administrative process. Take time to review the range of sub- jects available to you. There will be limited opportunity to vary enrolment once each academic session com- mences. It is your obligation to ensure that you enrol in the correct subjects and number of subjects. Record preferences for the total num- ber of subjects you must take, including any subjects to be taken in Session 2. The University requires that all students establish their study program for the entire academic year at the start of the year. There will be only limited opportu- nity to vary second session subject enrolments after the main enrolment period and before session 2 com- mences. 	See Section above, "Before attending the Centre for Liberal & General Stud- ies Enrolment Centre" above for important tips!
Assistance for Students		
Subject Advisers	Subject advisers, representing the academic units offering subjects in the	

PAGE 24	GENERAL EDUCATION • HANDBOOK
	program will be available at the Unisearch House En- rolment Centre to counsel students on subject con- tent and choice.
Program Require- ments Advice	The Centre's enrolling officers will be available to advise you on your General Education requirements.
Noticeboards	The Centre's noticeboards at Unisearch House and outside the Centre's office in the Morven Brown Building will carry up-to-the-minute information about the 1988 General Education Program
Stage Two: Card Allocation	Having filled out your preference form you should proceed to the Card Allocation Line. Present your en- rolment form and preference form to the Enrolling Officer, who will check your General Education requirement and preferences and issue subject cards for the subjects you have nominated, according to availability. Please check that the following details on the cards are correct:
	 Subject no Session Day and time
	You should then fill out all class cards and enter the details exactly as presented on the cards on your enrolment form. Complete both sides of all cards: the information is used by subject conveners for preparing class lists and contacting students.
Stage Three: The Card Checking Station	When you have filled out all cards and your enrol- ment form you should proceed to The Card Checking Station. The Enrolling Officer will:
	 Check your cards and form Sign your enrolment form Tear off and return to you the student portion of your class cards
IMPORTANT	 Keep your class cards in a safe place! Cards are not transferable. You must attend classes at the days and times specified on the cards. You will need to show them at your first tutorial as proof of enrolment. You will also need to produce the class card should you ever seek to vary your General Education

Vonder	 enrolment: it will not be possible to vary enrolment in General Education subjects later on without producing the class cards for subjects in which you are already enrolled. After completing these operations you will be able to proceed to the Fees Assessors to finalise enrolment 	
Varying Enrolment		
Procedures	 Students wishing to vary their enrolment by either adding or discontinuing sub- jects may do so by applying to the Director, Centre for Liberal & General Studies, on the University's form SR2. The following points should be noted: The Centre for Liberal & General Stud- ies is the subject authority for all Gen- eral Education subjects, that is, all subjects bearing a "26" prefix. All applications to vary enrolment must be lodged at the Centre's Office, not at your School office. Students wishing to discontinue sub- jects must present their class cards for those subjects with the SR2 form. Students wishing to add subjects must first obtain a place in those subjects and be issued with class cards. While the University permits students to add subjects to their enrolment program up to the end of the 2nd week of each Session, only a limited number of places in subjects will be available after the start of Session. As a general prin- ciple, only students with proven enrol- ment or timetable difficulties will be permitted to add subjects after the commencement of each session. Students enrolling in additional subjects after the commencement of each session should also note the University's attendance requirement for subject assessment which states that students must attend 80% of classes. 	Sec una me funta

See below under "Assessment" for further information.

PAGE 26	GENERAL EDUCATION •	HANDBOOK
	 Students enrolling after the commencement of session must also satisfy this attendance provision. Only a limited number of places will be available for students seeking to add subjects to their program before the start of Session 2. Students should enrol in General Education subjects to the extent of their requirement during the official enrolment period in February-March. 	
Deadlines for Discontinuation of Enrolment	Students wishing to apply to discontinue subjects without failure should ensure that they do so by the University's stated deadlines for first session, second session and full year subjects. Students should state why they are dis- continuing a subject or subjects in the space provided on the SR2 form. Appli- cations to discontinue will not be ac- cepted without this section completed.	
Subject Substitution	Students wishing to apply to substitute "outside" subjects for General Education subjects may do so on the form GE.SUB.1 [new rules] or GE.SUB.2 [old rules] available from the Centre for Liberal & General Studies office. Please note that the rules for substitution are different for students studying General Education under the GS requirements administered by the Department of General Studies, and those studying under the General Education Program requirements introduced from 1988. An "outside" subject is defined as any subject not offered by Centre for Liberal & General Studies nor bearing a "26" prefix subject number. Subjects offered by other Schools of the University [other than those taught for the General Educa- tion Program], and other tertiary institu- tions would be classified as outside subjects.	For an overview of the differing requirements, see "General Education Program Imple- mentation: Transition Ar- rangements" above.

Students completing under GeneralStudies rules	These students will continue to be able to substitute according to the Guidelines established by Board of Studies in General Education and administered by the Department of General Studies. Contact the Centre's Office for informa- tion about permissible substitutions.	
Students enroll- ing under Gen- eral Education Program rules	These students will be able to apply to substitute according to the General Education requirements established by the University. Under these require- ments, the Standing Committee on General Education will need to determine whether a subject proposed for substitu- tion satisfies the University's objectives for any of the categories of study in the Program.	See "The General Education Re- quirements" in Part 1 above for details. Contact the Centre's Office for information about the Standing Committee's policy on substitutions

27

Advanced Standing

Students transferring between courses within the University or transferring into a course from another institution may be eligible for advanced standing in General Education. The Registrar will provide transferring students with information about eligibility.

Advanced standing provisions should be understood within the frameworks of requirements for different courses outlined in "General Education Program Implementation" above

Miscellaneous Enrolment

Subject to demand from enrolled degree students for subjects offered, and the University's overall quota on miscellaneous enrolments, the Centre is happy to consider applications from people wishing to enrol in General Education subjects as miscellaneous students.

Potential applicants are advised that they will be required to pay statutory Federal Government tertiary administration charges and student fees as determined from time to time by the University.

For further information please contact the Centre's Administrative Officer at the address given at the front of this book.

Assessment: Additional Information

	The University's policy on assessment for subjects in the General Education Pro- gram is set out in Part 1 above. Contact the Centre's office for informa- tion about assessment in individual subjects.	
Attendance Requirement	 Students are advised that the University has ruled that if students attend less than 80% of their possible classes in a subject they may be refused final assessment. Students should bear this in mind when: Selecting subjects at enrolment. Students should not attempt to enrol in subjects which they will not be able to attend as required Enrolling late or varying enrolment. The attendance rule is applied to students enrolling late in a subject. 	See "Late Enrolments" and "Varying Enrolments" above.

Class Locations

The locations for lectures and tutorials are posted on the Centre's noticeboard in the week before the start of each session.

Laboratory times and locations are made available at lectures by the conveners of subjects with labs.

Tutorial locations are posted for students' information only. Students must attend the tutorial location/time specified for them by the subject convener at lectures.

Further information about Subjects and the Program

Up-to-the-minute information about the General Education Program, timetabling and related matters is posted on the Centre's noticeboard outside Room G.58, Morven Brown Building.

The Centre publishes information sheets on each of the subjects offered in the General Education Program. These are available from the Centre's office.

