

CALENDAR  
OF  
THE UNIVERSITY OF ADELAIDE  
FOR THE YEAR  
1979

VOLUME II  
DETAILS OF COURSES

ADELAIDE  
GRIFFIN PRESS LIMITED, MARION ROAD, NETLEY  
1979

## ADDRESS FOR CORRESPONDENCE

Correspondence should be addressed as follows:

About courses (and related matters such as admission, examinations, scholarships and prizes), and educational matters generally: *to*

The Academic Registrar.

About financial matters: *to*

The Bursar.

About other matters, including staff appointments of all kinds and matters relating to the buildings and grounds: *to*

The Registrar.

### Address:

The University's postal address is:

The University of Adelaide,  
Box 498 G.P.O.,  
ADELAIDE,  
South Australia 5001.

The University's telephone number is 223 4333 (Area code: 08).

The University of Adelaide

F O R E W O R D

The Calendar of the University is published annually in three Volumes, as follows:

VOLUME I

General information, including—

The University Act  
Staff  
Statutes  
Standing Orders of the Senate  
The Elder Conservatorium of Music  
Institutions, Foundations and Colleges of the  
University  
Public Lectures and Courses  
Service Departments and Divisions of the  
University  
Scholarships and Prizes  
Societies Associated with the University

VOLUME II

*“Details of Courses”*, being—

Information for Students of the University  
Regulations, Schedules and Syllabuses of degree and  
diploma courses  
Rules  
Timetables

VOLUME III

Annual Report, including—

Financial Statements  
Bibliography

The Commemoration Addresses and the List of Graduates and Diploma Holders of the University will not be published in Volume III of the Calendar for 1979. An up-to-date list of graduates and diploma holders is maintained by the Academic Registrar and may, on application, be consulted in his Office.

---

These Volumes are normally published as follows:

VOLUME I: In May: price \$2.  
VOLUME II: In December of previous year: price \$1.  
VOLUME III: In August: price \$1.  
Postage extra.



## THE ARMS OF THE UNIVERSITY

The heraldic description of the Coat of Arms is as follows:

Per pale Or and Argent an Open Book proper edged Gold on a Chief Azure five Mullets, one of eight, two of seven, one of six and one of five points of the second, representing the Constellation of the Southern Cross;

and the Motto associated with the Arms is—

Sub cruce lumen

“The light (of learning) under the (Southern) Cross”

# TABLE OF CONTENTS

## VOLUME II

### DEGREE AND DIPLOMA COURSES

(The information in this volume is correct as at 10 November, 1978.)

#### INFORMATION FOR STUDENTS

INFORMATION FOR STUDENTS OF THE UNIVERSITY - - - 509

#### REGULATIONS, SCHEDULES AND SYLLABUSES

[Syllabuses for each degree and diploma are to be found immediately following the corresponding regulations and schedules.]

#### FACULTY OF AGRICULTURAL SCIENCE:

Bachelor of Agricultural Science (B.Ag.Sc.) - - - 524

Master of Agricultural Science (M.Ag.Sc.) - - - 549

#### FACULTY OF ARCHITECTURE AND PLANNING:

Bachelor of Architecture (B.Arch.) - - - 552

Master of Architecture (M.Arch.) - - - 569

Master of Urban and Regional Planning (M.U.R.P.) - 570

#### FACULTY OF ARTS:

Bachelor of Arts (B.A.) - - - 572

Diploma in Applied Psychology (Dip.App.Psych.) - - 669

Diploma in Library Studies (Dip.Lib.St.) (Discontinued) 675

Diploma in Education (Dip.Ed.) - - - 679

Advanced Diploma in Education (Adv.Dip.Ed.) - - 686

Master of Education (M.Ed.) - - - 694

Master of Arts (M.A.) - - - 699

Doctor of Letters (D.Litt.) - - - 703

#### FACULTY OF DENTISTRY:

Bachelor of Dental Surgery (B.D.S.) - - - 706

Bachelor of Science in Dentistry (Honours degree)  
(B.Sc.Dent.) - - - 723

Master of Dental Surgery (M.D.S.) - - - 729

Doctor of Dental Science (D.D.Sc.) - - - 732

#### FACULTY OF ECONOMICS:

Bachelor of Economics (B.Ec.) - - - 734

Master of Business Management (M.B.M.) - - - 760

Master of Economics (M.Ec.) - - - 770

**FACULTY OF ENGINEERING:**

Bachelor of Engineering (B.E.)	-	-	-	-	-	774
Master of Engineering (M.E.)	-	-	-	-	-	818
Master of Engineering Science (M.Eng.Sc.)	-	-	-	-	-	820
Master of Applied Science (M.App.Sc.)	-	-	-	-	-	826
Doctor of Engineering (D.E.)	-	-	-	-	-	830

**FACULTY OF LAW:**

Bachelor of Laws (LL.B.)	-	-	-	-	-	834
Master of Laws (LL.M.)	-	-	-	-	-	847
Doctor of Laws (LL.D.)	-	-	-	-	-	849

**FACULTY OF MATHEMATICAL SCIENCES:**

Bachelor of Science in the Faculty of Mathematical Sciences (B.Sc.)	-	-	-	-	-	852
Diploma in Computing Science (Dip.Comp.Sc.)	-	-	-	-	-	884
Master of Science in the Faculty of Mathematical Sciences (M.Sc.)	-	-	-	-	-	888
Doctor of Science in the Faculty of Mathematical Sciences (D.Sc.)	-	-	-	-	-	890

**FACULTY OF MEDICINE:**

Bachelor of Medicine and Bachelor of Surgery (M.B., B.S.)	-	-	-	-	-	894
Bachelor of Medical Science (Honours degree) (B.Med.Sc.)	-	-	-	-	-	916
Diploma in Psychotherapy (Dip.P.T.)	-	-	-	-	-	919
Diploma in Clinical Science (Dip.Clin.Sc.)	-	-	-	-	-	923
Master of Clinical Science (M.Clin.Sc.)	-	-	-	-	-	924
Doctor of Medicine (M.D.)	-	-	-	-	-	925

**FACULTY OF MUSIC:**

Bachelor of Music (B.Mus.)	-	-	-	-	-	930
Master of Music (M.Mus.)	-	-	-	-	-	940
Doctor of Music (D.Mus.)	-	-	-	-	-	943

**FACULTY OF SCIENCE:**

Bachelor of Science in the Faculty of Science (B.Sc.)	-	-	-	-	-	946
Master of Science in the Faculty of Science (M.Sc.)	-	-	-	-	-	1004
Doctor of Science in the Faculty of Science (D.Sc.)	-	-	-	-	-	1006

**BOARD OF ENVIRONMENTAL STUDIES:**

Master of Environmental Studies (M.Env.St.)	-	-	-	-	-	1010
---	---	---	---	---	---	------

**BOARD OF RESEARCH STUDIES:**

Doctor of Philosophy (Ph.D.)	-	-	-	-	-	1018
------------------------------	---	---	---	---	---	------

HIGHER DEGREES:

Notes and Instructions to candidates for Higher Degrees 1023

RULES AND TABLES

RULES:

The University Library	-	-	-	-	-	-	-	1028
Laboratory and General Rules	-	-	-	-	-	-	-	1033
Economics Statistics Laboratory	-	-	-	-	-	-	-	1034
Napier Birks Room	-	-	-	-	-	-	-	1034
Computing Annexes	-	-	-	-	-	-	-	1035
Conduct of Examinations	-	-	-	-	-	-	-	1036

TIME-TABLES FOR 1979 - - - - - 1037

TABLES OF:

Unacceptable Combinations of Subjects	-	-	-	-	-	-	-	1066
Faculties and Departments	-	-	-	-	-	-	-	1072
Syllabus Numbers	-	-	-	-	-	-	-	1073
Subjects (in Alphabetical Order)	-	-	-	-	-	-	-	1079
Unitised Subjects and Subjects with Options	-	-	-	-	-	-	-	1085
Code Lists for Enrolment Purposes	-	-	-	-	-	-	-	1092

# INFORMATION FOR STUDENTS OF THE UNIVERSITY

---

(This section of the Calendar includes much valuable information which will be useful to students throughout the year. All students are asked to read it carefully, and refer to it as required.)

	<i>Page</i>		<i>Page</i>
1. Responsibilities .....	510	12. Insurance .....	517
2. University government .....	510	13. Supplementary examinations .....	517
3. Principal dates, 1979 .....	511	14. Preclusion from taking further studies in a course, or further enrolment not permitted for one year .....	517
4. Fees and charges .....	512	15. Student records .....	518
5. Faculty Secretaries, and Faculty and Course Advisers .....	513	16. Graduation ceremonies: admission to degrees and granting of diplomas .....	518
6. Amendments to enrolment, or withdrawals from a course .....	515	17. Barr Smith Library .....	519
7. Change of address or change of name .....	515	18. University Health Service .....	520
8. Entry for examinations and request for notification of results .....	516	19. Student Counselling Service .....	520
9. Students with a physical disability or other special circumstances .....	516	20. Student Welfare Services .....	520
10. Repeating students: application for exemption from attendance at lectures, tutorials or practical work .....	516	21. Careers Advisory Board .....	520
11. Enrolment in a following year in a different course .....	516	22. Residence .....	521
		23. The Mackinnon Parade Child Care Centre .....	521
		24. Rules .....	521
		25. Parking .....	521

**Note:**

It is provided by statute that "In any statute or regulation unless there is something in the context repugnant to such construction words importing the masculine gender or singular number shall be construed to include the feminine and plural respectively and *vice versa*." In this section, unless the wording clearly indicates otherwise, the masculine includes the feminine and the singular the plural.



## 1. Responsibilities

It is every student's responsibility to know and to comply with the University statutes, regulations, by-laws, rules and instructions in so far as they concern him and his course of study. They are all to be found in the University Calendar (Volumes I and II), and in the relevant official leaflets. Students are advised to look at the notice boards, which are to be found in every major building, as often as possible.

---

## 2. University government

### The Council and Senate

The governing body of the University is the Council, which under section 9 of the University Act "shall have the entire management and superintendence of the affairs" of the University, subject to the Act and the statutes and regulations of the University.

The Council comprises 35 members including the Chancellor and Vice-Chancellor, *ex officio*; 8 members of the academic staff, 1 member of the ancillary staff, 1 member of staff other than academic or ancillary, 1 postgraduate student and 13 persons not employed by the University, all these 24 being elected by the Convocation of Electors (comprising all graduates and postgraduate students of the University and all full-time staff); 4 members elected by the undergraduates; and 5 members of Parliament elected by the Parliament of South Australia.

The Council operates through a system of committees, and with the help of its executive and administrative officers. The two principal committees which advise it are the Education Committee and the Finance Committee.

The Senate, which normally meets each year in November, must approve all statutes and regulations and amendments thereto before they may be allowed by the Governor in Executive Council. The Senate consists of all graduates of the University, all employees of the University who are graduates of this or other universities, and all postgraduate students.

### Committees, faculties and boards

In the academic area, the committees which from the students' point of view are the most important are the eleven faculties and two boards of studies, which control the degree and diploma courses. Subject to the approval of the Council on advice from the Education Committee, the faculties and boards of studies are responsible for the structure, scope and content of University courses. The Finance Committee, as its name implies, is concerned with the financial aspects of University government. There are over 50 committees, faculties and boards which report to the Council.

### Statutes, regulations, rules and by-laws

Statutes, regulations, rules and by-laws are made by the Council under the authority of the University Act.

For every degree and diploma course **regulations** are made which give authority for that course. Changes in these regulations require the approval of the Education Committee, the University Council, the Senate, and the Governor in Executive Council. Details, such as subjects available and the structure of the course, are set out in **schedules** made by the Council under the authority of the regulations. The schedules are published immediately after the regulations; they are followed by the **syllabuses** for each of the subjects concerned together with the prescribed text-books. The **statutes**, which are published in Volume I of the Calendar, govern matters other than degree or diploma courses. They require approval in the same manner as the regulations. The **University by-laws**, for contravention of which penalties are laid down, govern such matters as trespass, parking and traffic, disorderly behaviour, etc., and are made by the Council and allowed by the Governor in Executive Council under the authority of the University Act. They are published in Volume I, after the University Act. **Rules** are made by the Council to govern such matters as the library, laboratories and lecture rooms, the conduct of examinations, and so on. They are published towards the end of this volume.

### The Administration

The Vice-Chancellor is the chief executive officer of the University; he is assisted by two Deputy Vice-Chancellors. The remainder of the central administration is organised in three Offices headed respectively by The Academic Registrar, The Bursar, and The Registrar, each of whom is responsible direct to the Vice-Chancellor. Insofar as matters relating to their courses are concerned, students will be interested most in the Office of the Academic Registrar who is responsible for what, broadly speaking, might be termed the academic administration of the University as distinct from the general (the responsibility of the Registrar) and the financial (the responsibility of the Bursar).

---

### 3. Principal dates, 1979

- 29 January Public Holiday: Celebration of Australia Day.  
30 January Clinical Year begins.  
12 February Enrolments begin.  
5 March FIRST TERM BEGINS.  
Orientation week begins.  
*NOTE:* Students are required to attend such preliminary meetings of classes in the first week of term as may be announced. Details will be on notice boards from 26 February.
- 12 March Lectures begin.  
13-16 April Easter.  
2 May Annual Commemoration: First and Second Ceremonies.  
9 May Annual Commemoration: Third and Fourth Ceremonies.  
12 May First term lectures end.  
28 May Examinations week begins.  
*NOTE:* Examinations may commence on Friday, 25 May.
- 11 June SECOND TERM BEGINS.  
1 July Entry for annual examinations may be lodged after this date.  
Entry as early as possible is desirable.  
11 August Second term lectures end.  
Last day of entry for annual examinations or request for results.  
*NOTE:* A late entry, if accepted, will be subject to a LATE CHARGE OF \$10. Last day for students to withdraw from a subject without the withdrawal counting as a failure.
- 20 August Examinations week begins.  
*NOTE:* Examinations may commence on Friday, 17 August.
- 3 September THIRD TERM BEGINS.  
3 November All lectures end.  
12 November Annual examinations, in general, begin.  
3 December Last day for Science and Mathematical Sciences students to change the units being taken within a subject, and to change a subject if this follows from a change of units.  
15 December Third term ends.
-

#### 4. Fees and charges

##### (a) General

No student, except a student taking a course in the Department of Continuing Education or a student of the Elder Conservatorium undertaking studies not forming part of a Music degree course, is required to pay any tuition or associated fee.

Every student is, however, required to pay the prescribed Statutory Union Fees [see (b) below]; and he may also, in some circumstances, incur a liability to pay certain University charges [see (c) below]. In some subjects attendance at excursions or camps forms a compulsory part of the practical work and certain costs are thereby incurred [see (d) below].

##### (b) Union fees

Payment of the prescribed Statutory Union Fee is compulsory for every student. Every student enrolled at the University must, unless exempted by the University Council from paying all or part of such fee, pay:

- (i) a **Union Entrance Fee** of \$20 in March of the first year of enrolment; **AND**
- (ii) a **Union Annual Fee** of \$124 for a student attempting 76-100% workload; \$93 for 51-75% workload; \$62 for 26-50% workload; or \$31 for 1-25% workload. Students enrolled for higher degrees pay *either* \$124 (full-time) *or* \$62 (part-time). An external student is not required to pay a Union Fee. Full-time clinical-year medical students (in 4th, 5th and 6th years), and full-time agricultural science students enrolled in 3rd and 4th years or for honours or higher degrees, pay \$62.

(In this context, a student's workload is as calculated by the University according to the subjects or other work for which the student is enrolled in the first term.)

**All fees should be paid in March of each year.**

A **late payment charge** for overdue fees will be made. The late charge will be applied at the rate of \$2 a month and will fall due on the first day of the month following the month in which the Annual Fee, or any agreed part thereof, falls due, until and including 1 December of each year. The maximum total late charge applicable to each fee will be \$18.

All students who arrange for deferment of payment of the Union Fee will be exempt from the late charge for the period of deferment. Enquiries concerning deferment of payment should be directed to the Welfare Co-ordinator, in the Union.

Payment of Union fees entitles students to be members of the Adelaide University Union (the Club to which all members of the University may belong) with the use of the Union buildings, facilities and services. Membership also entitles students and staff to take full part in the activities of the Students' Association, Clubs and Societies Council and the Sports Association.

##### (c) University charges

The following charges will be made by the University in appropriate cases:

Late enrolment .....	\$15
Late submission of entry for examination .....	\$10

In addition, charges may be made to students who do not comply with University rules. Such charges are set out in the rules concerned.

All rules are printed towards the end of this volume. (*See* Table of Contents.)

Students in the third year of the dental course are required to pay to the Cashier, Royal Adelaide Hospital, a returnable deposit of \$20 in connection with the use of hospital equipment during the clinical years of the course.

Students in the fourth and fifth years of the medical course are required to pay hospitals residence charges of \$34.50 a year. Students may, if they prefer to do so, pay the full fee on enrolment at the beginning of the fifth year.

Students who arrange to take their examinations externally are responsible for the payment of charges for supervision.

##### (d) Compulsory excursions and camps

In some subjects or courses attendance at excursions or at camps (usually during vacation) forms a compulsory part of the associated practical work. The University will endeavour to meet the **travel costs**; however students are required themselves to meet whatever **living costs** (accommodation, meals, etc.) may be involved.

The subjects or courses where living costs are involved in attendance at compulsory excursions or camps are listed below with an estimate of those costs:

Agricultural Science:	\$
Field trips	175
Architecture and Planning:	
B.Arch. (Fourth Year)	150
M.U.R.P. (Course Work)	150
Arts:	
Geography (Third Year)	30**
Engineering:	
Civil Engineering IIIB, Survey Camp	100
Chemical Engineering (Final Year)	80
Science:	
Geology II	80†
Geology III	120†
Honours Geology, Economic Geology, Geophysics: each	250†
Botany II	*
Botany III	*

This list is published only for the information and guidance of students and in no way restricts the University in determining each year the nature, duration and cost of the excursions or camps associated with particular subjects or courses, or the list of subjects and courses in which such attendance may be required.

\* Students should allow \$5-\$6 a day for Botany II and III courses/units which involve field camps.

† In addition students should allow up to \$75 for equipment and field clothing (full details from Department of Geology).

\*\* Depends on the number of field camps students elect to take.

## 5. Faculty Secretaries, and Faculty and Course Advisers

### Faculty Secretaries:

The Secretaries of Faculties and Boards of Studies are members of the staff of the Academic Registrar. They are all university graduates, with training and experience in educational matters. In so far as courses are concerned, they are competent to give advice on matters relating to the course for which the Faculty or Board they serve is responsible.

A student who is in doubt about any matter concerning his course is advised to consult his Faculty Secretary in the first instance. **Appointments are desirable whenever possible.** The Faculty Secretaries are located on the first floor of the Mitchell Building, at the southern end on level 7 of the Kenneth Wills Building, and at the western end of the top floor of the Old Classics Wing. There is a directory board in the foyer of the Mitchell Building.

<i>Faculty/Board</i>	<i>Secretary</i>	<i>Telephone Extension Number</i>
Agricultural Science	Ms. E. Campbell <sup>m</sup>	2673
Architecture and Planning	Mr. G. N. Stephenson <sup>k</sup>	2246
Arts	Ms. J. A. Philip <sup>m</sup>	2256
Dentistry	Mr. J. R. H. Cook <sup>k</sup>	2207
Economics	Mr. K. W. Halliday <sup>m</sup>	2245
Engineering	Mr. I. L. Carman <sup>o</sup>	2929
Environmental Studies	Ms. E. Campbell <sup>m</sup>	2673
Law	Mr. R. J. Hanney <sup>m</sup>	2658
Mathematical Sciences	Ms. L. M. Oertel <sup>m</sup>	2666
Medicine	Mr. G. N. Stephenson <sup>k</sup>	2246
Music	Mr. K. W. Halliday <sup>m</sup>	2245
Science	Ms. L. M. Oertel <sup>m</sup>	2666
Research Studies (Ph.D.)	Ms. E. Campbell <sup>m</sup>	2673
Scholarships Officer	Mr. J. Ogle <sup>o</sup>	2931

*m*-Mitchell Building; *k*-Kenneth Wills Building; *o*-Old Classics Wing.

### Faculty and Course Advisers:

Each Faculty and Board of Studies has appointed at least one adviser (usually a member of the academic staff) to advise students concerning courses of study and, where required, to approve the subjects for which they may be permitted to enrol.

Faculty Advisers are available for consultation throughout the year and students who feel that they are in need of advice, or who wish to discuss any problems relating to their courses, should call on their Faculty advisers. **Appointments are desirable whenever possible.**

The Faculty Advisers for 1979 are as follows:

#### *Agricultural Science:*

The Assistants to the Dean:  
Dr. D. R. Liljegren, Agricultural Biochemistry  
Dr. K. W. Shepherd, Agronomy

#### *Architecture and Planning:*

The Assistant to the Dean:  
Dr. B. Atkinson, Architecture

#### *Arts:*

##### *B.A. students:*

The Assistants to the Dean:  
Dr. T. L. Burton, English  
Dr. C. J. Cooper, Psychology  
Dr. C. J. Dawson, Education  
Dr. S. N. Gassner-Roberts, German

##### *Dip.App.Psych. students:*

Dr. N. H. Kirby, Psychology

##### *Dip.Ed. students (full-time)*

Mr. J. F. David, Education  
Mr. R. S. Lean, Education

##### *Dip.Ed. students (part-time)*

Miss M. J. Secombe, Education

##### *M.Ed. and Adv.Dip.Ed. students:*

###### *Course work:*

Mr. J. F. David, Education

###### *Thesis:*

Dr. J. A. Rowell, Education

#### *Dentistry:*

The Faculty Secretary:  
Mr. J. R. H. Cook,  
Kenneth Wills Building

#### *Economics:*

##### *B.Ec. students:*

The Assistants to the Dean:  
Dr. T. Sheridan, Economics  
Dr. P. E. Steidl, Commerce

##### *M.B.M. students:*

Mr. R. L. Newman, Commerce

#### *Engineering:*

##### *B.E. students:*

The Assistants to the Dean:  
Mr. J. R. Ewers, Civil Engineering  
Mr. J. H. Fowler, Mechanical Engineering

##### *M.Eng.Sc. and M.App.Sc. students:*

Dr. B. R. Davis, Electrical Engineering  
Mr. J. R. Ewers, Civil Engineering  
Dr. J. M. Pickles, Mechanical Engineering  
Dr. J. R. Roach, Chemical Engineering

#### *Environmental Studies:*

Dr. J. R. Hails, Director of Centre for Environmental Studies

#### *Law:*

The Assistant to the Dean:  
Mr. M. R. Goode, Law

#### *Mathematical Sciences:*

##### *B.Sc.(Math.Sc.) students:*

The Assistants to the Dean:  
Dr. B. P. Kidman, Computing Science  
Dr. P. R. Scott, Pure Mathematics

##### *Dip.Comp.Sc. students:*

Dr. J. L. C. Macaskill,  
Computing Science

#### *Medicine:*

The Faculty Secretary:  
Mr. G. N. Stephenson,  
Kenneth Wills Building

#### *Music:*

The Assistants to the Dean:  
Mr. G. H. Dudley, Music  
Mr. D. R. Shephard, Music

#### *Science:*

The Assistants to the Dean:  
Dr. R. H. Prager, Organic Chemistry (Surnames A-G)  
Dr. G. G. Ganf, Botany (Surnames H-O)  
Dr. B. H. Horton, Physics (Surnames P-Z)

## 6. Amendments to enrolment, or withdrawals from a course

A student who wishes to amend his enrolment must obtain an "Amendment to Enrolment" form, which must then be completed, approved by the appropriate Faculty Adviser, and returned to the Office of the Academic Registrar.

Once a student has enrolled the University continues to regard him as a student, subject to the statutes, regulations, rules and lawful directions of the University, until such time as he notifies the Academic Registrar on an "Amendment to Enrolment" form that he wishes to withdraw. [It is NOT sufficient for him merely to tell his lecturer.] After 31 July or the last day of second term\* (whichever is the later) a student who withdraws will be regarded as having failed, unless at the time of his withdrawal he offers reasons for his withdrawal which satisfy the University.

Students should realise the importance of this matter in relation to the annual reviews of academic progress. Withdrawals which are regarded as failures may result in a student being precluded from taking further studies in his course. [See section 14. Preclusion from taking further studies in a course.]

A student who may be contemplating withdrawing is strongly advised to consider carefully all the relevant factors before he reaches a decision. When doing so he may find it helpful first to consult one or more of the following: his Faculty or Course Adviser; his Faculty Secretary; the University Health Service (see section 18 below); the Student Counselling Service (see section 19 below).

\* Fourth-year Architecture and third-year Medical students will be regarded as having failed if they withdraw after the beginning of the third week of second term and later than four clear weeks before the last day of second term respectively.

---

## 7. Change of address or change of name

### Change of address

A student who changes his correspondence address should immediately notify the Academic Registrar, and each department in which he is studying, of the change. Preferably the student should call in person at the Records office [Level 7, southern end of Kenneth Wills Building] and complete the appropriate form.

### Change of name

A student's name in the University's records is the name given by the student on his first enrolment when he signs the Student's Roll. Sometimes this name has to be reconciled with that on other documents such as a birth certificate or matriculation certificate. This name must continue to be used unless and until it is changed in a way acceptable to the University. [See below.]

Whether a student's name in the University's records is to be changed is for the student to decide, e.g. a female student who marries may elect to leave her University records under her maiden name, or to ask that they be under her married name. They cannot be held concurrently under both names. On written request a married woman may, where the University's records already contain both maiden and married names, revert to use her maiden name.

In the interests of the student, the University will change a student's name in its records only if documentary evidence, satisfactory to the University, of the change of name is submitted. This evidence may be one of the following:

- (a) marriage certificate, birth certificate or passport;
- (b) deed poll, executed through a solicitor or notary public;
- (c) memorandum of change of name, issued by the Registrar General of Deeds. [This is a simple procedure and may be completed by calling at The Lands Title Office on the east side of Victoria Square—10 a.m. to 4 p.m. Monday to Friday. A small fee is required.]

A student wishing to have his or her name changed in the University's records should obtain from the Records Office, and complete, a "Change of Name and/or Address" form; attach the appropriate documentary evidence (original or photocopy); and lodge with the Records Office. An original document will be returned.

### 8. Entry for examinations and request for notification of results

Clause 2A of Chapter XXV of the Statutes requires every candidate for examination to lodge with the Academic Registrar a form of **Entry for Examination** (which includes a request for notification of results) on or before the end of the second term (in 1979: 11 August). This may be done at any time after 1 July. A late entry, if accepted, will be subject to a **LATE CHARGE** of \$10.

---

### 9. Students with a physical disability or other special circumstances

A student who has a physical disability, or other special circumstances, which requires special arrangements to be made to enable him to study at the University, or which he would like the University to take into account when examination arrangements are being made, should communicate with the Academic Registrar as soon as possible after enrolment. He might find it helpful to advise the relevant departments also.

---

### 10. Repeating students: applications for exemption from attendance at lectures, tutorials or practical work

A student who is repeating a subject, particularly a laboratory subject, in which he has failed may be eligible to be granted exemption from lectures, tutorials or seminars, practical work and practical examination. All applications for such exemption must be lodged with the Academic Registrar, on the appropriate form, preferably before, but not later than, the end of the enrolment period. Preliminary enquiries may be made at the department concerned.

---

### 11. Enrolment in a following year in a different course

The attention of every student is drawn to the following:

- (a) that in **each course** there is a quota on the number of new admissions in any year;
- (b) that any student who may wish to be accepted for a course different from that in which he is currently enrolled **must apply towards the end of the year** on the prescribed form, by the prescribed date (for 1980: October 31, 1979).

There are three exceptions to this, namely (i) for 1980, a student from Arts, Economics or Science may enrol in Mathematical Sciences if approved to do so by a Mathematical Sciences Faculty Adviser; (ii) a student from Engineering previously enrolled in the course for the degree of B.E. (in the departments of Chemical or Electrical Engineering) may enrol in Mathematical Sciences or Science if approved to do so by a Mathematical Sciences or Science Faculty Adviser (such a student must be able to complete the requirements for the degree of B.Sc. in one year of full-time study, or its equivalent); and (iii) a full-time student in any course may in addition enrol for a single subject in another course, without necessarily being selected for entry to that course, provided that the Faculty Adviser for each course approves and so endorses the enrolment form. (But in this case no assurance can be given that any subject so passed may later be counted towards a degree.)

---

## 12. Insurance

Although of course the University has its own public risk policy, students who wish to be insured against accidents should take out private insurance cover. Indeed the Council strongly advises every student—particularly those involved in laboratory or field work of any form—to consider his position and where necessary take out his own personal accident insurance policy covering

- (a) injuries to himself, and
- (b) third party claims, i.e. any claims arising from injuries suffered, as a result of his actions, by some other person or persons.

In this connection attention is drawn to the scheme arranged by the University Union whereby all students are automatically, as members of the Union, covered by the Australian Union of Students Friendly Society Accident Insurance Scheme. Under this scheme a student involved in an accident may receive up to \$500 for medical and other expenses plus up to \$500 for dental expenses. However, third party claims are not included in the scheme. Full particulars may be obtained from the Union Office.

---

## 13. Supplementary examinations

Supplementary examinations may be granted, to students who have failed one or more examinations, on the following grounds: medical, compassionate, or academic.

The current rules governing the granting of Supplementary Examinations may be found in the leaflet "Supplementary Examinations", obtainable from the Office of the Academic Registrar.

Supplementary examinations are normally held in January. Examinations are conducted in Adelaide and students planning to go away on holidays during the long vacation are advised to take this into account. Examinations will **not** be arranged at interstate or overseas centres for students absent from Adelaide for reasons not connected with their course of study.

Students who become ill during the year or whose studies may have been adversely affected by unfortunate traumatic events are strongly advised to consult the Student Health Service at the earliest possible opportunity.

---

## 14. Preclusion from taking further studies in a course, or further enrolment not permitted for one year

Under the provisions of Clause 4C of Chapter XXV of the Statutes a student whose academic progress is considered to be unsatisfactory may be precluded from taking further studies in the course for which he is enrolled; or further enrolment in that course may not be permitted for one academic year; or he may be permitted to re-enrol, but with a restricted course.

The general policy of the Council, and the intention of the Faculties, is as follows:

1. Where a student has been unable to make adequate progress with his studies the Faculty concerned may, in the student's own interest, *either*

- (a) limit or prescribe the subjects he may undertake in the following year, *or*
- (b) ask him to give good reasons for being permitted to enrol in the next ensuing academic year, *or*
- (c) ask him to show good cause why he should not be precluded from all further studies in his course.

2. A student whose academic progress is under review will be asked to give in writing reasons for his poor academic performance. It may be necessary for some students to submit medical certificates or reveal certain personal matters. Any information they supply will, in the first instance, be considered only by a small sub-committee of the Faculty concerned. These cases are not considered in open Faculty unless there are particular reasons for doing so. Before making a submission, the student is given an opportunity to discuss his position with his



Dean or Faculty Adviser, or other appropriate officer of the University, such as his Faculty Secretary, whose location may be found by consulting the directory board in the foyer of the Mitchell Building. [See section 5 above.]

3. If, in the light of the information supplied, the Faculty recommends that a student be required to defer his enrolment or be precluded, the student is informed of the decision by letter and given a further opportunity to bring before the University any information which was not available when the Faculty considered his case. Recommendations from the Faculties are considered by a Standing Committee of the Council, which reports to the Council. After taking into consideration all the evidence, the Council may confirm, vary or refer back to the Faculty the recommendation it has made.

4. It will be seen that a student whose progress is under review has ample opportunity to bring to the attention of his Faculty and the Council any information which he believes to be relevant to his poor academic performance. Each case is looked at individually, and is given full and careful consideration before any action is taken.

Further information may be found in a leaflet obtainable from the Office of the Academic Registrar.

---

## 15. Student records

An academic record card is maintained, for each student, by the Academic Registrar; and on this is kept information associated with the student's course of study. No other kind of information is kept on it.

Any student, past or present, of the University may apply at any time for a statement of his academic record. Information about the three types of statement that are available may be obtained on request to the Academic Registrar or to his Student Records Office.

All information supplied by a student for University purposes, and all details of his academic record, are regarded as confidential. Accordingly, in general a statement of a person's academic record is issued only at his request, or with his consent. The only exception to this is in the case of requests from other tertiary educational bodies.

---

## 16. Graduation ceremonies: admission to degrees and granting of diplomas

Normally, degrees are conferred and diplomas granted only at the Annual Commemoration Ceremonies (graduation ceremonies) which are usually held towards the end of the first term. In 1979 there will be four ceremonies at 11.00 a.m. and 3.00 p.m. on each of the last two Wednesdays of the first term, on 2 and 9 May.\* A candidate who believes that in his particular case there are exceptional circumstances which warrant the degree being conferred at either the July or December Council Meeting may make application to the Academic Registrar.

Students who are enrolled for their last subjects towards a Bachelor's degree or a diploma are required to lodge application forms for admission to a degree or granting of a diploma as soon as possible after 1 July. Application forms should preferably be lodged at the same time as the Form of Entry for Examinations (see section 8 above). Candidates for higher degrees will be notified by the Academic Registrar when they have been recommended for the award of their degrees and Application Forms will be sent to them for completion and immediate return.

An applicant for a degree may ask to be admitted to that degree *in absentia*, i.e. without personally attending a graduation ceremony, but the degree will nevertheless be conferred only at the graduation ceremony and not before.

Candidates for the granting of diplomas do not participate personally in any of the Commemoration Ceremonies and are not therefore required to attend. Their names will however be printed in the appropriate programme.

At the graduation ceremony a candidate attending for admission in person must wear the gown and hood appropriate to the degree to which he is to be admitted. Each candidate for a degree is presented by the Dean of the Faculty concerned to the Chancellor who officially admits him to his degree and shakes his hand. Candidates are handed their degree certificates as they return to their seats.

The *in absentia* candidates are formally admitted to their degrees by the Chancellor at the same ceremony as the candidates who are personally presented.

Each candidate for admission in person will be given tickets to enable three guests to attend the ceremony.

Details of the procedures for admission to degrees, including hire or purchase of academic dress, are given on a "tear-off" sheet attached to the degree or diploma application form. Further details concerning the ceremony are sent to all candidates in March.

Enquiries concerning the graduation ceremonies should be directed to Mr. J. R. H. Cook (extension 2207).

\* The ceremonies in 1979 will be held as follows:

<i>Wednesday, 2 May</i>	<i>Wednesday, 9 May</i>
<i>First Ceremony at 11.00 a.m.</i>	<i>Third Ceremony at 11.00 a.m.</i>
Economics	Agricultural Science
Music	Arts (Ordinary B.A. only)
Science (Ordinary B.Sc. only)	Environmental Studies
<i>Second Ceremony at 3.00 p.m.</i>	<i>Fourth Ceremony at 3.00 p.m.</i>
Architecture and Planning	Arts (Higher degrees and Honours degrees)
Engineering	Dentistry
Law	Mathematical Sciences
Science (Higher degrees and Honours degrees)	Medicine

---

## 17. Barr Smith Library

The Barr Smith Library and its various branch libraries contain about 950,000 volumes; and about 20,000 periodicals are currently received.

All students attending lectures at the University are entitled to use the Library for reference purposes. All students who are enrolled in a degree or diploma course in the University are entitled to borrow books from the Library. The rules for borrowing are printed in "Rules for the University Library" towards the end of this volume. (*See Table of Contents.*)

Information about library hours and the use of the Library may be found in its folder, "Information for Students". Free copies are available on application to the Librarian.

Generally the Library is open as follows:

During first and second terms and the latter part of the two short vacations: from 9.00 a.m. to 10.00 p.m. Monday to Friday; from 2.00 p.m. to 5.00 p.m. on Saturday; and from 1.30 p.m. to 5.30 p.m. on Sunday.

During third term and the early part of the two short vacations: from 9.00 a.m. to 11.00 p.m. on Monday to Friday; from 10.00 a.m. to 6.00 p.m. on Saturday; and from 1.30 p.m. to 5.30 p.m. on Sunday.

During the long vacation: from 9.00 a.m. to 10.00 p.m. on Wednesday; otherwise from 9.00 a.m. to 5.00 p.m. Monday to Friday until February; 9.00 a.m. to 6.00 p.m. from February until the beginning of term.

Notice boards should be consulted about arrangements for Public Holidays.

External students in the Faculty of Arts who reside in South Australia may register for service from the Country Lending Service of the Library on presentation of their certificate of exemption from attendance at lectures.

### 18. University Health Service

It is compulsory for all full-time students in their first year at the University to have a medical examination, Mantoux Test and X-ray examination of the chest, either by the Health Service or by their own doctors.

If a student prefers to be examined by his own doctor, he must ask him to conduct the examination in accordance with the provisions of the form used by the Health Service, and to complete the form and return it to the Health Service. The student must himself pay his doctor's fee in this case. There is no fee for examination by the Health Service. Health Service forms are obtainable on application to the clerk of the Health Service.

Also, every new part-time student is required to provide to the Health Service by the end of the first term (May 13) evidence of having had a satisfactory chest X-ray within the twelve months prior to enrolment.

All students are eligible for casualty service or advice on personal problems at the Health Service which is located on the ground floor of the Horace Lamb Building. The Director, Dr. R. C. Heddle and Medical Officer, Dr. C. O. Auricht, are available for consultation throughout the year; they are not, however, intended to replace your family doctor with whom they will liaise if necessary. [See section 13 Supplementary Examinations.]

---

### 19. Student Counselling Service

The Student Counselling Service aims to assist students with their problems, thereby enabling them to gain the maximum benefit from University life.

Students are offered assistance in dealing with personal difficulties or concerns, study problems, and course and career discussions. Interviews may be arranged by telephoning, or by calling at the Counselling Service which is located on the first floor, George Murray Building, next to the Union Bookshop, lower level. Three student counsellors are available from 9.00 a.m. to 5.00 p.m., generally at short notice. For further details a pamphlet can be obtained from a receptionist at the Service. Telephone 223 4333, extension 2098 and 2663.

---

### 20. Student Welfare Services

The Union Welfare Co-ordinator, who is located in the Lady Symon Building, is available to advise students concerning welfare resources, financial matters and housing. He acts as ombudsman for students seeking representations concerning academic and administrative decisions. He maintains a part-time and vacation employment service. He is available to assist overseas students with any problems.

---

### 21. Careers Advisory Board

The Careers Advisory Board provides information on careers, and all students have the opportunity to discuss careers open to them.

For final-year students assistance is given in finding employment. Interviews are arranged on campus with potential employers; liaison with the Professional Employment Office is maintained for job placement; information on employers and job-seeking techniques is distributed and information on postgraduate vocational courses is available.

For students interested in teaching, close liaison with the S.A. Education Department is maintained. A career newsletter "Options" is sent to students, discussing topics as they affect particular faculties, and an annual survey of the first destination of graduates is carried out. Careers literature and employer leaflets are available in the Board's Offices which are located on the top floor of the Old Classics Wing near the Wills Court waterfall.

---

## 22. Residence

There are five residential colleges affiliated with the University. St. Mark's is for men; Aquinas, Lincoln and St. Ann's are co-educational; and Kathleen Lumley is for postgraduate students, men and women, single or married. For particulars of admission to these colleges application should be made direct to:

- The Rector, Aquinas College, 19 Palmer Place, North Adelaide, S.A. 5006.
- The Master, Lincoln College, 54 Brougham Place, North Adelaide, S.A. 5006.
- The Master, St. Mark's College, 46 Pennington Terrace, North Adelaide, S.A. 5006.
- The Principal, St. Ann's College, 187 Brougham Place, North Adelaide, S.A. 5006.
- The Master, Kathleen Lumley College, 51 Finnis Street, North Adelaide, S.A. 5006.

Students who wish to live in lodgings are usually able to secure reasonably satisfactory living accommodation. Alternatively students may seek accommodation in one of the houses owned by the University in lower North Adelaide. These houses are administered by the Board of Non-Collegiate Housing. The Union Welfare Co-ordinator will supply details of the non-collegiate housing and will assist all students in obtaining suitable accommodation. (See section 20 above.)

The Secretary of the Council for the Welfare of Overseas Students in South Australia, 10th Floor, Sun Alliance House, 45 Grenfell Street, Adelaide, S.A. 5000 (Telephone: 51 3651) will, on application, help all overseas students seeking living accommodation. The Australian Development Assistance Bureau, at the same address, employs a social worker who is able to assist with any personal problems that may be encountered by overseas students.

---

## 23. The Mackinnon Parade Child Care Centre

Students with children between the ages of three months and five years may wish to avail themselves of the facilities offered by the Mackinnon Parade Child Care Centre where there are special concessions for student-parents. Enquiries should be addressed to the Director, The Mackinnon Parade Child Care Centre, 148 Mackinnon Parade, North Adelaide 5006. (Telephone: 223 4333, extension 2930.)

---

## 24. Rules

The attention of all students is drawn to the following Rules which are printed towards the end of this volume. (See Table of Contents.)

- Rules for the University Library.
- Laboratory Rules and Rules applicable to Students on University Premises.
- Rules for Students using the Economics Statistics Laboratory.
- Rules for Students using the Napier Birks Room.
- Rules of the Computing Annexes.
- Rules for the Conduct of Examinations.

---

## 25. Parking

The University much regrets that it cannot provide parking facilities for persons not holding permits. Save in the most exceptional circumstances (e.g. severe physical handicap), day-time permits cannot be made available to students, whether full-time or part-time. Part-time students especially are advised to consider carefully, before enrolling, whether it will be feasible for them to attend classes at the times they are held; and they should make their decision in the knowledge that permits for parking in the University grounds during the day time will not be available to them.



# FACULTY OF AGRICULTURAL SCIENCE

## REGULATIONS, SCHEDULES AND SYLLABUSES OF DEGREES

### Bachelor of Agricultural Science (B.Ag.Sc.):

Regulations	- - - - -	524
Schedules	- - - - -	527
Syllabuses	- - - - -	530
Agricultural Biochemistry	- - - - -	530
Agriculture	- - - - -	532
Agronomy	- - - - -	534
Animal Physiology	- - - - -	536
Biometry	- - - - -	538
Economics (for B.Ag.Sc.)	- - - - -	539
Entomology	- - - - -	542
Genetics (for Hons. B.Ag.Sc.)	- - - - -	544
Plant Pathology	- - - - -	545
Plant Physiology	- - - - -	546
Soil Science	- - - - -	547

### Master of Agricultural Science (M.Ag.Sc.):

Regulations	- - - - -	549
-------------	-----------	-----

### Doctor of Philosophy (Ph.D.):

Regulations and Schedules: under "Board of Research Studies"—*see* Table of Contents.