The Centre also publishes guides to essay writing and related topics. Contact the Centre's office for further details.

3. Subjects in the program

Summary of Subjects by Category and Area

Category A

	(1) Physical
28 hours	26.4509 Modern Cosmology 26.4515 From Alchemy to DNA: Observations & Experiments in Chemistry [Part I]
	26.4516 From Alchemy to DNA: Observations & Experiments in Chemistry [Part II]
56 hours	 26.420 Astronomy 26.421 Atmosphere, Weather and Climate 26.429 Energy: Options for the Future 26.432 From Alchemy to DNA: Observations & Experiments in Chemistry 26.444 Science of Music 26.448 Understanding the Earth 26.452 The World of Light
56 hours	(2) Biological 26.425 Australian Natural Environments 26.433 Human and Animal Behaviour 26.436 Man and the Sea
28 hours	(3) Technological 26.4506 Harnessing Energy: The Arrow of Time and the Temperature of the Sun
56 hours	 26.4508 Measuring up the Universe: The Development of Scientific Instruments 26.445 The Social Development of Technology 26.446 Technology Change 26.449 The Unreasonable Effectiveness of Mathematics
28 hours	 (4) Built and Planned 26.4501 Australian Urban Studies 26.4504 Global Crisis: The Transition to a Sustainable Society 26.4512 Constructing the 20th Century Built Environment Forces, Issues, Challenges
56 hours	 26.4514 Evolution of the Built Environment 26.424 Australian Environment and Human Response 26.430 Environmental Issues - Decision Making in Australia 26.431 Environmental Planning 26.441 Rainforests, Destruction and Development: The Amazonian Case
28 hours	(5) Social and Economic 26.4502 Bridging the Distance: Current Social and Political Issues in Germany and Australia: a Comparative Approach
	Germany and Australia: a Comparative Approach. 26.4510 Multicultural Societies 26.4513 Development and Underdevelopment: The Role of Australia 26.4517 The French Speaking World: The International Experience

GENERAL EDUCATION · HANDBOOK

26.4518... The French Speaking World: The Metropolitan Experience

- 56 hours 26.422 Australia's Relations with Asia.
 - 26.423 Australian Economic Policies
 - 26.426 Australian Trade Unions
 - 26.428 Economic Issues of Less Developed Countries
 - 26.434 Introduction to Economics
 - 26.435 Introduction to Industrial Relations
 - 26.438 Political & Social Institutions of Ancient Rome:
 - A Message for Today
 - 26.439 The Political System in Australia
 - 26.440 Questioning Australian Welfare
 - 26.443 Science & Technology in Modern Society

(6) Information and Communication

- 28 hours 26.4507 ... Mass Media & Communication
- 56 hours 26.447 Understanding Film

(7) Symbolic and Expressive

- 28 hours 26,4503 ... Gastronomy I: The Culture of Wine
 - 26.4511 ... Religion, Social Conservation and Social Change
 - 26.5503... Gastronomy II: The Philosopher in the Kitchen
 - 26.5504 ... The Ideal City
- 56 hours 26.427 Cultural Influences in Contemporary Society
 - 26.442 Rewriting the Past and Reclaiming the Present: Social Process & the Novel in Contemporary Latin America
 - 26.454 Music in its Social Contexts

Category B

[There are no area classifications in Cat. B.]

- 28 hours 26.5501 ... Conceptions of Physical Reality
 - 26.5502 ... The Expected Roles of Scientists & Engineers in Contemporary Australia
 - 26.5506 ... Language and Learning
 - 26.5507 ... Music: From Myth to Science
 - 26.5508 ... The Harmonic World-View & the Emergence of Ancient Technology
 - 26.5509... The Clockwork Universe & the Age of Modern Technology
 - 26.5510 ... Beliefs, Values & Ideologies
- 56 hours 26.451 Women, Science & Society
 - 26.501 The Art of Hypothesis and Prediction
 - 26.503 Changing Conceptions of the Scientific Method
 - 26.504 Computers, Logic & Thought
 - 26.505 Individual & Social Psychology
 - 26.506 Knowledge and Belief in the Sciences
 - 26.507 Language and Society
 - 26.508 Moral Dilemmas About Life and Death
 - 26.509 The Origin & Development of Economic Ideas

Category C [Cat C subjects are not offered in 1988.]

Subject

Exclusions

27.818 Australian Environment & Huma Response 27.295 Physical Geography for Survey26.425Australian Natural Environments27.111 Applied Physical Geography 1 27.811 Physical Geography.26.426Australian Trade Unions15.512 Industrial Relations 1B.26.427Cultural Influences in Contemporary Society26.356 Popular Culture.26.430Environmental Issues - Decision Making in Aust.26.200 Man & Environment 26.252 Man & Environment.26.431Environmental Planning 36.211 Introduction to Planning 36.411 Town Planning 36.4014 Environmental Planning.26.432From Alchemy to DNA: Obs & Expts in Chem26.4515 From Alchemy to DNA: Obs & Expts in Chem26.433Human & Animal Behaviour12.100 Psychology 1.26.434Introduction to Economics15.001 Microeconomics 1 15.011 Macroeconomics 1 26.162 Economics 26.615 Economics26.435Introduction to Industrial15.511 Industrial Relations 1A			
with Asia26.3002 Australia in South East Asia.26.423Australian Economic Policies15.001 Microeconomics 1 15.011 Macroeconomics 2.26.424Australian Environment & Human Response27.010 Land Studies 27.030 Environmental Processes 27.111 Applied Physical Geography 1 27.801 Introduction to Physical Geography 1 27.801 Physical Geography 1 26.422 Cultural Influences in Contemporary Society26.430Environmental Issues - Decision Making in Aust.26.200 Man & Environment 26.252 Man & Environment.26.431Environmental Planning 36.411 Town Planning 36.411 Town Planning 36.411 Town Planning.26.4515 From Alchemy to DNa: Obs & Expts in Chem26.433Human & Animal Behaviour12.100 Psychology 1.26.434Introduction to Economics 26.615	26.420	Astronomy	1.901 Astronomy.
15.011 Macroeconomics 2.26.424Australian Environment & Human Response27.010 Land Studies 27.030 Environmental Processes 27.111 Applied Physical Geography 1 27.801 Introduction to Physical Geography 1 27.818 Australian Environment & Huma Response 27.295 Physical Geography for Survey26.425Australian Natural Environments27.111 Applied Physical Geography 1 27.811 Physical Geography 1 27.811 Physical Geography 1 27.811 Physical Geography.26.426Australian Trade Unions15.512 Industrial Relations 1B.26.427Cultural Influences in Contemporary Society26.356 Popular Culture.26.430Environmental Issues - Decision Making in Aust.26.200 Man & Environment 26.252 Man & Environment.26.431Environmental Planning 36.411 Town Planning 36.411 Town Planning 36.4014 Environmental Planning.26.432From Alchemy to DNA: Obs & Expts in Chem26.4515 From Alchemy to DNA: Obs & Expts in Chem26.433Human & Animal Behaviour12.100 Psychology 1.26.434Introduction to Economics15.001 Microeconomics 1 15.011 Macroeconomics 1 26.616 Economics 26.610 Economics	26.422		
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15.011 Macroeconomics 1 26.162 Economics 26.610 Economics 26.615 Economics. 26.435 Introduction to Industrial 15.511 Industrial Relations 1A	26.433	Human & Animal Behaviour	12.100 Psychology 1.
	26.434	Introduction to Economics	15.011 Macroeconomics 1 26.162 Economics 26.610 Economics
	26.435		15.511 Industrial Relations 1A 26.157 Introduction to Industrial Relations.