OF THE DEGREE OF  
**BACHELOR OF AGRICULTURAL SCIENCE**  
REGULATIONS

1. There shall be an Ordinary and an Honours degree of Bachelor of Agricultural Science. A candidate may obtain either degree or both.

2. Except in special cases allowed by the Council, every candidate for the degree of Bachelor of Agricultural Science shall after matriculation spend at least four academic years in courses of study for the degree.

§3. To qualify for the degree, whether the Ordinary or the Honours degree, every candidate must do such written, laboratory and other practical work as is required and pass examinations in the subjects prescribed. He must also present evidence to the satisfaction of the Council that he has had the practical experience prescribed.

\*4. (a) Schedules defining the course of study, including laboratory and other practical work to be undertaken and the examinations to be passed, shall be drawn up by the Faculty of Agricultural Science and submitted to the Council for approval.

(b) Such schedules shall become effective from the date of approval by the Council or from such other date as the Council may determine, and shall be published in the next edition of the University Calendar.

5. Except by permission of the Faculty of Agricultural Science, a candidate shall not be admitted to the class in any subject for which he has not satisfactorily completed the pre-requisite studies as prescribed in the syllabus for that subject: Provided that the Faculty may grant a candidate who holds an Honours diploma of Roseworthy Agricultural College such exemption from the requirements of this regulation, and on such conditions, as it may determine.

†6. A candidate may be exempted from attendance at practical work in a subject in which he desires to be examined, but only upon grounds approved by the Council.

7. (a) Except in cases approved by the Council, the annual examination in a subject shall be held soon after the completion of the course of instruction in it. Supplementary examinations, when granted, shall be held at such time as may be fixed whether in term or in vacation.

† Amended 21 December, 1967.

§ Amended 24 December, 1969.

\* Amended 24 December, 1969 and 15 January, 1976.

\*(b) A candidate shall enter for examination on a form and by a date prescribed by the Council, but shall not be eligible to present himself for examination unless he has done written and laboratory or other practical work, where required, to the satisfaction of the professors and lecturers concerned.

(c) At the annual examination in a subject, the examiners may take into account the candidate's written or practical work in the subject and his results at terminal or other examinations in it.

†8. (a) A candidate who fails to pass in any subject shall, before presenting himself again for examination, again do practical work in that subject to the satisfaction of the professor and lecturers concerned unless exempted from doing so by the Faculty of Agricultural Science.

(b) A candidate who has twice failed to pass the examination in any subject may not enrol for the subject again except by permission of the Faculty and under such conditions as the Faculty may prescribe. For the purpose of this clause, a candidate who fails to receive permission to sit for or absents himself from the examination in any subject after having attended substantially the full course of instruction in it shall be deemed to have failed to pass the examination.

9. There shall be three classifications of pass at an annual examination in any subject for the Ordinary degree, as follows: Pass with Distinction, Pass with Credit, Pass. The names of the candidates who pass with Distinction or with Credit shall be arranged in order of merit within the classification; the names of other candidates who pass shall be arranged in alphabetical order either in one list or in two divisions as the Council may, on the recommendation of the Faculty, determine. If the list of candidates who pass be published in two divisions, a pass in the higher division may be prescribed in the appropriate syllabus as pre-requisite for admission to another subject. A candidate with a lower division pass who wishes to gain a higher division pass will be allowed to repeat the subject once only.

\*10. (a) A candidate for the Honours degree shall spend an additional year in advanced study in one of the subjects listed in the schedule relating to the Honours degree.

(b) The names of candidates who qualify for the Honours degree shall be published in alphabetical order within the following classes and divisions:

First Class  
Second Class  
    Division A  
    Division B  
Third Class.

\* Amended 21 December, 1967.

† Amended 24 December, 1969.



\*11. A candidate who has passed subjects in other faculties or other universities or elsewhere, may on written application to the Academic Registrar be granted such exemption from these regulations and schedules made under them as the Council on the recommendation of the Faculty may determine.

Regulations allowed 28 January, 1965.

\* Amended 28 February, 1974.

OF THE DEGREE OF

# BACHELOR OF AGRICULTURAL SCIENCE

## SCHEDULES

(Made by the Council under regulation 4.)

NOTE: Syllabuses of subjects for the degree of B.Ag.Sc. are published below, immediately after these schedules. For syllabuses of subjects taught for other degrees and diplomas see the table of subjects at the end of the volume.

### SCHEDULE I: THE ORDINARY DEGREE

1. The subjects of study for the Ordinary degree shall be as follows:

#### GROUP A SUBJECTS AND HALF-SUBJECTS

##### Subjects

SZ71 Biology I	QM11 Mathematics IM
SC01 Chemistry I	SP01 Physics I
SG01 Geology I	(see also 3. below)
QM01 Mathematics I	

##### Half-subjects

SB6H Botany IH	QM7H Mathematics IH
QA7H Computing IH	EE2G Microeconomics IH
SG7H Environmental Geology IH	SP7H Physics IH(M)
SJ7H Genetics and Human Variation IH	QT7H Statistics IH
EE1G Macroeconomics IH	

#### GROUP B SUBJECTS AND HALF-SUBJECTS

##### Subjects

WX02 Agriculture II	ST02 Genetics II
QN22 Applied Mathematics IIA	SG02 Geology II
QN12 Applied Mathematics IIB	QM02 Pure Mathematics II
SB02 Botany II	SZ02 Zoology II
SC12 Chemistry II	

##### Half-subjects

EE3G Macroeconomics IIH	EE4G Microeconomics IIH
-------------------------	-------------------------

#### GROUP C SUBJECTS

WB03 Agricultural Biochemistry I	EE43 Economics of Natural Resource Use <sup>oo</sup>
WP03 Agricultural Microbiology	WE03 Entomology and Plant Pathology
WX03 Agriculture III	EE53 Farm Management†
WN03 Animal Physiology and Production I	EE63 Farm Prices and Policy††
WY73 Biometry I	QT02 Mathematical Statistics II
WF03 Crop Physiology	WS03 Soil Science I

#### GROUP D SUBJECTS

WB04 Agricultural Biochemistry II	WE04 Entomology II
WX04 Agriculture IV	SJ03 Genetics III
WA74 Agronomy	WF04 Horticultural Science
WN04 Animal Physiology and Production II	QT03 Mathematical Statistics III
EE03 Economics III (Agricultural Science) (see 4. below)	WA84 Plant Breeding
	WP04 Plant Pathology II
	WS04 Soil Science II

<sup>oo</sup> EE43 Economics of Natural Resource Use is offered in alternate years (odd years).

† EE53 Farm Management is offered in alternate years (even years).

†† EE63 Farm Prices and Policy is offered in alternate years (odd years).

2. To qualify for the Ordinary degree a candidate shall, subject to the conditions and modifications specified in clause 5, satisfactorily complete the following courses:

- (a) SC01 Chemistry I, SZ71 Biology I, QT7H Statistics IH and the equivalent of one and a half group A subjects.
- (b) WX02 Agriculture II and *either* two other subjects from group B *or* one other subject from group B and a group A subject not previously taken or its equivalent.
- (c) WX03 Agriculture III, WP03 Agricultural Microbiology and *either* WY73 Biometry I and three other subjects from group C *or* QT02 Mathematical Statistics II and two other subjects from group C.
- (d) WX04 Agriculture IV and *either* two other subjects from group D *or* one other subject from group D and two subjects from group C not previously taken.

3. Except with special permission of the Faculty a candidate who has not completed all the subject requirements of any given year may not enrol in subjects of the subsequent year unless the candidate is also enrolled in the subjects required for the successful completion of the given year.

4. A candidate may present *in lieu* of not more than one group A subject, or its equivalent, required under section (a) or (b) of clause 2 above, NX01 Engineering I or not more than the equivalent of a first-year subject available in the Faculty of Arts, or SP6H Astronomy IH and another half-subject available in either the Faculty of Arts or the Faculty of Science.

5. A candidate wishing to present EE03 Economics III (Agricultural Science) towards the degree must take EE33 Economics IIIA and one half-subject from the following list:

EE4H Agricultural Economics IIH	EE7H Managerial Economics IIH
EE8H Econometrics IIH	EE2H Public Finance IIH.
EE3H Economics of Labour IIH	

6. (a) No candidate will be permitted to count for the degree any subject or half-subject together with any other subject or half-subject which, in the opinion of the Faculty, contains a substantial amount of the same material; and no subject, or half-subject, may be counted twice towards the degree.\*

(b) No candidate may present the same half-subject, section of a subject, unit of a subject or option, in more than one subject for the degree.

7. A candidate who enrolled for the degree during or before 1971 may continue either under the schedules then in force or under the new schedules.

#### 8. *Candidates from other faculties and institutions*

(a) Candidates from other faculties in the University, or from other tertiary educational institutions, may apply to the Academic Registrar for status in appropriate subjects in the course for the degree of Bachelor of Agricultural Science. Those from within the University will, however, be required to satisfy the examiners in the subjects WX02 Agriculture II, WX03 Agriculture III and WX04 Agriculture IV. Those from other institutions may be granted status in WX02 Agriculture II and WX03 Agriculture III but only in exceptional circumstances; and they will not be granted status in WX04 Agriculture IV.

(b) Extra study as prescribed by the Head/Chairman of the department concerned may be required in nominated subjects before the candidate enters the course.

#### 9. *Roseworthy Agricultural College*

A candidate who holds an Honours diploma of Roseworthy Agricultural College may be exempted from taking the subjects in group C and may be admitted to the subjects in group D at the discretion of the Head/Chairman of the department concerned and with permission of the Dean of the Faculty.

\* A table of unacceptable combinations of subjects and half-subjects is given towards the end of this Volume (*see* Table of Contents).

10. *Practical Experience\**

(a) A candidate will be required to complete 16 weeks of practical agricultural experience approved by the Faculty of Agricultural Science before he will be admitted to the degree. The candidate will be required to gain practical experience on properties in at least three different agricultural environments and he should discuss in advance with the Practical Experience Administrator, his plans for practical experience.

(b) A candidate who holds the diploma of Roseworthy Agricultural College will be exempted from the requirements of practical experience.

11. When, in the opinion of the Faculty of Agricultural Science, special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary the provisions of clauses 1-10 above.

NOTE (not forming part of the schedules):

*Work required to complete an Adelaide degree.*

With special permission of the Faculty, (i) students coming from other universities and wishing to obtain an Adelaide degree, will be required to complete at least the whole of the work of the final year of the course at Adelaide; and (ii) a student who has completed at Adelaide, at least the first three years of the degree, or its equivalent, may be permitted to complete the requirements of the degree at another institution.

## SCHEDULE II: THE HONOURS DEGREE

1. A candidate may, subject to approval by the Head/Chairman of the department concerned, proceed to the Honours degree in one of the following disciplines:

WB89 Agricultural Biochemistry	SJ79 Genetics
WA89 Agronomy	WF99 Horticultural Physiology
WN99 Animal Physiology and Production	WP99 Plant Pathology
WY89 Biometry	WF89 Plant Physiology
WE99 Entomology	WS99 Soil Science

2. A candidate for the Honours degree in any subject shall not begin Honours work in that subject until he has completed the course of study for the Ordinary degree, all the courses in that subject available for the Ordinary degree, and such other pre-requisite subjects (if any) as may be prescribed in the syllabus.

\* Students who were enrolled in 1972 in the second, third or fourth year of the course may satisfy the requirements relating to practical experience either under this schedule or the previous schedule (see Calendar for 1973, p. 515).

OF THE DEGREE OF  
**BACHELOR OF AGRICULTURAL SCIENCE**  
SYLLABUSES

*Text-books:*

Students are expected to procure the latest edition of all text-books prescribed.

*Examinations:*

For each subject students may obtain from the department concerned details of the examination in that subject including the relative weights given to the components (e.g. such of the following as are relevant: assessments, term or mid-year tests, essays or other written or practical work, final written examinations, *viva voce* examinations).

**AGRICULTURAL BIOCHEMISTRY.**

**WB03 Agricultural Biochemistry I.**

A course of two hours lectures and five hours practical work a week for three terms dealing with the intermediary metabolism of micro-organisms, plants and animals. Topics include enzymology; metabolism of carbohydrates, lipids, protein and nucleic acids; control mechanisms; biochemistry of vitamins and coenzymes and biochemistry of nitrogen and sulphur cycles in nature. Practical work will consist of experiments related to the above topics.

Aims of the Course: The course is designed to give students a basic knowledge of biochemistry, which is fundamental to all branches of biological science, and to illustrate the application of biochemistry to agriculture generally.

*Text-books:*

- Conn, E. E., and Stumpf, P. K., *Outlines of biochemistry*, 4th edition (Wiley).  
Lehninger, A. L., *Short course in biochemistry* (Worth).  
Lehninger, A. L., *Biochemistry*, 2nd edition (Worth)—suitable also for Agricultural Biochemistry II.

**WB04 Agricultural Biochemistry II.**

Pre-requisite subject: A good pass in WB03 Agricultural Biochemistry I. Completion of SCI2 Chemistry II would be an advantage.

A course of two hours lectures, one hour tutorial and eight hours practical work a week for three terms dealing with advanced aspects of the intermediary metabolism of micro-organisms, plants and animals. The topics will be considered in three main sections:

**1. THE REGULATION OF CELLULAR ACTIVITY.**

Molecular mechanisms of enzyme regulation and the control of metabolic pathways.

**2. THE BIOCHEMICAL BASIS OF GROWTH AND DEVELOPMENT.**

Cell division and the biosynthesis of nucleic acids during the cell cycle. Modulation of protein level in higher organisms. Biochemical function of trace elements.

**3. DIVERSITY IN METABOLISM.**

Utilisation of inorganic nitrogen and sulphur compounds in micro-organisms and in plants, specialised pathways related to compounds of physiological importance.

The practical work will consist of experiments related to the above topics and training in the use of stable and radio-active isotopes in biochemistry as well as a short research project.

Aims of the Course: The course will give the candidate an opportunity to gain an appreciation of current knowledge and developments in major areas of biochemistry; develop a range of laboratory skills; view agricultural problems through this acquired knowledge and skill; tackle a research problem, which should involve the planning and carrying out of experiments to test an hypothesis; become familiar with the biochemical literature and be able to make an appraisal of published work; present ideas and arguments in written and verbal form.

Text-books:

Lehninger, A. L., *Biochemistry*, 2nd edition (Worth).

Yudkin, M., and Offord, R., *Comprehensible biochemistry* (Longman).

A reading list will be given in the lectures.

HONOURS DEGREE.

**WB89 Agricultural Biochemistry for the Honours degree of B.Ag.Sc.**

Pre-requisite subject: A good pass in WB04 Agricultural Biochemistry II.

Students wishing to take the Honours degree in Agricultural Biochemistry should consult the Chairman of the Department of Agricultural Biochemistry during the third term of their final year of the B.Ag.Sc. Ordinary degree.

Candidates will be required to attend tutorials and to prepare seminars on selected topics. A research project will be assigned to each candidate, who will be required to present the results in a short thesis at the end of the course. Examination papers will also be set. Candidates should have a reading knowledge of a modern, foreign language. Candidates are expected to begin studies on 1 February.

## AGRICULTURE.

### WX02 Agriculture II.

A course of three lectures, three hours practical work and one tutorial a week for three terms and two one-day weekend field trips.

#### HUMAN SOCIOLOGY AND USE OF AGRICULTURAL RESOURCES:

*The development of agriculture:* Agriculture as a science including the logic of scientific discovery. Classification of agricultural systems. Sites of agricultural development; centres and theories of origin. Contemporary systems of agriculture and resource inputs. Role of science and technology.

*Agriculture in the Australian economy:* adjustment and welfare problems, marketing and Government intervention. Funding of research and development. Diffusion of new technology.

#### PHYSICAL ENVIRONMENT OF AGRICULTURE:

An integrated development of the following topics. *Climate:* radiation; energy and water balances. Climatic variations; macro- and micro-climates; relationships to plants, animals and man. *Hydrology:* precipitation, evaporation, surface runoff, infiltration, and their effects on soil water, ground water and stream flow. Water quality, salinity. Hydrology and land use. *Soils:* origin and constitution of soils; soils of the world; geomorphology, soils and land use of Australian regions.

#### ECOLOGY OF NATURAL AND AGRICULTURAL SYSTEMS:

The nature and management of natural and agricultural systems: diversity, stability, instability, epidemics, plagues; and control of instability in these systems. Plant and animal variability, domestication, breeding and selection. Preservation of existing variability. Population dynamics in ecology and its application to agriculture. The allocation and protection of resources and the formulation and implementation of policies in resource use.

#### Text-book:

Australia C.S.I.R.O., *The Australian environment*, 4th edition (M.U.P. paperback).

#### Reference book:

Grigg, D., *The agricultural systems of the world—an evolutionary approach* (C.U.P.).

### WX03 Agriculture III.

A course of two lectures and three hours practical work a week for three terms.

#### LAND USE:

Determination of land use by climate, soil, economic and sociological factors. The nature of farming and farming operations. Soil fertility, tillage, soil conservation and the use of fertilisers. Land development. Principles of pasture establishment and pasture improvement.

#### CROP PRODUCTION:

Principles of crop production. Annual and perennial crops. Comparisons of horticultural and agricultural production. Areas, types of enterprise, problems, research.

Factors affecting crop yields. Plant populations, plant type, environment and physiological factors.

Selected topics of production and uses of a range of crops; soil preparation, seeding, fertilisers, weed and pest control, harvesting and processing, storage and markets.

Marketing and economic control of the crop industries.

ANIMALS AND THE ANIMAL INDUSTRIES:

Characteristics, distribution and environmental tolerances of principal species and breeds of livestock. Animal nutrition, reproduction, growth and lactation. Factors which limit reproductive rate, numbers of offspring, rate of growth, body composition, lactation, wool growth. Efficiency factors in animal production. Feeding systems. Nutritive value of pastures, seasonal cycles, regional characteristics. Pasture animal interactions.

The Australian livestock industries; problems and prospects. World supplies of animal protein: distribution, need, cost. Crop versus animals as sources of food for man. Competitors of animals.

Reference books:

Alexander, G., and Williams, O. B. (eds.), *The pastoral industries of Australia* (Sydney U.P.).

Australia, C.S.I.R.O., *The Australian environment*, 4th edition (M.U.P.).

Moore, R. M., *Australian grasslands* (A.N.U.).

Wadham, S., and others, *Land utilization in Australia*, 4th edition (M.U.P.).

**WX04 Agriculture IV.**

Pre-requisite subjects: WX02 Agriculture II and WX03 Agriculture III.

Three hours a week for three terms.

INTEGRATION OF SCIENCE, PRACTICE, AND POLICIES IN AGRICULTURE:

A series of seminars and essays on selected topics of current interest. There will also be some invited speakers on subjects such as agricultural extension methods, overseas agriculture and other relevant information.



## AGRONOMY.

### WA74 Agronomy.

A course of three lectures and seven hours practical a week for three terms. The practical work includes visits to research stations, discussions on agronomic practice and an individual experimental project.

#### AGRONOMIC EXPERIMENTATION:

Development of a research project, formulation and testing of hypotheses, errors in experimentation, field plot variability and components of yield. Problems associated with field and glasshouse experiments. Interaction of plants and animals in grazing experiments.

#### BOTANY OF CROP AND PASTURE PLANTS:

Origin, evolution, morphology and development of agriculturally important species.

#### CROP ECOLOGY AND PRODUCTIVITY:

Aspects of the growth physiology of pasture grasses, subterranean clover, wheat, maize, potato and grain legumes.

#### CROP NUTRITION:

Relationships between crop yield and plane of nutrition; methods of assessing soil fertility and fertiliser needs; soil and plant analyses, critical levels; nutritional aspects of nitrogen fixation; genotypic variation in nutrient requirements; nutritional effects on plant water relations and disease resistance.

#### CROP AND PASTURE—ENVIRONMENT INTERACTION:

Dynamics of water and nutrient supply to the growing crop via the root system. Energy balance and the use of energy in crop production. Evaporation and crop water use.

#### PLANT IMPROVEMENT AND AGRONOMY:

Plant introduction, selection and breeding techniques. Changes in agronomic practice and the introduction of new varieties.

#### FOOD VALUE OF CROPS AND PASTURES:

Nutritional evaluation of crops, crop by-products and pastures for human use or for animal production.

#### PASTURE ECOLOGY, PRODUCTION, MANAGEMENT AND UTILISATION:

The grazing animal in the ecosystem; pasture production under grazing; nutritive value of pastures and the role of supplementary forage crops and fodder conservation; grazing management and animal production systems; the integration of crops and pastures.

### WA84 Plant Breeding.

Pre-requisite subject: A pass in *either* SJ02 Genetics II *or* SJ7H Genetics and Human Variation IH. Students planning to proceed to Honours in Agronomy with a plant breeding project are advised to take the Genetics II alternative.

A course of three lectures and seven hours practical work a week for three terms. The practical work includes an individual project.

Objectives and bases of breeding programmes. Plant introduction, adaptation, effect of breeding history, breeding systems, variability, selection methods, in self and cross-pollinated plants. Crop plant evolution. Genetic resources and their conservation. The role of international organisations in plant breeding.

Polyploidy, incompatibility, mutation, male sterility, disease resistance, cytogenetics and inter-specific hybridisation in relation to plant breeding.

Breeding for yield and quality. Biometrical, physiological and biochemical analysis. General philosophy of breeding, contributions of plant breeding to agriculture. Field plot procedures, mechanisation, computer techniques.

HONOURS DEGREE.

WA89 Agronomy for the Honours degree of B.Ag.Sc.

Students wishing to take the Honours degree in the Department of Agronomy should consult the Chairman of the Department during the third term of their final year of the Ordinary degree of B.Ag.Sc.

Candidates will be required to attend tutorials and to prepare seminars on selected topics. A research project will be assigned to each candidate, who will be required to present the results in a thesis at the end of the course. Examinations will also be set. Candidates may be required to develop a reading knowledge of a modern, foreign language. Candidates are to begin studies on or about 1 February.

## ANIMAL PHYSIOLOGY.

### WN03 Animal Physiology and Production I.

A three-term course of five hours weekly in three sections.

#### ANATOMY AND HISTOLOGY:

Gross structure and histology, with emphasis on the anatomical specialisation of ruminants.

#### PHYSIOLOGY AND BIOCHEMISTRY:

Animal functions in relation to environment, nutrition and productive efficiency. Protein production, and its ecological implications. Functions of skin, glands, hair and wool. Body composition, growth; metabolic turnover and conversion of water, electrolytes, proteins, carbohydrates and fats. Chemistry and synthesis of milk, meat and wool. Circulation and body fluids. Digestion, secretion, absorption and transport of metabolites. Endocrine functions, reproductive physiology. Nervous and neuroendocrine control. Behaviour. Adaptive mechanisms.

#### NUTRITION AND PRODUCTION:

Basic concepts of animal nutrition: balance of energy, carbon, nitrogen, electrolytes, and water. Energy, mineral and vitamin requirements and deficiencies, in growth, production and reproduction. Ecology and nutrition of the grazing animal: seasonal limitations to production. The economic approach to supplementary feeding, drought feeding, lot feeding; the use and limitations of feeding standards. Nutrition of pigs and poultry. Nutrition as a factor modifying the form, composition and carcass quality of farm animals.

#### Recommended texts:

- Bell, G. H., and others, *Textbook of physiology and biochemistry* (Livingstone).  
Hafez, E. S. E., and Dyer, I. A., *Animal growth and nutrition* (Lea and Febiger).  
Phillis, J. W. (ed.), *Veterinary physiology* (Wright-Scientechica).  
Pike, R. L., and Brown, M., *Nutrition: an integrated approach* (Wiley).  
Toner, P. G., and Carr, K. E., *Cell structure* (Livingstone).

### WN04 Animal Physiology and Production II.

Pre-requisite subject: WN03 Animal Physiology and Production I.

A three term course of ten hours a week including a project.

#### ANATOMY AND HISTOLOGY:

More detailed study of the structure of sheep, pig and bird. Histology, and electron micrography of cells. Structure-function relations of muscle, storage organs, glands, egg formation and reproductive tract.

#### PHYSIOLOGY:

Protein sources, protein synthesis, and patterns of protein use. Relative efficiencies and consequences of intensive and extensive production processes. Waste. Functional adjustments of bird, cattle, pig, sheep, goat to diverse environments. Physiological ecology in tropical, desert and temperate zone animal industry. Hormones, growth, and metabolic controls in birds and mammals. Behaviour and sociology. Photoperiod and seasonality. Reproduction, lactation. Population genetics.

#### ANIMAL PRODUCTION:

Special aspects of ruminant metabolism and nutrition. Principles of experimentation with grazing animals, methods for studying production in the field: wool, growth, milk production, reproduction, body growth and its components; carcass evaluation. Seasonal productivity and nutritive value of pastures, nitrogen turnover of grazing animals. The assessment of herbage intake, grazing time and composition of the diet.

PRINCIPLES OF DISEASE CONTROL:

Developmental, parasitic, degenerative and toxic dysfunctions. Principles of immunology, antibiotics and actions of trace elements. Management and legal aspects of disease.

Recommended texts:

- Blaxter, K. L., *Energy metabolism of ruminants* (Hutchinson).  
Hafez, E. S. E. (ed.), *Adaptation of domestic animals* (Lea and Febiger).  
Phillis, J. W. (ed.), *Veterinary physiology* (Wright-Scientifica).  
Yeates, N. T. M., *Modern aspects of animal production* (Butterworth).

HONOURS DEGREE.

WN99 Animal Physiology and Production for the Honours degree of B.Ag.Sc.

A candidate for the degree will be required to pass such examinations on the chosen subject of study as may be prescribed by the Chairman of the Department, and to submit a thesis reporting research work undertaken during the year.

A candidate may also be required to attend lectures and pass examinations in related subjects and to satisfy the Chairman of the Department that he has a reading knowledge of one or more languages other than English. University time not devoted to lectures must be spent in activities approved by the Chairman of the Department. Intending candidates should consult the Chairman of the Department concerned and should be prepared to begin studies on or about 1 February.

## BIOMETRY SECTION.

### WY73 Biometry I.

The course comprises two lectures and a one-hour practical class each week. The syllabus comprises:

- (a) *First and second terms*: Elementary statistical methods, non-parametric methods, introduction to computer programming, standard tests of hypotheses and sampling distributions, linear regression, analysis of variance, some simple experimental design and analysis.
- (b) *Third term*: Further experimental design and analysis, sequential analysis, transformations of data, systems analysis and other selected biomathematical topics.

Reference books:

- Bailey, N. T. J., *Statistical methods in biology* (English U.P.).  
Cochran, W. G., and Cox, G. M., *Experimental designs* (Wiley).  
Colquhoun, D., *Lectures on biostatistics* (O.U.P.).  
Cox, D. R., *Planning of experiments* (Wiley).  
Heath, O. V. S., *Investigation by experiment* (Arnold).  
Li, Jerome, C. R., *Statistical inference*, vol. 1 (Edwards Brothers, Inc.).  
Rice, J. K., and Rice, R., *Introduction to computer science* (Holt, Rinehart and Winston).  
Schaeffer, G. F., *Introducing computers* (Wiley).  
Seal, H. L., *Multivariate statistical analysis for biologists* (Methuen).  
Siegel, S., *Nonparametric statistics for the behavioural sciences* (McGraw-Hill).  
Snedecor, G. W., and Cochran, W. G., *Statistical methods*, 6th edition (Iowa State U.P.).  
Steel, R. G. D., and Torrie, J. H., *Principles and procedures of statistics* (McGraw-Hill).  
Watt, K. E. F., *Systems analysis in ecology* (Academic Press).  
Zar, J. H., *Biostatistical analysis* (Prentice-Hall).

WY73 Biometry I will be offered for the last time in 1979. In 1980, Biomathematics will be offered, as a compulsory course (for which QT7H Statistics III is the pre-requisite).

Biomathematics will cover mathematical topics of importance in biology, and advanced statistical methods.

### HONOURS DEGREE.

#### WY89 Biometry for the Honours degree of B.Ag.Sc.

Pre-requisite subject: QT03 Mathematical Statistics III.

A candidate for the degree will be required to pass such examinations on the chosen subject of study as may be prescribed by the Head of the Section, and to submit a thesis reporting research work undertaken during the year.

A candidate may also be required to attend lectures and pass examinations in related subjects and to satisfy the Head of the Section that he has a reading knowledge of one or more modern languages other than English. University time not devoted to lectures must be spent in activities approved by the Head of the Section. Intending candidates should consult the Head of the Section and should be prepared to begin studies on or about 1 February.

## ECONOMICS.

(FOR THE DEGREE OF BACHELOR OF AGRICULTURAL SCIENCE)

*Group A half-subjects:*

**EE1G Macroeconomics IH.**

**EE2G Microeconomics IH.**

For syllabuses see under the degree of B.Ec. in the Faculty of Economics.

*Group B half-subjects:*

**EE3G Macroeconomics IH.**

**EE4G Microeconomics IH.**

For syllabuses see under the degree of B.Ec. in the Faculty of Economics.

*Group C subjects:*

**EE43 Economics of Natural Resource Use.**

Pre-requisite subject: EE1G Macroeconomics IH and EE2G Microeconomics IH.

This course is offered in alternate years (odd years), for students proceeding to the degree of Bachelor of Agricultural Science or Master of Environmental Studies. The course will consist of two lectures and one tutorial a week throughout the year, and will cover the following topics:

Concepts from welfare economics, and in particular the notions of economic efficiency, redistribution of income, externalities and public goods. Application of these concepts to problems of pollution, and the methods of solving environmental problems. The economics of resource conservation and the use of common property resources.

Theory and techniques of project evaluation, and their application to the social evaluation of publicly financed agricultural projects.

Economic growth, including a survey of economists' theories, the historical record, and recent critiques and policy proposals.

Text-books:

Cipolla, C. M., *The economic history of world population* (Penguin).

Mishan, E. J., *Elements of cost-benefit analysis* (Allen and Unwin).

Reference books:

Pearce, D. W., *The economics of national resource depletion* (Macmillan).

Dasgupta, A. K., and Pearce, D. W., *Cost benefit analysis* (Macmillan).

Seneca, J. J., and Taussig, M. K., *Environmental economics* (Prentice-Hall).

Additional references will be prescribed by the lecturers.

**EE53 Farm Management.**

Pre-requisite subject: EE2G Microeconomics IH.

This course is offered in alternate years (even years), for students proceeding to the degree of Bachelor of Agricultural Science. The course will consist of two lectures and three hours practical work a week and will cover the following topics:

The nature of farm businesses, theories of farm management, farmers' goals, an analysis of farm investment, and farm management accounting methods.

Farm management techniques—including cash flow, partial and parametric budgeting, gross margins analysis, development budgets and net present value, and the decision theoretic approach to farm management problems. Farm management games are used to give students the opportunity to gain experience in the use of these techniques.

Text-books:

- Chisholm, A. H., and Dillon, J. L., *Discounting and other interest rate procedures in farm management* (Professional farm management guidebook no. 2).  
Makeham, J. P., and others, *Best-bet farm decisions* (Professional farm management guidebook no. 6).  
Rickards, P. A., and McConnell, D. J., *Budgeting, gross margins and programming for farm planning* (Professional farm management guidebook no. 3).

Reference books:

- Barnard, C. S., and Nix, J. S., *Farm planning and control* (C.U.P.).  
Bradford, L. A., and Johnson, G. L., *Farm management analysis* (Wiley).  
Castle, E. N., and Becker, M. H., *Farm business management* (Macmillan).  
Hardaker, J. B., and others, *Farm management and agricultural economics* (Angus and Robertson).  
Heady, E. O., and Candler, W., *Linear programming methods* (Iowa State U.P.).  
Queensland. Dept. of Primary Industries, *Accounting and planning for farm management*.  
Robertson, C. A., *An introduction to agricultural production economics and farm management* (Tata McGraw-Hill).  
*Farm management planning, budgeting, and financial control* (Western Australia. Dept. of Agriculture).

### EE63 Farm Prices and Policy.

Pre-requisite subject: EE1G Macroeconomics III and EE2G Microeconomics III.

This course is offered in alternate years (odd years), for students proceeding to the degree of Bachelor of Agricultural Science. The course will consist of two lectures and one tutorial a week throughout the year, and will cover the following topics:

An analysis of the determinants of prices for agricultural products, and various methods of forecasting agricultural prices.

The objectives of agricultural policy, and an analysis of agricultural policy measures in Australia and some overseas countries.

Text-books:

- Campbell, K. O., *Agricultural marketing and prices* (Cheshire).  
Throsby, C. D., *Agricultural policy* (Pelican).  
Tomek, W. G., and Robinson, K. L., *Agricultural product prices* (Cornell U.P.).

Reference books:

- Anderson, R., *Crisis on the land* (Sun Books).  
Fox, K. A., and Johnson, D. G., *Readings in the economics of agriculture* (Allen and Unwin).  
Dahl, D. C., and Hammond, J. W., *Market and price analysis* (McGraw-Hill).  
Mauldon, R. G., and Schapper, H. P., *Australian farmers under stress in prosperity and recession* (U.W.A.P.).  
Shepherd, G. S., *Agricultural price analysis* (Iowa State U.P.).  
Williams, D. B., *Agriculture in the Australian economy* (Sydney U.P.).

Additional references will be prescribed by lecturers.

*Group D subjects:*

**EE03 Economics III (Agricultural Science).**

EE03 Economics III (Agricultural Science) is available to students proceeding to the degree of Bachelor of Agricultural Science. A candidate who wishes to present EE03 Economics III (Agricultural Science) for the degree must study EE33 Economics IIIA and one half-subject from the following list:

- EE4H Agricultural Economics IIIH,
- EE8H Econometrics IIIH,
- EE3H Economics of Labour IIIH,
- EE7H Managerial Economics IIIH,
- EE2H Public Finance IIIH.



## ENTOMOLOGY.

### WE03 Entomology and Plant Pathology.

A course of two lectures and one practical class each week throughout the year. Half the year is spent on Entomology and half on Plant Pathology.

#### ENTOMOLOGY:

The course is concerned with ecological control of insect pests, the physiological action of insecticides and an introduction to insect taxonomy and morphology.

Students will be required to make a collection of 30 species of insects, representing 10 of the natural Orders, which must be submitted during the last week of lectures in third term. Collection should begin in the long vacation preceding the course and equipment may be obtained by intending students from the Entomology Department before this vacation.

#### Text-books:

- Imms, A. D., *Outlines of entomology*, 5th edition (Methuen).  
Wigglesworth, V. B., *Insect physiology*, 6th edition (Methuen).

#### Reference books:

- Borror, D. J., and De Long, D. M., *An introduction to the study of insects*, 4th edition (Holt).  
Imms, A. D., *Insect natural history*, 3rd edition (Collins).  
Martin, H., *Scientific principles of crop protection* (Arnold).  
O'Brien, R. D., *Insecticides: action and metabolism* (Academic Press).  
Tillyard, R. J., *Insects of Australia and New Zealand* (Angus and Robertson).  
Australia, C.S.I.R.O., *The insects of Australia* (M.U.P.).

#### PLANT PATHOLOGY:

A course in crop protection—in the introductory lectures the nature of disease, the incidence of disease and aspects of ecological plant pathology will be considered. The remaining lectures include cultural, physical, chemical and biological control of plant diseases and plant pathogens as well as host resistance, quarantine, forecasting of disease epidemics and extension work. The practicals will be devoted to the recognition and study of fungi, nematodes, viruses and bacteria.

#### Reference books:

- Text-books and research papers to which students can refer will be indicated during the course.

### WE04 Entomology II.

Pre-requisite subject: WE03 Entomology and Plant Pathology.

A course of three lectures and eight hours practical work a week (two periods of four hours) on a more detailed study of:

- (1) Insect morphology and taxonomy, with practice in the classification of insects to families; the study of particular species of economic importance.
- (2) Insect biochemistry, physiology and behaviour.
- (3) Insect ecology.
- (4) Selected topics including e.g. insect pathology, forest entomology, and apiculture.

Students will be required to make a collection of insects, properly mounted and identified, illustrating the morphological and taxonomic features of insects. The collection may be commenced in the long vacation preceding the course. Equipment may be collected by intending students from the Entomology Department before the vacation. The collection must be submitted in the last week of the final term.

#### Text-book:

- Australia, C.S.I.R.O., *The insects of Australia* (M.U.P.).

Reference books:

- Anderson, R. F., *Forest and shade-tree entomology* (Wiley).  
Andrewartha, H. G., and Birch, L. C., *The distribution and abundance of animals* (U.C.P.).  
Chapman, R. F., *The insects* (American Elsevier).  
Clark, L. R., and others, *The ecology of insect populations in theory and practice* (Methuen).  
Huffaker, C. B. (ed.), *Biological control* (Plenum Press).  
Imms, A. D., *A general text-book of entomology*, 9th edition (Methuen).  
Metcalf, C. L., Flint, W. P., and Metcalf, R. L., *Destructive and useful insects* (McGraw-Hill).  
Snedecor, G. W., *Statistical methods*, ed. W. G. Cochran, 6th edition (Iowa State U.P.).  
Southwood, T. R. E., *Ecological methods* (Methuen).  
Tillyard, R. J., *Insects of Australia and New Zealand* (Angus and Robertson).

HONCOURS DECREE.

WE99 Entomology for the Honours degree of B.Ag.Sc.

Students who wish to take the Honours degree in Entomology should consult the Chairman of the Department of Entomology some time during their final year.

Candidates are expected to attain a higher standard in general Entomology than that required for the Ordinary degree. In addition, they are required to study more intensively some branch of Entomology and to carry out a research project in that field.

Candidates may be required to attend such lectures and to pass such examinations as the Chairman of the Department may require. All time not necessarily devoted to lectures and set work must be spent in the laboratory.

A course of reading will be prescribed by the Chairman of the Department and should be commenced in the long vacation prior to the Honours year.

Candidates must have some reading knowledge of French and German and may be required to attend courses and pass examinations in these subjects.

GENETICS.  
HONOURS DEGREE.

**SJ79 Genetics for the Honours degree of B.Ag.Sc.**

A candidate for the degree will be required to pass such examinations on the chosen subject of study as may be prescribed by the Chairman of the Department, and to submit a thesis reporting research work undertaken during the year.

A candidate may also be required to attend lectures and pass examinations in related subjects and to satisfy the Chairman of the Department that he has a reading knowledge of one or more modern languages other than English. University time not devoted to lectures must be spent in activities approved by the Chairman of the Department. Intending candidates should consult the Chairman of the Department and should be prepared to begin studies on or about 1 February.

## PLANT PATHOLOGY.

### WP03 Agricultural Microbiology.

A course of one lecture and one practical a week throughout the year.

An introduction to micro-organisms; their morphology, physiology, ecology and general classification; the techniques used in the study of micro-organisms; the occurrence of micro-organisms in soil, air and water; their importance in agriculture and industry; the microbiology of foods.

### WP04 Plant Pathology II.

Pre-requisite subjects: WE03 Entomology and Plant Pathology and WP03 Agricultural Microbiology.

A course of three lectures and eight hours of practical work a week for three terms covering:

The morphology, taxonomy and physiology of fungi, nematodes, viruses and bacteria; infection of and proliferation in the host plant by pathogens; the resistance and tolerance of plants to disease; the behaviour and characteristics of pathogens prior to penetration of the host; ecological plant pathology; control of pathogens and disease in plants; the dispersal of pathogens. In the third term the practical classes will be devoted to an epidemiological project in the field.

Reference books:

Text-books and research papers to which students can refer will be indicated during the course.

## HONOURS DEGREE.

### WP99 Plant Pathology for the Honours degree of B.Ag.Sc.

A candidate for the degree will be required to pass such examinations on the chosen subject of study as may be prescribed by the Chairman of the Department, and to submit a thesis reporting research work undertaken during the year.

A candidate may also be required to attend lectures and pass examinations in related subjects and to satisfy the Chairman of the Department that he has a reading knowledge of one or more modern languages other than English. University time not devoted to lectures must be spent in activities approved by the Chairman of the Department. Intending candidates should consult the Chairman of the Department and should be prepared to begin studies on or about 1 February.

## PLANT PHYSIOLOGY.

### WF03 Crop Physiology.

This course consists of two lectures and three hours practical work a week for three terms and covers:

Effects of external environment, including temperature, light, water and atmospheric conditions on the determination of plant size, form and development; the growth patterns of selected crop plants.

The interaction of internal and environmental factors in the physiological control of dormancy, germination, vegetative growth (roots, leaves, stem), accumulation of storage substances, and sexual reproduction (floral initiation, seed set, fruit growth).

The course will use crop species as examples where appropriate.

Attention will be given to critical assessment of published information, presentation of such assessments and the undertaking of a short experimental project.

Text-book:

Leopold, A. C., and Kriedemann, P. E., *Plant growth and development* (McGraw-Hill).

Reference books:

Evans, L. T. (ed.), *Crop physiology* (C.U.P.).

And such other books and papers as are assigned during the course.

### WF04 Horticultural Science.

Pre-requisite subject: WF03 Crop Physiology.

A course consisting of four lectures and four hours of practical work a week for three terms. Lectures, practical work, demonstrations and field trips will cover:

The growth of fruit trees, mechanisms controlling growth, the uses of growth regulators in horticulture.

The water requirements of crops, methods of irrigation and drainage.

Mineral nutrition, fertilisers and soil management.

Movement and accumulation of substances in plants, reserves.

Bud development and bearing habit, propagation principles and methods, root-stocks, pruning and training.

Flower and fruit morphogenesis, mechanisms of floral initiation, fruit setting and fruit growth, and practices involved.

Ripening of fruits, harvesting, post-harvest physiology, storage, marketing and processing of fruits.

Horticultural production and establishment, varieties, protection, frost.

The culture of important horticultural crops.

Attention will be given to training and experience in experimental method, reading, writing and speaking. Opportunity will be given for a project of individual study involving literature revision and limited original investigation. No text-books are required but selected reading will be assigned.

## HONOURS DEGREE.

WF89 Plant Physiology for the Honours degree of B.Ag.Sc.

WF99 Horticultural Physiology for the Honours degree of B.Ag.Sc.

A candidate for the degree will be required to pass such examinations on the chosen subject of study as may be prescribed by the Chairman of the Department, and to submit a thesis reporting research work undertaken during the year.