26.436	Man & the Sea	45.112 Marine Ecology 68.302 Introduction to Marine Science 26.225 Man & the Sea.
26.439	The Political System in Australia	26.1503 Political Conflict in Australia 26.311 Political Conflict in Australia 54.1006 Australian Political System.
26.440	Questioning Australian Welfar	e26.1515 Australian Welfare History 26.3004 Social Welfare & Ideology in Australia
26.441	Rainforests, Destrctn & Devt: The Amaz. Case	26.221 Amazonia - Saga of a Rainforest.
26.443	Science & Technology in Modern Society	62.110 Science, Technology & Social Change
26.444	Science of Music	26.226 Science of Music.
26.448	Understanding the Earth	25.110 Earth Materials & Processes 25.120 Earth Environments & Dynamics 25.520 Geology for Mining Engineers 1 25.5331 Physical Geology for Petroleum Engineers 1 26.220 Understanding the Earth.
26.449	The Unreasonable Effectiveness of Math.	26.223 The Unreasonable Effectiveness of Math.
26.4502	Bridging the Dist: Curr Soc & Pol Iss in Gmny & Aust	26.132 Contemporary Germany
26.4503	Gastronomy I: The Culture of Wine	26.351 Gastronomy 26.919 Food in History.
26.4504	Global Crisis: The Transition to a Sustainable Soc	26.2501 Technology & Development 26.4513 Devt & Underdevt: The Role of Aust
26.4507	Mass Media & Communication	n 26.1523 The Mass Media.
26.4509	Modern Cosmology	26.2508 Cosmology 26.566 Cosmology.
26.451	Women, Science & Society	26.224 Women, Science & Society.
26.4510	Multicultural Societies	26.1512 Multicultural Societies

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26.4512	Constructing the 20th Century Built Environment	11.4101 Princ. of Dsgn, 35.592 Built Envmt II, 36.211 Intro to Plan., 37.0001 Intro to L. Arch.
26.4513	Devt & Underdevt: The Role of Aust.	26.2501 Technology & Development 26.2502 Political Economy of Development 26.2503 Sociology of Development 26.4504 Global Crisis:The Transition to a Sustainable Soc.
26.4514	Evolution of the Built Environment	11.4101 Princ. of Dsgn, 35.591 Built Envmt I, 36.211 Intro to Plan., 37.0001 Intro to L. Arch.
26.4515	From Alchemy to DNA: Obs & Expts in Chem [Pt I]	26.432 From Alchemy to DNA: Obs & Expts in Chem.
26.4516	From Alchemy to DNA: Obs & Expts in Chem [Pt II]	26.432 From Alchemy to DNA: Obs & Expts in Chem.
26.4517	The French Spkng Wrld: The International Experiance	26.131 The French Speaking World.
26.4518	The French Spkng Wrld: The Metro Experience	26.131 The French Speaking World.
26.454	Music in its Social Contexts	26.331 Music in Society.
26.503	Changing Conceptions of the Scientific Method	26.2507 Philosophy of Science 26.817 Philosophy of Science.
26.505	Individual & Social Psychology	12.100 Psychology 1.
26.506	Knowledge & Belief in the Sciences	26.222 Knowledge & Belief in the Sciences 62.032 The Scientific Theory 62.1021 Man, Megalith & Cosmos 62.111 Man, Megalith & Cosmos 62.202U Scientific Theory 62.219U Knowledge & Belief in the Sciences.
26.507	Language & Society	50.208 Language & Society.
26.509	The Origin & Development of Economic Ideas	26.1504 Political Economy: Adam Smith to Karl Marx 26.1505 Economic Thought: Marginalism to Monetarism 26.613 Economic Thought: Adam Smith to Present Day.

26.5503	Gastronomy II: The Philosopher in the Kitchen	26.351 Gastronomy: A Philosophical Intro to Food in Society 26.919 Food in History.
26.5507	Music: From Myth to Science	26.355 Philosophy of Music 26.815 Philosophy of Music.
26.5508	The Harmonic Wrld-View & the Emerg of Anc Tech	26.569 Philosophy of Technology 26.2504 Philosophy of Technology [Ancient] 26.2505 Philosophy of Technology [Modern].
26.5509	The Clockwork Universe & the Age of Mod Tech	26.569 Philosophy of Technology 26.2504 Philosophy of Technology [Ancient] 26.2505 Philosophy of Technology [Modern].
Subject Descriptions • Subjects Listed by Number

26.420 Astronomy

Cat.: A (1) Physical Exclusions: 1.901.

Involves an overview of Astronomy, from the Solar System to the galaxies. Includes an exploration of the Solar System to indicate the advances that have been made, particularly and most recently with space probes, in our understanding of planetary systems. The characteristics of stars discussed along with their use in establishing an understanding of stellar evolution. The treatment of galaxies includes consideration of the nature of our galaxy and its relation to other external systems, concluding with a brief discussion of aspects of observational cosmology. Discussion of such recent topics as black holes, pulsars, quasars.

Textbooks: No textbooks prescribed.

26.421 Atmosphere, Weather and Climate

Cat.: A (1) Physical Exclusions: Nil.

A description of the Earth's atmosphere from the ground up to the Sun. Elementary physics of the atmosphere. Problems with the ozone layer, carbon dioxide increase, nuclear winter and climatic change. Normal and extreme weather in the Australian region. Cyclones, storms and drought. Effects of changes on the Sun upon the upper atmosphere. The ionosphere, magnetic storms and aurora.

Textbooks: No textbooks prescribed.

26.422 Australia's Relations with Asia.

Cat.: A (5) Social and Economic *Exclusions: 26,1520, 26,3002.*

The subject will examine Australia's relations with China, Japan, the two Koreas, Indochina, and the ASEAN states. Particular attention will be given to Indonesia. The subject will canvas a wide range of issues - historical, strategic, political and economic. The impact of Asia on domestic issues such as immigration will be discussed. Special attention will be given to regionalism.

Textbooks: Millar T.B. Australia in Peace and War: External Relations 1788-1977 ANU

26.423 Australian Economic Policies

Cat.: A (5) Social and Economic *Exclusions:* 15.001, 15.011. An introduction to the theory and practice of economic policy-making in Australia. Policies considered include budgetary and monetary policies, exchange rate and other external policies, wages and incomes policies and policies towards industries, including the role of the Industries Assistance Commission, trade practices, legislation, consumer protection and research and development policies.

Textbooks: No textbooks prescribed.

26.424 Australian Environment and Human Response

Cat.: A (4) Built and Planned *Exclusions:* 27.010, 27.030, 27.111, 27.801, 27.818, 27.295.

Mechanisms of the physical environment with particular reference to Australia and the Sydney region; landscape as an expression of dynamic response; land use problems; humans as agents of landscape change; energy and weather; slope stability; coastal ecosystems; the major natural hazards in Australia: fire, flood, drought, erosion.

Textbooks: Marsh W. M. & Dozier J. Landscape: An Introduction to Physical Geography Addison-Wesley

Goudie A. The Human Impact: Man's Role in Environmental Change Blackwell

26.425 Australian Natural Environments

Cat.: A (2) Biological

Exclusions: 27.111, 27.811.

The interdependencies of climate, hydrology, landforms, soils and vegetation are briefly reviewed on a global scale and then considered in some detail on regional and local scales in specific Australian environments; attention is also given to analysing, classifying and mapping physical components of Australian environments for practical applications in the solution of human problems.

Textbooks: Linacre E. & Hobbs J. The Australian Climatic Environment Wiley

Paton T. R. The Formation of Soil Materials Allen & Unwin

26.426 Australian Trade Unions

Cat.: A (5) Social and Economic Exclusions: 15.512. An examination of the role of unions in Australian society. Theories of the labour movement; origins, growth and development of unions; union aims and methods; union policies and strategies; white collar and professional unions; union resources; unions as defensive and aggressive organisations; interunion cooperation and conflict: unions and the Australian Conciliation and Arbitration Commission; unions and economic policy; unions and the trade cycle; unions and technological change; unions and the political process; unions and the Accord; trade union laws; unions and women's issues; Trades and Labour Councils: the Australian Council of Trade Unions; international comparisons.

Textbooks: Rawson D.W. Unions and Unionists in Australia Allen & Unwin Davis E.M. Democracy in Australian Unions Allen & Unwin

26.427 Cultural Influences in Contemporary Society

Cat.: A (7) Symbolic and Expressive Exclusions: 26.356

A study of contemporary culture (high and popular, mainstream and alternative, folk and mass culture) and its historical evolution. Includes fiction, film, television, drama, romance, comedy, music, sport, minority cultures and recreational activities, with an emphasis on popular forms. The subject introduces basic concepts and major theoretical perspectives, such as the relationship of (mass) culture and the electronic media, economic and social aspects in the production and consumption of culture, the politics of culture. Focuses on the Australian context but includes global developments.

26.428 Economic Issues of Less Developed Countries

Cat.: A (5) Social and Economic Exclusions: Nil.

Economic issues facing less developed countries. Causes of low income levels, including population levels, lack of savings, distribution of income. Benefits and costs of agricultural and industrial development. Constraints imposed by the international economy, including effects of alternative development policies.

Textbooks: Todaro M. Economics for a Developing World Longman

26.429 Energy: Options for the Future Cat.: A (1) Physical

Exclusions: Nil

Reports in the media predicting, on the one hand "energy shortages", and on the other an "oil glut", have focussed attention in recent years on the fact that energy is a finite resource. Yet one of the central principles of Science states that energy is always conserved. How can this contradiction be reconciled? In this subject, we consider the different forms of energy, and the major processes for converting energy from one form to another. Among other topics considered will be the limits to more efficient use of energy, and the potential of various alternative energy sources to satisfy human needs, with particular emphasis on the Australian situation.

Textbooks: No textbooks prescribed.

26.430 Environmental Issues - Decision Making in Australia

Cat.: A (4) Built and Planned Exclusions: 26.200, 26.252. Within the theme population-resourcesenvironment, examination of a wide range of topics concerned with man's interaction with the environment. The emergence and nature of modern environmentalism. Critical analysis of recent and current Australian environment issues, stressing broad-based multi- and inderdisciplinary ecological assessment.

Textbooks: No textbooks prescribed.

Textbooks: No textbooks prescribed.

26.431 Environmental Planning Cat.: A (4) Built and Planned

Exclusions: 26.253, 36.211, 36.411, 36.4014. The environmental planning process and the individual's rights under it. The objectives of environmental planning and how the system operates, with particular reference to New South Wales. The nature of planning philosophy, environmental law and administrative structures. Topics: the central business district of cities, housing and equity, land-use and transport interaction, urban design, location theory, and urban and rural conservation. As planning is a temporal concept, historical, contemporary and future themes are built into the subject. Assessment is by written assignment, tutorial paper, and class participation. The assignment is based on the lecture material, and students are also required to prepare a written paper for tutorial discussion.

Textbooks: Hamnett S. & Bunker, R. (eds) Urban Australia Mansell Nelson Wadsworth McLoughlin J.B. & Huxley M. (eds) Urban Planning in Australia: Critical Readings Longman Cheshire

26.432 From Alchemy to DNA: Observations and Experiments in Chemistry Cat.: A (1) Physical

Exclusions: 26.4515, 26.4516. Observation and experiment are essential to science. Theories put forth on the basis of limited observation and without test have often been shown to be incorrect and misleading. Formulation of suitable working hypotheses can assist in the avoidance of such pitfalls. The antecedents of present day chemical science, the development of concepts and modes of reasoning which form the bases of current advances, will be examined. Topics to be addressed include microstructure and chemical architecture, chemical reactions and energetics, macromolecules and biotechnology. The latter part of the subject will focus on the chemistry of living systems, the chemistry of DNA, medicines and drugs, natural products and folk medicines. Emphasis will be on the search for correlations between chemical structure and activity, the beneficial and deleterious aspects of chemical research, environmental effects and other current chemical issues.

26.433 Human and Animal Behaviour Cat.: A (2) Biological

Exclusions: 12.100.

Although philosophers and other thinkers have been concerned with psychological issues for a very long time, scientific studies of psychology which explicitly recognise interactions between body and mind, are quite recent. This subject focuses on the ways human and animal responses, including those of infants and small children, can be measured, and then used to give information about underlying psychological and biological processes. Specific topics to be covered include the factors controlling thinking, memory and attention, the way in which information about the environment is acquired, how experience modifies behaviour and how actions are driven, sustained and controlled. The biological bases of behaviour will be introduced where necessary.

Note: This subject is the Session 2 component of 12.100 Psychology 1. Students who have already completed 12.100 are excluded from this subject.

Textbooks: Carlson N.R. *Psychology, The Science of Behaviour* Allyn and Bacon

26.434 Introduction to Economics

Cat.: A (5) Social and Economic *Exclusions:* 15.001, 15.011, 26.162, 26.610, 26.615.

An introduction to economic theory and policy, and their application to the Australian economy, including important aspects of macroeconomics, microeconomics and international economics. Topics include: the monetary system, unemployment, fiscal and monetary policies; consymer choice, production, efficiency, market structure, labour markets; international trade and finance; exchange rate.

Textbooks: Lipsey R.G., Langley P.C. & Mahoney D.M. *Positive Economics for Australian Students* Weidenfeld & Nicholson or

Baumol W.J. & Blinder A.S. *Economics* Harcourt Brace Jovanovich, or

Jackson J & McConnell C.R. *Economics* McGraw-Hill

Indecs Economics State of Play 4 Allen & Unwin

Textbooks: No textbooks prescribed.