A candidate may also be required to attend lectures and pass examinations in related subjects and to satisfy the Chairman of the Department that he has a reading knowledge of one or more modern languages other than English. University time not devoted to lectures must be spent in activities approved by the Chairman of the Department. Intending candidates should consult the Chairman of the Department and should be prepared to begin studies on or about 1 February.

## SOIL SCIENCE.

### WS03 Soil Science I.

Pre-requisite subject: SC01 Chemistry I.

A course of two hours of lectures and three hours of practical work a week for three terms. The aim of the course is to provide a general background in soil science with a strong bias towards aspects relevant to agriculture.

The topics considered include:

#### 1. PEDOLOGY AND SOIL COMPONENTS:

Soil genesis; distribution of major soils of the world and Australia. Composition of inorganic and organic fractions of soils; clay mineralogy; soil biology.

#### 2. CHEMISTRY OF PLANT NUTRIENTS:

Chemistry of soils in relation to soil fertility; nitrogen, phosphorus, potassium and the trace elements; soil reaction; concepts of nutrient availability.

#### 3. SOIL PHYSICS:

Energy and movement of water; irrigation and drainage; soil heat; evaporation; salinity and miscible displacement; aeration; water and wind erosion.

Practical work will consist of a number of field excursions, and laboratory work related to the above topics.

##### Text-books:

- Buol, S. W., and others, *Soil genesis and classification* (Iowa State U.P.).  
Fried, M., and Broeshart, H., *The soil plant system in relation to inorganic nutrition* (Academic Press).  
Hillel, D., *Soil and water* (Academic Press).  
Russell, E. W., *Soil conditions and plant growth*, 10th edition (Longmans).

##### Reference books:

- Baver, L. D., and others, *Soil physics*, 4th edition (Wiley).  
Bear, F. E., *Chemistry of the soil*, 2nd edition. (Van Nostrand, Reinhold).

### WS04 Soil Science II

Pre-requisite subject: A good pass in WS03 Soil Science I. Completion of SC12 Chemistry II would be an advantage.

A course of three hours lectures and eight hours of practical work a week for three terms, devoted to fundamental studies of the biology, biochemistry, chemistry and physics of the soil. The major topics considered are:

#### 1. COLLOID AND SURFACE CHEMISTRY:

Genesis and composition of clay minerals in different soil types. Reactions of water, ions and polymers at the surfaces of colloidal particles and the influence of these reactions on the physical and chemical properties of soils. Diffusion of ions in soils and the chemistry of nutrient uptake by plants.

#### 2. BIOLOGY AND BIOCHEMISTRY:

Chemistry of organic colloids in soils. The cycling of carbon, and organically bound nutrients in soils,  $^{14}\text{C}$  and  $^{15}\text{N}$  studies. Soil biomass; definitions, determination and functions. Enzymes in soils. The biology and chemistry of the rhizosphere.

#### 3. SOIL PHYSICS:

Soil structure: methods for measuring distributions of particles, pores and cracks. Agricultural soil mechanics: interactions between soil and wheels, tillage implements and plant roots. Mechanics and physics of swelling clays.

Practical work will be related to the above topics and will include a research project. In addition to those books recommended for WS03 Soil Science I the following are recommended:

##### Text-books:

- Bolt, G. H., and Bruggenwert, M. G. M., *Soil chemistry, part A* (Elsevier).  
McLaren, A. D., and Peterson, S. H., *Soil biochemistry* (Marcel Dekker).  
Yong, R. N., and Warkentin, P. P., *Soil properties and behaviour* (Elsevier).

Further references will be supplied during lectures.

**WS99 Soil Science for the Honours degree of B.Ag.Sc.**

Pre-requisite subject: A good pass in WS04 Soil Science II. Students wishing to take the Honours degree in Soil Science should consult the Chairman of the Department during the third term of their final year of the B.Ag.Sc. Ordinary degree.

Candidates will be required to attend tutorials and to prepare seminars on selected topics. A research project will be assigned to each candidate, who will be required to present the results in a short thesis at the end of the course. Examination papers will also be set. Candidates should have or be prepared to obtain a reading knowledge of a modern, foreign language. Candidates are expected to begin studies on 1 February.

---

**PRACTICAL EXPERIENCE.**

Candidates for the degree of Bachelor of Agricultural Science are required to obtain practical agricultural experience as laid down in the regulations and schedules.

In addition, students in Agricultural Science are required to attend organised tours of various agricultural areas of South Australia.

OF THE DEGREE OF  
MASTER OF AGRICULTURAL SCIENCE  
REGULATIONS

\*1. (a) Subject in each case to the applicant's academic qualifications being accepted by the Faculty of Agricultural Science as sufficient, the following persons may become candidates for the degree of Master of Agricultural Science: (i) Bachelors of Agricultural Science; (ii) other graduates.

(b) Subject to the approval of the Council, the Faculty may, in special cases and subject to such conditions (if any) as it may see fit to impose in each case, accept as a candidate for the degree a person who does not hold a degree of a university but has given evidence satisfactory to the Faculty of his fitness to undertake work for the degree.

\*\*2. A candidate who holds the Honours degree of Bachelor of Agricultural Science or its equivalent in a university recognised by the University of Adelaide may proceed to the degree of Master of Agricultural Science at the expiration of one year from the date of his admission to the Honours degree of Bachelor: no other candidate shall proceed to the degree before the expiration of two years from the date of the beginning of his candidature.

3. Subject to conditions to be determined in each case, a graduate of a university recognised by the University of Adelaide may be allowed by the Council to proceed to the degree in compliance with these regulations. Every such candidate must spend at least three consecutive academic terms or twelve calendar months at the University of Adelaide or at an institution approved for the purpose by the University of Adelaide.

†4. (a) Unless a candidate has completed one year of full-time study beyond that prescribed for the Ordinary degree, and has obtained an Honours degree at the University or at another university recognised for the purpose, he shall spend a qualifying period, the length of which shall be prescribed by the Faculty on the recommendation of the department concerned, on supervised study or research before he is permitted to continue with his candidature. Such qualifying period shall date from a time recommended by the department concerned and approved by the Faculty.

(b) On completion of such qualifying period as may be prescribed under (a) above, the candidate's progress will be reviewed by the Faculty after departmental assessment based on (i) written examination at Honours level or (ii) satisfactory progress with a research programme or (iii) both. The Faculty may then permit the candidate to continue his candidature or may grant him permission to transfer his candidature to that for another degree or may terminate his candidature.

\* Amended 16 March, 1961, and 4 October, 1962.

† Amended 21 December, 1972.

\*\* Amended 28 February, 1974.



°°5. The Faculty of Agricultural Science shall annually review the progress of candidates for the degree. If in the opinion of the Faculty a candidate is not making satisfactory progress the Faculty may, with the consent of the Council, withdraw its approval of his candidature and the candidate shall cease to be enrolled for the degree.

Before making a recommendation for termination of candidature to the Council the Faculty shall notify the candidate of its intention so to do and shall permit him to offer within one month such explanation as he can for his lack of satisfactory progress. If, notwithstanding any submission made by the candidate, the Faculty decides to recommend termination of his candidature, the candidate shall be informed accordingly and shall have the right of appeal within one month to the Council and any such appeal shall be considered by the Council at the same time as it considers the Faculty's recommendation.

6. To qualify for the degree a candidate shall submit a thesis upon an approved subject and shall adduce sufficient evidence that the thesis is his own work. The thesis shall give the results of original research or of an investigation on which the candidate has been engaged. A candidate may also submit other contributions in Agricultural Science in support of his candidature.

§7. Every candidate shall give at least three terms' notice of his intended candidature, and shall indicate therewith in general terms the subject of the research work or investigation on which he proposes to submit a thesis. The Faculty of Agricultural Science, if it approve the subject of his research, may appoint a supervisor to guide the candidate in his work. The candidate shall submit his thesis not earlier than *three terms* and, except by special permission of the Faculty, not later than *nine terms* after approval by the Faculty of the subject of his research.

8. The Faculty shall appoint a Board of Examiners to report upon the thesis and any supporting papers that the candidate may submit. The Board of Examiners may require any candidate to pass an examination in the branch of science to which his original research or investigation is cognate.

†9. On completion of his work the candidate shall lodge with the Academic Registrar three copies of his thesis prepared in accordance with directions given to candidates from time to time.\*

10. A candidate who complies with the foregoing conditions and satisfies the Board of Examiners shall, on the recommendation of the Faculty of Agricultural Science, be admitted to the degree of Master of Agriculture.

Regulations allowed 14 December, 1950.

† Allowed 16 March, 1961 and amended 15 January, 1976.

§ Amended 4 October, 1962.

\*\* Allowed 23 January, 1975.

\* Published in "Notes and Instructions to candidates for Higher Degrees":  
*see* Table of Contents.

# FACULTY OF ARCHITECTURE AND PLANNING

## REGULATIONS, SCHEDULES AND SYLLABUSES OF DEGREES

### Bachelor of Architecture (B.Arch.)

Regulations	-	-	-	-	-	-	-	-	-	552
Schedules	-	-	-	-	-	-	-	-	-	555
Syllabuses	-	-	-	-	-	-	-	-	-	557

### Master of Architecture (M.Arch.)

Regulations	-	-	-	-	-	-	-	-	-	569
-------------	---	---	---	---	---	---	---	---	---	-----

### Master of Urban and Regional Planning (M.U.R.P.)

Regulations, Schedules and Syllabuses	-	-	-	-	-	-	-	-	-	570
---------------------------------------	---	---	---	---	---	---	---	---	---	-----

### Doctor of Philosophy (Ph.D.)

Regulations and Schedules: under "Board of Research  
Studies"—*see* Table of Contents.

OF THE DEGREE OF  
**BACHELOR OF ARCHITECTURE**

REGULATIONS

1. There shall be an Ordinary and an Honours degree of Bachelor of Architecture.

†2. Schedules defining the courses of study, including lectures and the practical work to be undertaken and the examinations to be passed, shall be drawn up by the Faculty and submitted to the Council.

Such schedules shall become effective as from the date of approval by the Council or such other date as the Council may determine, and shall be published in the next University Calendar which is issued after that approval has been given.

\*3. (a) To qualify for the Ordinary degree of Bachelor of Architecture a candidate shall regularly attend lectures and do written and practical work (where such is required) and pass examinations in the subjects prescribed.

(b) Before being admitted to the degree a candidate shall also submit satisfactory evidence that he has had not less than six months' practical experience, not necessarily consecutive, in work approved by the Faculty as appropriate to his course.

\*4. (a) A candidate who has completed the work of the third year and who wishes to proceed to the Honours degree must make written application to the Academic Registrar, before or at the time of enrolment in the year in which he intends to take the Honours course, for permission to do so.

(b) Before granting such permission the Faculty will take into consideration the candidate's work up to the time of his application.

(c) To qualify for the Honours degree a candidate shall complete the full course prescribed for the Ordinary degree and shall in addition undertake further work of an advanced nature and pass examinations in such work. Further, he must pass in the subjects which he takes after his acceptance as an Honours student at a higher standard than is required from candidates for the Ordinary degree.

(d) The names of candidates who pass with Honours shall be arranged alphabetically in the following classes: First Class, Second Class Division A, Second Class Division B. A candidate who fails to obtain first or second class Honours may be awarded the Ordinary degree provided he has in all other respects completed the work for that degree.

\* Amended 21 December, 1967, and 2 February, 1978.

† Amended 15 January, 1976.

\*\* Amended 2 February, 1978.

(e) Before being admitted to the degree a candidate shall also submit satisfactory evidence that he has had not less than six months' practical experience, not necessarily consecutive, in work approved by the Faculty as appropriate to his course.

5. Except by permission of the Faculty a candidate shall not be admitted to the class in any subject for which he has not completed the pre-requisite work as prescribed in the syllabus for that subject.

6. (a) All annual examinations, other than supplementary, shall take place towards the end of the academic year, except that practical examinations and examinations in a subject in which the course of instruction has been completed by the end of the second term, may be held at any convenient time fixed by the Faculty.

(b) A candidate shall enter for examination on the form and by the date prescribed by the Council, but shall not be eligible to present himself for examination unless he has regularly attended the prescribed lectures and has done written and practical work where required to the satisfaction of the professors and lecturers concerned.

(c) Written and practical work done by candidates at the direction of the professors or lecturers and the results of terminal or other examinations in any subject may be taken into consideration at the final examination in that subject.

(d) There shall be three classifications of pass at the annual examination in any subject or division of a subject for the degree as follows: Pass with Distinction, Pass with Credit, Pass. The names of candidates who pass with Distinction or with Credit shall be arranged in order of merit within the classification; the names of other candidates who pass shall be arranged in alphabetical order either in one list or in two divisions as the Faculty may determine. If the pass list be published in two divisions, a pass in the higher division may be prescribed in the syllabuses as pre-requisite for admission either to further courses in that subject or to other subjects.

(e) A candidate who fails to pass in any subject shall again attend lectures and do practical work in that subject to the satisfaction of the professors and lecturers unless exempted by the Faculty. Any such exemptions granted will hold for one academic year only.

(f) Supplementary examinations will be held only in special circumstances approved by the Faculty after consideration of individual cases.

7. Except in case of illness or other sufficient cause allowed by the Faculty, no candidate shall be credited in any year with attendance at lectures or practical work in a subject unless he has attended the lectures and practical work respectively in that subject to the satisfaction of the lecturer concerned.

8. No candidate shall be granted exemption from attendance at lectures or practical work except upon grounds approved by the Faculty.

9. A candidate who has twice failed to pass the examination in any subject or division of a subject may not present himself again for instruction or examination therein unless his plan of study is approved by the Dean. If he fails a third time he may not proceed with the subject again except by special permission of the Faculty, and under such conditions as the Faculty may prescribe.

For the purpose of this regulation a candidate who is refused permission to sit for examination in any subject or division of a subject shall be deemed to have failed to pass the examination.

10. A student who has passed examinations *in pari materia* in another faculty or otherwise, or who desires that his work at other universities or technical schools should be counted *pro tanto* for the degree of Bachelor of Architecture may on application be granted such exemption from the requirements of these regulations as the Council shall determine.

Regulations allowed 9 January, 1958.

OF THE DEGREE OF  
**BACHELOR OF ARCHITECTURE**  
**SCHEDULES**

(Made by the Council under regulation 2.)

NOTE: Syllabuses of subjects for the degree of B.Arch. are published below, immediately after these schedules. For syllabuses of subjects taught for other degrees and diplomas see the table of subjects at the end of the volume.

**SCHEDULE I: THE ORDINARY DEGREE**

1. During the first, second, third, fourth and fifth years every candidate shall, unless exempted therefrom, attend courses of instruction and at the annual examination for the appropriate year shall satisfy the examiners in each of the following subjects:

(a) **First-year subjects**

RA01 Building Construction I	RA31 Architectural Design and Planning I
NC51 Architectural Structures I	RA71 Architectural and Free Drawing
RA11 Building Science I	RA81 Art History and Appreciation*
RA21 History of Architecture I	RA41 Studio Work I

(b) **Second-year subjects**

RA02 Building Construction II	RA32 Architectural Design and Planning II
NC52 Architectural Structures II	RA82 Architectural Surveying
RA12 Building Science II	RA42 Studio Work II
RA22 History of Architecture II	

(c) **Third-year subjects**

RA03 Building Construction III	RA33 Architectural Design and Planning III
NC53 Architectural Structures III	RA53 Professional Practice I
RA13 Building Science III	RA43 Studio Work III

(d) **Fourth-year subjects**

RA04 Building Construction IV	RA64 Urban and Regional Planning and Urban Design I
NC54 Architectural Structures IV	RA54 Professional Practice II
RA14 Building Science IV	RA44 Studio Work IV
RA34 Architectural Design and Planning IV	

(e) **Fifth-year subjects**

RA05 Building Construction V	RA75 Architectural Thesis
NC55 Architectural Structures V	RA55 Professional Practice III
RA15 Building Science V	RA45 Studio Work V
RA65 Urban and Regional Planning and Urban Design II	

\* The elective subject for 1979.

## SCHEDULE II: THE HONOURS DEGREE

A candidate who has been granted permission to proceed to the Honours degree under regulation 4 shall complete all the work for the Ordinary degree under schedule I, and undertake the following additional work:

### RA98 Advanced Studies I:

Seminar courses in one of a limited selection of topics. The topics may include the following:

1. Advanced Architectural Design and Planning
2. Architecture and Environment
3. Development of Contemporary Architecture
4. Industrialised Building
5. Architectural Structure
6. Urban Design and Planning
7. Landscape Design
8. Professional Management and Administration
9. Interior and Furniture Design
10. Building Services
11. Architectural Acoustics
12. Philosophy of Architecture

### RA99 Final Honours Architecture:

A candidate who has been granted permission to proceed to Final Honours Architecture shall enrol for RA99 Final Honours Architecture and undertake additional work as follows:

### RA89 Advanced Studies II:

Seminar courses as a continuation of the work undertaken in RA98 Advanced Studies I.

## SCHEDULE III: PRACTICAL EXPERIENCE

1. During the fourth year each candidate will normally be required to obtain at least three months practical experience satisfactory to the Faculty.

2. Such practical experience may form part of the six months practical experience required under regulation 3(b) or 4(e).

3. An indication of the kind of practical experience deemed appropriate to the course and acceptable to the Faculty is set out in a leaflet available from the Academic Registrar.

4. With the prior approval of the Faculty, candidates may undertake an architectural study tour outside South Australia or overseas during the third term of fourth year. The proposed programme and itinerary must be submitted to the Chairman of the Department of Architecture by 30 June of the year of the proposed tour for approval by the Faculty. Candidates may count up to three months of an approved study tour towards the six months practical experience required under regulation 3(b) or 4(e) of the degree of Bachelor of Architecture.

## SCHEDULE IV: APPROVAL OF COURSES

1. Except by permission of the Faculty, a candidate shall not proceed to any part of the work of the second or a subsequent year unless he has completed the whole of the work of, and passed the examination proper to, the preceding year or years. At the discretion of the Board of Examiners a candidate who fails to satisfy the examiners in not more than two subjects at an annual examination may be permitted to present himself for a supplementary examination in the subject or subjects concerned; and if he satisfies the examiners in the supplementary examination he shall then be deemed to have passed the whole examination.

2. Courses of study must be approved by the Dean of the Faculty (or his nominee) at enrolment each year.

OF THE DEGREE OF  
**BACHELOR OF ARCHITECTURE**  
SYLLABUSES

*Text-books:*

Students are expected to procure the latest edition of all text-books prescribed.

*Examinations:*

For each subject students may obtain from the department concerned details of the examination in that subject including the relative weights given to the components (e.g. such of the following as are relevant: assessments, term or mid-year tests, essays or other written or practical work, final written examinations, *viva voce* examinations).

---

POSSIBLE CHANGES TO B.ARCH. COURSE

Several changes which may be introduced to the Architecture course in 1980 are currently under discussion.

Students enrolling in 1979 are advised that it is proposed that 1979 should be a transitional year under current regulations, but that new regulations may be introduced for 1980 which would change the structure of the course.

The main proposals are:

1. The present one-degree 5-year course would be replaced by two courses.
2. The first course, of 3 years, would lead to a degree comparable with a B.A. or B.Sc.—a basic tertiary education with particular emphasis on studies in design and in the science/technology areas related to design.
3. The second course, of 2 years, would contain the “professional” education, concentrating on studies in the practice of architecture.
4. In the first course it is hoped that students would have a choice of subjects, some of which could be taken in faculties other than the Faculty of Architecture and Planning.

It is stressed that at the time of printing these are proposals only.

---

FIRST-YEAR SUBJECTS.

**RA01 Building Construction I.**

General principles—functional requirements; the building team; the building contractor. Foundations. External and internal walls. Ground floor construction and fireplaces. Roofs. Joinery—doors and windows. Masonry.

*Text-books:*

Foster, J. S., *Structure and fabric*, part 1, Mitchell's Building Construction (Batsford).

King, H., and Everett, A., *Components and finishes*, Mitchell's Building Construction (Batsford).

Chudley, R., *Construction technology vol. I* (Longman Construction Series).

*Reference books:*

McKay, W. B., *Building construction*, volume I (Longmans).

Trill, J., and Bowyer, J. T., *Problems in building construction* (Architectural Press).



### NC51 Architectural Structures I.

The course consists of approximately 40 hours of lectures and 40 hours of tutorials on the following topics:

The nature, function and form of structures, behaviour and failure of structural materials. Loads on structures. Equilibrium of forces, force diagrams for simple trusses and other statically determinate plane frames. Elasticity, stress and strain. Design of axially loaded members. Shear force and bending moment diagrams. Bending stresses. Design of steel or timber beams for bending.

Students will be required to undertake a structural design in association with RA41 Studio Work I.

Text-book:

A. J. *handbook of building structure*, ed. A. Hodgkinson (Architectural Press).

Reference books:

Lisborg, N., *Principles of structural design* (Batsford).

Reynolds, T. J., and Kent, L. E., *Introduction to structural mechanics*, 6th edition, S.I. Units (English Universities Press).

Cowan, H. J., *Architectural structure*, 2nd edition (Elsevier).

### RA11 Building Science I.

Introduction; man, environment and shelter. Human responses. The nature and properties of common building materials; occurrence and manufacturing problems; physical phenomena; moisture and porosity; moisture movement. Principles of control of natural environment; sun control; daylighting standards and assessment; natural ventilation.

Text-books:

Australia. Experimental Building Station, *Notes on the science of building* (E.B.S.) as prescribed by the lecturer.

Australia. Experimental Building Station, Bulletin No. 7: *The design of buildings for daylighting*, by D. Paix (E.B.S.).

Australia. Experimental Building Station, Bulletin No. 8: *Sunshine and shade in Australasia*, by R. O. Phillips (E.B.S.).

Australian Department of Labour and Immigration, Physical Working Environment Branch, Industrial Data Sheets—A2, *Control of sunlight penetration* (Rev. 1974) (*Aust. Govt. Pub. Service*, Canberra, 1975).

Eldridge, H. J., *Properties of building materials* (M.T.P.).

Great Britain. Building Research Board, *Principles of modern building*, vol. 1 (H.M.S.O.).

Great Britain. Building Research Station, *Architectural physics: lighting*, by R. G. Hopkinson (H.M.S.O.).

Ragsdale, L. A., and Raynham, E. A., *Building materials technology*, 2nd edition (Arnold).

### RA21 History of Architecture I.

The architecture of Egypt, Mesopotamia, the Aegean, Greece and Rome; and of the Early Christian, Byzantine, Romanesque, and Gothic periods, Renaissance beginnings.

Text-books:

Fletcher, B., *History of architecture* (Batsford).

Pevsner, N., *An outline of European architecture* (Penguin).

Raeburn, M., *An outline of world architecture* (Octopus).

Reference books:

- Copplesstone, T. (ed.), *World architecture* (Hamlyn).  
Gardner, H., *Art through the ages*, 5th edition revised by H. De la Croix and R. G. Tansey (Harcourt, Brace).  
Giedion, S., *The eternal present*, vol. 2: *The beginnings of architecture* (O.U.P.).  
Kidson, P., *Mediaeval world* (Hamlyn).  
Quennell, M., and C. H. B., *Everyday things in ancient Greece* (Batsford).  
Simpson, F. M., *History of architectural development*, vols. I, II, III (Longmans).  
*The great ages of world architecture series* (Braziller).  
*The Pelican history of art series*.  
Van Loon, H. W., *The arts of mankind* (Harrap).

**RA31 Architectural Design and Planning I.**

Two one hour lectures a week, assessment based on project(s) required during year.

The role and function of the architect in society historically and today; the elements of architectural design; an introduction to the nature and demands of architectural design at an elementary level; attitudes of designer favourable to users' satisfaction; design as an integrated use of information.

Elementary numerical techniques as an aid to decision-making in design, finance, planning, and forecasting.

Students will be referred to appropriate texts during the course of lectures.

**RA71 Architectural and Free Drawing.**

Drawing as a tool. Graphic communication. Drawing as Art.

These standard drawing practices will be referred to: geometric projections, perspective, sciagraphy and rendering in various media. Lettering and layout.

Text-book:

Ching, F., *Architectural graphics* (Architectural Press).

**RA81 Art History and Appreciation.**

The evolution and development of art forms through history and appreciation of contemporary development in the arts.

Students will be referred to appropriate texts during the course of lectures.

**RA41 Studio Work I.**

The practical application of theoretical work in architectural and free drawing, architectural design, building construction and building science.

**SECOND-YEAR SUBJECTS.**

**RA02 Building Construction II.**

Timber frame construction. Footings and drainage. Double storey framing. Roof framing. Roofing and roof drainage. External coverings. Plumbing and water supply. Electricity and gas supply. Internal finishes. Staircases. Doors. Windows. Joinery. Hardware. External works.

Text-books:

- Burberry, P., *Environment and services* (Mitchell's Building Construction) (Batsford).  
Everett, A., *Materials* (Mitchell's Building Construction) (Batsford).  
Foster, J. S., *Structure and fabric, parts I and II* (Mitchell's Building Construction) (Batsford).  
King, H, and Everett, A., *Components and finishes* (Mitchell's Building Construction) (Batsford).  
Wallis, N. A. K., *Australian timber handbook*, 3rd edition (Angus and Robertson).

NC52 Architectural Structures II.

The course consists of approximately 30 hours of lectures and 50 hours of tutorials, design and laboratory classes on the following topics:

Concrete as a structural material. Shear stress in beams, Design of reinforced concrete and composite beams, and floor systems. Introduction to prestressed concrete. Steel, reinforced concrete and composite columns, footings and foundations. Deflections of beams. Propped cantilevers, fixed end beams and two span continuous beams.

Students will be required to undertake a structural design in association with RA42 Studio Work II.

Text-books:

- Standards Association of Australia, AS.1480, 1974, *Use of reinforced concrete in structures* (Metric version).  
Standards Association of Australia, AS.1250, 1975, *Steel structures code*.

Reference book:

- Crawley, S. W., and Dillon, R. M., *Steel buildings* (Wiley).  
Cowan, H. J., *The design of reinforced concrete* (Sydney U.P.).  
Cement and Concrete Association of Australia, *Australian reinforced concrete design handbook* (Ultimate Strength, S.I. units).

RA12 Building Science II.

Provision of satisfactory environment; human physiology and comfort conditions relating to radiation, temperature, humidity, light, sound and ventilation. Climatology of Australia. Solar radiation and building shape. Thermal inertia of building materials; thermal effects of colour of materials; insulation; condensation and vapour barriers. Ventilation and air movement through buildings. Properties of sound; acoustical properties of materials; noise and the design of rooms. Light measurement. Electricity supply and wiring. Structural properties and applications of materials; adhesives and adhesion; sheet materials generally. Metals; corrosion; hardness of water and softening systems.

Sanitary science; hygiene. Water supply; hot and cold water services; plumbing. Central heating. Drainage; wastes; siphonage; sanitary fittings. Pumps. Sewerage; septic tanks; industrial effluents. Garbage disposal. Sanitary regulations.

Text-books:

- Australia. Department of Labour and National Service, *Sanitary plumbing and water supply* (McCarron Bird).  
Australia. Experimental Building Station, Bulletin No. 6, *Designing houses for Australian climates* (E.B.S.).  
Australia. Experimental Building Station, *Notes on the science of building* (E.B.S.), as prescribed by the lecturer.  
Bedford, T., *Basic principles of ventilation and heating*, 3rd edition (Lewis).  
Billington, N. S., *Thermal properties of buildings* (Cleaver Hume).  
Parkin, P. H., and Humphreys, H. R., *Acoustics, noise and buildings*, 3rd edition (Faber Paperback).  
S.A. Works, Ministry of, Regulations under the Sewerage Act 1929-1962, (S.A. Government Printer).

### RA22 History of Architecture II.

Renaissance architecture in Italy, France and England. Mannerism and Baroque. The Regency, 19th and 20th centuries architecture. The early architecture of Australia and its development to the present day.

Text-books:

- Fletcher, B., *History of architecture* (Batsford).  
Pevsner, N., *An outline of European architecture* (Penguin).

Reference books:

- Allsopp, B., *A general history of architecture* (Pitman).  
Bazin, G., *Baroque and rococo* (Thames and Hudson).  
Burckhardt, J. C., *The civilisation of the renaissance in Italy* (Phaidon or Mentor).  
Clark, K. M., *Civilisation* (BBC/John Murray).  
Copplesstone, T. (ed.), *World architecture* (Hamlyn).  
Gardner, H., *Art through the ages* (Bell).  
Giedion, S., *Space, time and architecture* (Harvard U.P.).  
*Encyclopaedia of modern architecture*, ed. G. Hatje (Thames and Hudson).  
Joedicke, J., *History of modern architecture* (Architectural Press).  
Jordan, R. F., *Victorian architecture* (Pelican).  
Lynton, N., *The modern world* (Hamlyn).  
Martindale, A., *Man and the renaissance* (Hamlyn).  
Pevsner, N., *Pioneers of modern design* (Pelican).  
Pevsner, N., *The sources of modern architecture and design* (Thames and Hudson).  
Simpson, F. M., *History of architectural development*, vol. IV (Longmans).

### RA32 Architectural Design and Planning II.

The theory and application of design methods; programme development; communities and groups of buildings; environment and architectural siting and density; landscape; visual elements of design and aesthetics; further development of ideas introduced in the first year; computer programming and problem solution.

Reference books:

- Broadbent, G., *Design in architecture* (Wiley).  
Chermayeff, S., *Community and privacy* (Doubleday).  
Jones, J. C., *Design methods—seeds of human futures* (Wiley).  
Lynch, K., *Site planning* (M.I.T. Pr.).  
McHarg, I., *Design with nature* (Natural History Pr.).  
Nelson, G., *Problems of design* (Whitney).

### RA82 Architectural Surveying.

The construction, use and adjustment of surveying equipment; optical square; staff; levels; theodolites and tellurometer. Chain surveys, levelling, traverses; measurement and setting out of building works; computation of traverses and levels, areas and volumes with straight and irregular boundaries; use of planimeter; plane table surveys. Surveys and measurements of existing buildings relating to dilapidations and alterations, photogrammetry.

Text-books:

- Bannister, A., and Raymond, S., *Surveying* (Pitman).  
Curtin, W., and Lane, R. F., *Concise practical surveying* (English U.P.).

Reference book:

- Huggins, F. R., *Building surveys* (Batsford).

### RA42 Studio Work II.

The practical application of theoretical work in architectural design; building construction; building science; history of architecture.

THIRD-YEAR SUBJECTS.

RA03 Building Construction III.

Retaining walls. Steel and reinforced concrete frame construction. Concrete slab floors and roofs. Foundations. Joinery, fittings, etc. Special doors and windows. Brickwork and panel walling. Shoring: timbering to trenches. Designed foundations and damp proofing of basements. Ductwork. Fire services, requirements, etc. Staircases, fire-resisting and special.

Students will be referred to appropriate texts during the course of lectures.

NC53 Architectural Structures III.

The course consists of approximately 30 hours of lectures and 50 hours of tutorials, design and laboratory classes. In addition, approximately 30 hours will be spent on structural design aspects of RA43 Studio Work III. Lecture topics will include:

Structural connections. Rigid frame buildings—three-dimensional action, resistance to wind loads, structural requirements for multi-storey buildings. Statical indeterminacy, approximate solutions. Analysis of continuous beams and simple frames by moment distribution. Applications of computers to analysis. Prestressed concrete, design and applications. Advanced structures. Graphical representation of stress.

Reference books:

- Crawley, S. W., and Dillon, R. M., *Steel buildings* (Wiley).  
Salvadori, M. G., *Structure in architecture* (Prentice-Hall).  
Torroja Miret, E., *Philosophy of structures* (California U.P.).  
Fischer, R. E. (ed.), *New structures* (McGraw-Hill).

RA13 Building Science III.

Internal environment; heating and air-conditioning (public and commercial buildings); artificial illumination; noise control. Acoustical design of auditoria and studios. Sun control problems associated with large buildings. Daylight control in group planning. Fire in buildings; fire resistance of materials. Functional analysis of architectural planning; ergonomics. Materials; concreting cements, special cements and additives; dense concrete surface finishes. Ceramics. Floor finishes. Biological attack on building materials; preventive methods.

Text-books:

- Great Britain. Ministry of Housing and Local Government. Planning bulletin 5: *Planning for daylight and sunlight* (H.M.S.O.).  
Parkin, P. H., and Humphreys, H. R., *Acoustics, noise and buildings* (Faber Paperback).  
Standards Association of Australia, A.S. 1680, 1976. *Interior lighting and the visual environment*.  
McGuinness, W. J., *Mechanical and electrical equipment for buildings*, 5th edition (Wiley).  
Phillips, D., *Lighting in architectural design* (McGraw-Hill).  
Walsh, J. W. T., *Planned artificial lighting* (Odhams).

RA33 Architectural Design and Planning III.

Assessment based on project work during the year. Theories of architecture and planning principles, historical and modern; design methods and design strategies; landscape architecture and design. Computer applications.

Reference books:

- Chermayeff, S. I., and Alexander, C., *Community and privacy* (Pelican).  
Joedicke, J., *History of modern architecture* (Architectural Pr.).  
*New directions in architecture* (Studio Vista).  
Norberg-Schulz, C., *Intentions in architecture* (Allen and Unwin).  
Papanek, V., *Design for the real world* (Thames and Hudson).  
Pevsner, N., *Pioneers of modern design from William Morris to Walter Gropius* (Pelican).  
Rasmussen, S. E., *Experiencing architecture* (M.I.T. Pr.).

Reference books for Landscape Design:

General:

- Crowe, S., *Landscape of roads* (Architectural Pr.).  
Crowe, S., *Landscape of power* (Architectural Pr.).

Domestic Scale:

- Practical guide to home landscaping* (Readers' Digest).  
Brooks, J., *Room outside* (Thames and Hudson).

Landscape Technique:

- Weddle, A. E. (ed.), *Techniques in landscape architecture* (Heinemann).

Horticulture:

- Lord, E. E., *Shrubs and trees for Australian gardens* (Lothian Publishing Co.).

RA53 Professional Practice I.

Specification; structure and organisation of building industry; central and local government; general law of contract; pricing of tenders; preparation of quantities. Business management and administration; book-keeping and accountancy. Building Act and by-laws, and other legislation.

Reference books:

- Aqua Group, *Pre-contract practice* (Lockwood).  
Dobson, D. E., *Building regulations: a review of the position in some western countries*. South Africa. National Building Research Institute, Bulletin 54.  
*Building act and regulations 1970-71* (S.A. Government Printer).  
Green, R., *Architects guide to running a job* (Architectural Pr.).  
Hudson, A. A., *Building and engineering contracts*, 10th edition, ed. by E. J. Rimmer and I. N. D. Wallace (Sweet and Maxwell).  
Institute of Quantity Surveyors (Aust.), *Australian standard method of measurement of building works* (The Institute).  
Institute of Builders: Board of Building Education, *Management studies for the building industry* (The Institute).  
Koontz, H. D., and O'Donnell, C., *Principles of management* (McGraw-Hill).  
Newman, W. H., Summer, C. E., and Warren, E. Kirby, *The process of management*, latest edition (Prentice-Hall).  
Perrigo, A. E. B., *Modern managerial techniques* (Van Nostrand).  
Royal Institute of British Architects, *Handbook of architectural practice and management* (R.I.B.A.).  
Royal Australian Institute of Architects, W.A. Practice Group, *Guide specification* (R.A.I.A.).  
Royal Institute of British Architects, *The architect and his office* (R.I.B.A.).  
Royal Australian Institute of Architects, *Handbook. Specification* (Architectural Pr.).  
Walker-Smith, D., and Close, H. A., *The standard forms of building contract* (C. Knight).  
Willis, A. J., *Specification writing for architects and surveyors* (Lockwood).  
Willis, A. J., *The elements of quantity surveying* (Lockwood).

RA43 Studio Work III.

The practical application of theoretical work in architectural design, building construction, building science, and structures.

FOURTH-YEAR SUBJECTS.

**RA04 Building Construction IV.**

Load bearing walls. Movement joints. Prestressed concrete. Large span roofs.

Text-book:

Michaels, L., *Contemporary structure in architecture* (Reynolds).

**NC54 Architectural Structures IV.**

The course consists of 25 lectures and 35 hours practical classes, and design tutorials. Consultations are given in connection with RA44 Studio Work IV. Lecture topics will include:

Geotechnical Engineering—Identification of problem soils, site investigation, design of foundations and design of retaining walls. Structural Engineering—Plastic theory of design, structural economics, constructional problems, tension structures.

**RA14 Building Science IV.**

Behaviour of materials and structural elements in fires, protective measures. Plastics and building applications; structural sandwich panels. Protection and decoration of materials and surface finishes. Illumination; design of the visual field, glare; permanent supplementary artificial lighting of interiors. Acoustics; speech reinforcement and loud speaker installations. Mechanical engineering services in large buildings; air-conditioning, lifts and escalators. Introduction to climatic aspects of group planning; natural air flow patterns around buildings.

Text-books:

McGuinness, W. J., *Mechanical and electrical equipment for buildings*, 5th edition (Wiley).

Great Britain. Building Research Station, *Architectural physics: lighting*, by R. G. Hopkinson (H.M.S.O.).

Illuminating Engineering Society. Technical report No. 4, *Lighting during daylight hours* (I.E.S.).

Kinzey, B. Y., and Sharp, H. M., *Environmental technologies in architecture* (Prentice-Hall).

Phillips, D., *Lighting in architectural design* (McGraw-Hill).

Sherratt, A. F. C. (ed.), *Air conditioning system design for buildings* (Elsevier).

Bird, E. L., and Docking, S. J., *Fire in buildings* (Black).

Olgay, V., *Design with climate* (Princeton U.P.).

Strakosch, G. R., *Vertical transportation: elevators and escalators* (Wiley).

**RA34 Architectural Design and Planning IV.**

Lecture: one hour a week. Assessment based on project work during the year.

Programming the built environment. Design objectives in planning, construction and environmental performance of buildings. Specialised design problems.

Text-book:

Canter, D., and Stringer, P., *Environmental interaction* (Surrey U.P.).

#### RA64 Urban and Regional Planning and Urban Design I.

The architect and town planning; the history of town planning from ancient times; colonial town planning; problems in town planning deriving from the industrial revolution; the garden city movement; the Radburn principle; the neighbourhood unit; satellites and new towns; regionalism; the central core and urban renewal; town planning as an art form; civic art and urban design.

Text-books:

- Gallion, A. B., and Eisner, S., *The urban pattern* (Van Nostrand).  
Mumford, L., *The city in history* (Pelican).

Reference books:

- Collins, G. R., and Collins, C. C., *Camillo Sitte and the birth of modern city planning* (Columbia U.P.).  
Cullen, G., *Townscape* (Architectural Pr.).  
Doxiadis, C. A., *Ekistics* (Hutchinson).  
Gibberd, F., *Town design* (Architectural Pr.).  
le Corbusier, *The radiant city* (Faber).  
Lynch, K., *Image of the city* (M.I.T. Pr.).  
Rasmussen, S. E., *Towns and buildings* (Liverpool U.P.).  
Reps, J. W., *The making of urban America* (Princeton U.P.).  
Sitte, C., *City planning according to artistic principles* (Phaidon).  
Smailes, A. E., *The geography of towns* (Hutchinson).  
Tetlow, J., and Goss, A., *Homes, towns and traffic* (Faber).  
Zucker, P., *Town and square* (Columbia U.P.).

#### RA54 Professional Practice II.

Building economics. Quantity surveying. Bills of quantities. Standard method of measuring. Law of building contracts. Standard form of contract.

Text-book:

- Royal Australian Institute of Architects, *Lump sum contracts*, current edition.

Reference book:

- Hudson, A. A., *Building and engineering contracts*, 10th edition, ed. by E. J. Rimmer and J. N. D. Walker (Sweet and Maxwell).

#### RA44 Studio Work IV.

The practical application of theoretical work in architectural design, urban planning, building construction and services, building science, and structures.

#### RA98 Advanced Studies I.

Available only to students who have been granted permission to proceed to the Honours degree. See below under Honours degree of Bachelor of Architecture.



FIFTH-YEAR SUBJECTS.

**RA05 Building Construction V.**

Builders' plant. Road construction. Concrete work and finishes. Glass-concrete and patent glazing. Lifts and escalators. Curtain walling. Factory production and prefabrication.

Reference books:

- Diamant, R. M. E., *Industrialised building*, vols. 1, 2 and 3 (Iliffe).  
Foster, J. S., and Harrington, R., *Structure and fabric*, part 2, Mitchell's building construction (Batsford).  
Morris, A. E. J., *Precast concrete cladding* (Fountain Press).  
Schaal, R., *Curtain walls* (Reinhold).  
Wilson, J. G., *Exposed concrete finishes*, 2 vols. (C. R. Books).

**NC55 Architectural Structures V.**

No lectures will be given in this course which will consist of structural design aspects of RA45 Studio Work V. Seminars will be held on appropriate topics.

**RA15 Building Science V.**

Quality control and materials. Sound measurements and acoustics tests on building elements and auditoria; noise surveys. Climatic aspects of group planning; solar radiation; sunlight and orientation; daylighting; air movement and atmospheric pollution. Illumination; luminance design; street lighting. Solar energy in architecture; solar heating and cooling. Specialised problems and scientific research for architecture and town planning. Research project on an approved topic.

**RA65 Urban and Regional Planning and Urban Design II.**

The practice of town and country planning. The principles of civic survey and the study of modern planning schemes. Outline of planning legislation. Regional and national planning with reference to economics, sociology and demography.

Text-book:

- Brown, A. J., and Sherrard, H. M., *An introduction to town and country planning*, 2nd edition (Angus and Robertson).

Reference books:

- Association for Planning and Regional Reconstruction, *The town and country planning text-book* (Architectural Pr.).  
Chapin, F. S., *Urban land use planning*, 2nd edition (Illinois U.P.).  
Cullen, G., *Townscape* (Architectural Pr.).  
Freeman, T. W., *The conurbations of Great Britain* (Manchester U.P.).  
Gallion, A. B., and Eisner, S., *The urban pattern* (Van Nostrand).  
Gifford, K. H., *The Victorian town planning handbook* (Law Book Co.).  
Jensen, R., *Cities of vision* (Applied Science).  
Jensen, R., *High density living* (Hill).  
Keeble, L. B., *Principles and practice of town and country planning* (Estates Gazette).  
Landau, R., *New directions in British architecture* (Studio Vista).