26.435 Introduction to Industrial Relations

Cat.: A (5) Social and Economic *Exclusions:* 15.511, 26.157. The subject examines some of the more significant aspects of Australian Industrial Relations. The focus is on current developments in such fields as negotiations, conciliation and arbitration, management and trade union strategies, wages and conflict. Students gain insights into the complexities of employer/ employee relationships which enables a greater understanding of the world of work. The approach to teaching encourages student participation.

Textbooks: Dabscheck B. & Niland J. Industrial Relations in Australia Allen & Unwin. Deery S & Plowman D.H. Australian Industrial Relations McGraw Hill.

26.436 Man and the Sea

Cat.: A (2) Biological *Exclusions:* 45.112, 68.302, 26.225. The subject includes discussion of marine living organisms, ocean chemistry, geology and ocean physics, and their interrelationship. Emphasis will be placed on case studies and the impact of development of industry and recreational areas in the Sydney area. Lectures will be supplemented with field trips.

Textbooks: No textbooks prescribed.

26.438 Political and Social Institutions of Ancient Rome: A Message for Today

Cat.: A (5) Social and Economic *Exclusions:* Nil.

The near-collapse of Rome in the third century AD was due to very similar problems to those facing society today. Unemployment, inflation, bankrupt leadership, labour unrest, family disintegration, moral and intellectual decline, the rise of new nations - these were the crucial factors in Rome's crisis. Rome solved the crisis and prolonged the life of her western empire by two hundred years. But she destroyed the fundamental basis of her society, and what emerged from the tunnel was very different from what had gone before.

Textbooks: Lewis N. & Reinhold M. *Roman Civilization: Sourcebook Vol 2: The Empire* Columbia University Press

26.439 The Political System in Australia

Cat.: A (5) Social and Economic Exclusions: 26.1503, 26.311, 54.1006. This subject focuses on issues in Australian politics. The issues covered include those such as peace, equality and defence as well as those about the political system itself such as the fairness or otherwise of Australia's electoral systems, and the power of the Governor-General and the Senate. In order to make such issues comprehensible the subject covers the components of the Australian political system - the House of Representatives, the Senate, the Governor-General, the Public Service, the High Court and the States as well as the relationships between these components.

Textbooks: Lucy R. *The Australian Form of Government* Macmillan

26.440 Questioning Australian Welfare

Cat.: A (5) Social and Economic Exclusions: 26.1515, 26.3004. What are the origins of Australian social weifare and social work? Do the values of 19th century charity and the Poor Law have any relevance to present day welfare? Why is the Welfare State in crisis? Is social welfare a vehicle to promote greater democracy and social justice, or a bulwark of domination and subordination? These are some of the questions to be addressed in this subject of Historical Sociology, using the modes of comparison, interpretation and advocacy. A special study will be made of alcohol misuse in Australia. Students must be prepared to read widely.

Textbooks: Kennedy R. (ed) *Australian Welfare History: Critical Essays* Macmillan Kennedy R. *Charity Warfare* Hyland House

26.441 Rainforests, Destruction and Development: The Amazonian Case Cat.: A (4) Built and Planned

Exclusions: 26.221. The Amazonian rainforest is unique in its size

and importance, not just to the countries in which it lies, but to the entire world. The geography of the area; "natural" ecosystems; indigenous peoples and their cultures. The impact of modern development on the environment and possible deleterious effects on the Earth's ecosystem. Rainforest resource management within the context of policy choices to be made by developing countries.

Textbooks: No textbooks prescribed.

26.442 Rewriting the Past and Reclaiming the Present: Social Process and the Novel in Contemporary Latin America

Cat.: A (7) Symbolic and Expressive *Exclusions: Nil.*

One way of becoming aware of the scope and limitations of one's own culture is to come face to face with the world view projected by a culture very different from it. This subject sets out to make a critical reading of the English translations of four popular and influential novels which seek to define the social, cultural and political conditions which make Latin America (and its constituent nations) 'different'. We shall examine how these works do not merely reflect the reality they depict, but attempt to actively transform our perception of it - and of our own.

Textbooks: García Márquez G. One Hundred Years of Solitude Picador, Vargas Llosa M. The War of the End of the World Faber, Puig M. The Kiss of the Spider-Woman Random Argueta M. A Day in the Life Random

26.443 Science and Technology in Modern Society

Cat.: A (5) Social and Economic Exclusions: 62.110.

An introduction to the interaction of science and technology with social, economic and political development in the twentieth century. Major forms of organized scientific research and technological innovation and their differential development in different countries. The control of science and technology: basic concepts in science and technology policy; the role of experts in modern societies; social and ethical controversies over science and technology, topics to include genetic engineering and IVF, information technology and work, energy strategies.

Textbooks: Barnes B. About Science Blackwell, Clarke R. Science and Technology in World Development O.U.P., Pacey A. The Culture of Technology M.I.T. Press

26.444 Science of Music Cat.: A (1) Physical Exclusions: 26.226. The patterns and regularities of music are analysed and compared with those of science. We examine the way in which instruments produce musical sounds, how sound is transmitted and how we perceive and analyse music. The subject has laboratory sessions in which we investigate examples of the phenomena discussed in class. (Tone-deaf students would be disadvantaged in the laboratory). The subject does not require a detailed knowledge of the terminology of either music or science.

Textbooks: No textbooks prescribed.

26.445 The Social Development of Technology

Cat.: A (3) Technological Exclusions: Nil.

This subject considers the various social, cultural and political forces that influence the direction in which technologies develop in industrial societies. Issues examined will include the parallels between scientific and technological knowledge; the role of experimentation in engineering; the effect of changing design methods and educational philosophies; the ideology and values of the engineering profession; the beliefs that technology can solve social problems and that the experts know best.

Textbooks: No textbooks prescribed.

26.446 Technology Change

Cat.: A (3) Technological Exclusions: Nil.

Analyses the history of scientific and technological advance in Europe and America, as a preliminary for the discussion of 3 major themes: (1) the advancement of technology in the West during the 19th century; (2) the diffusion of technologies within national economic systems; (3) the transfer of technologies between nations and the consequent distribution of technological resources in the modern world. As prelude to 1-3 there will be a short discussion of the economics of technical change. As an aftermath of 1-3 there will be a detailed discussion of the transfer of technologies to America. India and China in the 19th and 20th centuries. The last part of the subject will consider the pattern of technological policy in Australia in this light, ie. should Australian 'science policy' assume that our best strategy is policy which increases the efficiency of technological transfer into Australia and its

subsequent internal diffusion, or should policy be geared to the construction of an independent technological enterprise? Is there a halfway house?

Textbook: No textbooks prescribed.

26.447 Understanding Film

Cat.: A (6) Information and Communication *Exclusions:* Nil.

Film is more than entertainment. It is an industry backed by a sophisticated technology. It is a mass medium which comes in many forms, as feature, documentary or experiment. Film is politics, it is art, it is an essential ingredient in myth-building. All these aspects will be highlighted in this subject which centres around classic examples and examines particularly the position of Australian cinema.