- Mumford, L., *The culture of cities* (Secker and Warburg).  
Rapkin, C., and Grigsby, W. G., *Residential renewal in the urban core*  
(Pennsylvania U.P.).  
Rasmussen, S. E., *Towns and buildings* (Liverpool U.P.).  
Sharp, T., *Town planning* (Pelican).  
South Australia: Town Planning Committee, *Report on the metropolitan  
area of Adelaide* (Government Printer, S.A.).  
Sulman, J., *An introduction to the study of town planning in Australia*  
(Government Printer, N.S.W.).  
Unwin, R., *Town planning in practice* (Fisher Unwin).  
Winston, D., *Sydney's great experiment* (Angus and Robertson).

#### RA75 Architectural Thesis.

To be on a selected and approved subject involving architectural design, building science, and constructional problems and to be accompanied by an explanatory report.

#### RA45 Studio Work V.

Advanced projects in architectural design and applications relating to building science, architectural construction, and structures.

#### RA55 Professional Practice III.

The code of professional conduct. Standard fee scales. Office organisation. Programming. Building investment and budgeting. Variations. Certificates and accounts. Law relating to the architect. Arbitration. Insurance. Bankruptcy and liquidated damages. Contract law.

Text-book:

Royal Australian Institute of Architects, *Lump sum contracts*, current edition.

Reference books:

- Hudson, A. A., *Building and engineering contracts* (Sweet and Maxwell).  
Keating, D., *Law and practice of building contracts* (Sweet and Maxwell).  
Willis, A. J., and George, W. N. B., *The architect in practice* (Crosby Lockwood).

### HONOURS DEGREE OF BACHELOR OF ARCHITECTURE.

A student wishing to proceed to the Honours degree of Bachelor of Architecture should consult the Chairman of the Department during the enrolment period at the beginning of the fourth year of the Architecture course.

The work for the Honours degree consists of the work for the Ordinary degree together with additional seminar courses in the fourth year (RA98 Advanced Studies I) and the fifth year (RA89 Advanced Studies II).

Honours candidates will be required to show a greater depth of understanding than that required for the Ordinary degree.

**RA98 Advanced Studies I.**

Available only to students who have been granted permission to proceed to the Honours degree. The work is undertaken concurrently with the work of the fourth year of the Architecture course.

For details see the schedules of the degree of Bachelor of Architecture (Schedule II: The Honours Degree).

Appropriate reading and reference lists will be supplied at the commencement of the year.

**RA99 Final Honours Architecture.**

*and*

**RA89 Advanced Studies II.**

Students granted permission to proceed to Final Honours will enrol for both RA99 Final Honours Architecture and RA89 Advanced Studies II.

For details see the schedules of the degree of Bachelor of Architecture (Schedule II: The Honours Degree).

Appropriate reading and reference lists will be supplied at the commencement of the year.

OF THE DEGREE OF  
MASTER OF ARCHITECTURE  
REGULATIONS

1. There shall be a degree of Master of Architecture.

\*2. Except as provided in regulation 3, a candidate for the degree shall either:

- (a) be qualified for admission to the degree of Bachelor of Architecture in the University of Adelaide; or
- (b) be qualified for admission to another degree in the University of Adelaide or to a degree in another university recognised by the University of Adelaide, the qualifications of which degree are considered by the Faculty of Architecture and Planning to be equivalent for the purpose to those of the degree of Bachelor of Architecture.

†3. Subject to the approval of the Council, the Faculty may in special cases and subject to such conditions (if any) as it may see fit to impose in each case accept as a candidate for the degree a person who does not hold a degree of a university but has given evidence satisfactory to the Faculty of his fitness to undertake work for the degree.

4. To qualify for the degree a candidate shall prepare a thesis, embodying the results of original research or investigation made by him into an architectural topic which has been approved in advance by the Faculty, which he has prepared under the guidance of and in regular consultation with a supervisor or supervisors appointed by the Faculty.

5. Before approving the topic of his proposed research or investigation, the Faculty may require a candidate to pursue for not more than one calendar year under the supervision of a supervisor or supervisors appointed by the Faculty, and pass examinations in, advanced courses related to his field of study.

6. Unless the Faculty approve an extension of time in a particular case, a candidate shall submit the thesis not earlier than one calendar year and not later than three calendar years from the date of approval of the topic.

7. If in the opinion of the Faculty a candidate for the degree is not making satisfactory progress, the Faculty may, with the consent of the Council, withdraw its approval of his candidature, and the candidate shall cease to be enrolled for the degree.

† Allowed 28 February, 1974.

\* Amended 15 January, 1976, and 2 February, 1978.

†8. A candidate shall lodge with the Academic Registrar three copies of his thesis, prepared in accordance with directions given to candidates from time to time.\*

9. The Faculty shall nominate examiners of the thesis, of whom at least one shall be external. The examiners may recommend that the thesis:

- (a) be accepted; *or*
- (b) be accepted subject to the candidate passing an examination in the field of study immediately relevant to the subject of his thesis; *or*
- (c) be returned to the candidate for revision and re-submission (within such period of time as the Faculty may allow); *or*
- (d) be rejected.

10. A candidate for the degree of Doctor of Philosophy whose work is considered by the Faculty, after report by the examiners appointed to adjudicate on it, not to be of sufficient merit to qualify him for that degree, but of sufficient merit to qualify him for the degree of Master of Architecture, may be admitted to the degree of Master provided that he is otherwise qualified to become a candidate for the degree.

11. A candidate who complies with the foregoing conditions and satisfies the examiners may be admitted to the degree of Master of Architecture.

Regulations allowed 21 December, 1967.

† Amended 15 January, 1976.

\* Published in "Notes and Instructions to candidates for Higher Degrees":  
*see* Table of Contents.

---

OF THE DEGREE OF  
MASTER OF URBAN AND  
REGIONAL PLANNING

For the Regulations, Schedules and Syllabuses of this degree, *see* Calendar of the University for 1977, Volume II, pages 561-566.

There will be no *new* enrolments in this course in 1979.

# FACULTY OF ARTS

## REGULATIONS, SCHEDULES AND SYLLABUSES OF DEGREES AND DIPLOMAS

### Bachelor of Arts (B.A.)

Regulations	-	-	-	-	-	-	-	-	-	572
Schedules	-	-	-	-	-	-	-	-	-	575
Syllabuses	-	-	-	-	-	-	-	-	-	580
Anthropology	-	-	-	-	-	-	-	-	-	580
Asian Studies	-	-	-	-	-	-	-	-	-	586
Classics	-	-	-	-	-	-	-	-	-	593
Comparative Literature	-	-	-	-	-	-	-	-	-	603
Drama	-	-	-	-	-	-	-	-	-	604
Economics (for B.A.)	-	-	-	-	-	-	-	-	-	605
English	-	-	-	-	-	-	-	-	-	607
French	-	-	-	-	-	-	-	-	-	616
Geography	-	-	-	-	-	-	-	-	-	625
German	-	-	-	-	-	-	-	-	-	631
History	-	-	-	-	-	-	-	-	-	639
Music (for B.A.)	-	-	-	-	-	-	-	-	-	644
Philosophy	-	-	-	-	-	-	-	-	-	647
Physics (for B.A.)	-	-	-	-	-	-	-	-	-	653
Politics	-	-	-	-	-	-	-	-	-	654
Psychology	-	-	-	-	-	-	-	-	-	663
Social Biology (for B.A.)	-	-	-	-	-	-	-	-	-	666
Service Courses in Foreign Languages	-	-	-	-	-	-	-	-	-	668

### Diploma in Applied Psychology (Dip.App.Psych.)

Regulations	-	-	-	-	-	-	-	-	-	669
Schedules	-	-	-	-	-	-	-	-	-	671
Syllabuses	-	-	-	-	-	-	-	-	-	672

### Diploma in Library Studies (Dip.Lib.St.)

Regulations	-	-	-	-	-	-	-	-	-	675
Schedules	-	-	-	-	-	-	-	-	-	677

### Diploma in Education (Dip.Ed.)

Regulations	-	-	-	-	-	-	-	-	-	679
Schedules	-	-	-	-	-	-	-	-	-	681
Syllabuses	-	-	-	-	-	-	-	-	-	682

### Advanced Diploma in Education (Adv.Dip.Ed.)

Regulations	-	-	-	-	-	-	-	-	-	686
Schedules	-	-	-	-	-	-	-	-	-	687
Syllabuses	-	-	-	-	-	-	-	-	-	689

### Master of Education (M.Ed.)

Regulations	-	-	-	-	-	-	-	-	-	694
Schedules	-	-	-	-	-	-	-	-	-	696
Syllabuses	-	-	-	-	-	-	-	-	-	689, 698

### Master of Arts (M.A.)

Regulations	-	-	-	-	-	-	-	-	-	699
Notes by Departments	-	-	-	-	-	-	-	-	-	701

### Doctor of Philosophy (Ph.D.)

Regulations and Schedules: under "Board of Research Studies"—see Table of Contents.

### Doctor of Letters (D.Litt.)

Regulations	-	-	-	-	-	-	-	-	-	703
-------------	---	---	---	---	---	---	---	---	---	-----

OF THE DEGREE OF  
BACHELOR OF ARTS  
REGULATIONS

1. There shall be an Honours degree and an Ordinary degree of Bachelor of Arts. A candidate may obtain either degree or both.

†2. The course of study for the Ordinary degree shall extend over three academic years and that for the Honours degree over four academic years.

†3. (a) In these regulations and in schedules made under them by the Council the word "subject" means a course of study at the University normally completed in one academic year. In syllabuses, if the context so requires, it may mean alternatively a subject at one of the public examinations conducted by the University.

°(b) The Council, after receipt of advice from the Faculty of Arts, shall from time to time prescribe schedules defining (i) the subjects of study for the degree to be provided by the University, (ii) the range of subjects (including lecture courses, laboratory courses and other practical work) to be satisfactorily completed and the examinations to be passed by candidates.

(c) Such schedules shall become effective from the date of prescription by the Council or such other date as the Council may fix.

(d) The syllabuses of subjects shall be specified by the Head of the department concerned and submitted to the Faculty and the Council for approval.

(e) Schedules made and syllabuses approved by the Council shall be published in the next edition of the University Calendar.

§4. A candidate for the degree shall attend classes as required by the Head of the department concerned and pass examinations in accordance with the provisions of schedule II (Ordinary degree) or schedule III (Honours degree).

††5. (a) A candidate desiring to enter for an honours school must obtain the approval of the head of the school concerned. The final examination may not, except by special permission of the Faculty, be taken until four years of study have been completed after matriculation.

(b) The work of the Final Honours year must be completed in one year of full-time study, save that on the recommendation of the Head of the department concerned, the Faculty may permit a candidate to spread the work over two years, but not more, under such conditions as it may determine.

(c) The names of the candidates who qualify for the Honours degree shall be published in alphabetical order within the following classes and divisions in each school:

† Allowed 28 January, 1965.

†† Allowed 16 December, 1965.

§ Amended 24 December, 1969, and 21 December, 1972.

\* Amended 15 January, 1976.

First Class  
Second Class  
    Division A  
    Division B  
Third Class.

\* (d) A candidate who is unable to complete the course for the Honours degree within the time allowed, or whose work is unsatisfactory at any stage of the course, or who withdraws from the course shall be reported to the Faculty which may permit him to re-enrol for the Honours degree under such conditions (if any) as it may determine.

(e) A candidate may not enrol a second time for the Final Honours course in the same school if he (i) has already qualified for Honours in that school; or (ii) has presented himself for examination in that school but has failed to obtain Honours; or (iii) withdraws from his course, unless the Faculty under paragraph (d) hereof permits him to re-enrol.

††6. Except by permission of the Faculty a candidate shall not proceed to a subject for which he has not completed the pre-requisite subjects prescribed in the syllabuses.

7. A candidate shall do such written or practical work as may be prescribed by the professor or lecturer.

\*8. Except in special cases approved by the Council the annual examinations shall take place towards the end of the academic year. A candidate shall enter for examination on the form and by the date prescribed by the Council, but shall not be eligible to present himself for examination unless he has regularly attended the prescribed classes and has done written and laboratory or other practical work, where required, to the satisfaction of the professors and lecturers concerned. Written or practical work done by candidates by direction of the professors or lecturers and the results of terminal or other examinations in a subject may be taken into consideration at the final examination of that subject.

†9. The names of candidates who pass at an annual examination in any subject or division of a subject for the Ordinary degree shall be published in alphabetical order in the following classifications:

Pass with Distinction,  
Pass with Credit,  
Pass.

If the pass lists be published in two divisions, a pass in the higher division may be prescribed in the syllabuses as a pre-requisite for admission either to further courses in that subject or to other subjects.

10. A candidate who fails to pass in a subject and who desires to take the subject again shall again attend lectures and do practical work in the subject to the satisfaction of the professors and lecturers, unless exempted therefrom by the Faculty of Arts.

† Allowed 28 January, 1965; amended 17 December, 1970, and  
21 December, 1972.

†† Allowed 16 December, 1965.

\* Amended 21 December, 1972.



†11. A candidate who has twice failed to pass the examination in any subject or division of a subject may not enrol for that subject again except by special permission of the Faculty and then only under such conditions as the Faculty may prescribe.

For the purpose of this regulation a candidate who is refused permission to sit for examination, or who fails, without a reason accepted by the Dean as adequate, to attend all or part of an annual examination (or a supplementary examination if granted) after having enrolled for at least two terms in that year, shall be deemed to have failed to pass the examination.

\*\*12. A candidate who has passed subjects in other faculties or universities or elsewhere may on written application to the Academic Registrar be granted such exemption from these regulations and from schedules made under them as the Council on the recommendation of the Faculty may determine.

‡13. (a) A graduate in another faculty who wishes to proceed to the degree of Bachelor of Arts and to count towards that degree subjects which he has already presented for another degree may do so subject to the following conditions: (i) he may present not more than three such subjects, save that a graduate in law who in qualifying for the degree of Bachelor of Laws presented two of the arts subjects referred to in the regulations of the degree of Bachelor of Laws under which he qualified for that degree, may present five such subjects; (ii) he shall present a range of subjects which fulfils the requirements of the relevant schedule made under regulation 4; and (iii) he shall present two third-year subjects not presented for another degree.

(b) A candidate who holds a diploma may be granted such status in the course for the degree of Bachelor of Arts as the Faculty shall in each case determine; provided that if status be granted for more than three subjects the candidate shall, except as provided for in section (c) of this regulation, surrender his diploma before being admitted to the degree.

(c) A matriculated student who was enrolled for the Diploma in Social Studies before 30 June, 1962, may until 30 June, 1967, present for the degree of Bachelor of Arts more than three subjects which he has presented for the diploma without surrendering his diploma before being admitted to the degree.

§14. No graduate who has obtained an Honours degree in a subject or field of study in another faculty may obtain the Honours degree of Bachelor of Arts in a corresponding subject, field of study, or school of the Faculty of Arts.

Regulations allowed 17 January, 1952.

§ Amended 24 December, 1969.

† Allowed 16 March, 1961.

‡ Allowed 16 December, 1965; amended 17 December, 1970, and 15 January, 1976.

\*\* Amended 21 December, 1972.

OF THE DEGREE OF  
**BACHELOR OF ARTS**  
**SCHEDULES**

(Made by the Council under regulation 3.)

NOTE: Syllabuses of subjects for the degree of B.A. are published below, immediately after these schedules. For syllabuses of subjects taught for other degrees and diplomas see the table of subjects at the end of the volume.

**SCHEDULE I: SUBJECTS OF STUDY**

1. The following shall be the subjects of classes and examinations:

**GROUP A SUBJECTS AND HALF-SUBJECTS**

**1. Arts subjects**

AA01 Anthropology I	AH01 History IA
AQ01 Chinese I	AH31 History IB
AC31 Classical Studies I	AH41 History IC
UA11 Drama I	AQ21 Japanese I
AJ71 Economic Geography I	AQ31 Japanese IA
EC01 Accounting I	AC01 Latin I
AE01 English I	AC41 Latin IA
AF01 French I	QM11 Mathematics IM
AF11 French IA	UA51 Music I
AJ01 Geography I	UA61 Music IA
AG01 German I	AP11 Politics IA
AG11 German IA	AP21 Politics IB
AC11 Greek I	AY01 Psychology I
AC71 Greek IA	EE71 Social Economics I

**Arts half-subjects**

EE4F Economic History IH	QM7H Mathematics IH
EE5F Economic Institutions and Policy IH	EE1F Mathematics for Economists IH
AJ2H Human Geography IH	EE2G Microeconomics IH
AL2H Logic IH	AL1H Philosophy IH(A)
EE1G Macroeconomics IH	AL3H Philosophy IH(B)
EE2F Mathematical Economics IH	AJ1H Physical Geography IH
	SP9H Physics, Man and Society IH

**2. Science subjects**

SZ71 Biology I	SG01 Geology I
SC01 Chemistry I	SP01 Physics I

**Science half-subjects**

SP8H Astronomy IH	SJ7H Genetics and Human Variation IH
SB6H Botany IH	
SG7H Environmental Geology IH	

**3. Mathematical Sciences subjects**

QM01 Mathematics I

**Mathematical Sciences half-subjects**

QA7H Computing IH	QT7H Statistics IH
-------------------	--------------------

## GROUP B SUBJECTS AND HALF-SUBJECTS

## 1. Arts subjects

AE82 American Literature II	AG12 German IIA
AC72 Ancient History II (Roman)	AG87 German IIB
AA02 Anthropology IIA	AC12 Greek II
AA12 Anthropology IIB	AC82 Greek IIA
AA22 Anthropology IIC	AC77 Greek IIS
AQ42 Asian Civilisations: Past and Present II	AC92 Greek Art and Archaeology II
AQ12 Asian Development II	AH02 History IIA
AE72 Australian Literary Studies II	AH22 History IIB
AQ02 Chinese II	AQ22 Japanese II
AC32 Classical Studies II	AC02 Latin II
UA12 Drama II†	AC42 Latin IIA
EE22 Economic Statistics II	AC57 Latin IIS
EE32 Economic Statistics IIA	AE92 Linguistics II
AE02 English II	AL22 Logic II
AF02 French II	UA52 Music II
AF12 French IIA	AE87 Old and Middle English II
AF72 French IIB	AL02 Philosophy II
AJ12 Geography IIA	AP32 Politics IIA
AJ22 Geography IIB	AP42 Politics IIB
AG02 German II	AY02 Psychology II

## Arts combined subjects

See clause 8 below.

## Arts half-subjects

EE6F Economic History III(A)	EE3G Macroeconomics III
EE7F Economic History III(B)	EE3F Mathematical Economics III
AJ7H Geography III	EE4G Microeconomics III

## 2. Science subjects

SY02 Biochemistry II	SO02 Organic Chemistry II
SB02 Botany II	SC02 Physical and Inorganic Chemistry II
SC12 Chemistry II	
SJ02 Genetics II	SP02 Physics II
SG02 Geology II	SS02 Physiology II
SG72 Geophysics II	SZ02 Zoology II

## 3. Mathematical Sciences subjects

QN22 Applied Mathematics IIA	QA12 Computing Science IIC
QN12 Applied Mathematics IIB	QT02 Mathematical Statistics II
QA02 Computing Science II	QM02 Pure Mathematics II

## 4. Law subjects\*

LL32 Constitutional Law II	LL22 The Law of Property
One subject from:	LL77 Comparative Law
	LL37 International Law
	LL47 Jurisprudence
	LL28 Legal History
	LL67 Roman Law

\* See schedules of degree of LL.B.—Schedule IV: Restriction of Courses.

† To be offered in 1979 only if staff available.

GROUP C SUBJECTS AND HALF-SUBJECTS

1. Arts subjects

AC73 Ancient History III (Roman)	AC88 German IIIB
AA03 Anthropology IIIA	AC13 Greek III
AA13 Anthropology IIIB	AC78 Greek IIIS
AA23 Anthropology IIIC	AH03 History IIIA
AA33 Anthropology IIID	AH13 History IIIB
AQ03 Chinese III	AQ23 Japanese III
AC33 Classical Studies III	AC03 Latin III
AQ43 The Development of Asia III	AC67 Latin IIIS
EE73 Economic Development Studies III	AE93 Linguistics III
EE03 Economics III (Arts)	AL23 Logic III
AE03 English IIIA	UA53 Music III
AE13 English IIIB	UA68 Music IIIS
AF03 French III	AE88 Old and Middle English III
AF88 French IIIB	AL03 Philosophy IIIA
AJ13 Geography IIIA	AL13 Philosophy IIIB
AJ23 Geography IIIB	AP03 Politics IIIA
AG03 German III	AP13 Politics IIIB
	AY23 Psychology III

Arts combined subjects

See clause 8 below.

Arts half-subjects

AJ8H Geography IIIB	AY1H Psychology IIIB(A)
AL4H Philosophy IIIB*	AY2H Psychology IIIB(B)
AP1H Political Sociology IIIB*	SJ3H Social Biology IIIB

2. Science subjects

QN83 Applied Mathematics IIIM	SO83 Organic Chemistry IIIM
SY03 Biochemistry III	SC13 Physical and Inorganic Chemistry IIIB
SY83 Biochemistry IIIM	SC83 Physical and Inorganic Chemistry IIIM
SB03 Botany III	SP03 Physics III
SB83 Botany IIIM	SP83 Physics IIIM
QA83 Computing Science IIIM	SS33 Physiology IIIA (Physiology)
SJ03 Genetics III	SS43 Physiology IIIB (Pharmacology)
SG03 Geology III	SS83 Physiology IIIM
SG83 Geology IIIM	QM83 Pure Mathematics IIIM
SG73 Geophysics III	QF03 Theoretical Physics III
MA13 Histology and Cell Biology III	SZ03 Zoology III
SK03 Microbiology and Immunology III	SZ83 Zoology IIIM
SO03 Organic Chemistry III	

3. Mathematical Sciences subjects

QN03 Applied Mathematics III	QF13 Mathematical Physics III
QN13 Applied Mathematics IIIA	QT03 Mathematical Statistics III
QA03 Computing Science III	QM03 Pure Mathematics III
QA13 Computing Science IIIA	QM13 Pure Mathematics IIIA

2. (a) No candidate will be permitted to count for the degree any subject or half-subject together with any other subject or half-subject which, in the opinion of the Faculty, contains a substantial amount of the same material; and no subject, or half-subject, may be counted twice towards the degree.†

(b) No candidate may present the same half-subject, section of a subject, unit of a subject or option, in more than one subject for the degree.

\* These half-subjects may only be taken with SJ3H Social Biology IIIB.

† A table of unacceptable combinations of subjects and half-subjects is given towards the end of this Volume (see Table of Contents).

3. A candidate shall not present more than two of AH01 History IA, AH31 History IB and AH41 History IC.

4. A candidate shall not present any of the following: EE41 Mathematics (Economics) I, EE22 Economic Statistics II and EE32 Economic Statistics IIA unless he has also passed EE1G Macroeconomics IH and EE2G Microeconomics IH.

5. A candidate shall not present more than two of AA03 Anthropology IIIA, AA13 Anthropology IIIB, AA23 Anthropology IIIC and AA33 Anthropology IIID.

6. A candidate who enrolled as a matriculated student before 31 March, 1964, and passed in 101 Education before 31 March, 1966, may present that subject for either the Ordinary or the Honours degree.

7. When, in the opinion of the Faculty of Arts, special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of clauses 1-5 above.

8. A candidate may, on the recommendation of the two departments concerned, and with the approval of the Faculty, present parts of two second-year or two third-year subjects *in lieu* of a second-year or third-year subject.

9. These schedules came into force on 1 January, 1973.

A candidate who enrolled as a matriculated student before 1 January, 1973, may continue under the regulations and schedules in force in 1972. Alternatively, he may complete his degree under the present regulations and schedules with such modifications as may be necessary to ensure that subjects validly passed under the 1972 or earlier schedules be counted *pro tanto* under the present schedules.

## SCHEDULE II: THE ORDINARY DEGREE

1. To qualify for the Ordinary degree a candidate shall present nine subjects which shall include:

- (a) Not more than four subjects or their equivalent from group A.
- (b) At least two subjects or their equivalent from group C of which at least one must be chosen from group C.1 (Arts subjects and half-subjects) or C.3 (Mathematical Sciences subjects).
- (c) Not more than three subjects or their equivalent from group A.2 (Science subjects and half-subjects) and B.2 (Science subjects) combined.
- (d) Not more than four subjects or their equivalent from group B.3 (Mathematical Sciences subjects) and C.3 (Mathematical Sciences subjects).
- (e) Not more than three subjects from group B.4 (Law subjects).

NOTES (not forming part of the regulations and schedules):

1. *Pattern of study.*

The Faculty of Arts recommends that the normal pattern of study for the Ordinary degree of Bachelor of Arts be four subjects in the first year, three in the second and two in the third.

2. *Arts combined subjects* (policy of the Faculty of Arts).

Parts of two second-year or two third-year subjects may be combined to make a single subject for the Ordinary degree provided that:

- (a) the subjects concerned can be readily divided into compatible parts;
- (b) no student doing such a combined subject will be required to do more work than if he were doing a single subject;
- (c) the student has satisfied the pre-requisites for entry to both of the subjects from which parts are being combined;

- (d) such combined subjects will be offered only on application by individual students, when there are adequate teaching resources available in the two departments, and when the two departments concerned agree that the combined subject is academically desirable;
- (e) the minimum part of a subject which may be combined will normally be one third (which will then be combined with two thirds of the other subject), although, in particular cases, applications for exceptions may be made.

It is envisaged that, normally, these subjects will help students prepare for combined Honours, but that, where academically desirable and agreed by the two departments concerned, they may be taken by students not intending to proceed to Honours.

3. *Work required to complete an Adelaide degree* (policy of the Faculty of Arts).

To qualify for the degree:

- (a) students who have completed most of the requirements for the degree of Bachelor of Arts at another institution will be required as a minimum to complete a full third-year's work in order to qualify for the Adelaide degree; and
- (b) with special permission of the Faculty, a student who has completed most of the subjects for the degree of Bachelor of Arts in Adelaide including one third-year subject may be permitted to complete the requirements for the degree at another institution.

All applications must be made in writing to the Academic Registrar.

4. *Study for the degrees of LL.B. and B.A. concurrently.*

Candidates who wish to study for the degrees of LL.B. and B.A. concurrently should take their subjects according to one of the schemes outlined in the notes following the schedules of the degree of Bachelor of Laws (*see* Table of Contents).

5. *Study for the degrees of B.Mus. and B.A. concurrently.*

Candidates who wish to study for the degrees of B.Mus. and B.A. concurrently should take their subjects according to the scheme outlined in the notes following schedule I of the degree of Bachelor of Music (*see* Table of Contents).

### SCHEDULE III: THE HONOURS DEGREE

1. A candidate for the Honours degree shall attend classes regularly and pass examinations in one of the following subjects:

AA99 Anthropology	AC99 German Language and Literature
AC79 Classical Studies	AH99 History
AC99 Classics	AC89 Latin
EE99 Economics	UA69 Music
AE99 English Language and Literature	AL99 Philosophy
AF99 French Language and Literature	AP99 Politics
AJ99 Geography	AY99 Psychology

or in a combination of subjects approved by the Faculty. The combination shall include such parts of two subjects as shall when combined be deemed by the Faculty to be equivalent to a single subject, provided that one of the parts of the combination may be taken from a subject within *either* the Faculty of Mathematical Sciences *or* the Faculty of Science.

A candidate desiring to proceed to the Honours degree must, before enrolment, obtain the approval of the Chairman of the department concerned.

2. Subject to the approval of the Faculty in each case, a candidate may proceed to the Honours degree in a subject taught in a department in another faculty. The Chairman of the department concerned must seek that approval by 30 November of the preceding year.

A candidate wishing to proceed to Honours in subjects within the Faculty of Mathematical Sciences is referred to regulation 11 of the degree of Bachelor of Science in the Faculty of Mathematical Sciences.

3. A candidate for the Honours degree in any subject shall not begin Honours work in that subject until he has qualified for the Ordinary degree of Bachelor of Arts and has completed such pre-requisite subjects (if any) as may be prescribed in the Honours degree syllabus published in this Calendar.

4. Except by permission of the Faculty a candidate shall take the whole of the final examination for the Honours degree at the one annual examination.

OF THE DEGREE OF  
BACHELOR OF ARTS  
SYLLABUSES

*Text-books:*

Students are expected to procure the latest edition of all text-books prescribed.

*Pre-requisite subjects:*

Students are reminded that in order to proceed to the second year in any subject in the Faculty of Arts they must, in the case of any first-year subject or pre-requisite subject in which the pass list is published in two divisions, pass at Division I level or higher, unless special permission is obtained in writing from the Academic Registrar.

*Examinations:*

For each subject students may obtain from the department concerned details of the examination in that subject including the relative weights given to the components (e.g. such of the following as are relevant: assessments, term or mid-year tests, essays or other written or practical work, final written examinations, *viva voce* examinations).

## ANTHROPOLOGY.

## FIRST YEAR.

## AA01 Anthropology I.

No pre-requisite. Students will be expected to attend two lectures a week in addition to one tutorial and to submit written work when required.

The general aim of the course will be to consider a number of basic issues in Anthropology and the ways in which anthropologists have confronted them. In part, this will be done by an examination of some of the classic anthropological ethnographies (detailed descriptions of cultural and social behaviour in Western and non-Western settings).

The books recommended are intended to provide a general background to the subject and more exhaustive reading lists will be distributed at the beginning of the year.

## Reference books:

- Barth, F., *Political leadership among the Swat Pathans* (Athlone Press).  
 Barth, F., *Ethnic groups and boundaries* (Universitetsforlaget, Bergen).  
 Black-Michaud, J., *Cohesive force* (St. Martins Press).  
 Blok, A., *The Mafia of a Sicilian village, 1860-1960* (Harper & Row).  
 Evans-Pritchard, E. E., *Witchcraft, oracles and magic among the Azande* (O.U.P.).  
 Evans-Pritchard, E. E., *The Nuer* (O.U.P.).  
 Festinger, L., *When prophecy fails* (Harper Torchbooks).  
 Gluckman, M., *Politics, law and ritual in tribal society* (Mentor).  
 Harris, M., *Cows, pigs, wars and witches* (Vantage Books).  
 Hobsbawn, E. J. E., *Primitive rebels* (Manchester U.P.).  
 Keesing, R., *Kin groups and social structure* (Holt, Rinehart and Winston).  
 Lee, R. B., and DeVore, I. (eds.), *Man the hunter* (Aldine).  
 Malinowski, B., *Argonauts of the Western Pacific* (Dutton).  
 Mauss, M., *The gift* (Cohen and West).  
 Meggitt, M. J., *Blood is their argument* (Mayfield pub.).  
 Sahlins, M. D., *Stone age economics* (Aldine).  
 Sahlins, M. D., *Uses and abuses of biology* (Tavistock).

## SECOND YEAR.

Pre-requisite: AA01 Anthropology I.

There are three subjects offered; each will involve two lectures and one tutorial a week. Students intending to proceed to third-year work in Anthropology must complete satisfactorily at least one of the subjects offered in Anthropology at second-year level. Those students planning to proceed to an Honours year in Anthropology must have satisfactorily completed *two* of the subjects, or their equivalent, offered in the second year.

More exhaustive reading reference lists will be available from the department at the beginning of the year.

### AA02 Anthropology IIA.

#### ECONOMIC AND POLITICAL ANTHROPOLOGY:

The first part of the course will concern itself primarily with the organisation of production, distribution and consumption in small-scale social systems which are essentially unstratified and which lack highly formalised institutions of political control. Attention will be given to evolutionary perspectives and cultural ecology; kinship as it relates to economic processes; the sociology of material exchange; and some recent Marxist approaches to non-Western small-scale economies.

The second part of the course will examine societies which are highly stratified and exhibit marked inequalities in the distribution of wealth and political power. The lectures will be concerned with the institutions of kinship, the aristocracy and gentry, and the bureaucratic organisation of the State in ancient and modern non-Western contexts. Some of the specific topics to be examined will be modes of political succession, forms of political conflict and the factors underlying the transformation of socio-economic and political orders.

In dealing with these topics, throughout the course attempts will be made to explicate with varying degrees of formality certain major theoretical perspectives in social anthropology.

#### Reading:

- Sahlins, M. D., *Stone Age economics* (Aldine).  
Firth, R. W., *Themes in economic anthropology* (Tavistock).  
Firth, R. W., *Primitive Polynesian economy* (Tavistock).  
Richards, A. I., *Land, labour and diet in Northern Rhodesia* (O.U.P.).  
Brookfield, H. C., *Melanesia: a geographical interpretation of an island world* (Methuen).  
Geertz, C., *Agricultural involution* (Calif. U.P.).  
Evans-Pritchard, E. E., *The Nuer* (O.U.P.).  
Terry, E., *Marxism and "primitive" societies* (Monthly Review).  
Nadel, S. F., *A black-Byzantium* (International African Institute).  
Genovese, E., *The political economy of slavery* (Vintage).  
Dumont, L., *Homo hierarchicus* (Paladin).  
Bloch, M., *Feudal Society* (University of Chicago Press).  
Moore, B., *Social origins of dictatorship and democracy* (Penguin).  
Marx, K., *The German ideology* (Lawrence and Wishart).  
Southall, A., *Alur Society* (O.U.P.).  
Evans-Pritchard, E. E., *Divine kingship of the Shilluk of the Nilotic Sudan* (C.U.P.).

### AA12 Anthropology IIB.

#### RELIGION, RITUAL AND COMMUNICATION: THE ANTHROPOLOGY OF SYMBOLIC ACTION:

This course examines the processes by means of which social action becomes meaningful through patterns of communication and symbolic transformations. Three approaches to the problem of meaning and the nature of signs/symbols form the basis for the critical assessment of anthropological studies of symbolism. The first approach focuses on meaning in relation to the symbolic and instrumental functions of ritual systems in small-scale societies of Africa, Asia and



New Guinea. In the second approach, meaning is analysed as the logical relations between signs in a communication system. In addition to language, such communicative forms as art, myth and legend of both Western and non-Western societies comprise the ethnographic material subject to this mode of structural analysis. The third approach emphasises the study of cognitive systems which underlie the use of symbols in communication. In this context studies of drinking behaviour, social deviance, ghetto English and disease will be the basis for the examination of the methods through which the cognitive orientation of participants can be understood and analysed in relation to the processes of constructing meaningful social interactions.

## Reading:

- Bateson, G., *Steps to an ecology of mind* (Chandler).  
 Douglas, M., *Natural symbols* (Penguin).  
 Giglioli, P., *Language and social context* (Penguin).  
 Levi-Strauss, C., *Structural anthropology* (Allen Lane).  
 Lessa, W. A., and Vogt, E. Z., *A reader in comparative religion* (Harper and Row).  
 Rossi, I. (ed.), *The unconscious in culture* (Blackwell).  
 Turner, V. W., *The forest of symbols* (Cornell U.P.).  
 Tyler, S. (ed.), *Cognitive anthropology* (Holt).  
 Weber, M., *The protestant ethic and the spirit of capitalism* (Allen and Unwin).

## AA22 Anthropology IIC.

## CHANGE AND CONTROL IN MODERN SOCIETIES:

The course will be divided into three sections, corresponding to terms which will consider successively the following problem areas:

(a) Coercion, belief and social control in societies undergoing transition towards industrialisation. The historical sociology of slavery in the Americas and the social structure of colonial societies will provide case materials.

(b) The transformation of peasantries and small agricultural producers through rural change and migration. Recent Western and "Third World" (especially South Asian and African) studies will be utilised.

(c) Social control in Western industrial society. Studies of deviance, mental illness, language and education in mainly Western societies will be used in an examination of processes of social control and the distribution of knowledge.

## Reading:

- Elkins, S., *Slavery* (Chicago U.P.).  
 Genovese, E. D., *The world the slaveholders made* (Allen Lane).  
 Williams, E. E., *Capitalism and slavery* (Russell and Russell).  
 Shanin, T., *Peasants and peasant society* (Penguin).  
 Epstein, A. L., *Politics in an urban African community* (Manchester U.P.).  
 Douglas, J. D., *The social meanings of suicide* (Princeton U.P.).  
 Goffman, E., *Asylums* (Penguin).

### THIRD YEAR.

Of the four third-year subjects in the Department of Anthropology, three will be given each year. They will each consist of two lectures and one tutorial a week throughout the year. Essays and tutorial assignments will constitute the major part of the assessment in each subject.

Students taking third-year subjects and planning to take the Honours course must complete any two of the three subjects offered.

It is advisable that students who are interested in eventually proceeding to Honours discuss their choice of subjects with the Chairman of the Department before enrolling.

#### AA03 Anthropology IIIA.

[May not be offered in 1979.]

##### ANTHROPOLOGY OF TRIBAL SOCIETIES:

Pre-requisite: Pass in one full course in Anthropology at second-year level.

Through the use of detailed ethnographic material (primarily from Australia and Oceania), this course will examine some of the major anthropological issues arising from studies of tribal societies. Initially attention will be directed to ideas regarding the nature and organisation of these systems. This will involve focusing on concerns such as subsistence bases, social organisation, the relationship between social organisation and productive activity, and forms of religious observance. From here the discussion will shift to centre on the subject of socio-cultural change, and in particular theories dealing with evolutionary development. Finally the impact of "colonial" expansion will be considered.

The lectures will assume a knowledge of the contents of M. Gluckman, *Politics, law and ritual in tribal society*, and M. D. Sahlins, *Tribesmen*.

##### Reading:

- Durkheim, E., *The division of labour in society* (Free Press).
- Gluckman, M., *Politics, law and ritual in tribal society* (Mentor).
- Lee, R. M., and DeVore, I., *Man the hunter* (Aldine).
- Levi-Strauss, C., *The elementary structures of kinship* (Beacon).
- Morgan, L. H., *Ancient society* (Meridian).
- Murphy, R. F., *The dialectics of social life* (Allen and Unwin).
- Sahlins, M. D., *Tribesmen* (Prentice-Hall).

#### AA13 Anthropology IIIB.

##### IDEOLOGIES AND INEQUALITY:

Pre-requisite: Pass in one full course in Anthropology at second-year level.

This course will examine the relationship between ideologies and social inequalities. A major question will be the nature of various social hierarchies and their economic and political foundations. Attention will also be paid to the role of religion as a basis for protest and economic change, and as a source of ideological legitimation, and economic continuities. These will be surveyed in a variety of historical and contemporary contexts, with special attention to peasant societies. A major component of the course will be devoted to the caste systems of South Asia.

##### Reading:

- Aron, R., *Main currents of European sociological thought*, 2 vols. (Penguin).
- Bailey, F. G., *Caste and the economic frontier* (Manchester U.P.).
- Bloch, M., *Feudal society*, 2 vols. (Chicago U.P.).
- Dumont, L., *Homo hierarchicus* (Paladin).
- Geertz, C., *Peddlers and princes* (Chicago U.P.).
- Gerth, H., and Mills, C. W., *From Max Weber* (Routledge).
- Heller, C. S. (ed.), *Structured social inequality* (Macmillan).
- Marx, K., and Engels, F., *Selected works* (Progress Publishers).
- Marx, K., and Engels, F., *The German ideology* (Lawrence and Wishart).
- Moore, B., *The social origins of dictatorship and democracy* (Penguin).
- Scott, J. C., *Moral economy of the peasant* (Yale U.P.).
- Shanin, T., *Peasants and peasant societies* (Penguin).
- Weber, M., *The protestant ethic and the spirit of capitalism* (Scribner).
- Weber, M., *Theory of social and economic organisation* (Free Pr.).
- Wolf, E., *Peasants* (Prentice Hall).

## AA23 Anthropology IIIC.

## SOCIAL ORGANISATION AND CULTURE:

Pre-requisite: Pass in one full course in Anthropology at second-year level.

The first part of this course takes up the problem of attributing rationality to individuals and to "structures" as these have been described and analysed by sociologists. In part, this involves the distinction that can be drawn between a scientific observer's criticism of rationality and that which counts as competent social action by people within a social situation. The problem will be examined through studies of work, education, ritual and other activity settings.

This topic will lead out to studies in the sociology of knowledge and "mass culture" which seek to typify, and explain, modes of thought characterising both specialist and "everyday" knowledge. Science, advertising and public entertainment will be topics examined in some depth.

The final section of the course will be concerned with recent anthropological approaches to the study of myths, rites, jokes and accusations.

## Reading:

- Berger, P. L., and Luckman, T., *The social construction of reality*. (Penguin).  
 Curtis, J. E., and Petras, J. W. (eds.), *The sociology of knowledge: a reader* (Duckworth).  
 Emmet, D., and MacIntyre, A., *Sociological theory and philosophical analysis* (Macmillan).  
 Giglioli, P., *Language and social context* (Penguin).  
 Gouldner, A., *For sociology* (Penguin).  
 Wright, G. H. von, *Explanation and understanding* (R.K.P.).  
 Wilson, B. R. (ed.), *Rationality* (Blackwell).

## AA33 Anthropology IIID.

## CITIES AND TOWNS; CONTEXT, STRUCTURE AND CHANGE:

This course will be primarily concerned with the sociological character of the urban phenomenon in modern non-Western contexts. In the final term, however, aspects of the urban process in modern Western settings; America, Europe and Australia, will be examined.

The course will start with a consideration of the historical emergence of the city. Specific attention will be focused on the "pre-industrial" city in ancient and near contemporary contexts. The works of such scholars concerned with this problem, Coulanges, Hocart, Weber, Childe and Sorokin, will be examined in relation to material drawn from Europe, the Middle East, Africa and Asia. From this the focus will then shift to modern Third World settings. The problems to be discussed will be aspects concerned with the relation of the city to its wider national and international environment, urban/rural interrelations, the causes of urban growth and migration. This will lead into an examination of sociological and anthropological theories for the study of urban behaviour, and styles of urban life. Some of the specific problems to be examined in relation to sociological monographs will be forms of urban socio-economic differentiation, urban elites, class, caste and ethnicity; the structure of urban social and political movements and protest; the relation of the State to emergent urban forms. An overall objective of the course will be to arrive at synthesis of approaches and perspectives developed in the study of urban life in modern Western and non-Western contexts.

## Reading:

- Banton, M. P., *Political systems and the distribution of power* (Tavistock).  
 Banton, M. P., *The social anthropology of complex societies* (Tavistock).  
 Beteille, A., *Caste, class and power; changing patterns of stratification in a Tanjore village* (Campus).  
 Cohen, A. (ed.), *Urban ethnicity* (Tavistock).  
 Epstein, A. L., *Politics in an urban African community* (Manchester U.P.).