Textbooks: Bordwell D. & Thompson K. *Film Art* Knopf, Dermody S. & Jacka L. *The Screen ing of Australia* Currency

26.448 Understanding the Earth

Cat.: A (1) Physical *Exclusions:* 25.110, 25.120, 25.520, 25.5331, 26.220.

Formation, structure and dynamics of the Earth. Nature of geological processes involved in continental drift, mountain building and the formation on continents and ocean basins. Development of Australia during the past 4000 million years. Fossils, the origin and evolution of life, and the geological time scale. Economic importance of geology. Impact of exploitation of natural resources on the environment.

Textbooks: Perspectives of the Earth Australian Academy of Science

26.449 The Unreasonable Effectiveness of Mathematics

Cat.:A(3)Technological *Exclusions: 26.223*.

What is mathematics? (Is it more than a language? How does manipulating marks on paper let us know about and plan the world? What are its limitations? Why are mathematical models used in more and more fields? Why do people find mathematics so hard?) How exactly is mathematics so effective? Case studies will be drawn from technology (eg. paths through networks, computer simulations) and the physical and social sciences (eg. predicting orbits, evaluating historical data). No technical knowledge of mathematics is assumed. Textbooks: No textbooks prescribed.

26.4501 Australian Urban Studies

Cat.: A (4) Built and Planned *Exclusions: Nil.*

The subject is an introduction to urban studies, focussing on urban politics and urban change. It will review various theories and research relating to urban development, design and planning, urban government, urban problems and the range of responses to such problems. There will be an emphasis on issues of contemporary concern and public debate.

Textbooks: No textbooks prescribed.

26.4502 Bridging the Distance: Current Social and Political Issues in Germany and Australia:

a Comparative Approach.

Cat.: A (5) Social and Economic Exclusions: 26.132

An introduction to general issues of post-war German history and civilisation combined with a comparison of major institutions and trends of the German societies with those of Australia. Social and political institutions and aspects of the every day life such as government, the education system, trade unions, sport and recreation, housing and living, theatre and the arts will be introduced in such a way that past and current developments in the two Germanies and Australia can be compared and critically evaluated. A variety of materials including films and videos will be used.

Textbooks: Dahrendorf R. *Society and Democracy in Germany* N.Y., Grosser A. *Germany in Our Time* London, Childs D. *Germany since* 1918 N.Y.

26.4503 Gastronomy I: The Culture of Wine

Cat.: A (7) Symbolic and Expressive *Exclusions: 26.351, 26.919.*

The role of wine in European civilisation since the establishment of viticulture, emphasising social, intellectual, artistic and religious influences. Traces the history of wine from its origins in the ancient Near East, through Egypt, Greece, Rome and medieval Europe, to its introduction in the New World and the Southern Hemisphere. Special attention is paid to the development of the Australian wine industry since colonial times, and its impact on gastronomy, literature and manners.

Continued next page

Textbooks: Hyams E. Dionysius; A Social History of the Wine Vine Sidgwick & Jackson

26.4504 Global Crisis: The Transition to a Sustainable Society Cat.: A (4) Built and Planned

Exclusions: 26.2501. 26.4513.

The subject examines the argument that our society's commitment to economic growth and affluent living standards is generating a number of critical global problems, such as resource and energy scarcity, destruction of the environment, the gap between rich and poor countries and the underdevelopment and poverty of the Third World, international conflict, unemployment, waste and quality of life issues. Most attention is given to the view that our society is unsustainable and that fundamental change is required to a more simple and self-sufficient way of life. Alternative lifestyles, technologies and movements are discussed. Films, 'games' and a visit are involved.

Textbooks: No textbooks prescribed .

26.4506 Harnessing Energy: The Arrow of Time and the Temperature of the Sun

Cat.: A (3) Technological

Exclusions: Nil. Energy is all pervasive! This subject will address the concept of energy, the relationship between energy, work and heat, and the balancing of energy accounts in nature. Topics to be covered include the harnessing of energy from chemical reactions, the energetics of biological systems, atmospheric systems, the development of energy technology, and the role and importance of our choices of energy sources in the economic and political aspects of modern life.

Textbooks: No textbooks prescribed.

26.4507 Mass Media and Communication

Cat.: A (6) Information and Communication *Exclusions: 26.1523.*

Major developments in (mass) communication and the media in the 20th century. Introduction to basic concepts and theoretical perspectives, and analysis of newspapers, magazines, radio and TV programmes. Topics include: the

nature and function of communication, the role of the media in contemporary society, changes in media technology, ownership and control of the media, media and politics, images of women, advertising, alternative media, news and current affairs, the politics of programming, aspects of audience reception.

Textbooks: Windshuttle K. *The Media* Penguin

26.4508 Measuring up the Universe: The Development of Scientific Instruments

Cat.: A (3) Technological *Exclusions: Nil.*

The development of the instruments and apparatus used in physical science will be discussed, and an attempt will be made to show how contemporary technical skills influence the course of science. Lectures will be supplemented by experience in using some of the equipment in the School of Chemistry's Museum of the History of Science.

Textbooks: No textbooks prescribed.

26.4509 Modern Cosmology

Cat.: A (1) Physical Exclusions: 26.2508, 26.566. Recent developments in astrophysical observations and their impact on our understanding of the nature of the observable universe. The relation of mathematical models to the physical world and our observations of it. A cosmological model involving an assumption of light-propagation in our universe; its implications for relativity and gravitation, and for the nature of matter and of life. Students should have an interest in the nature of the world around us. Mathematical descriptions are employed but the emphasis is on their meaning rather than on mathematical manipulations.

Textbooks: Prokhovnik S.J. The Logic of Special Relativity UNSW Press

26.451 Women, Science and Society Cat.: B

Exclusions: 26.224.

Social and historical background to the participation of women in science and technology. Explanations of Women's low participation and strategies for its increase.

Textbooks: To be advised.

26.4510 Multicultural Societies

Cat.: A (5) Social and Economic

Exclusions: 26.1512, 26.4007.

To examine, using a broadly comparative approach, the nature and consequences of European settlement and immigration in a number of societies, with special emphasis on Australia. Relations between settlers and indigenous peoples; relationships between ethnicity, class, status and power; and contrasts in the rates and nature of assimilation and mobility of different groups, are emphasised.

Textbooks: Bell R. *Multicultural Societies: A Comparative Reader* Sable

26.4511 Religion, Social Conservation and Social Change

Cat.: A (7) Symbolic and Expressive *Exclusions: Nil.*

Religion, in one form or another, continues to be both a phenomenon in and an influence on the larger society. This subject will examine the variety of ways in which religious organizations and movements affect, directly or indirectly, structures of stability and the dynamics of change, as well as configurations of values in a society.

Textbooks: Mol H. *Meaning and Place: An Introduction to the Social Scientific Study of Religion* Pilgrim

26.4512 Constructing the 20th Century Built Environment

- Forces, Issues, Challenges Cat.: A (4) Built and Planned

Exclusions: 11.4101, 35.592, 36.211, 37.0001. Development of an understanding of the nature of the C20th "western" industrial city in general and C20th Sydney in particular: how the urban system functions and the forces and skills at work in its continuing growth. Lectures will sketch the essentials of western industrialisation in the 18th and 19th Centuries, urban problems facing "Third World" countries, the particular problems of C20th Sydney in terms of socio-political environment, environmental pollution, transport, urban decay and renewal and expansion, the current planning and development framework, and possible futures for the built environment in Australia.

26.4513 Development and Underdevelopment: The Role of Australia

Cat.: A (5) Social and Economic Exclusions: 26.2501, 26.2502, 26.2503, 26.4504.

A study of the paradox of 'poverty in the midst of plenty'. What are the causes of underdevelopment? What part does Australia play in either promoting or hindering development in the Asia-Pacific region? What does 'development' mean to an Aborigine in Australia in this Bicentennial year? Is Australia in danger of becoming a 'banana republic'? What part can UNSW graduates play in promoting ecologically and socially equitable development in Australia and the world?

Textbooks: Donaldson P. *Worlds Apart* Penguin

26.4514 Evolution of the Built Environment

Cat.: A (4) Built and Planned

Exclusions: 11.4101, 35.591, 36.211, 37.0001. The intention is to develop an understanding of the relevance of Man's "culture" (that thing which his social, economic, political, religious and physical environment gives rise to) to the nature of the buildings and settlements which he devises, and an appreciation of the architecture and building (in particular in terms of materials and construction) of those cultures which can be see to be providing the line to modern "western" building from as far back as "the stone ages".

Textbooks: To be advised.

26.4515 From Alchemy to DNA: Observations and Experiments in Chemistry [Part I]

Cat.: A (1) Physical Exclusions: 26.432.

This subject will introduce the concepts and modes of reasoning of predet day chemical science. A historical development, demonstrating the need for careful observation and experiment, will be followed. Topics to be addressed include microstructure and chemical architecture, chemical reactions and energetics, macromolecules and biotechnology. No prior knowledge of chemistry will be assumed.

Textbooks: No textbooks prescribed.

Textbooks: To be advised.

26.4516 From Alchemy to DNA: Observations and Experiments in Chemistry [Part II]

Cat.: A (1) Physical Exclusions: 26.432.

This subject will focus on the chemistry of living systems, the chemistry of DNA, speculation on the chemistry of the origin of life, medicine and drugs, natural products and folk medicines. Emphasis will be on the search for correlations between chemical structure and activity, the beneficial and detrimental effects of chemicals, environmental effects and other chemical issues. Some chemical knowledge will be assumed either from Part I of "From Alchemy to DNA", HSC Chemistry, or the equivalent.

Textbooks: No textbooks prescribed.

26.4517 The French Speaking World: The International Experience

Cat.: A (5) Social and Economic *Exclusions: 26.131.*

An introduction to the reasons for and the nature of the extension of French political, economic and cultural influence to other parts of the world. This subject will consider the distinctive character and long-term effects of the French colonization of Canada, Indo-China, the West Indies, parts of Africa and the Pacific. Special attention will be given to the relations between France and Australia arising from French policy and influence in the Pacific.

Textbooks: Bostock W. *Francophonie* River Seine Publications

Lyons M. The Totem and the Tricolore UNSW Press.

26.4518 The French Speaking World: The Metropolitan Experience

Cat.: A (5) Social and Economic Exclusions: 26.131.

An introduction to the political and social systems of modern France. This subject will consider the distinctive character of French language, political institutions, social structure and intellectual and cultural life. Special attention will be given to movements for regional autonomy, the feminist movement and nuclear policy. Students will be asked to draw comparisons with the systems, institutions and character of their own society.

Textbooks: Ardagh J. France in the 80's Penguin, Zeldin T.H. The French Fontana

26.452 The World of Light

Cat.: A (1) Physical Exclusions: Nil.

A general non-mathematical introduction to the nature of light and its manifold interactions with the world around us. Lectures will consider various phenomena associated with visual perception. They will also show how the different interactions between light and matter can produce several atmospheric phenomena of great beauty. The possible influence of the increasing comprehension of the behaviour of light upon the history of the visual Arts will also be treated.

Textbooks: No textbooks prescribed.

26.454 Music in its Social Contexts

Cat.: A (7) Symbolic and Expressive *Exclusions: 26.331*

Music as signals in secular and religious ceremonies, drama, advertising and magic; vocal melody and its origins; instruments as tools and signs; tribal music and its organisation; traditional musics and their study; social meaning in the Western concert industry, opera and the rock industry; musical notation and its effect on music and musicians; the notion of copyright; transplanted peoples and their musics.

Textbooks: No textbooks prescribed.

26.501 The Art of Hypothesis and Prediction Cat.: B

Exclusions: Nil.

The subject will study methods of rationally justifying hypotheses and predictions. Examples studied will range from small qualifiable cases (e.g. evidence for the smokingcancer link) to the principle of legal evidence and the evaluation of large-scale scientific theories, historical evidence and theories on the meaning of life and the existence of God.

Textbooks: No textbooks prescribed.

26.503 Changing Conceptions of the Scientific Method Cat.: B

Exclusions: 26.2507, 26.817.

Traditionally, scientific growth is supposed to have occurred through deriving theories by induction from careful observation. However, some recent theorists have argued that scientific growth has resulted from guesses, that theories precede observations and are used to interpret the results of observations, and that the History of Science contains revolutions which undermine the most fundamental achievements of previous scientists. Subject examines both conceptions of scientific growth and draws out the social consequences of each conception.

Textbooks: Chalmers A.F. What Is This Thing Called Science? QUP.

26.504 Computers, Logic and Thought Cat.: B

Exclusions: Nil.

An introduction to the recent use of computers as a medium for modelling some human abilities. The subject includes an introduction to logic and its role in reasoning and representing knowledge. The philosophical and psychological implications of computing and artificial intelligence are critically discussed.

Textbooks: Burton M. & Shadbolt N. POP-11 Programming for Artificial Intelligence Addison-Wesley

26.505 Individual and Social Psychology Cat.: B

Exclusions: 12.100.

This subject will emphasise the functioning of the individual as a whole and particularly the interplay of biological and social influences on cognitive and emotional states, and on both the onset and the amelioration of abnormal or maladaptive behaviour. Another major focus will be the nature and measurement of individual differences in the areas of abilities, personality, attitudes and values. The subject will emphasise rigorous analysis of psychological concepts and systematic research, rather than speculative approaches.

Note: This subject is the Session 1 component of 12.100 Psychology 1. Students who have already completed 12.100 are excluded from this subject.

Textbooks: Carlson N.R. Psychology, The Science of Behaviour Allyn and Bacon

26.506 Knowledge and Belief in the Sciences Cat.: B

Exclusions: 26.222, 62.032, 62.1021, 62.111, 62.202U, 62.219U.

An introduction to the philosophy and sociol-

ogy of scientific knowledge. The way in which beliefs about the natural world become accepted as knowledge in various cultures, and especially in modern scientific culture. Topics are organised historically and include: oral traditions and the introduction of writing; the impact of the invention of printing; the origins and development of the experimental method; the effect of the political and social environment on scientific thought; rhetoric and rationality in scientific controversies; the nature of progress and theory change in the sciences: the relations between science and technology as forms of theoretical and practical knowledge.