- Geertz, C., *Agricultural involution* (Calif. U.P.).  
Geertz, C., *Peddlers and princes* (Chicago U.P.).  
Grillo, R. D., *African railwaymen* (C.U.P.).  
Kapferer, B., *Strategy and transaction in an African factory* (Manchester U.P.).  
Lloyd, P. C., *Power and independence: urban Africans' perceptions of social inequality* (Routledge).  
Mitchell, J. C., *Social networks in urban situations* (Manchester U.P.).  
Pons, V., *Stanleyville* (O.U.P.).  
Shanin, T., *Peasants and peasant societies* (Penguin).  
Swartz, M. J., *Local-level politics* (Aldine).  
Vincent, J., *African elite: the big men of a small town* (Columbia U.P.).  
Wertheim, W., *Indonesian society in transition* (Van Hoeve).  
Weber, M., *The city* (Heinemann).  
Singer, M., *When a great tradition modernizes* (Praeger).  
Warner, L., *The living and the dead* (Yale U.P.).

#### HONOURS DEGREE.

##### AA99 Anthropology for the Honours degree of B.A.

A student who wishes to enrol for the Honours degree in Anthropology must have completed satisfactorily: (i) AA01 Anthropology I; (ii) two full subjects in Anthropology at second-year level, or their equivalent; and any two subjects in Anthropology given in the third year.

Honours in Anthropology is a full year's course, involving weekly seminars, essays, and a final dissertation. Students wishing to take Honours should consult the Chairman of the Department during their third-year's work. Admission to the program is subject to approval by the Chairman.

CENTRE FOR  
ASIAN STUDIES.

The Centre for Asian Studies offers, for the Ordinary degree of Bachelor of Arts, subjects in modern Chinese language and civilisation and modern Japanese language and civilisation, and, subject to the availability of staff, the interdisciplinary subjects, AQ42 Asian Civilisations: Past and Present II and AQ43 The Development of Asia III. The subject AQ12 Asian Development II may not be offered in 1979 and subsequent years.

## INDONESIAN LANGUAGE.

Prospective students of Indonesian language should note that Flinders University teaches 37150 Indonesian I and 37250 Indonesian II. Adelaide University students may seek enrolment in these subjects as visiting students. (For details see Calendar of Flinders University.) If numbers warrant, lectures and tutorials will be held on the University of Adelaide campus.

## CHINESE LANGUAGE.

Students should note that because of restrictions in staffing, first, second and third year courses in Chinese cannot all be offered in each year. Instead a cyclical pattern of teaching has been adopted so that any student enrolling in Chinese I has the prospect of studying up to third year level in successive years. The cyclical pattern until the year 1984 is as follows (X indicates that a course is NOT offered).

Subject	Year					
	1979	1980	1981	1982	1983	1984
Chinese I	X			X		
Chinese II		X			X	
Chinese III			X			X

## AQ01 Chinese I.

No previous knowledge of Chinese is required.

Five hours of class work a week plus a minimum of two hours supervised work in the language laboratory.

The course consists of the study of the basic grammar, vocabulary and structures of Modern Standard Chinese (Mandarin) with special emphasis on the style and usage found in China today. The students will learn approximately 650 basic Chinese characters and associated compounds concentrating on vocabulary which relates to contemporary China. In addition, there will be a series of occasional lectures on modern Chinese culture and society.

This course is usually taught to two classes, each working in parallel; one class meets at 9 a.m. and the other class in the afternoon. The timing for the latter class is scheduled for 3.15 p.m. but if there is sufficient demand from people for whom that time is inconvenient, a later time can be arranged.

## Text-books:

*Elementary Chinese*, parts 1 and 2 (Commercial Press, Peking).

This course will be supplemented and expanded by materials prepared by the lecturers.

## Recommended reference books:

Newnham, R., *About Chinese* (Pelican).

Karlgren, B., *Sound and symbol in Chinese* (Hong Kong U.P.).

Kratochvil, P., *The Chinese language today* (Hutchinson University Library).

Recommended reference books on Modern China:

- Tregear, T. R., *A geography of China* (London U.P.).  
Schram, S. R., *Mao Tse-tung* (Pelican).  
Mao Tse-tung, *Selected works* (Foreign Languages Press, Peking).  
Harrison, J. P., *The long march to power: a history of the CCP 1921-1972* (Macmillan).  
Snow, E., *Red star over China* (Penguin).

Dictionary:

- Xinhua Zidian* (Commercial Press, Peking).

### AQ02 Chinese II.

Pre-requisite subject: AQ01 Chinese I at Division I standard or higher, or proof of attainment of an equivalent standard.

There will be five hours of class work a week plus a minimum of one hour supervised work in the language laboratory and one tutorial hour.

The course consists of tuition in the speaking, writing and reading of Modern Standard Chinese. The main emphasis is on building up vocabulary and reading experience as a basis for studying contemporary Chinese society and culture. It is anticipated that by the end of the year the student will know between 1,500 and 2,000 Chinese characters.

Text-books:

- Modern Chinese reader*, 2 parts (Commercial Press, Peking).  
These books will be supplemented by materials supplied by the lecturers.

Recommended reference books:

- Kratochvil, P., *The Chinese language today* (Hutchinson University Library).  
Chao Y-R, *A grammar of spoken Chinese* (California U.P.).

Dictionaries:

- Xinhua Zidian* (Commercial Press, Peking).  
*Jianhuazi Zongbiao Jianzi* (Language Reform Press, Peking).  
*Han-Ying Shishi Yongyu Cihui* (Commercial Press, Peking).

### AQ03 Chinese III.

Pre-requisite: AQ02 Chinese II at Division I standard or higher, or proof of the attainment of a similar standard, and a pass in one of the following courses: AH31 History IB, the Politics option: P704 Third World Political Economy or P709 International Politics or P705 Chinese Politics, AQ12 Asian Development II, AQ42 Asian Civilisations: Past and Present II, AQ43 The Development of Asia III, the History option: H702 The Rise of China and Japan: Conflict and Crisis in Modern East Asia (formerly Modern and Contemporary History of China and Japan), AE92 Linguistics II.

In special cases, alternative pre-requisites may be accepted by the Chairman of the Centre for Asian Studies after consultation with the language teachers.

The course aims to consolidate and extend the language skills already attained by means of further oral, reading, writing and translation practice. The emphasis will be on the application of the students' language training to the study of Chinese source materials reflecting contemporary Chinese culture and society. It is envisaged that by the end of the course, the students will have consolidated their linguistic skills, gained experience of reading modern literary and journalistic styles, and will be familiar with the historical and social background of the texts studied. It is proposed to assess the historical and literary aspects of the course by essay work.

The course will fall into two parts: intensive study of selected contemporary literary writings and extensive reading of documentary and other materials related to contemporary Chinese society. Texts studied in the intensive course will include selections from the short stories and essays by Lu Xun, China's leading literary figure in the 20th century, selections from two highly influential stylists Ye Sheng-tao and Zhu Zi-qing, and others.

Texts studied in the extensive reading course include short selections from the following and other materials as prescribed by the lecturer concerned:

Mao Ze-dong, *Qingnian Yundong de Fangxiang (The orientation of the youth movement)* (1939).

*Guanyu Zhengque Chuli Renmin Neibu Maodun de Wenti (On the correct handling of contradictions among the people)* (1957).

*Lun Shi Da Guanxi (On the ten great relationships)* (1956).

Hong Yu, *Lishi shi Luoxuanshi fazhan de (History develops in a spiral fashion)* from *Hongqi* No. 10, 1974.

*Dang de Jichu Zhishi (Basic party knowledge)* (Shanghai, 1973).

*Zhongguo Gongchandang Zhangcheng (Constitution of the Chinese Communist Party)* 1973 and 1977 versions.

Deng Xiao-ping, *Zai Lian Da Tebie Huiyi shang de Fayan (Speech at the special session of the U.N. General Assembly)* April 1974.

Texts studied in the intensive course include selections from the following and other materials as prescribed by the lecturer concerned:

Mao Ze-dong, *Zai Yanan Wenyi Zuotanhui shang de Jianghua (Talks on literature and art at the Yanan forum)*.

Chen Du-xiu, *Ben Zhi Zu'an zhi Dabian Shu (In defence of la jeunesse)*.

Hu Shi, *Jianshe de Wenxue Geming Lun (On constructive literary revolution)*.

Lu Xun, *Guxiang (My home town)*.

*Xingfu de Jiating (A happy family)*.

Modern Peking Opera, *Zhi Qu Weihu Shan (Taking the Tiger Mountain by strategy)*.

A fuller list of prescribed texts can be obtained from the Centre for Asian Studies.

The course will also introduce the regular style of Chinese characters alongside the simplified form and the Wade-Giles system of romanisation.

Reference books:

\**Xinhua Zidian* (Peking).

*Chinese English dictionary of modern Communist usage* (U.S. National Technical Information Service).

\**Jianhuazi Zongbiao Jianzi* (Peking).

\**Han-Ying Shishi Yongyu Cihui* (Peking).

\**Mathews Chinese English dictionary*.

Chi, Wen-Shun, *Readings in Chinese Communist ideology* (Calif. U.P.).

Chou, Tse-tsung, *The May fourth movement: intellectual revolution in modern China* (Harvard U.P.).

Hsia, C. T., *A history of modern Chinese fiction* (Yale U.P.).

Snow, E., *Living China, modern Chinese short stories* (Reynal and Hitchcock).

Snow, E., *The long revolution* (Random House).

Snow, H. F., *The modern literary movement*, by Nym Wales (pseud.) (Appendix to E. Snow: *Living China*).

\*Brugger, B., *Contemporary China* (Croom Helm).

Hinton, W., *Turning point in China* (Monthly Review Press).

Robinson, J., *The cultural revolution in China* (Penguin).

Harrison, J. P., *The long march to power: a history of the Chinese Communist Party, 1921-72* (Macmillan).

Schurmann, H. F., *Ideology and organization in Communist China* (Calif. U.P.).

MacFarquhar, R., *The origins of the cultural revolution*, vol. 1 (O.U.P.).

Daubier, J., *A history of the Chinese cultural revolution* (Random House).

\* Indicates books which must be bought.

Other materials will be supplied by lecturers.

### JAPANESE LANGUAGE.

Students should note that because of restrictions in staffing, first, second and third year courses in Japanese cannot all be offered in each year. Instead a cyclical pattern of teaching has been adopted so that any student enrolling in Japanese I has the prospect of studying up to third year level in successive years. The cyclical pattern until the year 1984 is as follows (X indicates that a course is NOT offered).

Subject	Year					
	1979	1980	1981	1982	1983	1984
Japanese I and IA			X			X
Japanese II				X		
Japanese III					X	

#### AQ21 Japanese I.

There is no pre-requisite for AQ21 Japanese I, but a knowledge of Japanese to a satisfactory standard in the matriculation examination or similar equivalent qualification is assumed.

Five hours of class work a week plus language laboratory work.

The emphasis in this course will in the first instance be on the reinforcement of the skills of speaking and aural comprehension. During the course this will be combined with increased attention to the reading of contemporary texts.

Text-books:

(Prescribed):

*Intensive course in Japanese*, 2 vols.: Dialogues and drills II, Notes (Japanese Language Promotion Centre).

Hibbett, H. S., and Itasaka, G., *Modern Japanese: a basic reader* (Harvard).

Dictionaries:

(Recommended):

Nelson, *Japanese-English character dictionary* (Tuttle).

*Shin Sutandādo Wa-Ei Jiten* (Taishūkan).

#### AQ31 Japanese IA.

No previous knowledge of Japanese is required.

Five hours of class work a week plus language laboratory work.

This introductory course is designed to achieve a solid foundation in the basic grammar and vocabulary of modern spoken Japanese, together with a basic knowledge of the writing system. Emphasis will be on the intensive practice of oral skills through class lectures, practical tutorials and language laboratory sessions.

Text-book:

*Intensive course in Japanese*, 3 vols.: Dialogues and drills I, Dialogues and drills II, Notes (Japanese Language Promotion Centre).



## AQ22 Japanese II.

Pre-requisite: AQ21 Japanese I or AQ31 Japanese IA at Division I standard or higher, or equivalent.

Five hours of class work a week plus a minimum of two hours of supervised language laboratory work.

This intermediate course continues instruction and drill in the speaking, understanding, writing, and reading of modern Japanese. Throughout the course mastery of the conversational skills will be reinforced through oral-aural practice, and at the same time increased emphasis will be placed on reading contemporary texts.

Text-books:

(Prescribed):

*Intensive course in Japanese*, 2 vols.: Dialogues and drills II, Notes (Japanese Language Promotion Centre).

Hibbett, H. S., and Itasaka, G., *Modern Japanese: a basic reader* (Harvard), with supplementary grammar notes and exercises which will be provided by the instructor.

Dictionaries:

(Recommended):

Nelson, *Japanese-English character dictionary* (Tuttle).

*Shin Sutandādo Wa-Ei Jiten* (Taishūkan).

## AQ23 Japanese III.

Pre-requisite: AQ22 Japanese II or AQ32 Japanese IIA (before 1977) at Division I standard or higher, or equivalent, and a pass in one of the following courses: AH31 History IB, the Politics option: P704 Third World Political Economy or P709 International Politics, AQ12 Asian Development II, AQ42 Asian Civilisations: Past and Present II, AQ43 The Development of Asia III, the History option: H702 The Rise of China and Japan: Conflict and Crisis in Modern East Asia (formerly Modern and Contemporary History of China and Japan), AE92 Linguistics II.

In special cases, alternative pre-requisites may be accepted by the Chairman of the Centre for Asian Studies after consultation with the language teachers.

Six hours of lectures and tutorials a week, with a minimum of two hours language laboratory work.

This advanced course is a continuation of the course in modern Japanese for students who have reached a satisfactory intermediate level. Emphasis will be placed on widening students' experience of the grammatical structures, vocabulary and styles of the language and of its social and cultural background through work with original Japanese materials from a variety of modern sources. These will include selections from leading modern Japanese authors, and readings in the area of social and linguistic science; there will also be readings from Japanese newspapers. A short translation project in the area of students' interests may be required during third term.

Text-books:

(Prescribed):

Hibbett, H. S., and Itasaka, G., *Modern Japanese: a basic reader* (Harvard).

Additional materials will be provided throughout the year.

(Recommended):

Alfonso, A., *Japanese language patterns* (Sophia University).

Dictionaries:

Nelson, A. N., *Japanese-English character dictionary* (Tuttle).

*Kenkyūsha's new Japanese-English dictionary* (Kenkyūsha).

## ASIAN DEVELOPMENT.

### AQ12 Asian Development II.

(May not be offered in 1979 and subsequent years.)

Pre-requisites: Any two first-year subjects (or the equivalent in half-subjects) in the departments of Anthropology, Economics, Geography, History, Politics, or the Centre for Asian Studies.

AQ12 Asian Development II is an interdisciplinary subject surveying the historical background to, and nature of contemporary political and economic institutions and issues in the three major regions of Asia: East, South and South-East Asia. It will be conducted as two lectures and one tutorial a week throughout the year. The course does not presume any previous work on Asia.

#### Introductory reading:

- Stein, L., *Economic realities in poor countries* (Angus and Robertson).  
Myint, H., *South East Asia's economy* (Penguin).  
Panikkar, K. M., *Asia and Western dominance* (Methuen University Paperbacks).

#### Reference books:

- Little, I. M. D., Scitovsky, T., and Scott, M. F., *Industry and trade in some developing countries* (O.U.P.).  
Myrdal, G., *Asian drama* (Penguin or Pantheon, 3 volumes. A one volume condensed version is also available.).  
Wheelwright, E. L., and McFarlane, B. J., *The Chinese road to socialism* (Monthly Review).  
(*The*) *Crisis of Indian planning*, ed. P. Streeten and M. Lipton (O.U.P.).  
*In search of South-East Asia: a modern history*, ed. D. J. Steinberg and others (Praeger).  
Friedman, E., and Seldon, M., *America's Asia* (Random).  
Caldwell, M., *Indonesia* (O.U.P.).  
Geertz, C., *Agricultural involution* (California U.P.).  
Moore, B., *Social origins of democracy and dictatorship* (Teregrine).  
Haliday, J., *Political history of Japanese capitalism* (Pantheon).

Other references will be given at the beginning of first term.

### AQ42 Asian Civilisations: Past and Present II.

(Offered subject to the availability of staff.)

Pre-requisites: Any first-year subject (or the equivalent in half-subjects) in the departments of Anthropology, Economics, Geography, History, Politics or the Centre for Asian Studies, or other appropriate subject approved by the Chairman of the Centre for Asian Studies. However, students are strongly recommended to take as one of their first-year subjects AH31 History IB (Old Societies and New States).

The course will be conducted as two lectures and one tutorial a week throughout the year and will include films, slides and other exhibits.

AQ42 Asian Civilisations: Past and Present II is an interdisciplinary course which will first explore the cultural and social roots from which Asian societies today have sprung and second, how these societies have sustained, or altered, the legacy of the past within the context of rapid change in the present. Through an examination of Asian religions, philosophies, arts, sciences and various systems of social, economic and political organisation, the course will examine how Asian societies have responded to such universal problems as man's relationship to nature and the cosmos and man's relationship to man in ways that contrast with the experience of Western civilisations.

In particular the course examines the similarities and contrasts between Asian countries in respect of the following key areas:

- (i) the philosophical, cultural and scientific concepts which have been central to traditional Asian civilisation and how those concepts have influenced social structures;
- (ii) the response of Asian societies to their environment in terms of economic growth, social organisation and technological development, and the influence of material factors on cultural concepts;
- (iii) those aspects of human relationships both within the family and in society at large on which Asian peoples have placed value and emphasis.

Introductory reading:

- Butwell, R., *Southeast Asia—a political introduction* (Praeger).  
 Benedict, R., *Chrysanthemum and the sword* (Routledge and Kegan Paul, paperback).  
 Elvin, M., *The pattern of the Chinese past* (Eyre Methuen).  
 Basham, A. L., *The wonder that was India* (Grove).

Reference books:

- Scalapino, R. A. (ed.), *The communist revolution in Asia—tactics, goals and achievements* (Prentice Hall).  
 Sansom, G., *Japan: A short cultural history* (Appleton-Century Crofts).  
 Steinberg, D. J., *In search of Southeast Asia: a modern history* (Praeger).  
 Yang, C. K., *Chinese Communist society: The family and the village* (M.I.T. Press).  
 Thapar, R. and Spear, P., *A history of India* (Pelican).  
 McNeill, *The rise of the West* (Chicago).

Additional references will be prescribed by the lecturers.

### AQ43 The Development of Asia III.

(Offered subject to the availability of staff.)

Pre-requisite: AQ42 Asian Civilisations: Past and Present II.

AQ43 The Development of Asia III is an interdisciplinary subject surveying the current economic and political problems in Asia's development process. It will be conducted as two lectures and one tutorial a week throughout the year.

Introductory reading:

- Stain, L., *Economic realities in poor countries* (Angus and Robertson).  
 Myint, H., *South East Asia's economy* (Penguin).  
 Steinbert and others (eds.), *In search of South-East Asia: a modern history* (Praeger).

Reference books:

- Little, Scitovsky and Scott, *Industry and trade in some developing countries* (O.U.P.).  
 Myrdal, G., *Asian drama* (Penguin or Pantheon, 3 vols. A one volume condensed version is also available).  
 Wheelwright, E. L., and McFarlane, B. J., *The Chinese road to socialism* (Monthly Review).  
 Streecon, P., and Lipton, M. (eds.), *The crisis of Indian planning* (O.U.P.).  
 Friedman, E., and Seldon, M., *America's Asia* (Random).  
 Caldwell, M., *Indonesia* (O.U.P.).  
 Goertz, C., *Agricultural involution* (California U.P.).

### OTHER COURSES RELATED TO ASIAN REGIONS.

Attention is drawn to the many courses, related to Asian regions, which are offered in the Departments of Anthropology, Economics, Geography, History and Politics, and which may profitably be combined with language study.

## CLASSICS.

The editions of Greek and Latin texts mentioned below are not prescribed, but are recommended for the use of students.

Parts of the syllabuses may be examined separately during the year.

Before commencing Honours work in any subject, a student must have qualified for the Ordinary degree of Bachelor of Arts.

### LATIN.

There are seven subjects in Latin for the Ordinary degree of Bachelor of Arts: AC41 Latin IA, AC01 Latin I, AC42 Latin IIA, AC02 Latin II, AC57 Latin IIS, AC03 Latin III and AC67 Latin IIIS. Except with the permission of the Faculty of Arts, no student proceeding to a degree may take the subject AC42 Latin IIA until he has passed in AC41 Latin IA, or the subject AC02 Latin II until he has passed in AC01 Latin I, or the subject AC03 Latin III until he has passed in either AC42 Latin IIA or AC02 Latin II. No subject is pre-requisite to AC01 Latin I, but the standard of Latin at the Matriculation Examination is assumed, and, in general, students are not advised to attempt the subject unless they have reached Grade C or higher in that examination.

Every student taking a subject in Latin should have a Latin-English lexicon.

#### AC41 Latin IA.

This subject aims to give students with no previous knowledge of the language a reading knowledge of Latin in one year. Students with some knowledge of the language will be advised by the Department concerning the level at which the language should be taken. The subject is countable as one of the required nine subjects towards the Ordinary degree. It occupies five hours of formal tuition a week. The subject is designed as a foundation course, to equip students to proceed at least to AC42 Latin IIA.

The following book will be used:

*Teach yourself Latin* (English Universities Press).

#### AC01 Latin I.

The subject is divided into two parts:

(a) The study of three works of Latin literature:

Virgil, *Aeneid VI*, ed. F. Fletcher (O.U.P.).

Horace, *Odes I*, ed. Gould and Whiteley (Macmillan).

Ovid, *Amores I*, ed. J. A. Barsby (O.U.P.).

Each work is the subject of two weekly lectures in one term. The works may be examined separately during the year; passages from them are set for translation, short passages are set for comment, and an essay may also be set.

(b) A course to improve the students' knowledge of the language, and to widen their reading. The material that students will use will be issued during the year. There will be weekly written work and a weekly tutorial.

#### AC57 Latin IIS.

This subject is available only to those who have been accepted as Honours students in Classical Studies. It aims to give students with no previous knowledge of the language a reading knowledge of Latin in one year. It occupies four hours of formal tuition a week.

The books used are as set out in the syllabus for AC41 Latin IA.

#### AC42 Latin IIA.

Pre-requisite subject: AC41 Latin IA.

The syllabus is as set out for AC01 Latin I, with the addition of:

Ovid, *Metamorphoses I*, ed. A. G. Lee (C.U.P.), which is to be read before the start of the first term.

Students intending to enrol for the course should consult the Chairman of the Department as early as possible in January.

## AC02 Latin II.

The subject is divided into two parts:

- (a) The study of four works of Latin literature:  
Ovid, *Metamorphoses I*, ed. A. G. Lee (C.U.P.).  
Juvenal, *Satires*, ed. J. D. Duff (C.U.P.).  
Tacitus, *Annals I*, ed. N. P. Miller (Methuen).  
Lucretius III, ed. E. J. Kenney (C.U.P.).

The works may be examined separately during the year.

(b) A course in the practical criticism of selected passages and in Medieval Latin; there will also be exercises in unseen translation. The material will be issued during the year. There will be weekly tutorials throughout the year.

Students intending to enrol for the course should consult the Chairman of the Department as early as possible in January to discuss vacation reading. It is intended that one of the set texts in (a) will have been read before the start of the first term.

## AC67 Latin IIIS.

Pre-requisite subject: AC57 Latin IIS.

This subject is available only to those who have been accepted as Honours students in Classical Studies.

The syllabus is as set out for AC42 Latin IIA.

## AC03 Latin III.

The subject is divided into two parts:

- (a) The study of seven works of Latin literature:  
Martial and Pliny, ed. E. C. Kennedy (C.U.P.).  
Livy XXII, ed. G. G. Loane (Blackie)  
Virgil, *Aeneid II*, ed. R. G. Austin (O.U.P.), in addition to the works prescribed for AC02 Latin II. The works may be examined separately during the year.

(b) A course in the practical criticism of selected passages and in Medieval Latin; there will also be exercises in unseen translation. The material will be issued during the year. There will be weekly tutorials throughout the year.

Students intending to enrol for the course should consult the Chairman of the Department as early as possible in January to discuss vacation reading. It is intended that one of the set texts in (a) will have been read before the start of the first term.

## HONOURS DEGREE.

## AC89 Latin for the Honours degree of B.A.

Pre-requisite subjects: AC01 Latin I or AC41 Latin IA, AC02 Latin II or AC42 Latin IIA, AC03 Latin III; AC11 Greek I or AC78 Greek IIIS.

The formal work of the Honours year consists mainly of weekly essays and tutorials. Essays in one term are devoted to literature, and in the other two to history and society. Unseen translation is also practised.

The examination consists of the following three-hour papers:

- (a) Passages for translation into English from Latin prose authors.  
(b) Passages for translation into English from Latin poets.  
(c) Latin literature.  
(d) Roman history: the Age of Augustus.  
(e) Roman society, thought and religion.

A wide choice of topics will be given in papers (c), (d) and (e).

## GREEK.

There are seven subjects in Greek for the Ordinary degree of Bachelor of Arts: AC71 Greek IA, AC11 Greek I, AC82 Greek IIA, AC12 Greek II, AC77 Greek IIS, AC13 Greek III and AC78 Greek IIIS. Except with the permission of the Faculty of Arts, no student proceeding to a degree may take the subject AC82 Greek IIA until he has passed in AC71 Greek IA, or the subject AC12 Greek II until he has passed in AC11 Greek I, or the subject AC13 Greek III until he has passed in AC82 Greek IIA or AC12 Greek II. No subject is pre-requisite to AC11 Greek I, but in general, students are advised to have obtained the standard of Greek at a Matriculation examination.

Every student taking a subject in Greek should have a Greek-English lexicon.

### AC71 Greek IA.

This subject aims to give students with no previous knowledge of the language a reading knowledge of classical Greek in one year. Students with some knowledge of the language will be advised by the Department concerning the level at which the language should be taken. The subject is countable as one of the required nine subjects towards the Ordinary degree. It occupies five hours of formal tuition a week.

The subject is designed as a foundation course, and the aim is to enable students to proceed at least to AC82 Greek IIA in a subsequent year.

The following books will be used:

- Walters, W. C. F., and Conway, R. S., *Deigma* (Murray).  
McKay, K. L., *Croesus of Lydia* (A.N.U. Press).

### AC11 Greek I.

The subject is divided into two parts:

- (a) The study of three works of Greek literature:  
Homer, *Odyssey IX*, in *Odyssey I-XII*, ed. W. B. Stanford (Macmillan).  
Herodotus *II*, ed. W. G. Waddell (Methuen).  
Euripides, *Medea*, ed. A. Elliott (O.U.P.).

The works may be examined separately during the year: passages from them are set for translation, short passages are set for comment, and an essay may be set.

(b) A course to improve the students' knowledge of the language, and to widen their reading. The material that students will use will be issued during the year. It involves weekly written work and a weekly tutorial.

### AC77 Greek IIS.

This subject is available only to those who have been accepted as Honours students in Classical Studies, or Latin. It aims to give students with no previous knowledge of the language a reading knowledge of classical Greek in one year. It occupies four hours of formal tuition a week.

The books used are as set out in the syllabus for AC71 Greek IA.

### AC82 Greek IIA.

Pre-requisite AC71 Greek IA.

The syllabus is as set out for AC11 Greek I, with the addition of:

- Xenophon, *Memorabilia I*, ed. G. M. Edwards (C.U.P.), which is to be read before the start of the first term.

Students intending to enrol for the course should consult the Chairman of the Department as early as possible in January.

## AC12 Greek II.

The subject is divided into two parts:

- (a) The study of four works of Greek literature:

Homer, *Iliad I*, in *A commentary on Homer's Iliad I-VI*, ed. M. M. Willcock (Macmillan).

*Thucydides VII*, ed. K. J. Dover (O.U.P.).

Aeschylus, *Agamemnon*, eds. J. D. Denniston and D. L. Page (O.U.P.).

Aristophanes, *Clouds*, ed. K. J. Dover (O.U.P.).

The works may be examined separately during the year.

- (b) Unprepared translation and the study of a literary genre; for 1979—Drama. There will be weekly tutorials and weekly written work.

Students intending to enrol for the course should consult the Chairman of the Department as early as possible in January to discuss vacation reading. It is intended that one of the set texts in (a) will have been read before the start of the first term.

## AC78 Greek IIIS.

Pre-requisite subject: AC77 Greek IIS.

This subject is available only to those who have been accepted as Honours students in Classical Studies or Latin.

The syllabus is as set out for AC82 Greek IIA.

## AC13 Greek III.

The subject is divided into two parts:

- (a) The study of seven works of Greek literature:

Homer, *Iliad XXII*, in *Iliad XIII-XXIV*, eds. W. Leaf and M. A. Bayfield (Macmillan).

Euripides, *Helen*, ed. A. M. Dale (O.U.P.).

Attic Orators, ed. R. C. Jebb (Macmillan), in addition to the works prescribed for AC12 Greek II.

The works may be examined separately during the year.

- (b) Unprepared translation and the study of a literary genre; for 1979—Drama. There will be weekly tutorials and weekly written work.

Students intending to enrol for the course should consult the Chairman of the Department as early as possible in January to discuss vacation reading. It is intended that one of the set texts in (a) will have been read before the start of the first term.

## HONOURS DEGREE.

## AC99 Classics for the Honours degree of B.A.

Pre-requisite subjects: AC01 Latin I, AC02 Latin II and AC03 Latin III; AC11 Greek I, AC12 Greek II and AC13 Greek III.

The formal work of the Honours year consists mainly of weekly essays and tutorials. Essays in one term are devoted to literature, and in the other two to history and society. Unseen translation is also practised.

The examination consists of the following three-hour papers:

- (a) Passages for translation into English from Greek prose authors and poets.
- (b) Passages for translation into English from Latin prose authors and poets.
- (c) Greek and Latin literature.
- (d) Greek and Roman history: Imperial Athens, and the Age of Augustus.
- (e) Greek and Roman society, thought and religion.

A wide choice of topics will be given in papers (c), (d) and (e). In each paper candidates must answer questions from both the Greek and the Roman sections.

### CLASSICAL STUDIES.

There are three subjects in Classical Studies for the Ordinary degree of Bachelor of Arts: AC31 Classical Studies I, AC32 Classical Studies II and AC33 Classical Studies III. Except with the permission of the Faculty of Arts, no student proceeding to a degree may take the subject AC32 Classical Studies II until he has passed in AC31 Classical Studies I, or the subject AC33 Classical Studies III until he has passed *either* in AC32 Classical Studies II *or* both AC31 Classical Studies I and AC72 Ancient History II. No subject is pre-requisite to AC31 Classical Studies I.

In these subjects classical literature is studied in translation, and no knowledge of Greek or Latin is required.

AC31 Classical Studies I is available to approved students with exemption from lectures in special circumstances approved by the Chairman of the Department of Classics.

#### AC31 Classical Studies I.

The subject forms an introduction to the classical world, and is concerned with the literature of classical Greece and its social and cultural background. Greek epic is studied in first term, Greek tragedy and Herodotus in second term, and Greek drama and Apollonius in third term. As an example of the method that is followed, the treatment of the epic is as follows: there is one lecture and one tutorial a week on epic literature, combining a broader survey with detailed study of the *Iliad* and the *Odyssey*. The tutorial, for which preparatory reading is set, is connected with the lecture. A second lecture a week is given in a general course intended to provide background for the literary studies. Topics include Mycenaean civilisation, Homeric society, religion, archaeology, etc.

Parts of the syllabus may be examined separately during the year.

General books for the whole subject, which students should obtain:

Baldry, H. C., *Ancient Greek literature in its living context* (Thames and Hudson).

Bowra, C. M., *Landmarks in Greek literature* (Weidenfeld Goldback or Pelican).

#### FIRST TERM.

Introductory reading:

Beye, C. R., *The Iliad, the Odyssey and the epic tradition* (Macmillan).

Bowra, C. M., *Homer* (Duckworth).

Texts which students should obtain:

*The Iliad of Homer*, tr. R. Lattimore (Chicago U.P.).

Homer, *The Odyssey*, tr. R. Fitzgerald (Doubleday).

Hesiod, *Works and days*, in *Hesiod and Theognis*, tr. D. Wender (Penguin).

#### SECOND TERM.

Introductory reading:

Kitto, H. D. F., *Greek tragedy* (Methuen University paperback); *OR*

Lesky, A., *Greek tragedy* (Benn paperback).

Texts which students should obtain:

Aeschylus, *Oresteia*, tr. R. Fagles (Penguin or Bantam Paperbacks).

Herodotus, *The Histories*, tr. A. de Selincourt (Penguin).

Sophocles, *The Theban plays*, tr. E. F. Watling (Penguin).

Aristotle, *Poetics*, tr. T. S. Dorsch, in *Classical literary criticism* (Penguin).



## THIRD TERM.

Texts which students should obtain:

- Euripides, *Hippolytus*, in *Alcestis and other plays*, tr. P. Vellacott (Penguin).  
 Euripides, *Bacchae*, in *The Bacchae and other plays*, tr. P. Vellacott (Penguin).  
 Euripides, *Medea*, in *Medea and other plays*, tr. P. Vellacott (Penguin).  
 Aristophanes, *Frogs*, in Aristophanes, *The Frogs and other plays*, tr. D. Barrett (Penguin).  
 Aristophanes, *Birds*, in Aristophanes, *The Birds and other plays*, tr. D. Barrett and A. M. Sommerstein (Penguin).  
 Apollonius, *Voyage of Argo*, tr. E. V. Rieu (Penguin).

## AC32 Classical Studies II.

Pre-requisite subject: AC31 Classical Studies I.

In the first term students may opt to do a course in Greek art and archaeology or in Roman poetry; in the second term the options are Greek art and archaeology or Pastoral, satire and the novel; in the third term Greek art and archaeology or Comparative Literature or Narrative and didactic poetry.

The options which make up this subject may also be taken in AC33 Classical Studies III; some of these may also be taken in AC92 Greek Art and Archaeology II. No option may be counted twice; furthermore, if C701 has been counted before 1979, neither C701 nor C711 may now be counted. Options C703, C705, C715 (on Roman art and archaeology) will be available in 1980.

## FIRST TERM.

## C701 GREEK ART AND ARCHAEOLOGY (1).

This option covers Art and Archaeology from the earliest times: Ancient Egypt, Minoan Crete and Mycenae. It also deals with Greek pottery, sculpture and architecture up to about 500 B.C.

Text which students should obtain:

- Cook, R. M., *Greek art* (Penguin).

OR

## C702 ROMAN POETRY.

Introductory reading:

- Duff, J. W., *A literary history of Rome in the Golden age* (Benn paperback).

Texts which students should obtain:

- Catullus, *The poems*, tr. J. Michie (Panther).  
 Horace, *The Odes*, tr. J. Michie (Penguin).  
 Ovid, *Amores*, tr. G. Lee (Murray paperback).  
 Virgil, *The Aeneid*, in *The Eclogues, Georgics and Aeneid of Virgil*, tr. C. Day Lewis (O.U.P. paperback).

## SECOND TERM.

## C711 GREEK ART AND ARCHAEOLOGY (2).

This option continues the study of Greek art and architecture through the Classical period of 5th century Athens and surveys the Hellenistic art of the successors of Alexander the Great.

Text which students should obtain:

- Cook, R. M., *Greek art* (Penguin).

OR

C704 PASTORAL, SATIRE AND THE NOVEL.

(a) *Pastoral*.

Introductory reading:

Higginbotham, J. (ed.), *Greek and Latin literature, a comparative study* (Methuen University paperback).

Texts which students should obtain:

*The Idylls of Theokritos*, tr. B. Mills (Purdue).

Virgil's *Eclogues*, in *The Eclogues, Georgics and Aeneid of Virgil*, tr. C. Day Lewis (O.U.P. paperback).

(b) *Satire*.

Texts which students should obtain:

*Satires of Horace and Persius*, ed. N. Rudd (Penguin).

Juvenal, *The sixteen satires*, tr. P. Green (Penguin).

(c) *The Novel*.

Texts which students should obtain:

Petronius, *The satyricon and the fragments*, tr. J. P. Sullivan (Penguin).

Apuleius, *The golden ass*, tr. J. Lindsay (Indiana U.P.).

THIRD TERM.

C712 GREEK ART AND ARCHAEOLOGY (SPECIAL TOPICS).

This option involves the study of two topics: (1) Greek pottery, involving a study of a special period and also the methods of manufacturing pottery; (2) The Athenian Agora, involving a study of the archaeological dig reports.

[Note: This option may not be attempted unless at least one of C701 and C711 has been previously studied.]

Text which students should obtain:

Cook, R. M., *Greek art* (Penguin).

OR

C706 COMPARATIVE LITERATURE.

For syllabus see under "Comparative Literature" immediately after the Classics syllabuses.

OR

C710 NARRATIVE AND DIDACTIC POETRY.

[Note: This option will be subject to the availability of staff.]

Texts which students should obtain:

Hesiod, *Theogony and Works and days*, in *Hesiod and Theognis*, tr. D. Wender (Penguin).

*The Idylls of Theokritos*, tr. B. Mills (Purdue).

Ovid, *The Metamorphoses*, tr. May M. Innes (Penguin).

Lucretius, *The way things are*, tr. Rolfe Humphries (Indiana paperback).

Virgil, *The Georgics*, in *The Eclogues, Georgics and Aeneid of Virgil*, tr. C. Day Lewis (O.U.P.).

Horace, *On the art of poetry*, in *Classical literary criticism*, tr. T. S. Dorsch (Penguin).

Ovid, *The art of love*, tr. Rolfe Humphries (Indiana paperback).

AC33 Classical Studies III.

Pre-requisite subjects: *Either* AC32 Classical Studies II *or* both AC31 Classical Studies I and AC72 Ancient History II.

In the first term students may opt to do a course in Greek art and archaeology *or* in Ancient Philosophy *or* in Roman poetry. In the second term the options are Greek art and archaeology *or* Greek and Roman Historiography *or* Pastoral, satire and the novel; in the third term Greek art and archaeology *or* Comparative Literature *or* Narrative and didactic poetry *or* Later Roman Empire.

For restrictions on options which may be taken, see the introduction to AC32 Classical Studies II.

## FIRST TERM.

## C701 GREEK ART AND ARCHAEOLOGY (1).

The syllabus is as for AC32 Classical Studies II; but additional work will be set for AC33 Classical Studies III students.

OR

## C708 ANCIENT PHILOSOPHY.

The aim of the subject is to introduce some of the main ideas of the philosophers considered, and to relate the philosophies to the Greek society in which they arose and the Roman society in which some of them flourished. The main topics considered are: 1. The fifth century Athenian Enlightenment: The Sophistic Movement, including Socrates; 2. Classical Greek philosophers: Plato and Aristotle; 3. Philosophies of the Hellenistic and Roman periods: Stoicism and Epicureanism.

Texts which students should obtain:

Plato, *Last days of Socrates*, tr. H. Tredennick (Penguin).

Plato, *Republic*, tr. H. D. P. Lee (Penguin).

Aristotle, *Ethics*, tr. J. A. K. Thomson (Penguin).

Seneca, *Letters from a stoic*, tr. R. Campbell (Penguin).

Lucretius, *The way things are*, tr. Rolfe Humphries (Indiana paperback).

A reading list will be issued during the year.

Recommended preliminary reading:

Cornford, F. M., *Before and after Socrates* (C.U.P.).

OR

## C702 ROMAN POETRY.

The syllabus is as for AC32 Classical Studies II, but additional work will be set for AC33 Classical Studies III students.

## SECOND TERM.

## C711 GREEK ART AND ARCHAEOLOGY (2).

The syllabus is as for AC32 Classical Studies II, but additional work will be set for AC33 Classical Studies III students.

OR

## C707 GREEK AND ROMAN HISTORIOGRAPHY.

Texts which students should obtain:

Herodotus, *The histories*, tr. A. de Selincourt (Penguin).

Thucydides, *The Peloponnesian war*, tr. R. Warner, with an introduction by M. I. Finley (Penguin).

Sallust, *The Jugurthine war and the conspiracy of Catiline*, tr. S. A. Handford (Penguin).

Tacitus, *On imperial Rome*, tr. M. Grant (Penguin).

Usher, S., *The historians of Greece and Rome* (Methuen University paperback).

The above works will be studied as part of a course in the general development of historical writing, including the works of Polybius and Livy.

OR

## C704 PASTORAL, SATIRE AND THE NOVEL.

The syllabus is as for AC32 Classical Studies II, but additional work will be set for AC33 Classical Studies III students.

THIRD TERM.

C712 GREEK ART AND ARCHAEOLOGY (SPECIAL TOPICS).

The syllabus is as for AC32 Classical Studies II, but additional work will be set for AC33 Classical Studies III students.

OR

C706 COMPARATIVE LITERATURE.

The syllabus is as for AC32 Classical Studies II, but additional work will be set for AC33 Classical Studies III students. For syllabus see under "Comparative Literature" immediately after the Classics syllabuses.

OR

C709 LATER ROMAN EMPIRE.

This course is concerned with the Graeco-Roman world of the 4th and 5th centuries A.C. A period of decline and sterility or a period of change and dynamism? The first two weeks of the term will be spent on St. Augustine and the rest of the term on a project involving a 4,000-5,000 word essay. The art and literature of the age will be looked at, and particular consideration will be given to problems such as the relationship between paganism and Christianity, and the reasons for the disintegration of the Roman Empire in the West.

Assessment will be by tutorial papers and an essay.

Books students should obtain:

Brown, P., *The world of late antiquity* (Thames and Hudson).

St. Augustine, *Confessions* (Penguin).

Isbell, H., *The last poets of imperial Rome* (Penguin).

The following list of recommended books gives some idea of the scope of the course.

Binns, J. W. (ed.), *Latin literature of the fourth century* (Routledge).

Brown, P., *Augustine of Hippo* (Faber).

Chadwick, H., *The early church* (Pelican).

Chambers, M. (ed.), *The fall of Rome* (Holt, Rinehart and Winston).

Jones, A. H. M., *The decline of the ancient world* (Longmans).

Laistner, M. L. W., *Christianity and pagan culture in the late Roman Empire* (Cornell).

Gough, M., *The origins of Christian art* (Thames and Hudson).

Momigliano, A., *The conflict between paganism and Christianity in the fourth century* (Clarendon).

OR

C710 NARRATIVE AND DIDACTIC POETRY.

The syllabus is as for AC32 Classical Studies, but additional work will be set for AC33 Classical Studies III students.

HONOURS DEGREE.

AC79 Classical Studies for the Honours degree of B.A.