Textbooks: Farrall L. Unwritten Knowledge Deakin UP, Chalmers A.F. What is This Thing Called Science? Queensland UP, Albury R. The Politics of Objectivity Deakin UP, Charlesworth M. Science, Non-Science and Pseudo-Science Deakin U.P.

26.507 Language and Society Cat.: B

Exclusions: 50.208

A study of the reflexive relationship between language and society, with special reference to the way in which language is appropriated for different purposes by different social groups. The subject will examine how language operates to convey attitudes and values, frequently in a covert way, and how an understanding of this process increases an individual's control over life, arms us against our manipulative and exploitative verbal environment, and enriches our appreciation of the literary uses of language. The subject will consider language as a vehicle for literature, for scientific discussion, for advertising, for political propaganda, for bureaucracy.

Textbooks: No textbooks prescribed.

26.508 Moral Dilemmas About Life and Death Cat.: B

Exclusions: Nil.

The advance of scientific knowledge and the development of technological prowess have given the human race greater power over life and death and thus raised new ethical problems and dilemmas. The issues raised by in vitro fertilization, experimentation of human embryos, genetic engineering and organ transplantation among others have extended older debates about abortion, eugenics and euthanasia and raised new questions. This subject will study the nature of these questions and the various kinds of moral reasoning used in addressing them.

Textbooks: No textbooks prescribed.

26.509 The Origin and Development of Economic Ideas Cat.: B

Exclusions: 26.1504, 26.1505, 26.613. A broad analysis of the philosophical origins and developments of economic thought from scholasticism to the present day with particular reference to the works of Adam Smith, Malthus, Ricardo, J. S. Mill, Marshall and Keynes. The parallel progress of socialist thought is examined by considering the contributions of the Ricardian socialists, Karl Marx and the Fabian socialists, et. al.

Textbooks: Barber W.J. A History of Economic Thought Pelican, Robinson J. Economic Philosophy Penguin, Deane P. The Evolution of Economic Ideas Cambridge University Press, Burkitt B. Radical Political Economy Wheatsheaf Books

26.5501 Conceptions of Physical Reality Cat.: B

Exclusions: Nil.

Physics and Metaphysics: linguistic and cultural aspects of conceptualising phenomena: regularity as a feature of physical reality. Concepts and difficulties with absolute time and space-simultaneity and its relation to physical reality Determinism vs Indeterminism. Einstein-Podolski-Rosen paradox. Hidden variables; Philosophical dilemmas and implications of Bell's theorem. The arrow of time, origin of the universe and physical significance of "nothingness".

Textbooks: No textbooks prescribed.

26.5502 The Expected Roles of Scientists and Engineers in Contemporary Australia Cat.: B

Exclusions: Nil.

What sorts of ideas and influences are currently shaping science and engineering in Australia? What changes have occurred? What could happen in the future? What could this mean for individual scientists and engineers? What could it mean for other people? Differences between Australia and other nations. The professional functions of scientists and engineers; the influence of teachers, peers, employers, politicians and others; the expectations of various groups in society. Changing attitudes towards professionals; the socialisation of scientists and engineers; the origins and consequences of conflict.

Textbooks: No textbooks prescribed.

26.5503 Gastronomy II: The Philosopher in the Kitchen

Cat.: A (7) Symbolic and Expressive *Exclusions: 26.351, 26.919.*

Gastronomy involves not only the study of food as sustenance and nutrition but also its moral, social, political, religious and symbolic dimensions of eating and drinking. This larger subject is introduced through a detailed study of Brillat-Savarin's classic 'Physiology of Taste' (1825) and its influence on modern gastronomy, including that of Australia. Brillat-Savarin's theories on the economic importance of gastronomy are examined with special reference to the development of the tourist industry.

Textbooks: Brillat-Savarin J.-A. The Philosopher in the Kitchen Penguin

26.5504 The Ideal City

Cat.: A (7) Symbolic and Expressive *Exclusions: Nil.*

A 28 hour introduction to the culture of cities, both actual and ideal, and to the traditions of urbanity considered as spatial and symbolic forms as well as manners and modes of expression. A broad historical review of ancient, medieval and modern cities will provide a background for a critical study of urban life in Australia. Tutorials will be devoted to classic writings in urban history, theory and speculation.

Textbooks: Rosenau H. The Ideal City; Its Architectural Evolution in Europe Methuen

26.5506 Language and Learning Cat.: B

Exclusions: Nil.

This subject will consider the relationship between our use of language and our activities as learners. It will pose questions such as: To what extent is knowledge shaped by the language we know? To what extent is our ability to use language correctly determined by our mastery of the content we are trying to communicate? The aim is to help students become better communicators (particularly in writing) and simultaneously better learners. Students will be allowed to explore particular aspects of the broad topic which interest them individually, reporting to the group on their discoveries. Some class sessions will be writing workshops.

Textbooks: Flower L. *Problem-solving Strategies for Writing* Harcourt Brace Tovanovich

26.5507 Music: From Myth to Science Cat.: B

Exclusions: 26.355, 26.815.

Music is the oldest of the exact sciences; but long before it became a mathematical discipline in ancient Greece, music was a highly sophisticated art or technology with applications in magic, religion, education, townplanning, medicine and law. This subject follows the development of music from prehistoric mythology to the beginnings of philosophy and science, emphasising the role of musical ideas in the earliest organisation and interpretation of the civilised world. There is no set textbook. Lectures will review the findings of recent research and tutorials will be devoted to the discussion of significant publications.

Textbooks: No textbooks prescribed.

26.5508 The Harmonic World-View and the Emergence of Ancient Technology Cat.: B

Exclusions: 26.259, 26.2504, 26.2505 This subject is an introduction to ancient views on the nature and role of technology. It traces the development of these ideas within the harmonic world-view and explores the analogy between 'macrocosm' and 'microcosm' based upon the practice and, later, the theory of music. From the premise that 'Dance is the Mother of the Arts', the argument proceeds from the ideas of pre-literate mythology to the beginnings of philosophy and science, emphasising the remarkable influence of music on Greek and Roman technology, particularly that of the liberal arts and the learned professions.

Textbooks: No textbooks prescribed.

26.5509 The Clockwork Universe and the Age of Modern Technology Cat.: B

Exclusions: 26.259, 26.2504, 26.2505 This subject traces the development of the modern Philosophy of Technology from the 'mechanical world-view' based on the invention of precision timekeepers and other automatic instruments to the present time in which technological developments seem to be undermining this world-view. The mechanical clock, in uniting science with the design of machines, took on archetypal significance which resulted in the idea of technological 'progress'. The subject will explore the ways in which 'the clockwork universe' is now being questioned and examine the new models or archetypes currently being proposed.

Textbooks: No textbooks prescribed.

26.5510 Beliefs, Values and Ideologies Cat.: B

Exclusions: Nil.

An analysis of the concept of belief and its relation to values, attitudes and ideologies. Theories of ideology and the 'dominant ideology' thesis. Engels' concept of 'false consciousness'. The science ideology distinction. The role of the mass media in transmitting ideology. Values and value systems and their cultural basis.

Textbooks: McLellan, D. *Ideology* Open Univ. Press

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