Pre-requisite subjects: AC31 Classical Studies I, either AC32 Classical Studies II and AC33 Classical Studies III or AC32 Classical Studies II and AC73 Ancient History III or AC72 Ancient History II and AC33 Classical Studies III; either AC78 Greek IIS or AC67 Latin IIS or AC03 Latin III or AC13 Greek III, or such other work as may be approved by the Chairman of the Department as being of an equivalent standard.

The work of the Honours year will consist of:

(a) The study of a Greek or Roman text in the original language: for 1979

- (i) Aeschylus, *Agamemnon*, eds. J. D. Denniston and D. L. Page (O.U.P.),  
and  
Thucydides VII, ed K. J. Dover (O.U.P.).

OR

- (ii) Horace, *Odes I-IV*, ed. T. E. Page (Macmillan).

- (b) The cultural and social development of classical Greece and Rome, to be studied under set topics: e.g. early Greek lyric and its background; the Athenian tragedians; the new learning; and so on.
- (c) A special topic, to be chosen from the field of classical studies in accordance with the interests of the candidate. It will be the subject of a long essay to be written during the year.

#### AC72 Ancient History II (Roman).

Second-year subject. Pre-requisite: AC01 Latin I or AC11 Greek I or AC31 Classical Studies I or AH01 History IA or AH31 History IB or AH41 History IC or AP01 Politics IA or AA01 Anthropology I: Not available to students with exemption from lectures. No knowledge of Latin or Greek is assumed.

Roman and Greek history will be offered in alternate years; there will accordingly be a course Ancient History III (Greek) available in 1980. It is not possible either to study Greek (or Roman) history for two years or to take two Ancient history courses in the same year.

#### ROMAN HISTORY 133 B.C.-180 A.D.

The course is concerned with the political and social history of Rome. In the first term the period 133 B.C.-27 B.C. will be studied; in the second term 27 B.C.-180 A.D.; in the third term a special topic; in 1979 the topic will be *Treason, alienation, and unrest in the Roman empire*. This topic involves the study of phenomena such as provincial and slave revolts, urban and rural violence, counter-cultures, millenialism, and aristocratic and philosophic opposition to autocrats.

Text-books which students should obtain:

- Scullard, H. H., *From the Gracchi to Nero* (Methuen); OR  
Cary, M., *History of Rome* (Macmillan).  
Plutarch, *Makers of Rome* (Penguin).  
Plutarch, *Fall of the Roman republic* (Penguin).  
Suetonius, *The twelve Caesars* (Penguin).

#### AC73 Ancient History III (Roman).

Pre-requisite: AC72 Ancient History II or AH02 History IIA or AC32 Classical Studies II or AC92 Classical Art and Archaeology II. AC73 may not be counted together with AC72 Ancient History II if AC72 was taken before 1978.

The syllabus is as for AC72 Ancient History II, but additional work will be set for AC73 students.

#### AC92 Greek Art and Archaeology II.

Pre-requisite: Any first-year subject.

The course will presuppose a general knowledge of the Greek world approximating to Pass standard at Matriculation Classical Studies or Ancient History. It consists of the options C701, C711 and C712 available for AC32 Classical Studies or AC33 Classical Studies III. but does not require AC31 Classical Studies I as a pre-requisite and does not qualify students to proceed to AC33 Classical Studies III.

For restrictions on the options available to students who are also attempting AC32 or AC33 see the notes on AC32 Classical Studies II. The syllabus is as for the options C701, C711, and C712, which are listed under AC32. In 1980 a course Roman Art and Archaeology III will be available.

## COMPARATIVE LITERATURE.

(OPTION FOR THE DEGREE OF BACHELOR OF ARTS)

### C706 COMPARATIVE LITERATURE.

This option is available in 1979 to all students of AE03 English IIIA, AF03 French III, AG02 German II, AG12 German IIA, AG03 German III, AC32 Classical Studies II and AC33 Classical Studies III. It will be taught on an interdisciplinary basis and is the equivalent of one-third of a subject. The course will be offered in term 3 and will consist of sixteen lectures and eight tutorials.

All students taking this course must enrol for Unit/Option C706 Comparative Literature in the Unit/Option section of the enrolment form.

The course is entitled *The Classical World and Political Drama*. Problems of studying literature in translation will be considered in lectures and tutorials. There will also be introductory lectures on the theory and scope of studies in Comparative Literature, based partly on S. S. Prawer, *Comparative literary studies* (Duckworth), which is required reading.

Texts which students should obtain:

Aeschylus, *Eumenides*, in *The Oresteia* (Penguin).

Euripides, *Orestes*, in *Orestes and other plays* (Penguin).

or in *Euripides IV*, in *The Complete Greek Tragedies*, ed. Grene and Lattimore (Phoenix).

Sophocles, *Antigone*, in *The Theban plays* (Penguin).

Shakespeare, *Coriolanus* (Penguin or Arden).

Jonson, *Sejanus* (New Mermaid).

Kleist, *Prince Frederick of Homburg* (Barron).

Shaw, *St. Joan* (Penguin).

Anouilh, *Antigone* (Methuen).

Sartre, *The flies*, in *Altona and other plays* (Penguin).

Brecht, *Coriolanus*, vol. 9 of *Brecht's plays* (Pantheon).

## DRAMA.

## (FOR THE DEGREE OF BACHELOR OF ARTS)

The course offered in Drama will deal with the history and development of theatre arts and the theory and practice of drama.

Assessment will be a continuous process based on the written and practical work of students throughout the year.

Students may be required to be available for part of the May or August vacations. Such requirements will be notified at least one term in advance. Students participating in performances for the public (if a course requirement) must expect additional calls on their normally free hours during the day or evening.

## UA11 Drama I.

UA11 Drama I is a subject for the Ordinary degree of Bachelor of Arts.

This subject consists of one lecture a week on the history and development of theatre arts and one tutorial and one practical session a week in the theory and practice of drama.

Students should have read the following books before the beginning of Term I. Students who have not completed such reading will be at a serious disadvantage.

Brockett, O. G., *The theatre, an introduction* (Holt, Rinehart and Winston).

Brook, P., *The empty space* (Penguin).

Styan, J. L., *The elements of drama* (C.U.P.).

Text-books (students must obtain editions prescribed):

Kinghorn, A. M., *Medieval drama* (Evans).

Allen, J. (ed.), *Three medieval plays* (Heinemann).

Esslin, M., *An anatomy of drama* (Temple Smith).

Kitto, H. D. F., *Form and meaning in drama* (Methuen).

Aeschylus, *The Oresteian trilogy* (Penguin).

Sophocles, *The Theban plays* (Penguin).

Euripides, *Medea and other plays* (Penguin).

## UA12 Drama II.

(Offered subject to availability of staff.)

UA12 Drama II is a subject for the Ordinary degree of Bachelor of Arts.

This course will offer an in-depth study of specific areas of the history and development of theatre arts and the theory and practice of drama. The approach to these areas will be through project work (six hours a week) and tutorials (one hour a week).

Text-books:

Machiavelli, N., *Mandragola* (Bobbs).

*Seventeenth century French drama*; introd. J. Guicharnaud (Modern Library).

Stanislavskii, K. S., *Creating a role* (Theatre Arts).

Stanislavskii, K. S., *An actor prepares* (Bles).

Lewis, R., *Method or Madness?* (Heinemann).

Braun, E., *Myerhold on theatre* (Methuen).

Chekhov, A., *The cherry orchard* (O.U.P.).

## ECONOMICS.

(FOR THE DEGREE OF BACHELOR OF ARTS)

It is possible for Arts students to take first- and second-year subjects and/or half-subjects in Economics which will enable them to take either one or even two Economics subjects in the third year of the course for the degree of Bachelor of Arts. Courses in Economics forming such a sequence are the half-subjects EE1G Macroeconomics IH and EE2G Microeconomics IH; EE3G Macroeconomics IIH and EE4G Microeconomics IIH; and EE03 Economics III (Arts) and/or EE73 Economic Development Studies III.

Arts students may also take the following subjects and half-subjects in Economics: In first year, EE1F Mathematics for Economists IH or EE2F Mathematical Economics IH, EC01 Accounting I, EE4F Economic History IH and EE5F Economic Institutions and Policy IH, and in second year EE22 Economic Statistics II or EE32 Economic Statistics IIA, EE6F Economic History IIH(A), and EE7F Economic History IIH(B).

The subject EE71 Social Economics I is designed for students who intend to take only a one-year course in Economics, and all such students are recommended to take it instead of the two half-subjects EE1G Macroeconomics IH and EE2G Microeconomics IH. It will not be accepted as qualifying a student to enrol in the second-year half-subjects EE3G Macroeconomics IIH and EE4G Microeconomics IIH, except that students who have passed with credit in EE71 Social Economics I may, with the approval of the Dean of the Faculty of Economics, be permitted to enrol in the two second-year half-subjects EE3G Macroeconomics IIH and EE4G Microeconomics IIH.

### EE71 Social Economics I.

This course comprises two lectures and one tutorial a week. Its scope is as follows:

The economic basis of social welfare, with special reference to the following topics: demand and supply; competition and monopoly; distribution of income and wealth; international trade; national accounting; money and banking; theory of employment; government policy in depression and inflation; an introduction to the process of development in developing countries.

#### Preliminary reading:

Heilbroner, R. L., *The making of economic society*, 5th edition (Prentice-Hall).

Mundell, R. A., *Man and economics* (McGraw-Hill).

Gill, R. T., *Economic development: past and present*, 3rd edition (Prentice-Hall).

Kasper, W., *Issues in economic policy: an introduction for Australian students* (Macmillan).

#### Text-books:

Samuelson, P. A., Hancock, K. J., and Wallace, R. H., *Economics*, Australian edition (McGraw-Hill); OR

Heilbroner, R. L., and Thurow, L. C., *The economic problem*, 4th edition (Prentice-Hall).

Reference books will be prescribed in lectures.

### SUBJECTS FOR A SEQUENCE IN ECONOMICS.

(FOR THE DEGREE OF B.A.)

#### FIRST YEAR.

(Group A subjects and half-subjects.)

EC01 Accounting I.

EE1G Macroeconomics IH.

EE1F Mathematics for Economists IH;

OR

EE2F Mathematical Economics IH.



**EE2G Microeconomics III.**  
**EE4F Economic History III.**  
**EE5F Economic Institutions and Policy III.**

For syllabuses see under the degree of B.Ec. in the Faculty of Economics.

**SECOND YEAR.**  
 (Group B subjects and half-subjects.)

**EE6F Economic History III(A).**  
**EE7F Economic History III(B).**  
**EE22 Economic Statistics II.**  
**EE32 Economic Statistics IIA.**  
**EE3G Macroeconomics III.**  
**EE4G Microeconomics III.**

For syllabuses see under the degree of B.Ec. in the Faculty of Economics.

**THIRD YEAR.**  
 (Group C subjects.)

Arts students who have passed the necessary pre-requisite subjects and half-subjects may take either or both of the subjects EE03 Economics III (Arts) and EE73 Economic Development Studies III.

**EE03 Economics III (Arts).**

EE03 Economics III (Arts) is available to candidates proceeding to the degree of Bachelor of Arts.

A candidate who wishes to present EE03 Economics III (Arts) towards the degree must take EE33 Economics IIIA and one half-subject from the following list:

**EE4H Agricultural Economics IIIH.**  
**EE8H Econometrics IIIH.**  
**EE8G Economic History IIIH.**  
**EE8F Economic Theory IIIH.**  
**EE3H Economics of Labour IIIH.**  
**EE7H Managerial Economics IIIH.**  
**EE2H Public Finance IIIH.**

For syllabuses of these half-subjects see under the degree of B.Ec. in the Faculty of Economics.

**EE73 Economic Development Studies III.**

Pre-requisite subjects: The student should have passed both EE3G Macroeconomics IIIH and EE4G Microeconomics IIIH.

EE73 Economic Development Studies III is available to candidates proceeding to the degree of Bachelor of Arts. A candidate who wishes to present EE73 Economic Development Studies III must study the subject EE13 Economic Development III and one of the half-subjects EE2H Public Finance IIIH or EE4H Agricultural Economics IIIH or EE8G Economic History IIIH, provided that a part subject may not be counted towards both EE03 Economics III (Arts) and EE73 Economic Development Studies III.

For syllabuses of this subject and these half-subjects see under the degree of B.Ec. in the Faculty of Economics.

**HONOURS DEGREE.**

**EE99 Economics for the Honours degree of B.A. and B.Ec.**

Pre-requisite subject for B.A. candidates: EE03 Economics III (Arts) (including EE33 Economics IIIA and EE8F Economic Theory IIIH).

For syllabuses see under the degree of B.Ec. in the Faculty of Economics.

## ENGLISH LANGUAGE AND LITERATURE.

AE01 English I, AE02 English II, AE03 English IIIA, AE13 English IIIB, AE87 Old and Middle English II, AE88 Old and Middle English III, AE82 American Literature II, AE72 Australian Literary Studies II, AE92 Linguistics II and AE93 Linguistics III are subjects for the Ordinary degree of Bachelor of Arts. No student proceeding to a degree may, without special permission, normally take any second year subject offered by the Department until he has passed the final examination in AE01 English I. Exceptions to this, and pre-requisites of all English Department subjects, are as set out in relation to specific courses below.

The subjects are made up of lectures and tutorials. Since the tutorial groups are small, and are arranged as far as possible at times to suit the best convenience of both students and tutors, all students must attend the preliminary meeting held in the first week of the first term in each year, at which the tutorial timetable is fixed.

In AE01 English I and AE02 English II there are two lectures and one tutorial a week. In AE03 English IIIA, three lectures and one tutorial.

AE01 English I, AE02 English II and AE03 English IIIA may be available to certain approved students in special circumstances with exemption from classes. However, it is advisable that students wishing to take these subjects externally should obtain the permission of the Chairman of the Department before enrolling.

Reference books will be prescribed before the start of the teaching year or in lectures. For additional information on this and on alternative editions of the set texts students are advised to contact the departmental office.

### AE01 English I.

There are no pre-requisites for AE01 English I, but a knowledge of English literature and a facility in English expression of Matriculation standard are desirable. Students who have reason to think they do not meet this standard are advised to consult the Chairman of the Department before enrolment.

#### I. ENGLISH LANGUAGE.

The history of the language and fundamental terms and procedures of literary criticism.

Abrams, M. H., *A glossary of literary terms* (Holt, Rinehart and Winston).

#### II. THE MODERNIST PERIOD (1890-1930).

Conrad, J., *Heart of darkness* and *The secret sharer* (Bantam).

Forster, E. M., *Howards End* (Penguin).

Yeats, W. B., *Selected poems*, ed. A. N. Jeffares (Pan paperback).

Lawrence, D. H., *Women in love* (Penguin).

Joyce, J., *Portrait of the artist as a young man* (Penguin).

Woolf, V., *To the lighthouse* (Panther).

Eliot, T. S., *Selected poems* (Faber paperback).

Shaw, G. B., *Heartbreak house* (Penguin).

O'Casey, S., *Three plays* (Papermac).

*Imagist poetry*, ed. Peter Jones (Penguin).

*Men who march away*, ed. I. M. Parsons (Chatto and Windus).

#### III. CHAUCER AND SHAKESPEARE.

##### Chaucer:

*The general prologue to the Canterbury tales*, ed. R. T. Davies (Harrap).

*The miller's prologue and tale*, ed. J. Winny (C.U.P. paperback).

##### Shakespeare:

*Richard II.*

*Henry IV*, parts I and II.

*Henry V.*

Assessment as at present envisaged is based upon the year's work (essays, tutorial assignments, and participation in tutorial group discussions) and upon two three-hour examination papers at the end of the year.

## AE02 English II.

Pre-requisite subject: AE01 English I.

A study of English Literature and Drama with special but not exclusive reference to the works listed. This study will comprehend all three sections below.

## I. ROMANTIC AND VICTORIAN POETRY AND DISCURSIVE PROSE.

Set texts:

*Romantic poetry and prose*

and

*Victorian prose and poetry*, both volumes edited by Harold Bloom and Lionel Trilling as part of *The Oxford Anthology of English Literature* (O.U.P.).

[Note: A detailed list of the poets and prose selections to be lectured on will be available from the department from the beginning of 1979.]

## II. THE NOVEL FROM RICHARDSON TO JAMES.

Set texts:

Richardson, *Clarissa Harlowe*, Vol. I.

Fielding, *Tom Jones*.

Austen, *Mansfield Park*.

Bronte, *Jane Eyre*.

Dickens, *Pickwick papers*, *Great expectations*.

Eliot, *The mill on the floss*.

Hardy, *Jude the obscure*.

James, *Portrait of a lady*.

## III. MODERN DRAMA.

Set texts:

Ibsen, *The masterbuilder and other plays* (Penguin).

Chekhov, *Plays* (Penguin).

Strindberg, *Three plays* (Penguin).

Shaw, *Man and superman* (Penguin).

Genet, *The balcony* (Faber).

Brecht, *Mother Courage* (Methuen).

Pinter, *The homecoming* (Methuen).

Beckett, *Endgame*, *Waiting for Godot* (Faber).

Classes in practical criticism will be held and students will be expected to show some competence in this area in the end-of-year assessment. Assessment as at present envisaged is by a combination of assessments during the year and two examinations.

## AE03 English IIIA.

Pre-requisite subjects: AE02 English II or AE82 American Literature II or AE72 Australian Literary Studies II or AE87 Old and Middle English II.

The course comprises English Literature from 1350 to 1780. In the first term there will be an intensive study of two authors, Shakespeare and Milton, and of nine authors in the second. Subject to satisfactory enrolments and staffing, in the third term students may study any one of three periods, 1350-1550, 1550-1660, 1660-1780, or the one-term course in Comparative Literature.

I. SHAKESPEARE AND MILTON.

Shakespeare:

*The Comedy of Errors.*  
*Richard II.*  
*Henry V.*  
*A Midsummer Night's Dream.*  
*Twelfth Night.*  
*Measure for Measure.*  
*King Lear.*  
*Macbeth.*  
*The Winter's Tale.*  
*The Tempest.*

(Preferred editions: New Arden, New Cambridge, New Penguin.)

Milton:

*Complete poems and major prose*, ed. Merritt Hughes.

II. MAJOR ENGLISH WRITERS 1350-1780.

Chaucer, *The parlement of Foulys*, "The wife of Bath's prologue and tale", "The franklin's tale", "The nun's priest's tale", in *Complete works*, ed. F. N. Robinson.

Spenser, *Poetry*, ed. H. Maclean (Norton).

Donne, *Complete English poems*, ed. A. J. Smith (Penguin).

Jonson, *The alchemist*, and *Volpone*.

Dryden, *Selected poetry*, ed. John Arthos (Signet).

Swift, *Gulliver's travels*

Pope, *Selected poetry and prose*, ed. W. K. Wimsatt (Rinehart).

Johnson, *Rasselas*, ed. J. Hardy (O.U.P.), and  
*Selected writings*, ed. P. Cruttwell (Penguin).

Sterne, *Tristram Shandy*, ed. Graham Petrie (Penguin).

III. ONE of the following four options:

1. ENGLISH LITERATURE 1350-1550.

*Sir Gawain and the Green Knight*, ed. R. A. Waldron (York Medieval Texts).

Malory, *Morte d'Arthur*, 2 vols. (Penguin), excluding books VIII-XIII.

Chaucer, *Troilus and Criseyde*, ed. Daniel Cook (Anchor) OR in *Complete works*, ed. F. N. Robinson.

Langland, *Piers Plowman*, B, *Prologue and Passus I-VII*, ed. J. A. W. Bennett (O.U.P.).

2. ENGLISH LITERATURE 1550-1660.

The course will examine the reaction of writers to the period and will consider content and literary form.

Set texts:

*The literature of renaissance England*, ed. J. Hollander and F. Kermodé,  
*The Oxford anthology of English literature* (O.U.P.).

*Three Jacobean tragedies*, ed. G. Salgado (Penguin).

Dekker, T., *The shoemaker's holiday*.

## 3. ENGLISH LITERATURE 1660-1780.

- Etherege, *The man of mode* (Arnold).  
 Congreve, *The way of the world*.  
 Defoe, *Moll Flanders*.  
 Fielding, *Joseph Andrews*.  
 Goldsmith, *The Vicar of Wakefield*.  
 Sterne, *A sentimental journey*.  
 Smollett, *Humphrey Clinker*.  
*The late Augustans*, ed. Donald Davie (Heinemann).

## 4. C706 COMPARATIVE LITERATURE.

For syllabus see under "Comparative Literature" immediately after the Classics syllabuses.

All students taking this course must enrol for Option C706 Comparative Literature in the Unit/Option section of the Enrolment Form.

---

**AE13 English IIIB.**

Pre-requisite subjects: AE72 Australian Literary Studies II or AE82 American Literature II (AE02 English II if taken before 1975 or other subject as approved by the Chairman of the Department may be acceptable as pre-requisites, but only in exceptional cases). Since AE13 English IIIB is a re-shaping of what used to be called AE73 Australian Literary Studies III, no student may have both these units credited towards a degree.

The course will consist of two lecture periods (one hour each) and two tutorial hours each week. It is not available to students with exemption from lectures.

Four topics will be covered each term in classes. Students are required to write tutorial papers on aspects of any two of these topics each term. This arrangement makes it possible for a student to concentrate (though not exclusively) on Australian material, for example, or American material, or to combine topics in other ways. In addition to the tutorial papers, two long essays must also be submitted. The remainder of the assessment will be based on a three-hour examination in November.

## TERM I TOPICS:

1. Bush and Frontier.
  - Cooper, J. F., *The prairie* (Airmont).
  - Furphy, J., *Such is life* (Angus and Robertson).
  - Baynton, B., *Bush studies* (Angus and Robertson).
  - Ward, R., *The Australian legend* (O.U.P.).
2. Contemporary American and Australian Poetry.
  - Shapcott, T. (ed.), *Contemporary American & Australian poetry* (U.Q.P.).
3. Racial Conflict.
  - Prichard, K. S., *Coonardoo* (Angus and Robertson).
  - Brown, D., *Bury my heart at Wounded Knee* (Pan).
  - Baldwin, J., *The fire next time* (Dell).
  - Malcolm X, *The autobiography of Malcolm X* (Penguin).
  - Styron, W., *Confessions of Nat Turner* (New American Library).
4. The Depression in Fiction.
  - Johnston, G., *My brother Jack* (Pan).
  - Tennant, K., *The Battlers* (Angus and Robertson).
  - Steinbeck, J., *The grapes of wrath* (Pan).
  - Mulgan, J., *Man alone* (Longman Paul).

TERM II TOPICS:

1. The American South.  
Faulkner, W., *Light in August* (Penguin).  
Welty, E., *The golden apples* (Harcourt Brace).  
O'Connor, F., *Everything that rises must converge* (Penguin).
2. Australian Convict Literature.  
Clarke, M., *For the term of his natural life* (Angus and Robertson).  
Porter, H., *The tilted cross* (Seal).  
Keneally, T., *Bring larks and heroes* (Sun).
3. Australian Historical Sagas.  
Franklin, M., *All that swagger* (Angus and Robertson).  
Penton, B., *Landtakers* (Angus and Robertson).  
Herbert, X., *Capricornia* (Angus and Robertson).
4. Anglo-Indian Fiction.  
Anand, M. R. *Coolie* (Inter-Culture).  
Jhabvala, R. P., *A backward place*.  
Narayan, R. K., *The man-eater of Malgudi* (Heinemann).  
Raja Rao, *The serpent and the rope* (Inter-Culture).

TERM III TOPICS:

1. Religious Elements in American and Australian Poetry.  
Selections from:  
Stevens, W., *The palm at the end of the mind*.  
Berryman, J., *Love and fame*.  
Kinnell, G., *The book of nightmares*.  
Webb, F., *Collected Poems*.  
Buckley, V. T., *Golden builders*.  
Murray, L. A., *Selected poems*.
2. The 'Nineties in Australia.  
Lawson, H., *Selected stories* (Seal).  
Cantrell, L. (ed.), *The 1890s* (U.Q.P.).  
Palmer, V., *The legend of the 'Nineties* (Melbourne U.P.).  
Ward, R. (ed.), *The Penguin book of Australian ballads* (Penguin).
3. African Drama.  
Selections from:  
Soyinka, W., *Collected plays* (O.U.P.), (*A dance of the forests, The road*).  
Fugard, A., *Three Port Elizabeth plays* (O.U.P.).  
Rotimi, O., *Kurunmi* (O.U.P.).
4. Women and the Family in American Fiction.  
Chopin, K., *The awakening* (Norton).  
McCullers, C., *A member of the wedding* (Penguin).  
Stead, C., *The man who loved children* (Penguin).  
Stein, G., *Ida* (Random House).

AE87 Old and Middle English II.

Pre-requisite subject: AE01 English I or other subject approved by the Chairman of the Department.

This course is not available to students with exemption from lectures.

A. ANGLO-SAXON CULTURE AND INSTITUTIONS.

B. INTRODUCTION TO OLD ENGLISH LANGUAGE AND LITERATURE.

Prescribed books:

- Whitelock, D. (ed.), *Sweet's Anglo-Saxon reader in prose and verse*, 15th edition (Clarendon).  
Quirk, R., and Wrenn, C. L., *An Old English grammar*, 2nd edition (Methuen).

C. INTRODUCTION TO EARLY MIDDLE ENGLISH LANGUAGE AND LITERATURE.

Prescribed book:

- Bennett, J. A. W., and Smithers, G. V. (eds.), *Early Middle English verse and prose*, 2nd edition (O.U.P.).

## AE88 Old and Middle English III.

Pre-requisite subject: AE87 Old and Middle English II.

This course is not available to students with exemption from lectures.

## A. MEDIEVAL ENGLISH CULTURE AND INSTITUTIONS.

## B. OLD AND MIDDLE ENGLISH LANGUAGE.

For reference:

Quirk, R., and Wrenn, C. L., *An Old English grammar*, 2nd edition (Methuen).

Wardale, E. E., *An introduction to Middle English* (Routledge, paperback).

## C. STUDY OF OLD AND MIDDLE ENGLISH TEXTS.

Prescribed books:

Cassidy, F. G., and Ringler, R. N. (eds.), *Bright's old English grammar and reader*, 3rd edition (Holt, Rinehart and Winston).

Bennett, J. A. W., and Smithers, G. V. (eds.), *Early middle English verse and prose*, 2nd edition (O.U.P.).

Luria, M. S., and Hoffman, R. L. (eds.), *Middle English lyrics* (Norton Critical Edition).

Sisam, K. (ed.), *Fourteenth century verse and prose* (O.U.P.).

## AE72 Australian Literary Studies II.

Pre-requisite: AE01 English I or any other unit approved by the Chairman of the Department.

The course will consist of two lecture periods (one hour each) each week, with one tutorial of two hours each week.

Lectures: The first of the two lecture periods will regularly be used and the second occasionally, according to flexible needs.

Tutorials: Students should enquire when enrolling about the available times for tutorials. Unless otherwise determined the system of holding tutorials at 10 a.m.-12 noon and 2-4 p.m. will be continued and provision will be made for at least one evening meeting for those who cannot fit in at any of these times.

This course is not available to students with exemption from lectures.

## I. POETRY AND PROSE IN GENERAL.

1. Wilkes, G. A. (ed.), *The colonial poets* (Angus and Robertson).  
Wright, J., *Collected poems* (Angus and Robertson).  
Neilson, J. S., *Selected poems* (Angus and Robertson).  
Heseltine, H. (ed.), *The penguin book of Australian verse*.  
McAuley, J., *Collected poems* (Angus and Robertson).
2. Fiction, early.  
Clarke, M., *For the term of his natural life* (introduction by Elliott) (Angus and Robertson).  
Kingsley, H., *Geoffrey Hamlyn* (Seal).  
Boldrewood, R., *Robbery under arms* (Macmillan).  
Spence, C., *Clara Morison* (Seal).  
Tucker, J. R., *Ralph Rashleigh* (Angus and Robertson).
3. Fiction, later.  
Richardson, H. H., *The fortunes of Richard Mahony* (Penguin).  
Stead, C., *For love alone* (Angus and Robertson).  
Stow, R., *To the islands* (Penguin).  
Ireland, D., *The chantic bird* (Angus and Robertson).  
Moorhouse, F., *The Americans, baby* (Angus and Robertson).
4. Critical prose.  
Barnes, J., *The writer in Australia* (O.U.P.).

II. MORE SPECIALISED TOPICS.

1. Patrick White.  
A study involving at least *three* of White's novels.
2. Drama.  
Sykes, A. (ed.), *Five plays* (Q.U.P.).  
Geoghegan, G., *The currency lass* (Currency Methuen).  
Blair, R., *The Christian brothers* (Currency Methuen).
3. Joseph Furphy.  
*Such is life* (Angus and Robertson).  
*The Buln-Buln and the Brolga* (Seal).

Students will be required to choose one of two assessment schemes:

- (a) tutorial papers and essays
- (b) tutorial papers and one three-hour examination.

AE82 American Literature II.

Pre-requisite subject: AE01 English I.

The course consists of two lectures and one tutorial a week. It is not available to students with exemption from lectures.

PROSE:

Hawthorne, *The scarlet letter* (Penguin or Perennial Classics).  
Melville, *Selected tales and poems* (Rinehart or Penguin).  
Twain, *Huckleberry Finn*.  
James, *The Bostonians* (Penguin).  
Fitzgerald, *The last tycoon* (Penguin).  
West, *Collected works* (Penguin).  
Hemingway, *Fiesta* (Panther).  
Faulkner, *Go down Moses* (Penguin).  
O'Connor, *Three by Flannery O'Connor* (Signet).  
Bellow, *The victim* (Signet).  
Malamud, *The assistant* (Penguin).  
Nabokov, *Lolita* (Penguin).  
Pynchon, *The crying of Lot 49* (Bantam).  
*The Penguin book of American short stories*, ed. Cochrane.

POETRY:

Whitman, *Leaves of grass* (Modern Library).  
Dickinson, *A choice of Emily Dickinson's verse* (Faber).  
Frost, *Selected poems* (Penguin).  
Pound, *Selected poems* (Faber).  
Stevens, *Selected poems* (Faber).  
Crane, H., *Complete poems* (Anchor).  
Roethke, *Selected poems* (Faber).  
Berryman, *Selected poems* (Faber).  
Lowell, *Robert Lowell's poems, a selection*, ed. Raban (Faber).

DRAMA:

O'Neill, *The iceman cometh, Long days journey into night* (Cape).  
Williams, *The glass menagerie, A streetcar named desire* (Penguin).  
Miller, *The crucible, Death of a Salesman* (Penguin).  
Albee, *Who's afraid of Virginia Woolf* (Penguin).  
Kopit, *Indians* (Methuen).

Assessment as at present envisaged: 50% for the year's work (including 3 essays) and 25% each for two examination papers at the end of the year.



## AE92 Linguistics II.

Pre-requisite: A Division I Pass or better in any foreign language which may be counted towards a University of Adelaide B.A. degree or any of: AE01 English I; QM01 Mathematics I or QM11 Mathematics IM; UA51 Music I; AL01 Philosophy I (before 1974); AL1H Philosophy IH(A) and AL2H Logic IH; AY01 Psychology I.

The subject will consist of two lectures and one tutorial a week providing an introduction to (i) grammar and descriptive linguistics and (ii) historical and social linguistics.

[Note: This course will only operate in 1979 subject to satisfactory staffing and enrolments.]

Assessment, as at present envisaged, will be made on the following basis:

- (1) The year's work, including three essays and some smaller tutorial papers (60%).
- (2) One final examination (40%).

This course is not available to students with exemption from lectures.

Prescribed text:

Pearson, B. L., *Introduction to linguistic concepts* (Knopf).

Recommended preliminary reading:

Crystal, D., *Linguistics* (Penguin).

Palmer, F. R., *Grammar* (Penguin).

Bloomfield, L., *Language* (Allen and Unwin).

Chomsky, N., *Syntactic structures* (Mouton).

Lyons, J., *Chomsky* (Fontana).

Lyons, J., *Introduction to theoretical linguistics* (C.U.P.).

Candidates intending to proceed to AE93 Linguistics III are asked to note that a knowledge of a language other than Modern English is a pre-requisite for that course. Those who have not completed as part of their degree (or are not enrolled for) a language course and hope to be accepted on other grounds should consult the Department as early as possible in the year in which they take AE92 Linguistics II. Acceptable "other grounds" would be, for example, a mother-tongue that is not English, or an effective knowledge of a language other than English, acquired outside the University.

## AE93 Linguistics III.

[Note: This course will only operate in 1979 subject to satisfactory staffing and enrolments.]

Pre-requisite subject: AE92 Linguistics II and at least one first-year subject of a language other than Modern English. This language requirement may be waived if evidence is provided of competence in a foreign language.

The subject will consist of one lecture and two tutorials or seminars a week. Lectures will provide a more detailed study of grammar, including problems in Transformational Grammar, "Generative Phonology" and "Generative Semantics", and will examine systems of grammar: Glossematics, Tagmemics, the work of the "London School", particularly M. A. K. Halliday, etc.

Tutorials will provide training in the more subtle discrimination of phonetics: patterns of stress, juncture and intonation. There will also be exercises in transformational grammar and direct involvement in the problems of language description. Seminars will give attention to problems raised by articles in current periodicals and provide opportunity from time to time for meeting with people expert in various fields related to language study.

This course is not available to students with exemption from lectures.

Assessment will be made in three ways:

- (a) continuous assessment based on tutorial work and exercises,
- (b) a three-hour examination at the end of the year,
- (c) a long essay: most probably a grammatical analysis of a particular text or variety of language, not necessarily English.

Prescribed text:

Lyons, J., *Introduction to theoretical linguistics* (C.U.P.).

Recommended reading titles:

- Chomsky, N., *Selected readings* (O.U.P.).  
Chomsky, N., *Aspects of the theory of syntax* (M.I.T.).  
Robins, R. H., *A short history of linguistics* (Longmans).  
O'Connor, J. D., *Phonetics* (Penguin).  
Steinberg, D. D., and Jacobovits, L. A. (eds.), *Semantics* (C.U.P.).  
De Saussure, F., *Course in general linguistics*, tr. W. Baskin (McGraw-Hill).

HONOURS DEGREE.

English Language and Literature for the Honours degree of Bachelor of Arts.

Students wishing to take honours should consult the Chairman of the Department before beginning the second year's work.

Before proceeding to the fourth and final year of honours work they will be required:

- (a) to reach an acceptable standard in AE02 English II and AE03 English IIIA.
- (b) to complete such honours work as may be required in second- and third-year courses in English,
- (c) to include in the nine courses required for their pass degree at least four from among those provided by the English Department, and to consult the Chairman of the Department about the selection of their other courses.

In special circumstances students may be accepted for honours after their second year.

AE99 Honours English Language and Literature.

The final examination, which will normally be taken at the end of the fourth year, will consist of the following six papers:

- (i) *Compulsory*. General Critical Paper (including passages for comment); and at least one of (ii), (iii) or (iv) listed below, *subject to the approval of the Chairman of the Department*:
- (ii) Shakespeare.
- (iii) Medieval and Early Renaissance Literature.
- (iv) Special Period of English Literature (taken from the period *before* 1780).

Four, three or two papers from those listed below, *subject to the approval of the Chairman of the Department*:

- (v) Old Norse.
- (vi) Old English.
- (vii) Middle English Special.
- (viii) Special Period of English Literature (taken from the period *after* 1780).
- (ix) Special Author or Authors.
- (x) Special Topics.
- (xi) The Novel.
- (xii) Drama.
- (xiii) American Literature.
- (xiv) Australian Literature.
- (xv) Commonwealth Literature.
- (xvi) Continental Novel in Translation.

Before presenting themselves for examination in any of the papers numbered (v), (vi) or (vii), students will be required to complete the course for AE88 Old and Middle English III.

Students may submit or may be required to submit a long essay of not more than 12,000 words on a subject approved by the Chairman of the Department as an alternative to one or two of papers numbered (ix)-(xvi).

Not all courses are available every year, and some—e.g. (viii), (xi), (xii), (xvi)—are only available in alternate years. Students intending to proceed to fourth year honours should check at the beginning of their third year, and be prepared to attend lectures in a course of particular interest to them that will not be available in their fourth year. Information about special periods, topics, authors, and other matters, is available from the English Department.

## FRENCH LANGUAGE AND LITERATURE.

There are seven courses in French for the Ordinary degree of Bachelor of Arts: AF11 French IA, AF01 French I, AF02 French II, AF12 French IIA, AF72 French IIB, AF03 French III and AF88 French IIIB. AF11 French IA assumes little or no previous knowledge of the language and is a first-year unit for the degree of B.A. The aim of the course is to provide a basic working knowledge of the written and spoken language to those students who have done little or no French at school and who wish to study the language at University, either for cultural reasons, or for more practical reasons, such as to acquire a reading knowledge of French for Honours or postgraduate work in another discipline. No subject is pre-requisite to AF01 French I, but a knowledge of French at the standard of the Matriculation examination is assumed and students are advised to attempt the course only if they have reached Grade D or higher in that examination or possess some other equivalent qualification. Students enrolled in AF01 French I for the first time will not be exempted from attendance at lectures and tutorials.

AF12 French IIA will be taken by students who have passed in AF11 French IA at Division I standard or higher. Students who pass AF12 French IIA will be qualified to enter AF03 French III in the following year. The sequence AF11 French IA, AF12 French IIA, AF03 French III will count as a sequence for the Ordinary degree.

AF72 French IIB may be taken as an additional course to AF02 French II, and may be taken either in second or third year, the only pre-requisite being a pass in AF01 French I at Division I standard or higher. AF72 French IIB does not by itself qualify for admission to AF03 French III, for which a pass in AF02 French II is required.

AF88 French IIIB may also be taken as an additional course to AF03 French III, and will normally be taken in third year, the pre-requisite being a pass in AF72 French IIB. The sequence AF01 French I, AF72 French IIB, AF88 French IIIB will count as a sequence for the Ordinary degree.

In AF02 French II and AF03 French III the lectures on the literature may be given in French.

All exercises set during the year form an integral part of the courses, and students may be refused permission to sit for the annual examination if their performance of the exercises has been unsatisfactory.

## AF11 French IA.

N.B.: No previous knowledge of French is required. Students with some knowledge of the language will be advised by the Department concerning the level at which the language should be taken.

## I. LANGUAGE.

- (a) Grammar, dialogues, translation and writing of French.
- (b) Speaking, aural comprehension, reading of simple texts.

(Students are advised that, in addition to the hours of formal instruction, they must devote at least two hours weekly to independent work in the language laboratory.)

## Prescribed text:

Bieler, A., and others, *Perspectives de France*, revised 1972 edition (Prentice-Hall) and Workbook for *Perspectives de France*.

## Recommended reference books:

- Murray, M. W., and Lentz, E. E., *A French vocabulary* (Blackie).
- Mansion, J. E., *A grammar of present-day French* (Harrap).
- Mansion, J. E., *Harrap's shorter French and English dictionary*.

## 2. MODERN FRANCE.

Background reading, illustrating the life and culture of contemporary France.

## Prescribed text:

Harris, J., and Lévêque, A., *Basic French reader*, 3rd edition (Holt, Rinehart and Winston).

Recommended reference book:

Michaud, G., and Torrès, G., *Nouveau Guide France* (Hachette).

### 3. LITERATURE AND THOUGHT.

Significant modern French authors, read partly in French, partly in translation.

Prescribed texts:

Camus, *L'Etranger* (Methuen).

Sartre, *Huis Clos* (Methuen).

Vercors, *Le Silence de la mer* (Macmillan).

(These literary texts are suited to the needs of students who wish to obtain a reading knowledge of French for Honours or postgraduate work in another subject.)

### AF01 French I.

The course comprises:

1. Tuition in the speaking and writing of French by means of the Language Laboratory (1-2 hours a week).
2. Tutorials on grammar and French civilisation, based on the reading of passages and exercises from the prescribed books (2 hours a week).
3. Lectures on French literature and civilisation (1 hour a week).

#### 1. LANGUAGE AND CIVILISATION.

Prescribed books:

Comeau, R., and others, *Ensemble: Grammaire* (Holt, Rinehart and Winston).

Comeau, R., and others, *Ensemble: Culture et société* (Holt, Rinehart and Winston).

The student should consult in the library:

Armstrong, L. E., *The phonetics of French* (Bell).

Mansion, J. E., *Harrap's standard French and English dictionary*, 2 vols.

Petit, C., *Dictionnaire français-anglais* and *Dictionnaire anglais-français* (Hachette).

*Le Petit Larousse illustré* or *Le Nouveau Larousse universel*, 2 vols.

*Le Petit Robert*.

Reference books on civilisation:

Michaud, G., and Torrès, G., *Nouveau Guide France* (Hachette).

Parker, C. S., and Grigaut, P. L., *Initiation à la culture française* (Harper and Row).

Ardagh, J., *The new France* (Pelican).

#### 2. LITERATURE.

This will consist of a general introduction to contemporary French literature, based on the study of significant modern literary texts, chosen for the most part from works written since 1940. Some of the prescribed books will be treated *intensively*, for detailed textual commentary, others will be treated *more generally*, by the discussion of their ideas or literary qualities.

Prescribed books:

Textual study:

Davies, J. C. (ed.), *Contes modernes* (Cheshire).

Vercors, *Le Silence de la mer* (Macmillan).

*Anthology of modern French poetry* (to be distributed).

General study:

Gide, *La symphonie pastorale* (Harrap).

Sartre, *Huis Clos* (Methuen).

Ionesco, *Three plays* (Heinemann).

## AF02 French II.

Pre-requisite subject: AF01 French I at Division I standard or higher.

## 1. TRANSLATION FROM ENGLISH INTO FRENCH.

Prescribed book:

Mansion, J. E., *A grammar of present-day French, with exercises* (Harrap).

Reference books: As for French I, together with:

Robert, P., *Dictionnaire alphabétique et analogique de la langue française*, 7 vols.

Bailly, R., *Dictionnaire des synonymes* (Larousse); OR

Bénac, H., *Dictionnaire des synonymes* (Hachette).

Maquet, C., *Dictionnaire analogique* (Larousse).

Lacroix, U., *Dictionnaire des mots et des idées* (Nathan).

*Le Grand Larousse encyclopédique*, 10 vols.

Grevisse, M., *Le Bon usage* (Geuthner).

Hanse, J., *Dictionnaire des difficultés grammaticales et lexicologiques* (Baude).

## 2. TUITION IN THE SPEAKING AND WRITING OF FRENCH BY MEANS OF THE LANGUAGE LABORATORY AND IN TUTORIALS.

Prescribed texts:

Dayan, F., *Les formes verbales du Français—Grammar notes and Dialogues et exercices structuraux*, 2 vols. (University of Tasmania).

Helbling, R. E., and Barnett, A., *L'Actualité française and Interviews. Tape study guide* (Holt, Rinehart and Winston).

## 3. LITERATURE AND CIVILISATION.

Selected texts from the seventeenth, eighteenth and nineteenth centuries.

Questions for special study:

Term I: *Roman, poésie et théâtre au XIXe siècle*.

Term II: *Le Roman au XVIIIe siècle*.

Term III: *Le Théâtre au XVIIe et au XVIIIe siècles*.

Essay subjects will be set each term on the question studied. The marks obtained by the student in essays will be incorporated with his total marks for the annual examination.

Prescribed books:

(a)

Lagarde, A., and Michard, L., *XVIIe Siècle and XVIIIe Siècle* (Harrap).

*Anthology of poetry* (to be distributed).

*Anthology of 19th century literature* (to be distributed).

(b) Works set for detailed study and *explication de textes*:

Term I:

Balzac, *Le Père Goriot* (Garnier-Flammarion).

Hugo, *Ruy Blas* (Nouveaux Classiques Larousse).

Stendhal, *Le Rouge et le Noir* (Garnier-Flammarion).

Term II:

Prévost, *Histoire du Chevalier des Grieux et de Manon Lescaut* (Garnier).

Voltaire, *Candide* (London U.P.).

Laclos, *Les Liaisons Dangereuses* (Garnier).

Term III:

Corneille, *Le Cid* (Bordas).

Molière, *Le Tartuffe* (Bordas).

Racine, *Andromaque* (Bordas).

Beaumarchais, *Le Barbier de Séville* (Bordas).

Reference books:

Lough, J., *Introduction to seventeenth-century France* (Longmans).

Lough, J., *Introduction to eighteenth-century France* (Longmans).

Lagarde, A., and Michard, L., *XIXe Siècle* (Harrap).

**AF12 French IIA.**

Pre-requisite subject: AF11 French IA at Division I standard or higher.

**1. FRENCH GRAMMAR AND TRANSLATION FROM ENGLISH INTO FRENCH.**

(1-2 hours a week).

Prescribed texts:

Whitmarsh, W. F. H., and Jukes, C. D., *New advanced French course* (Longman).

Mansion, J. E., *A grammar of present day French, with exercises* (Harrap).

Recommended Reference books:

Mansion, J. E., *Harrap's standard French and English Dictionary*, 2 vols.  
Petit, C., *Dictionnaire français-anglais* and *Dictionnaire anglais-français* (Hachette).

*Le Nouveau Larousse Universel*, 2 vols.

Robert, P., *Dictionnaire alphabétique et analogique de la langue française*, 7 vols.

Grevisse, M., *Le bon usage* (Geuthner).

**2. TUITION IN THE SPEAKING AND WRITING OF FRENCH BY MEANS OF THE LANGUAGE LABORATORY AND IN TUTORIALS. (Two hours a week.)**

**3. FRENCH LITERATURE AND CIVILISATION.**

A selection of texts from authors of the seventeenth to the twentieth centuries, of which those treated in first term are for detailed language study. This part of the course also treats aspects of modern French civilisation. (Two classes a week throughout the year.)

Prescribed texts:

Term I:

Davies, J. C. (ed.), *Contes modernes* (Cheshire).

Molière, *Le Bourgeois Gentilhomme* (Bordas).

Term II:

Beauvoir, S. de, *Les Belles Images* (Folio).

Martin du Gard, R., *Les Thibault*, Tome I (Folio).

Term III:

Beaumarchais, *Le Barbier de Séville* (Bordas).

Rousseau, *Les Confessions (extraits)*, Bordas).

St. Exupéry, *Terre des hommes* (Folio).

In addition, students will choose an essay subject based on one of the authors treated during the course. An essay of 3,000 words in English on the subject chosen will be submitted by the end of third term and will count for 50 marks in the annual assessment.

**AF72 French IIB.**

AF72 French IIB may be taken as an additional course to AF02 French II, the pre-requisite being a pass in AF01 French I at Division I standard or higher. AF72 French IIB does not by itself qualify for admission to AF03 French III, for which a pass in AF02 French II or AF12 French IIA is required. AF72 French IIB will also be taken by intending French Honours candidates in their second year of study.

This course consists of:

**1. OUTLINE OF THE HISTORY OF THE FRENCH LANGUAGE — GRAMMAR OF OLD AND MIDDLE FRENCH.**

Prescribed book:

Raynaud de Lage, G., *Introduction à l'ancien français* (S.E.D.E.S.).

Reference books:

Wartburg, W. von, *Evolution et structure de la langue française* (Francke).

Bruneau, C., *Petite histoire de la langue française*, 2 vols. (Colin).

## 2. INTRODUCTION TO MEDIEVAL FRENCH LITERATURE: TRANSLATION OF SET TEXTS.

Prescribed books:

Groult, P., and others, *Anthologie de la littérature française du moyen âge*, Vol. I; *Textes*, Vol. II: *Notes et glossaire* (Duculot). (The Department has copies of Vols. I and II which students may borrow for the year.)

Reference book:

Bossuat, R., *Le Moyen Age* (del Duca).

## 3. STUDY OF MEDIEVAL AND RENAISSANCE TEXTS.

Prescribed books:

*La Chanson de Roland*, ed. F. Whitehead (Blackwell).  
Bodel, J., *Le Jeu de Saint Nicolas*, ed. F. J. Warne (Blackwell).  
*Four Farces*, ed. B. C. Bowen (Blackwell).  
Rabelais, *Oeuvres complètes*, vol. I, ed. P. Jourda (Classiques Garnier).

Reference book:

Cruickshank, J., *French Literature and its background: I. The Sixteenth Century* (O.U.P.).

## AF03 French III.

Pre-requisite subjects: AF02 French II or AF12 French IIA.

## 1. TRANSLATION FROM ENGLISH INTO FRENCH.

Prescribed book:

Mansion, J. E., *A grammar of present-day French, with exercises* (Harrap).

Reference books:

As for AF01 French I and AF02 French II.

## 2. TUITION IN THE SPEAKING AND WRITING OF FRENCH BY MEANS OF THE LANGUAGE LABORATORY AND IN TUTORIALS.

Material will be provided by the Department.

## 3. LITERATURE AND CIVILISATION.

This study will consist of three parts:

(a) A COMPULSORY CORE COURSE, studied in first term for two hours a week, and consisting of lectures on French literature and civilisation of the 19th and 20th centuries.

Prescribed texts:

Nerval, *Les filles du feu, suivi des Chimères* (Garnier-Flammarion).  
Musset, *Lorenzaccio*, in *Théâtre I* (Garnier-Flammarion).  
Gide, *Les Faux-Monnayeurs* (Folio).  
Sartre, *Kean* (O.U.P.).  
Proust, *Combray* (Harrap).

Reference books:

Lagarde, A., and Michard, L., *XIXe siècle and XXe siècle* (Harrap).  
Abraham, P., *Histoire littéraire de la France*, vols. 4, 5 and 6 (Les Editions sociales).

(b) SUBJECT OPTIONS (Terms II and III): *Two* will be selected by the student from the following range of lecture courses:

N.B.: This choice must *not* include topics which students have already taken as part of AF02 French II.

(i) HUMAN COMMUNICATION AND SOCIAL ADJUSTMENT IN THE CONTEMPORARY NOVEL (Term II).

Prescribed books:

S. de Beauvoir, *La Femme rompue* (Folio).  
Etcherelli, *A propos de Clémence* (Folio).  
Sarraute, *Martereau* (Folio).  
Duras, *Moderato cantabile* (Methuen).

(ii) APPLIED LINGUISTICS (Term II: One lecture and one tutorial a week).

Prescribed text:

Poltitzer, R. L., *Teaching French: an introduction to applied linguistics*, 2nd edition (Ginn).

Recommended reading:

Corder, S. P., *Introducing applied linguistics* (Penguin Education).  
Allen, J. P. B., and Corder, S. P., *The Edinburgh course in applied linguistics* (O.U.P.):  
Volume 1: *Readings for applied linguistics*.  
Volume 2: *Papers in applied linguistics*.  
Volume 3: *Techniques in applied linguistics*.

(iii) POLITICS OPTION (Term II).

Crises in French Politics since 1936.

Prescribed texts:

Giscard d'Estaing, V., *Démocratie française* (Fayard).  
Touchard, J., *La gauche en France depuis 1900* (Seuil).  
Vincent, G., *Les Jeux français* (Fayard).

(iv) LE THÉÂTRE TRAGIQUE AU XVII<sup>E</sup> SIÈCLE (Term II).

Prescribed texts:

Corneille, *Le Cid* (Bordas).  
Racine, *Andromaque* (Bordas).  
Racine, *Phèdre* (Bordas).

(v) LA POÉSIE DEPUIS BAUDELAIRE (Term III).

Prescribed texts:

Baudelaire, *Les Fleurs du mal* (Garnier).  
Apollinaire, *Alcools* (London U.P.).

(vi) TECHNIQUES IN THE NINETEENTH AND TWENTIETH CENTURY NOVEL (Term III).

Prescribed texts:

Flaubert, *Madame Bovary* (Classiques Garnier).  
Camus, *La Peste* (Methuen).  
Butor, *La Modification* (Methuen).

(vii) L'ART ET L'ARCHITECTURE ROMANS ET GOTHIQUES AU MOYEN ÂGE (Term III).

A reading list will be supplied.

(viii) C706 COMPARATIVE LITERATURE. (Term III).

For syllabus see under "Comparative Literature" immediately after the Classics syllabuses. All students taking this course must enrol for the Option C706 Comparative Literature in the Unit/Option section of the Enrolment Form.

(c) ESSAY OPTIONS: Any *one* of a list of topics is to be chosen for an essay of 4,000 words, prepared individually by the student under supervision and written in French. The essay topic is to be chosen by the beginning of second term, and the essay submitted by the beginning of third term. It will count for 50 marks in the annual assessment.



List of topics and prescribed texts.

- (i) BOSCO ET LE ROMAN POÉTIQUE.  
Prescribed text:  
Bosco, *Le Mas Théotime* (Folio).
- (ii) STENDHAL.  
Prescribed text:  
Stendhal, *Vie de Henry Brulard* (10/18 or Garnier).
- (iii) ROUSSEAU AND AUTOBIOGRAPHY.  
Prescribed text:  
Rousseau, *Les Confessions* (Livre de Poche, Vol. I).
- (iv) R. MARTIN DU GARD AND THE NOVEL.  
Prescribed texts:  
Martin du Gard, R., *Le Cahier gris, Le Pénitencier, La Belle Saison*, in *Les Thibault*, vol. I (Folio).
- (v) MALRAUX.  
Prescribed texts:  
Malraux, *Les Conquérants* (Folio).  
Malraux, *La Condition humaine* (Livre de Poche—Université).
- (vi) SIMONE DE BEAUVOIR AND AUTOBIOGRAPHY.  
Beauvoir, S. de, *Mémoires d'une jeune fille rangée* (Folio).
- (vii) CHATEAUBRIAND.  
Prescribed text:  
Chateaubriand, *Mémoires d' Outre-Tombe* (Bordas).

#### AF88 French IIIB.

AF88 French IIIB may be taken as an additional course to AF03 French III, the pre-requisite being a pass in AF72 French IIB. AF88 French IIIB will also be taken by intending French Honours candidates in their third year of study.

This course consists of:

1. MEDIEVAL AND 16TH CENTURY LITERATURE: ASPECTS OF THE HISTORY OF THE LANGUAGE.  
Prescribed books:  
*La Chanson de Roland*, ed. F. Whitehead (Blackwell).  
Chrétien de Troyes, *Le Chevalier de la Charrette*, ed. M. Roques (Champion).  
Bodel, J., *Le Jeu de Saint Nicolas*, ed. F. W. Warne (Blackwell).  
*Four Farces*, ed. B. C. Bowen (Blackwell).  
Rabelais, *Oeuvres Complètes*, vol. I, ed. P. Jourda (Classiques Garnier).  
Montaigne, *Selected Essays*, eds. A. Tilley and A. M. Boase (Manchester U.P.).  
Ménard, P., *Syntaxe de l'ancien français (Manuel du français du moyen âge*, vol. I) (Sobodi).
2. TWENTIETH CENTURY POETRY AND DRAMA.  
Prescribed texts:  
Caudel, *Partage de Midi* (Folio).  
Giraudoux, *Intermezzo* (Harrap).  
Giraudoux, *La Guerre de Troie n'aura pas lieu* (London U.P.).  
Ionesco, *Three Plays* (Heinemann).  
Beckett, *En attendant Godot* (Harrap).  
Beckett, *Fin de Partie* (Methuen).  
Sartre, *Les Mouches* (Folio).  
Sartre, *La Putain respectueuse* (Folio).  
Sartre, *Les Séquestrés d'Altona* (London U.P.).  
Genet, *Le Balcon* (L'Arbalète).  
Baudelaire, *Petits poèmes en prose* (Poésie-Gallimard).

HONOURS DEGREE.

AF99 French Language and Literature for the Honours degree of B.A.

Students intending to take Honours should consult the Professor before the beginning of their second year's work. It is also possible to take a combined Honours degree, consisting of French and another subject. For this also, students should consult the Professor of French before the beginning of the second year.

Honours students will normally be required (i) to take the courses AF02 French II or AF12 French IIA in their second year, followed by AF03 French III in their third year; (ii) in addition, to complete AF72 French IIB and AF88 French IIIB before entry to the fourth year; (iii) to devote their fourth year entirely to advanced courses and exercises (including a 15,000 word thesis) in literature and language. However, the Department may vary the pre-requisites in (ii) above in certain exceptional cases where the applicant for Honours has demonstrated a high level of ability. For combined honours, the pre-requisites concerning second- and third-year subjects may be fulfilled by taking approved combined subjects which include parts of these. Before entering the final year of Honours, students must have qualified for the Ordinary degree of B.A., i.e. have passed in nine subjects. To avoid doing more than nine subjects in qualifying for entry to combined honours, such students may arrange with the departments concerned to take appropriate combined subjects in second and third years.

The marks obtained for the essays in both the third and the fourth years may be considered with the final examination results in determining the student's classification.

The fourth-year courses will consist of the following:

1. MEDIEVAL LITERATURE.

Prescribed books:

- La Chanson de Roland*, ed. F. Whitehead (Blackwell).  
Chrétien de Troyes, *Le Chevalier de la Charrette*, ed. M. Roques (Champion).  
Bodel, J., *Le Jeu de saint Nicolas*, ed. F. W. Warne (Blackwell).  
*Four Farces*, ed. B. C. Bowen (Blackwell).

2. (A) ASPECTS OF THE HISTORY OF THE LANGUAGE; 16TH CENTURY LITERATURE.

Prescribed books:

- Ménard, P., *Syntaxe de l'ancien français* (Manuel du français du moyen âge: vol. I) (Sobodi).  
Rabelais, *Oeuvres Complètes*, vol. I, ed. P. Jourda (Classiques Garnier).  
Montaigne, *Selected essays*, ed. A. Tilley and A. M. Boase (Manchester U.P.).

OR

(B) TWENTIETH CENTURY POETRY AND DRAMA.

Prescribed texts:

- Claudel, *Partage de Midi* (Folio).  
Giraudoux, *Intermezzo* (Harrap).  
Giraudoux, *La Guerre de Troie n'aura pas lieu* (London U.P.).  
Ionesco, *Three Plays* (Heinemann).  
Beckett, *En attendant Godot* (Harrap).  
Beckett, *Fin de Partie* (Methuen).  
Sartre, *Les Mouches* (Folio).  
Sartre, *La Putain respectueuse* (Folio).  
Sartre, *Les Séquestrés d'Altona* (London U.P.).  
Genet, *Le Balcon* (L'Arbalète).  
Baudelaire, *Petits poèmes en prose* (Poésie-Gallimard).

## 3. OPTIONS.

The study of *One* special subject chosen from a list which will be supplied at the beginning of the fourth year. Some of the subjects offered in 1979 include:

Chrétien de Troyes, Pascal, Racine, Chateaubriand, Dostoyevsky and the French Novelists, Bernanos, The Nineteenth Century Realist Novel, Gide, Butor, *Le Cinéma français*, lexicography, linguistics.

Honours students should make themselves familiar with the following works:

Langlois, P., et Mareuil, A., *Guide bibliographique des études littéraires* (Hachette).

Bouvier, E. F., et Jourda, P., *Guide de l'étudiant en littérature française* (P.U.F.).

Dupouy, A., *Géographie des lettres françaises* (Colin).

Genest, E., *Dictionnaire des citations françaises* (Nathan); OR

Guerlac, O., *Les Citations françaises* (Colin).

Marouzeau, J., *Lexique de la terminologie linguistique* (Geuthner).

Marouzeau, J., *Précis de stylistique française* (Masson).

Cressot, M., *Le Style et ses techniques* (P.U.F.).

Mornet, D., *Histoire de la clarté française* (Payot).

Le Bidois, G., et Le Bidois, R., *Syntaxe du français moderne*, 2 vols. (Picard).

Oster, P., *Nouveau dictionnaire de citations française* (Tchou/Hachette).

Colin, J. P., *Nouveau dictionnaire des difficultés du français* (Tchou/Hachette).

Viney, J. P., and Darbelnet, J., *Stylistique comparée du français et de l'anglais* (Didier).

## GEOGRAPHY.

More detailed information about the Department and its courses may be found in the Departmental Handbook which will be available at the departmental office after mid-January 1979.

### FIRST YEAR.

A student intending to take a full first year subject in Geography must take *either* AJ01 Geography I *or* AJ71 Economic Geography I, but no student may present both as a part of their degree structure. AJ01 Geography I allows a student to take any of the optional courses offered at second-year level. AJ71 Economic Geography I allows a student to take only second-year options in Human Geography.

Students in other faculties who wish to take only one half-subject in Geography may take *either* AJ1H Physical Geography IH *or* AJ2H Human Geography IH. Students in any faculty who have already passed in one of these half-subjects may be allowed to take the other with the consent of the Chairman of the Department.

There are no pre-requisites for any of the first-year courses and none is available to students with exception from lectures.

#### AJ01 Geography I.

Two lectures and two hours tutorial/practical a week throughout the year.

The course involves elements of both Human and Physical Geography. The former will be concerned with problems of Social Welfare in different societies and the related influence of cultural, economic and political factors. The latter will involve a study of the ecosphere, its component systems and their functional integration.

#### AJ71 Economic Geography I.

Two lectures and one tutorial a week throughout the year.

The course is concerned with the idea that the economy is a system operating within and interacting with other systems, e.g. biotic, political, religious, etc. The main theme concentrates on the proposition that whatever system man devises to satisfy his economic needs must attain a long-term equilibrium with the environments within which it functions, from which it draws its resources and into which it pours its residuals.

#### AJ1H Physical Geography IH.

Two lectures and two hours tutorial/practical a week throughout the second half of the year.

The course will involve a study of the ecosphere, its component systems and their functional integration.

#### AJ2H Human Geography IH.

Two lectures and two hours tutorial/practical a week throughout the first half of the year.

The course will be concerned with problems of Social Welfare in different societies and the related influence of cultural, economic and political factors.

## SECOND YEAR.

Pre-requisites: AJ1H Physical Geography IH and AJ2H Human Geography IH, or AJ7I Economic Geography I.

There are two subjects offered, AJ12 Geography IIA which consists of two of the optional courses offered, and AJ22 Geography IIB, which consists of two of the optional courses which have not been presented for AJ12 Geography IIA.

Students who wish to take only one half-subject in Geography may be allowed to take AJ7H Geography IIH with the consent of the Chairman of the Department. AJ7H Geography IIH will consist of one of the optional courses offered.

Each of the optional courses offered will have one lecture a week and the equivalent of two hours for tutorials, practical classes or field work. The following options will be offered in 1979:

## J710 BIOGEOGRAPHY AND CLIMATOLOGY.

The first part of the course will deal with community/environment relationships, particularly variation in plant community characteristics along environmental gradients. The second part of the course will deal with the composition and structure of the atmosphere, in particular radiative processes and aspects of large-scale atmospheric motion.

Practical exercises and field work are considered to be an integral part of this course.

## References:

- Whittaker, R. H., *Communities and ecosystems* (Macmillan).  
Peterssen, S., *Introduction to meteorology* (McGraw-Hill).

## J711 ECONOMIC GEOGRAPHY.

This course treats the space-economy as a system and examines the various factors which influence the locations, patterns and movements of economic phenomena, together with an analysis of some of the spatial models which have been developed to describe various elements of the system.

## References:

- Berry, J. L. B. *et al.*, *The geography of economic systems* (Prentice-Hall).  
Chisholm, M., *Geography and economics* (Bell).  
Conkling, E. C., and Yeates, M., *Man's economic environment* (McGraw-Hill).  
Haggett, P. *et al.*, *Locational models* (Arnold).  
Lloyd, P. E., and Dicken, P., *Location in space* (Harper).  
Smith, D. M., *Patterns in human geography* (David and Charles).

## J712 GEOMORPHOLOGY AND PEDOLOGY.

This course is concerned with the structure of the Earth's crust and the form and development of its surficial layers. The first part of the course includes topics such as the effects of joints, faults, folds and rock type on landform development. The second part of the course deals with soil forming processes.

Practical exercises and field work are considered to be an integral part of this course.

## References:

- Holmes, A., *Principles of physical geology* (Nelson).  
Jennings, J. N., *Karst* (A.N.U. Press).  
Smith, R. T., and Atkinson, K., *Techniques in pedology* (Elek).  
Twidale, C. R., *Structural landforms* (A.N.U. Press).

J713 SOCIAL GEOGRAPHY.

This course is concerned with the patterns and processes that derive from man living in society. It deals with the major habitats of country and city and the interactions between them, primarily in the context of Western society. There will be at least one day excursion.

References:

- Burnley, I. H., *Social environment* (McGraw-Hill).  
Clout, H. D., *Rural geography* (Pergamon).  
Johnston, R. J., *Urban residential patterns* (Bell).  
Jones, E., and Eyles, J., *An introduction to social geography* (O.U.P.).  
Woodruffe, B. J., *Rural settlement policies and plans* (O.U.P.).

The subjects offered are:

**AJ12 Geography IIA.**

Any two of the second-year options.

**AJ22 Geography IIB.**

Two of the second-year options not already presented for AJ12 Geography IIA.

**AJ7H Geography IIH.**

Any one of the second-year options.

THIRD YEAR.

Pre-requisites: In general, at least two of the following half-subjects (taken in 1975-1978): AJ1G Biogeography and Soils IIH, AJ2G Climatology and Hydrology IIH, AJ4H Geomorphology IIH, AJ5H Economic Geography IIH, AJ6H Social Geography IIH, SB4H Ecology and Taxonomy IIH, AJ3H Biogeography and Climatology IIH; but some third-year units require particular second-year half-subjects as pre-requisites.

AJ13 Geography IIIA consists of six units and AJ23 Geography IIIB consists of six other units not presented for AJ13 Geography IIIA. Students offering AJ13 Geography IIIA are expected to take two double unit courses and two single unit courses. Students offering AJ23 Geography IIIB in addition to AJ13 Geography IIIA may take any combinations to make six units, provided these have not been presented for AJ13 Geography IIIA. Students requiring a half-subject in Geography will take AJ8H Geography IIHH which consists of one double unit and one single unit.

Each double unit will run for two terms. There will be one lecture and one tutorial/practical session a week in each, and in addition there will be five days of field work or its equivalent in practical sessions. Each single unit will run for one term: there will be one lecture and one tutorial/practical session a week.

With the consent of the Chairman of the Department, two of the six units may be taken in another faculty. (This will mean a double unit in Science or a half-subject in Economics.)

With the consent of the Chairman of the Department, students from other faculties may take one double unit without the listed pre-requisites.

The following double units will be offered in 1979 as staff and enrolments allow:

J720 BIOGEOGRAPHY.

A study of principles and processes related to spatial variation in the attributes and functioning of biogeocoenoses. Practical exercises and field work are used to illustrate techniques of description, mapping and causal analysis.

References:

- Mueller-Dombois, D., and Ellenberg, H., *Aims and methods of vegetation ecology* (Wiley).  
Specht, R. L., *Vegetation of South Australia*, 2nd edition (S.A. Government Printer).

## J721 CARTOGRAPHY.

This course involves theoretically based investigations of the application of graphic and cartographic techniques to spatial problems and of the successful communication of graphic information.

## References:

- Robinson, A. H., and Sale, R. D., *Elements of cartography*, 3rd edition (Wiley).  
 Keates, J. S., *Cartographic design and production* (Longmans).  
 Downs, R. M., and Stea, D., *Image and environment* (Aldine).  
 Haggett, P., and others, *Locational methods* (Arnold).

## J722 CLIMATOLOGY.

The general circulation of the atmosphere: the three-cell model; Hadley circulation; conservation of absolute angular momentum and the subtropical jet stream; divergence, vorticity and kinematics of Rossby waves; the polar-front jet stream; the angular momentum and energy budgets of the earth-atmosphere system.

The dynamic climatology of the South Asian and West African monsoons, and the Australian continent.

## References:

- Gentilli, J. (ed.), *Climates of Australia and New Zealand* (Elsevier).  
 Lorenz, E. N., *The nature and theory of the general circulation of the atmosphere* (World Meteorological Organization).  
 Ramage, C. S., *Monsoon meteorology* (Academic).  
 Reiter, E. R., *Jet streams: how do they affect our weather?* (Doubleday).

## J723 CULTURAL GEOGRAPHY.

The course studies the various ways in which culture influences how people see and use their environment and the interactions which occur when communities from different cultural backgrounds compete for the same land.

## References:

- Gale, G. F., *Urban Aborigines* (A.N.U., Press).  
 Tuan, Yi-Fu, *Topophilia, a study of environmental perception, attitudes and values* (Prentice-Hall).  
 Wagner, P. L., and Mikesell, M. W. (eds.), *Readings in cultural geography* (Chicago U.P.).

## J724 ECONOMIC GEOGRAPHY.

This course examines the nature and causes of spatial inequality in economic growth and development at various scales.

## References:

- Open University, *Regional analysis and development*, ed. by J. Blunden and others (Harper).  
 Found, W. C., *A theoretical approach to rural land use patterns* (Arnold).  
 Haggett, P., and others, *Locational methods* (Arnold).  
 Smith, D. M., *Industrial location* (Wiley).  
 Smith, D. M., *Human geography: a welfare approach* (Arnold).

## J725 GEOMORPHOLOGY.

The processes responsible for building the land surface are considered, including weathering, mass movements, and the work of running water, wind and waves. Particular attention is given to the influence of climate, to the form and development of slopes, to evolutionary aspects of landform development and to the importance of the Quaternary.

## References:

- Guilcher, A., *Coastal and submarine morphology* (Methuen).  
 Morisawa, M., *Streams: their dynamics and morphology* (McGraw-Hill).  
 Twidale, C. R., *Analysis of landforms* (Wiley).

J726 RURAL GEOGRAPHY.

This course will concentrate on the spatial aspects of social and economic life in rural areas of western countries. Particular attention will be paid to the social organisation of space, while land use and farming problems and the economic problems of backward rural areas will be considered as background variables.

References:

- Bell, C., and Newby, H., *Community studies* (Allen and Unwin).  
Jones, G., *Rural Life: patterns and processes* (Longman).  
Robinson, E. A. G. (ed.), *Backward areas in advanced countries* (Macmillan).  
Whitby, M. C. et al., *Rural resource development* (Methuen).

J727 SOUTH-EAST ASIA.

A study of the changing human geography of the region over the period from about 1850 to the present, including changes in agricultural systems, population, regional economies and urbanisation.

References:

- Asian Development Bank, *S.E. Asia's economy in the 70's* (Longmans).  
Fryer, D. W., *Emerging South-East Asia* (Philip).  
McGee, T. G., *The Southeast Asian city* (Bell).

J728 URBAN GEOGRAPHY (not offered in 1979).

A comparative approach to urbanisation processes, patterns and attendant problems of city growth and structure in two settings: the western metropolis, and the 'Third World' city.

References:

- Berry, B. J. L., and Horton, F. E., *Geographic perspectives on urban systems* (Prentice-Hall).  
Bourne, L. S. (ed.), *Internal structure of the city* (O.U.P.).  
Dwyer, D. J., *People and housing in third world cities* (Longman).  
Neutze, G. M., *Urban development in Australia* (Allen and Unwin).

The following single units will be offered in 1979 as staff and enrolments allow.

J730 GEOGRAPHIC THOUGHT

A history of the development of geographic thought from classical times to the present.

J731 TECHNIQUES IN HUMAN GEOGRAPHY.

The study of classificatory techniques, such as factor analysis, in the context of the socio-economic zonation of Adelaide.

Reference:

- Taylor, P. J., *Quantitative Methods in Geography* (Houghton Mifflin).

J733 REMOTE SENSING TECHNIQUES.

Photogrammetry and photo interpretation—basic techniques and a survey of recent developments in remote sensing designed for both human and physical geographers.

Reference:

- Avery, T. E., *Interpretation of aerial photographs*, 3rd edition (Burgess).

The subjects offered are:

AJ13 Geography IIIA.

Any six units. Students are expected to take two double unit courses and two single unit courses.



**AJ23 Geography IIIB.**

Any other six units not presented for AJ13 Geography IIIA.

**AJ8H Geography IIIB (half-subject).**

Students requiring a third-year half-subject in Geography will take one double unit and one single unit.

**HONOURS DEGREE.**

**AJ99 Geography for the Honours degree of B.A.**

Normally a standard of credit or above in AJ13 Geography IIIA will be expected as a pre-requisite.

Entry to Honours will depend on satisfactory performance in the work of the third year.

Honours work includes seminars, written examinations and a field study of a selected geographical problem. Admission to the programme is subject to approval by the Chairman.

## GERMAN LANGUAGE AND LITERATURE.

AG01 German I, AG11 German IA, AG02 German II, AG12 German IIA and AG03 German III are subjects for the Ordinary degree of Bachelor of Arts, AG87 German IIB and AG88 German IIB may be taken as subjects for the Ordinary degree. Candidates for the Honours degree of B.A. in German must take these either as whole subjects or as part of approved combined subjects (see the Schedules of the degree of B.A. and AG99 German for the Honours degree of B.A.).

Students may be required to attend tutorials at times additional to those published in the calendar.

Students may wish to supplement their academic course-work by joining the German Students' Club, the Adelaide German Club, the Goethe Society, and by additional, independent work in the Language Laboratory.

More detailed information on course aims and the options available may be found in the Departmental Handbook. Students are requested to collect their copy of the year's Departmental Handbook from the Secretary's office in November of the preceding year.

*Note:* Evening classes (in addition to day classes) are offered in German I, II and III in 3-yearly cycles, as staff and students allow. In 1979 German II will be offered as a day and evening course.

### AG01 German I.

It will be assumed that candidates have studied German to fourth-year secondary school level. Students with outstanding qualifications in language may, with the permission of the Department, take the language component of the course at a more advanced level.

#### A. LANGUAGE.

##### Prescribed texts:

Lohnes, W. F. W., and Strothman, F. W., *German: a structural approach* (Norton).

Conant, J. B., ed., *Cochran's German review grammar* (Prentice-Hall).  
(This text will be used for the language option only.)

*Langenscheidt's concise German dictionary* (Hodder and Stoughton).

##### Recommended texts:

Borgert, U., and Nyhan, C., *A German reference grammar* (Sydney U.P.).

Dickins, E. P., *German for advanced students* (O.U.P.).

Duden, K., *Der grosse Duden*, Bd. 1: *Rechtschreibung* (latest edition).

Eggeling, H. F., *A dictionary of modern German* (O.U.P.).

Stopp, F. J., *A manual of modern German* (University Tutorial Press).

Wahrig, G., *Deutsches Wörterbuch* (Bertelsmann).

#### B. INTRODUCTION TO MODERN GERMANY.

##### (i) Germany 1945-78.

##### Prescribed texts:

Grosser, A., *Germany in our time* (Pelican).

Johann, E., and Junker, J., *German cultural history of the last hundred years* (this text is available from the Department).

Radcliffe, S., *Twenty five years on: the two Germanies 1970* (Harrap).

##### Recommended texts:

Adams, M. (ed.), *The German tradition* (Wiley).

Elliott, B. J., *Hitler and Germany* (Longmans).

##### (ii) Studies in the West German press: newspapers provided by the Department.

## (iii) Selected German Literary Texts 1945-78.

Prescribed texts:

- Dürrenmatt, F., *Der Besuch der alten Dame* (Arche).  
 Plenzdorf, U., *Die neuen Leiden des jungen W.* (Wiley).  
 Handke, P., and Wenders, M., *Falsche Bewegung* (Suhrkamp).

## C. SELECTED GERMAN LITERARY TEXTS OF THE 20TH CENTURY.

Prescribed texts:

- Newnham, R. (ed.), *German Short Stories: Parallel Texts*, vol. I (Penguin).  
 Kafka, F., *Short Stories* (O.U.P.).  
 Mann, T., *Mario und der Zauberer* (Fischer Schulausgabe).  
 Brecht, B., *Die Dreigroschenoper* (Suhrkamp).  
 Frisch, M., *Biedermann und die Brandstifter* (Methuen).  
 Grass, G., *Katz und Maus* (Heinemann).

## D. PRACTICE IN CONVERSATION.

Practice in conversation, pronunciation, etc. is given in regular tutorial classes. Candidates will also be required to work through a specified number of programmes in the Language Laboratory.

## AG02 German II.

Pre-requisite subject: AG01 German I at Division I standard or higher.

In AG02 German II Studies in German Literature and Cultural Background are divided into a core course, compulsory for all members, and a series of options. Options will be offered, as staff and students allow, as listed below under C. The core course is given in first term. For second and third terms students will in each case choose *one* option.

*Note:* An option may not be counted as part of more than one subject.

All options are common to German II, IIA, III, IIB and IIIB but it is possible for students to choose options directly related to the core course in Background Studies. In 1979 these studies span the period 1870-1945. All options fall into two groups: Group A and Group B. In 1979 Comparative Literature, History of Language and Special Problems of Teaching German form Group B. All other options form Group A. The following limits apply to the number of Group B options students may take:

- (i) A student doing only German II or German IIA may take one option from Group B in second year.
- (ii) A student majoring in German may take at most two options from Group B over second and third year. Hence a student wishing to do both Language Teaching options in successive years would have to take the remaining two options for a major from Group A.
- (iii) Students doing IIB as well as II (or IIA) and IIIB as well as III may include two Group B options in each sequence if they wish, thus a total of four in a double major (both III and IIIB).

For further explanatory notes see *Departmental Handbook*.

Students with outstanding qualifications in language may, with the permission of the Department, take the language component of the course at a more advanced level.

## A. LANGUAGE.

Prescribed texts:

- Hammond, R. T., *Fortbildung in der deutschen Sprache* (O.U.P.).  
 Duden, K., *Der grosse Duden*, Bd. 2: *Stilwörterbuch*.  
 Wahrig, C., *Deutsches Wörterbuch* (Bertelsmann).

B. STUDIES IN GERMAN LITERATURE AND CULTURAL BACKGROUND 1870-1945.

Prescribed texts:

- Brecht, B., *Der aufhaltsame Aufstieg des Arturo Ui* (Suhrkamp).  
Brett-Evans, D., *Makers of the twentieth century: Marx, Nietzsche, Freud* (Prentice-Hall).  
Hofmannsthal, H. von, *Essays* (a selection will be distributed by the Department).  
Johann, E., and Junker, J., *German cultural history of the last hundred years* (Nymphenburg). (Copies to be supplied by the Department.)  
Killy, W., *Zeichen der Zeit: ein deutsches Lesebuch*, vols. 3-4 (Fischer).  
Mann, H., *Der Untertan* (dtv 256-57).  
An anthology of 20th century lyric poetry will be available from the Department.

Recommended texts:

- Klassenbuch*, eds. H. M. Enzensberger and others, vols. 2 (1850-1919) and 3 (1920-1971) (Luchterhand).  
Eckart, R. (ed.), *Das Zeitalter des Imperialismus* (Goldmann 1819).  
Geissler, C. (ed.), *Das Dritte Reich* (Goldmann 1820).  
Mann, G., *The history of Germany since 1789* (Chatto and Windus).  
Pascal, R., *The growth of modern Germany* (Russell and Russell).  
Pascal, R., *From naturalism to expressionism* (Weidenfeld and Nicolson).

SECOND TERM.

C. OPTIONS.

(i) CONTEMPORARY GERMAN PROSE.

Prescribed texts:

- Böll, H., *Ansichten eines Clowns* (dtv 400).  
Böll, H., *Die verlorene Ehre der Katharina Blum* (dtv 1150).  
Grass, G., *Die Blechtrommel* (Fischer 473/4).  
Grass, G., *Aus dem Tagebuch einer Schnecke* (rororo 1751).  
Schmidt, A., *Nachrichten von Büchern und Menschen*, vol. 1 (Fischer 1164).  
Fülleborn, U. (ed.), *Deutsche Prosagedichte des 20. Jahrhunderts* (W. Fink).

OR

(ii) SATIRE.

Prescribed texts:

- Heine, H., *Atta Troll, Deutschland* (O.U.P.).  
Keller, C., *Kleider machen Leute* (Reclam).  
Sternheim, C., *Bürger Schippel* (Reclam).  
Mann, H., *Der Untertan* (dtv).  
Schnitzler, A., *Leutnant Gustl* (C.U.P.).  
Dürrenmatt, F., *Griechen sucht Griechin* (Arche).  
Hildesheimer, W., *Die Prinzessin Turandot* (Fischer 971).  
Kernan, A. (ed.), *Modern Satire* (Harcourt, Brace and World).

OR

(iii) HISTORY OF THE GERMAN LANGUAGE.

See AG87 German IIB entry under this heading.

OR

(iv) MUSIC AND LITERATURE.

See AG88 German IIIB entry under this heading.

OR

(v) FRANZ KAFKA.

See AG88 German IIIB entry under this heading.

## THIRD TERM.

## (i) C706 COMPARATIVE LITERATURE.

For syllabus see under "Comparative Literature" immediately after the Classics syllabuses. All students taking this course must enrol for the Option C706 Comparative Literature in the Unit/Option section of the Enrolment Form.

OR

## (ii) NINETEENTH CENTURY GERMAN PROSE.

Prescribed texts:

Wiese, B. von (ed.), *Deutschland erzählt: Von Büchner bis Hauptmann* (Fischer 711).

Mörke, E., *Mozart auf der Reise nach Prag* (Harrap).

Storm, T., *Aquis submersus* (Reclam).

Fontane, T., *Irrungen Wirungen*, ed. Field (Macmillan).

OR

## (iii) SPECIAL PROBLEMS OF TEACHING GERMAN.

See AG87 German IIB entry under this heading.

OR

## (iv) STUDIES IN AUSTRIAN LITERATURE.

See AG87 German IIB entry under this heading.

OR

## (v) GOETHE'S LATER WORKS.

See AG88 German IIIB entry under this heading.

## AG03 German III.

Pre-requisite subject: AG02 German II or AG12 German IIA or AG87 German IIB.

The AG03 German III course will be the same as the AG02 German II course in the areas of literature and background studies including options.

*Note:* An option may not be counted as part of more than one subject.

The language component of AG03 German III will be as below. Students in AG03 German III will be required to complete the literature and background components of the course at a more advanced level than those doing AG02 German II. Students with outstanding qualifications in language may, with the permission of the Department, take the language component of the course at a more advanced level.

## A. LANGUAGE.

Prescribed text:

*Tintenfish 12* (Wagenbach).

## B. STUDIES IN GERMAN LITERATURE AND CULTURAL BACKGROUND.

See AG02 German II entry under this heading.

## C. OPTIONS.

See AG02 German II entry under this heading.

## AG11 German IA.

No previous knowledge of German is required. Students with some knowledge of the language will be advised by the Department concerning the level at which the language should be taken.

A. LANGUAGE: Speaking, reading, comprehension, writing, grammar.

Prescribed texts:

- Schäpers, R., *Deutsch 2000 Band 1 and 2* (Hueber).  
Schäpers, R., *Arbeitsbuch 1 and 2* (Hueber).  
Schäpers, R., *Glossar Deutsch-Englisch 1 and 2* (Hueber).  
Schäpers, R., *Deutsch 2000—A grammar of contemporary German* (Hueber).  
*Langenscheidt's concise German dictionary* (Hodder and Stoughton).

Recommended texts:

- Eggeling, H. F., *A dictionary of modern German prose usage* (O.U.P.).  
Conant, J. B. (ed.), *Cochran's German review grammar* (Prentice-Hall).  
Stopp, F. J., *A manual of modern German* (University Tutorial Press).

B. LANGUAGE AND LITERATURE: Reading, discussion, grammar, lectures.

Prescribed texts:

- Vail, V. H., and Sparks, K., *Der Weg zum Lesen: a German structural reader*, 2nd edition (Harcourt, Brace and Jovanovich).  
Kafka, F., *Short stories* (O.U.P.).  
Brecht, B., *Kalendergeschichten* (Rowohlt TB R-G776).  
Böll, H., *Nicht nur zur Weihnachtszeit* (dtv 350).

C. ORAL.

Oral work is an integral part of the course and of the assessment in this course. Candidates are advised that they must devote a total of at least two hours weekly to independent work in the Language Laboratory.

**AG12 German IIA.**

Pre-requisite subject: AG11 German IA at Division I standard or higher.

A. LANGUAGE: Translation, composition and essay writing.

Prescribed texts:

- Lohnes, W. F. W., and Strothmann, F. W., *German: a structural approach* (Norton).  
Schäpers, R., *Deutsch 2000—Band 3* (Hueber).  
Schäpers, R., *Glossar Deutsch-Englisch 3* (Hueber).  
Conant, J. B. (ed.), *Cochran's German review grammar* (Prentice-Hall).

B. STUDIES IN GERMAN LITERATURE AND CULTURAL BACKGROUND.

See AG02 German II entry under this heading.

C. OPTIONS.

*Note:* No part of this subject may also be counted as part of another subject.  
See AG02 German II entry under this heading.

**AG87 German IIB.**

Pre-requisite subject: A pass at Division I standard or higher in AG01 German I or AG11 German IA.

*Note:* No part of this subject may also be counted as part of another subject.

A. LANGUAGE.

Prescribed text:

- Tintenfisch 12* (Wagenbach).

## B. OPTIONS.

## FIRST TERM.

## EIGHTEENTH CENTURY AND ROMANTIC PROSE-WRITING.

## Prescribed texts:

- Wieland, C. M., *Die Geschichte der Abderiten* (Reclam).  
 Goethe, J. W., *Three tales*, ed. C. A. H. Russ (O.U.P.).  
 Richter, J. P. E., *Leben des vergnügten Schulmeisterlein Maria Wutz in Auenthal* (Reclam).  
 Tieck, L., *Der blonde Eckbert* (Reclam).  
 Kleist, H. von, *Die Marquise von O.* (dtv).  
 Wiese, B. von (ed.), *Deutschland erzählt: von Goethe bis Tieck* (Fischer).

## SECOND TERM.

## HISTORY OF THE GERMAN LANGUAGE.

## Prescribed text:

- Bach, A., *Geschichte der deutschen Sprache* (Quelle and Meyer).

Further details available from the Department.

## Recommended text:

- Chambers, W., and Wilkie, J., *A short history of the German language* (Methuen).

## THIRD TERM.

## (i) SPECIAL PROBLEMS OF TEACHING GERMAN.

OR

## (ii) STUDIES IN AUSTRIAN LITERATURE.

## Prescribed texts:

- Grillparzer, F., *Der arme Spielmann* (Reclam).  
 Stifter, A., *Bergkristall* (Reclam).  
 Schnitzler, A., *Professor Bernhards* (Pergamon).  
 Kraus, K., *Magie der Sprache: ein Lesebuch* (Suhrkamp).  
 Musil, R., *Drei Frauen* (Rowohlt Taschenbuch).  
 Broch, H., *Pasenow* (Bibliothek Suhrkamp).  
 Doderer, H. von, *Das letzte Abenteuer* (Reclam).  
 Roth, J., *Radetzkymarsch* (Rowohlt Taschenbuch).  
 Bernhard, T., *Prosa* (Suhrkamp).

## Recommended texts:

- Crankshaw, E., *The fall of the House of Habsburg* (Sphere).  
 Janik, A., and Toulmin, S., *Wittgenstein's Vienna* (Touchstone).

## AG88 German IIB.

Pre-requisite subject: A pass in AG02 German II or AG12 German IIA or AG87 German IIB.

Note: No part of this subject may also be counted as part of another subject.

## A. LANGUAGE.

## Prescribed text:

- Tintenfisch 12* (Wagenbach).

## B. OPTIONS.

## FIRST TERM.

## (i) RECENT POETRY AND PROSE OF THE DDR.

## Prescribed texts:

- Raddatz, F. J., *Traditionen und Tendenzen*, 2v. (Suhrkamp TB.269).  
 Biermann, W., *Mit Marx und Engelszungen* (Wagenbach).  
 Brasch, T., *Vor den Vätern sterben die Söhne* (Rotbücher 162).  
 Kirsch, S., *Katzenkopfpflaster* (dtv. Sonderr. 5449).  
 Kunze, R., *Die wunderbaren Jahre* (Fischer).  
 Schädlich, H. J., *Versuchte Nähe* (Rowohlt).  
 Wolf, C., *Kindheitsmuster* (Luchterhand).

OR

## (ii) STUDIES IN THE DRAMA (MEDIÆVAL TO STURM UND DRANG).

Prescribed texts:

- Donaueschinger Passionsspiel* (copies to be supplied by the Department).  
 Sachs, H., *Der fahrende Schüler im Paradies* (Reclam).  
 Biedermann, J., *Cenodoxus* (copies to be supplied by the Department).  
 Lessing, G., *Emilia Galotti*, ed. Stahl (Blackwell).  
 Schiller, F., *Die Räuber* (Reclam).  
 Goethe, J. W., *Götz von Berlichingen* (Reclam).

## SECOND TERM.

## (i) MUSIC AND LYRIC/LITERATURE.

Prescribed text:

Praver, S. S., *The Penguin book of German Lieder* (Penguin).

An anthology will be supplied by the Department.

OR

## (ii) FRANZ KAFKA.

Prescribed text:

Kafka, F., *Gesammelte Werke*, ed. M. Brod, 7 v. (Fischer).

Recommended texts:

- Binder, H., *Kafka Kommentar*, 2v. (Winkler).  
 Binder, H. (ed.), *Kafka Handbuch* (Winkler).

## THIRD TERM.

## GOETHE'S LATER WORKS.

Prescribed texts:

- Staiger, E. *et al.* (eds.), *Insel-Goethe*, 6v. (Insel/KNO Sonderausg.).  
 Friedenthal, R., *Goethe*, 2v. (dtv).

## HONOURS DEGREE.

## Honours Seminar.

This seminar is compulsory for Final Honours students in third term, open to postgraduate students and may be taken as an option by other interested students with the Chairman's approval.

## AG99 German for the Honours degree of B.A.

Before entering the final honours year candidates for the Honours degree in German must have qualified for the Ordinary degree of B.A., and should normally have passed AG01 German I or AG11 German IA; AG02 German II or AG12 German IIA; AG87 German IIB, AG03 German III, and AG88 German IIIB, at appropriately high standard. However, the Department reserves the right to vary these pre-requisites where it is satisfied as to the academic merit of an applicant. Note that the pre-requisites concerning second- and third-year subjects may be fulfilled by taking approved combined subjects which include parts of these. See Schedules—Degree of B.A., Schedule III: The Honours Degree.

During the final year students will write a dissertation on some aspect of German literature or language. Choice of subject should be made not later than the beginning of the third term in the preceding year. Students must also attend advanced courses in language, together with literature options. Both thesis topic and literature options should be chosen in consultation with the Chairman of Department.



Final Honours students will attend in third term a seminar (in 1979 "Goethe's Later Works") which is also open to postgraduate students. It may also be taken as an option by other interested students with the Chairman's approval.

Students may obtain the permission of the Faculty of Arts to combine German with another subject for the Honours degree. They should consult the Chairman of Department as soon as possible, ideally before entering AG87 German IIB, so that a suitably modified course can be arranged. Where the subjects taken for the Ordinary degree of B.A. need to be chosen to satisfy the pre-requisites of more than one Department, a student may arrange with the Departments to take appropriate combined subjects, so as to avoid doing more than nine subjects to qualify for entry to combined honours.

---

#### AG74 Science German.

This subject is open to members of staff, research students and those Honours students required by their Departments to take the course in Science German. It consists of two lectures weekly throughout the year. Its aim is to ensure fluency in reading German and in translation from German into English. *No previous knowledge of the language is required.*

Text-book:

Meinel, H. A., *A course in scientific German* (Hueber).

Dictionary:

De Vries, L., *German-English science dictionary* (McGraw-Hill).

## HISTORY.

There are seven subjects in History. No more than five of the seven subjects may be presented for the B.A. degree. A student proceeding to a degree must pass in AH01 History IA or AH31 History IB or AH41 History IC or another appropriate subject approved by the Chairman of Department before taking AH02 History IIA or AH22 History IIB; and in AH02 History IIA or AH22 History IIB before taking AH03 History IIIA or AH13 History IIIB.

### FIRST YEAR.

#### AH01 History IA.

RENAISSANCE, REFORMATION AND REVOLUTION IN EUROPE 1350-1650.

No pre-requisite subject.

A first-year subject: not available to students with exemption from lectures.

Preliminary reading:

Hay, D., *The medieval centuries* (Methuen).

Holmes, G. A., *Europe: hierarchy and revolt* (Fontana).

Elton, G. R., *Reformation Europe* (Fontana).

#### AH31 History IB.

OLD SOCIETIES AND NEW STATES: THE REVOLUTIONARY TRANSFORMATION OF ASIA, AFRICA AND THE PACIFIC, 1700 TO THE PRESENT.

No pre-requisite subject: available to approved students with exemption from lectures.

In the first and second terms students will be introduced to societies in Asia, Africa and the Pacific before the modern era. Next they will examine the causes and consequences of European imperialism. Finally they will study the revolutionary changes and ideas which characterise the newly independent states of the Third World.

In the third term students will study in depth the recent history of a single country or region.

Introductory reading:

Kiernan, E. V. G., *The lords of human kind* (Weidenfeld and Nicolson).

Moore, B., *The social origins of dictatorship and democracy* (Allen Lane/Penguin).

A fuller reading list will be available from the Department of History in February.

#### AH41 History IC.

AUSTRALIAN HISTORY.

No pre-requisite subject.

A first-year subject: not available to students with exemption from lectures.

The course surveys aspects of Australian social history since 1788.

Introductory reading:

Crawford, R. M., *Australia* (Hutchinson).

Blainey, G., *Triumph of the nomads* (Melbourne U.P.).

A fuller reading list and more course information will be available at the preliminary lecture.

## SECOND YEAR.

The following options will be offered in 1979, as staff and enrolments allow.

## H701 POPULAR RELIGION AND THE PRE-SCIENTIFIC WORLD VIEW IN EARLY MODERN ENGLAND, c.1500-1700.

A study of the components of "pre-scientific" thought (e.g. astrology, alchemy, humoral medicine and psychology, witchcraft), and popular religious movements in sixteenth and seventeenth century England.

Preliminary reading:

Thomas, K., *Religion and the decline of magic* (Pelican).

Hill, C., *The world turned upside down* (Pelican).

A detailed reading list will be available from the Department in February.

## H702 THE RISE OF CHINA AND JAPAN. CONFLICT AND CRISIS IN MODERN EAST ASIA.

A study of the political, socio-economic, and cultural transformation of modern China and Japan in the nineteenth and twentieth centuries.

Introductory reading:

Fairbank, J. K., Reischauer, E. O., and Craig, A. M. *East Asia: tradition and transformation* (Allen and Unwin).

McAleavy, H., *Modern history of China* (Weidenfeld and Nicolson).

Fairbank, J. K., *The United States and China* (Harvard).

Bianco, L., *Origins of the Chinese revolution* (Stanford U.P.).

Han, Suyin, *The crippled tree* (Mayflower).

Beasley, W. G., *Modern history of Japan* (Weidenfeld and Nicolson).

Maruyama, M., *Thought and behaviour in modern Japanese politics* (O.U.P.).

Benedict, R., *The chrysanthemum and the sword* (Weidenfeld and Nicolson).

Mishima, Y., *Runaway horses* (Secker and Warburg).

Crowley, J. B., *Modern East Asia: essays in interpretation* (Harcourt Brace).

## H703 FRANCE 1850-1918.

A political, social and intellectual history which begins with the themes of Bonapartism and democracy after the 1848 Revolution, and ends with an analysis of the effects of the First World War on French society. Amongst the topics to be examined in depth will be: Bonapartism in practice during the régime of the Second Empire; painters, writers and musicians under Napoleon III; peasant society in nineteenth-century France; the Franco-Prussian War and the Paris Commune of 1871; Catholicism, anticlericalism and the conflict over education; the Dreyfus Affair and the origins of modern antisemitism; the French Army, conscription and the War of 1914-1918.

Preliminary reading:

One of the standard histories of the Revolution of 1848:

Denholm, A. F., *France in Revolution: 1848* (Wiley), gives a detailed account from contemporary sources.

Prescribed texts:

Thomson, D., *France: Empire and Republic 1850-1940: Selected Documents* (Macmillan).

Halstead, J. B. (ed.), *December 2, 1851* (Doubleday Anchor).

Edwards, S. (ed.), *The Communards of Paris, 1871* (Thames and Hudson).

Zola, E., *Germinal* (Penguin), *L'Assommoir* (Penguin), *Earth* (Mentor).

Recommended books:

- Zeldin, T., *France 1848-1945* (O.U.P.).  
Williams, R. L., *The world of Napoleon III* (Collier paperback).  
Bury, J. P. T., *Napoleon III and the Second Empire* (English University Press).  
Zeldin, T. (ed.), *Conflicts in French society* (Allen and Unwin).  
Kamenka, E. (ed.), *Paradigm for revolution: The Paris Commune* (A.N.U. Press, paperback).  
Brogan, D. W., *The development of modern France* (Hamish Hamilton).  
Zola, E., *Germinal* (Penguin).  
Berlioz, H., *The memoirs of Berlioz* (Panther, paperback).  
Chapman, G., *The Dreyfus trials* (Paladin, paperback).

H704 CULTURE AND CRISIS: ENGLAND AND EUROPE 1870-1970.

This course will examine assaults on assumptions about man, society and culture in the twentieth century through an analysis of major crises in Europe as they impinged upon England—in literature, thought, sensibilities and politics.

Prescribed texts:

- Larkin, M., *Gathering pace: continental Europe 1870-1945* (Macmillan).  
Stearns, P., *European society in upheaval* (Macmillan).

Reference books:

- Joll, J., *Europe since 1870* (Pelican).  
Taylor, A. J. P., *English history 1914-1945* (Pelican).

Further reading will be prescribed in February, 1979.

H707 BISMARCK TO HITLER.

A history of the Germans from unification to division. Political, social and economic issues will be discussed in a course of lectures, and intellectual and cultural issues in a parallel tutorial course.

Introductory reading:

- The New Cambridge Modern History, relevant chapters in vols. X-XII (Cambridge U.P.).

For constant reference:

- Holborn, H., *A history of modern Germany, 1840-1945* (Eyre and Spottiswoode).  
Pinson, K. S., *Modern Germany—its history and civilization* (Macmillan).  
Bracher, K. D., *The German dictatorship* (Penguin).  
Stolper, G., *The German economy—1870 to the present* (Weidenfeld and Nicolson).  
Dawidowicz, L., *The war against the Jews* (Pelican).

H708 MEDIEVAL EUROPE.

An introduction to the history of Western continental Europe from the early 4th Century to the middle of the 15th Century. Lectures will concentrate on the great institutions of medieval Europe: papacy, Empire, court, monastery, town, manor, and on the religious, intellectual and social changes within European society during this period. Tutorials will be based on the examination of literary texts in translation, and on their historical content.

Introductory reading:

- Hay, D., *The medieval centuries* (University Paperbacks).  
Erickson, C., *The medieval vision. Essays in History and Perception* (O.U.P.).  
Brown, Peter R. L., *The world of late antiquity* (Thames and Hudson).

Text-book:

- Cantor, N. F., *Medieval history. The life and death of a civilization*, 2nd edition (Collier Macmillan).

**H709 AUSTRALIA: OUTPOST OF EMPIRE IN THE ANTIPODES.**

A study of Australian history from the 1850s to the 1930s emphasising the interaction between British heritage and Australian environment.

This option is available to approved students with exemption from lectures.

## Introductory reading:

- Blainey, G., *The tyranny of distance* (Sun Books).  
 Clark, C. M. H., *A short history of Australia* (Mentor Books).  
 Crawford, R. M., *Australia* (Hutchinson).  
 Crowley, F. K. (ed.), *A new history of Australia* (Heinemann).  
 Hancock, W. K., *Australia* (Jacaranda Press).  
 Thomson, D., *England in the nineteenth century* (Pelican).  
 Thomson, D., *England in the twentieth century* (Pelican).

**H710 PACIFIC HISTORY.**

A study of social change in the Pacific islands from the earliest times to the present day. Comparative material from New Zealand and New Guinea will also be included and there will be opportunities for specialisation within the area.

Available to approved students with exemption from lectures.

## Introductory reading:

- Davidson, J. W., and Scarr, D., *Pacific islands portraits* (A.N.U. Press).  
 Suggs, R. G., *The island civilisation of Polynesia* (New Amer. Lib.).  
 Maude, H. E., *Of islands and men* (O.U.P.).  
 Shineberg, D., *They came for sandalwood* (M.U.P.).  
 Sinclair, K., *A history of New Zealand* (Pelican).  
 Hastings, P., *New Guinea: problems and prospects* (Cheshire).

**H712 SOCIAL AND POLITICAL IDEAS SINCE THE SEVENTEENTH CENTURY.**

A study of conservative, liberal and socialist traditions of social thought and action, and of contemporary conservationist and liberationist ideas in relation to those traditions.

## Introductory reading:

- Thomson, D., *Political ideas* (Penguin).  
 Duncan, G. C., *Marx and Mill: Two views of social conflict and social harmony* (C.U.P.).

**H713 NATIONALISM AND REVOLUTION IN MODERN SOUTH EAST ASIA.**

A study of the transformation of traditional South East Asian societies from about 1800 to the present. A survey of the history of the region will be accompanied by a special examination of Indonesia, Malaysia and Vietnam.

## Introductory reading:

- Bastin, J., and Benda, H. J., *A history of modern south east Asia*, 2nd edition (Prentice-Hall).  
 Von der Mehden, F. F., *South-east Asia, 1930-1970* (Thames and Hudson).  
 Steinberg, D. J. (ed.), *In search of south east Asia: a modern history* (Praeger).  
 Burling, R., *Hill farms and paddy fields: life in mainland south east Asia* (Spectrum).

The subjects offered in second year are:

**AH02 History IIA.**

Pre-requisite: Pass in AH01 History IA or AH31 History IB or AH41 History IC or another appropriate subject approved by the Chairman of the Department.

**AH22 History IIB.**

Pre-requisite: Pass in AH01 History IA or AH31 History IB or AH41 History IC or another appropriate subject approved by the Chairman of the Department; and pass in AH02 History II (before 1978) or enrolment in AH02 History IIA.

### THIRD YEAR.

The following options will be offered, as staff and enrolments allow:

- H701 POPULAR RELIGION AND THE PRE-SCIENTIFIC WORLD VIEW IN EARLY MODERN ENGLAND, c.1500-1700.
- H702 THE RISE OF CHINA AND JAPAN. CONFLICT AND CRISIS IN MODERN EAST ASIA.
- H703 FRANCE 1850-1918.
- H704 CULTURE AND CRISIS: ENGLAND AND EUROPE 1870-1970.
- H707 BISMARCK TO HITLER.
- H708 MEDIEVAL EUROPE.
- H709 AUSTRALIA: OUTPOST OF EMPIRE IN THE ANTIPODES.
- H710 PACIFIC HISTORY.
- H712 SOCIAL AND POLITICAL IDEAS SINCE THE SEVENTEENTH CENTURY.
- H713 NATIONALISM AND REVOLUTION IN MODERN SOUTH EAST ASIA.

The subjects offered in third year are:

#### AH03 History IIIA.

Pre-requisite: Pass in AH02 History IIA, or AH22 History IIB.

One of the options not already passed as AH02 History IIA, or AH22 History IIB.

The syllabus in each of the options listed for AH03 History IIIA will be similar to that of the corresponding option in AH02 History IIA; but students taking AH03 History IIIA will be required to undertake an additional study relating to the material of the option.

#### AH13 History IIIB.

Pre-requisite: Pass in AH02 History IIA or AH22 History IIB and enrolment or pass in AH03 History IIIA.

One of the options not already passed as AH02 History IIA or AH22 History IIB or AH03 History IIIA.

The syllabus in each of the options listed for AH13 History IIIB will be similar to that of the corresponding option in AH02 History IIA; but students taking AH13 History IIIB will be required to undertake an additional study relating to the material of the option.

### HISTORY FOR THE HONOURS DEGREE OF B.A.

A student who wishes to enrol for the Honours degree in History must:

- (a) have passed in AH03 History IIIA and two other subjects in history; and
- (b) have reached a standard satisfactory to the Chairman of the Department of History in the first three years of study. (A student who has passed at Credit standard in at least two subjects including one in history will generally be deemed to have reached this standard.)

Students who wish to take Honours should consult the Co-ordinator of Honours Studies in History.

#### AH99 History for the Honours degree of B.A.

Honours work includes the writing of a thesis, and two special subjects:

Students may choose from a list of subjects to be offered by members of staff. The list will be available during the first term.

Honours students will also be required to take a general essay paper in the final examination.

## MUSIC.

## (FOR THE DEGREE OF BACHELOR OF ARTS)

Courses are offered in the Department of Music and in the Centre for Aboriginal Studies in Music.

All students are encouraged to participate in the practical work of the Department (e.g. choir; orchestra; chamber music). Those who have ability as performers may also apply for admission as "single study" students in voice or instrument.

## UA61 Music IA.

No previous knowledge of music is required. However, students should be aware that the course involves intensive study in music theory. Students with some knowledge of music will be advised by the Department concerning the level at which Music should be taken—UA61 Music IA or UA51 Music I. UA61 Music IA is usually a one-year course only and may lead to UA52 Music II only with the permission of the Chairman of the Department.

The course consists of four hours lectures/tutorials a week.

## 1. MUSIC THEORY:

The course deals with the basic vocabulary and rudiments of music: the procedures of rhythm, melody, tonality, harmony and instrumentation are studied using the forms and styles of Western music as the basis for analysis.

Text-book:

Karolyi, O., *Introducing music* (Pelican).

## 2. MUSIC IN WESTERN SOCIETY:

A study of selected areas in music history, taking into account the general cultural background of the other arts.

Text-books:

Brown, H. M., *Music in the renaissance* (Prentice-Hall).  
 Longyear, R. M., *Nineteenth century romanticism in music* (Prentice-Hall).  
 Palisca, C. V., *Baroque music* (Prentice-Hall).  
 Paily, R. G., *Music in the classic period* (Prentice-Hall).  
 Salzman, E., *Twentieth century music* (Prentice-Hall).  
 Seay, A., *Music in the medieval world* (Prentice-Hall).

## 3. ASSESSMENT:

Assessment is predominantly by assignments and tests, although students are required to sit for at least one examination at the end of the year.

Additional information is available from the Music Office.

## UA51 Music I.

The course assumes a working knowledge of notation and the elementary principles of harmony.

The course consists of four hours lectures/tutorials a week.

## 1. MUSIC THEORY:

- (a) Introduction to general musical structure: e.g. temperament, intervals, scales, modes, tonality and atonality.
- (b) A broad understanding of melody and harmony, with exercises in theme construction, melodic variations, four-part harmony, and analysis.

Reference books:

Karolyi, O., *Introducing Music* (Pelican).  
 Lloyd, L. S., and Boyle, H., *Intervals, scales and temperament* (Macdonald).  
 Morris, R. O., *Foundations of practical harmony and counterpoint* (O.U.P.).  
 Schoenberg, A., *Fundamentals of musical composition* (Faber).

2. MUSIC IN WESTERN SOCIETY:

A study of selected areas in music history, taking into account the general cultural background.

Text books:

See UA61 Music IA above.

3. ASSESSMENT:

Assessment is predominantly by assignments and tests, although students are required to sit for at least one examination at the end of the year.

UA52 Music II.

Pre-requisite subject: UA51 Music I at Division I standard or higher; or UA61 Music IA, with permission of the Chairman of the Department.  
The course consists of four hours lectures/seminars a week.

1. MUSIC THEORY:

- (a) Study of tonal harmony and melody through exercises in constructive listening, the harmonising of melodies and figured basses, and the re-arranging of orchestral scores for smaller ensembles or piano.
- (b) Analysis, with particular reference in Term III to set works.

Set works:

Mozart, W. A., *Symphony No. 40 in G minor* (Eulenberg).  
Bruckner, A., *Symphony No. 7* (Eulenberg).  
Hartmann, K., *Symphony No. 4* (Schott).

2. HISTORY OF MUSIC:

(Two terms only). A choice of topics within the 18th and 19th centuries.

Text-books:

Abraham, G. E. H., *A hundred years of music* (Duckworth).  
Denny, J., *The Oxford school harmony course*, book I (O.U.P.).  
Hardy, G., and Fish, A., *Music literature: a workbook for analysis*, vol. I (Dodd).  
Reti, R., *The thematic process in Music* (Faber).  
Rosen, C., *The classical style: Haydn, Mozart and Beethoven* (Faber).

3. ELECTIVE STUDIES:

- (a) A choice of: introduction to ethnomusicology; introduction to music in education; musicology project.

OR

- (b) Individual instruction throughout the year in voice or instrument or electronic music (subject to audition, and availability of teaching facilities).

4. ASSESSMENT:

Assessment is predominantly by assignment, although students are required to sit for one examination at the end of the year and an aural awareness test arranged by the Department.

UA53 Music III.

Pre-requisite subject: a Pass at Division I standard or higher in UA52 Music II.

The course consists of:

1. PROJECTS.

Two projects, one in each of *two terms*, chosen from the Department's Project Programme (as for B.Mus., Faculty of Music).

Projects are studied from a broad perspective which covers, as well as specific considerations of music theory and music history, the related musicological implications of aesthetics, philosophy and sociology.

Intensive course work is followed by individual study, with a folio of work for the Project being submitted for assessment.



2. THEORETICAL STUDIES (Subject to availability of teaching facilities).  
Extension of theoretical work begun in UA52 Music II, including analytical studies.
3. ELECTIVE STUDIES.  
Extension of work begun in UA52 Music II.

## READING LISTS:

Reading lists for each Project are provided by the Department. There are no set text-books.

## MUSIC FOR THE HONOURS DEGREE OF B.A.

## UA68 Music IIIS.

Available only to students who have the permission of the Chairman of the Department to enter the Honours course.

The course consists of:

1. THEORETICAL STUDIES.  
One weekly theory class (additional to the theoretical requirements of UA53 Music III).
2. PRELIMINARY HONOURS.  
Preliminary honours work (seminars, workshops, practical work) in a chosen area; ethnomusicology, musicology, music in education.
3. PROJECT.  
One project (additional to the requirements of UA53 Music III), chosen from the Department's Project Programme.  
Assessment is by assignments and tests as arranged by the Department.

## UA69 Music for the Honours degree of B.A.

Students intending to take Honours should consult the Chairman of the Department before the beginning of their third year's work.

Pre-requisite subjects: UA51 Music I, UA52 Music II, UA53 Music III and UA68 Music IIIS.

Candidates will complete research assignments as directed during the year.

1. ETHNOMUSICOLOGY.  
*Syllabus:* A course of seminars and individual tuition in the theoretical background to ethnomusicology, including field techniques, transcription, analytical procedures, performance techniques; or
2. HISTORICAL MUSICOLOGY.  
*Syllabus:* A course of seminars and individual tuition in: paleography; selected theoretical writings; editorial practice; musicological method (analytical bibliography, source evaluation, periodisation of musical terminology); or
3. SYSTEMATIC MUSICOLOGY.  
*Syllabus:* A course of seminars and individual tuition in: advanced acoustics; psycho-acoustics; music physiology; advanced music aesthetics; music philosophy; information theory; or
4. MUSIC IN EDUCATION.  
A course of workshops in creative music, and improvisation; and a comprehensive study of more advanced teaching methods, including associated work in electronics. Part of this work will involve students taking projects into primary and secondary schools.

## PHILOSOPHY.

### FIRST YEAR.

There are three half-subjects: AL1H Philosophy IH(A), AL2H Logic IH, and AL3H Philosophy IH(B). Each is offered both in the day and in the evening. The department recommends taking the equivalent of a full subject, especially for Arts students. There are two ways to do this:

- (i) *AL1H Philosophy IH(A) and AL2H Logic IH.* This is an introduction to philosophy that includes the study of logic. A pass in both half-subjects with at least one at division I level allows entry into AL02 Philosophy II. A division I pass in AL2H Logic IH allows entry into AL22 Logic II. This combination is advised for those who may wish to proceed to third year. While AL2H Logic IH is not a pre-requisite for any later year philosophy subjects, it is a pre-requisite for logic *options* within those subjects, as well as for the subjects AL22 Logic II and AL23 Logic III. Knowledge of logic to at least the level of the first year course is often required in courses at Honours level, and may be required in some philosophy options in second and third years.
- (ii) *AL1H Philosophy IH(A) and AL3H Philosophy IH(B).* This is an introduction to philosophy without the study of logic. A pass in both half-subjects, with at least one at division I level, allows entry into AL02 Philosophy II which leads to third year philosophy subjects. It does not allow entry into AL22 Logic II or AL23 Logic III, and does not provide background that is often required for Honours level courses and may be required for some philosophy options in second and third years.

The half-subjects may be taken separately. Those who wish to study logic without philosophy will enrol in:

- (iii) *AL2H Logic IH alone.* A division I pass allows entry into AL22 Logic II, or else, under certain conditions, into AL23 Logic III. (See the description of AL23 Logic III below.) It does not allow entry into AL02 Philosophy II.

Those who wish to undertake just one half-subject of Philosophy may enrol in either of:

- (iv) *AL1H Philosophy IH(A) alone.*
- (v) *AL3H Philosophy IH(B) alone.*

In neither case will it be possible to enter any later year subject, unless a further half-subject is successfully completed in a later year.

No patterns of enrolment other than (i)-(v) are allowed. Thus, it is not possible to take all three half-subjects nor is it possible to take the combination of AL2H Logic IH and AL3H Philosophy IH(B). Three half-subjects or the combination of AL3H Philosophy IH(B) and AL2H Logic IH may be presented for a degree only if all are passed prior to March 1979.

The half-subject AL3H Philosophy IH(B) may not be available in future years.

There are no pre-requisites for any of the first-year half-subjects. They are completed in one year and are not normally available to students with exemption from lectures. Assessment for each half-subject is an aggregate of assessments for each term's work. There are no compulsory examinations in AL1H Philosophy IH(A) or in the second and third terms of AL3H Philosophy IH(B). Each half-subject consists of one lecture a week and one tutorial a fortnight.

### AL1H Philosophy IH(A).

An introduction to some main problems of philosophy; the issues viewed in this course concern the nature of human beings and their situation in the universe. First term: *Concepts of Freedom.* The classical problem whether people act freely in the natural world and, if they do, how and in what social conditions they may do so. Second term: *Ethics.* Is there a rational basis for morality, whether in terms of self-interest, the will of God, the demands of society or the greatest happiness of the greatest number? Third term: *Knowledge.* What, if anything, can we know and what light may be shed on the nature of man? *Mind.* Is a person merely a complex physical thing or is a spiritual element essential to being human?

## Text-books:

Berofsky, B. (ed.), *Freewill and determinism* (Harper and Row).

Frankena, W. K., *Ethics* (Prentice-Hall).

Shaffer, J. A., *Reality, knowledge and value* (Random House),

## AL2H Logic IH.

In first term the nature of reasoning will be studied.

## Text-book:

Copi, I. M., *Introduction to logic*, 5th edition (Collier-Macmillan).

In second and third terms the topics will be: introduction to truth-functional logic, truth-trees, the adequacy of the truth-tree method, some modifications of the method, and introduction to quantificational logic.

## Text-book:

Jeffrey, R. C., *Formal logic: its scope and limits* (McGraw-Hill).

*Note:* Those who wish to abandon the study of logic at the end of either first or second term may do so by changing their enrolment to Philosophy IH(B). Their earlier results will count towards their final assessment.

## AL3H Philosophy IH(B).

The first term is identical with that of AL2H Logic IH. The topic is the nature of reasoning.

## Text-book:

Copi, I. M., *Introduction to logic*, 5th edition (Collier-Macmillan).

In second term the topic is *the State and the individual*. What are the proper limits of State interference with the individual? Have we the right to publicly and perhaps violently disobey a bad law?

## Text-book:

Wasserstrom, R. A. (ed.), *Morality and the law* (Wadsworth).

In third term the topic is *the existence of God*: a discussion of one argument for and one against the existence of God, a consideration of some views about the nature of religious language.

## Text-book:

Hick, J. (ed.), *The Existence of God* (Macmillan).

Those who wish to do so may transfer from Philosophy IH(B) to Logic IH at the end of first term by changing their enrolment. Their first term assessment will count towards their final assessment.

## SECOND YEAR.

There are two subjects. AL02 Philosophy II consists of three term-long options. AL22 Logic II consists of the three logic options. These subjects are completed in one year and are not normally available to students with exemption from lectures. Each option is normally two lectures and one tutorial each week. Pre-requisites for subjects and special pre-requisites for some options are stated in their descriptions.

Logic options: Students who completed the pre-requisite courses for L201, L205 or L208 some time ago should revise their knowledge before beginning the option. Please consult the Department for advice on suitable revision texts well before the option begins.

It is expected that the options will be:

L201 LOGIC: First term.

Pre-requisite: AL2H Logic IH, A, B and C options in 1976 or later years; or AL2H Logic and Argument IH, A and B options in 1974; or AL01 Philosophy I before 1974. Students may not count toward their degree both this course and the logic part of AL02 Philosophy II prior to 1974.

Text-book:

Mates, B., *Elementary logic*, 2nd edition (O.U.P.).

L204 ETHICS: First term.

R. M. Hare and modern moral theory.

Text-books:

Hare, R. M., *The language of morals* (O.U.P.).

Hare, R. M., *Freedom and reason* (O.U.P.).

Hudson, W. D., *Modern moral philosophy* (Macmillan).

L213 THEORIES OF HUMAN NATURE: First term.

A study of some theories of human nature, with a strong emphasis on existential ideas (especially Sartre's theory).

Text-books:

Stevenson, L., *Seven theories of human nature* (O.U.P.).

Sartre, J. P., *Being and nothingness*, tr. Hazel Barnes (Methuen).

L209 SCIENCE, PROGRESS AND TRUTH: First term.

A discussion of Hume, Popper, Kuhn, Lakatos and Feyerabend.

Text-book:

Chalmers, A. F., *What is this thing called Science?* (Queensland U.P.).

L205 MODAL LOGIC: Second term.

Pre-requisite: Logic L201.

Text-book:

Hughes, G. E., and Cresswell, M. J., *Introduction to modal logic*, Revised edition (Methuen).

L217 PROBLEMS IN CAUSATION: Second term.

Causation is a critical issue in metaphysics, in philosophy of science and in philosophy of history.

Text-book:

Beauchamp, T. L. (ed.), *Philosophical problems of causation* (Dickensen).

L211 MARXISM: Second term.

A philosophical study of the thought of Karl Marx and later Marxists and some of their critics. Topics covered will include the theory of human nature, alienation, historical materialism, the critique of capitalist society, the state, Revolution, ideology, communism.

Text-books:

Marx, K., *Selected writings*, ed. D. McLennan (O.U.P.).

Marx, K., *Selected writings in sociology and social philosophy*, eds.

T. B. Bottomore and M. Rubel, 2nd edition (Pelican).

Required reading:

Avineri, S., *The social and political thought of Karl Marx* (C.U.P.).

Lichtheim, G., *Marxism* (Routledge & Kegan Paul).

McLellan, D., *The thought of Karl Marx* (Macmillan).

All books cited are available in paperback editions.

## L230 AESTHETICS: Second term.

Special reference will be made to the visual arts.

Text-book:

Wollheim, R., *Art and its objects* (Peregrine).

Other suggested reading:

Gombrich, E. H., *Art and illusion* (Phaidon Press).

Collingwood, R. G., *The principles of art* (O.U.P.).

Osborne, H. (ed.), *Aesthetics* (O.U.P.).

Osborne, H. (ed.), *Aesthetics in the modern world* (Thames and Hudson).

## L208 ADVANCED LOGIC: Third term.

Topics in the metalogic of first order theories: completeness, decidability, non-standard models, etc.

Text-book:

Hunter, G., *Metalogic* (Macmillan).

## L206 TOPICS IN METAPHYSICS OR PHILOSOPHY OF MIND: Third term.

Details and texts to be announced by March 1979.

## L203 PHILOSOPHY OF RELIGION: Third term.

Topics include Eastern religions, mysticism and miracles.

Preliminary reading:

Smart, N., *The religious experience of mankind*, Chs. 1 and 3 (Fontana).

Text-books:

Rowe, W. L., and Wainwright, W. J. (eds.), *Philosophy of religion* (Harcourt, Brace Jovanovitch).

Swinburne, R., *The concept of miracle* (Macmillan).

## L221 RELATIVISM, WITCHCRAFT, TRUTH AND LOGIC: Third term.

Text-books:

Trigg, R., *Reason and commitment* (C.U.P.).

Wilson, B. R., *Rationality* (Harper Torchbooks).

Other suggested reading:

Evans-Pritchard, E. E., *Witchcraft, oracles and magic among the Azande* (O.U.P.).

Haack, S., *Deviant logic* (C.U.P.).

Levy-Bruhl, L., *How natives think* (Allen and Unwin).

Mead, M., *Culture and commitment* (Bodley Head).

Phillips, D. Z., *The concept of prayer* (Routledge).

Winch, P., *The idea of a social science* (Routledge).

Whorf, B. L., *Language, thought and reality*, ed. J. Carroll (M.I.T.).

The subjects offered are:

## AL02 Philosophy II.

Pre-requisite: *Either*

(a) Division I pass or better in one of AL1H Introductory Philosophy IH (1974) or AL1H Philosophy IH(A) or AL3H Philosophy IH(B) or AL2H Logic and Argument IH (1974) or AL2H Logic IH and a Division II pass or better in another; *or*

(b) Division I pass or better in AL01 Philosophy I before 1974.

One option each term.

### AL22 Logic II.

Pre-requisite: *Either*

(a) Division I pass or better in AL2H Logic IH, A, B and C options in 1976 and later years; *or* Division I pass or better in AL2H Logic and Argument IH (1974) (students must have taken either ABD or ABE in this course); *or*

(b) Division I pass or better in AL01 Philosophy I before 1974.

The subject consists of the options L201, L205 and L208. No option counted towards AL02 Philosophy II, AL03 Philosophy IIIA or AL13 Philosophy IIIB may count as a course for AL22 Logic II.

This subject may not be available in future years, subject to the availability of staff.

### THIRD YEAR.

The Department of Philosophy offers term-long options, each normally two lectures and one tutorial a week, and term-long seminars. Any student takes a third-year subject by taking one option in each term and a seminar (or equivalent written project) in one of the terms. Options count equally towards assessment for the subject. The seminar (or equivalent written project) is half the value of an option. The subject is completed in one year and is not normally available to students with exemption from lectures.

A student may take both AL03 Philosophy IIIA and AL13 Philosophy IIIB. No student enrolls in IIIB unless he has passed IIIA or is currently undertaking it. No option or seminar or project may count towards both IIIA and IIIB.

Options are selected from the following list and from the list offered for Second Year. No option counted towards AL02 Philosophy II, AL22 Logic II or AL23 Logic III may count towards IIIA or IIIB. Where an option overlaps significantly with an option given in earlier years only one of them may count towards any subject in philosophy. Students should consult the Department if in doubt about option overlap. Students taking AL02 Philosophy II options as part of IIIA or IIIB will be required to undertake additional study relating to the material of the subject.

Options may have a special pre-requisite stated in their description.

Seminars meet weekly for 1½ hours.

The options are the second-year options, and:

C708 ANCIENT PHILOSOPHY: First term.

For syllabus see under Classics (AC33 Classical Studies III).

The subjects offered are:

#### AL03 Philosophy IIIA.

Pre-requisite: AL02 Philosophy II *or* AL22 Logic II.

One option each term plus one seminar. The subject is completed in one year.

#### AL13 Philosophy IIIB.

Pre-requisite: As for AL03 Philosophy IIIA.

For students who have passed AL03 Philosophy IIIA *or* who enrol concurrently for AL03 Philosophy IIIA.

Three options not presented for AL03 Philosophy IIIA or any other subject given by the Department of Philosophy and one seminar not otherwise presented. The subject is completed in one year.

This subject may not be available in future years, subject to the availability of staff.

**AL23 Logic III.**

## Pre-requisite:

(a) As for AL22 Logic II and

(b) AL02 Philosophy II or a second-year Mathematical Sciences subject.

The course is as for AL22 Logic II.

Students taking these courses as AL23 Logic III will be required to undertake additional study relating to the material of the courses.

This subject may not be available in future years, subject to the availability of staff.

**AL4H Philosophy IIIH.**

Pre-requisite: As for AL03 Philosophy IIIA.

This half-subject is available for students who wish to take it together with SJ3H Social Biology IIIH. Intending students should consult the Chairman of the Department.

## HONOURS DEGREE.

**AL99 Philosophy for the Honours degree of B.A.**

Pre-requisite subjects: AL01 Philosophy I (before 1974), AL02 Philosophy II and AL03 Philosophy IIIA.

There is no logic pre-requisite for the Honours year, but Honours courses frequently require a knowledge of logic to at least the level of the first year course. Prospective Honours students are advised to take AL2H Logic IH. The Department does not guarantee to provide sufficient Honours courses without such pre-requisites to enable the Honours year to be completed by these alone.

Courses and texts will be decided at the beginning of each year. Prospective Honours students should consult with the Chairman of the Department before the end of January.

PHYSICS.  
(FOR THE DEGREE OF BACHELOR OF ARTS)

SP9H Physics, Man and Society IH.

This half-subject, given by members of the Departments of Physics and Mathematical Physics, is intended primarily for students of the humanities and social sciences.

It cannot be counted as a subject towards the degree of Bachelor of Science in the Faculty of Science, and only one of SP01 Physics I and SP9H Physics, Man and Society IH, can be counted towards any other degree.

The course is non-mathematical in character and no previous knowledge of physics is assumed. It is designed to provide an understanding of some of the principal currents of thought in physics and of the scientific background to some of the philosophical, political and social issues that confront society. The course will consist of a limited number of topics which will be developed in lectures, tutorials, reading assignments and essays. There will be an average of one lecture a week and a tutorial every second week throughout the year. There will be no formal laboratory work.

At least three distinct topics will be offered each year. Each topic occupies one term and the half-subject comprises three topics. In 1979 the topics will be selected from the following.

A. THE IMPACT OF PHYSICS.

The topic will discuss the nature and status of some of the great discoveries of physics. Particular attention will be paid to the question of how the ideas of physics have or have not passed into the current of human thought and as to how those ideas have influenced man's interpretation and understanding of himself, both as an individual and as a member of society.

B. MATTER AND ANTI-MATTER.

The fundamental constituents of matter, the elementary particles and their anti-particles, will be studied, with emphasis on the basic symmetry principles and consequent conservation laws. The social and political implications of the funding of expensive scientific projects, such as accelerators to study the elementary particles, will be discussed.

C. LIGHT—WAVES OR PARTICLES?

This topic is treated historically and stresses the development of man's ideas about the nature of light. It also serves as a "case history" to illustrate the nature of the scientific method.

D. PEOPLE AND ENERGY.

An introduction will be given to the physical concept of energy and the consequences of the increasing use of energy by man. The rapid depletion of fossil fuel reserves, the problems associated with the use of fossil and nuclear fuels, and the solar alternative, will be discussed.

E. SPACE, TIME AND RELATIVITY.

The contributions of Galileo, Newton, Einstein and others to our understanding of space, time and motion. Cosmology.

F. THE REALM OF THE ATOM.

An introduction to the basic ideas of quantum theory. Topics to be discussed include the particle and wave aspects of light and matter, the indeterminacy relations, quantisation, the probabilistic nature of the fundamental laws and some philosophical positions concerning the nature of man's knowledge of the atomic world.

G. THE SEA AND THE SKY.

Origin and composition of the atmosphere and the oceans. Elementary meteorology. Solar radiation and its interaction with the atmosphere. The origins of life. Man's interaction with the atmosphere and the oceans. The possibility of extra-terrestrial life.

Further information and reading lists may be obtained from the Departments.

---

For syllabuses of SP01 Physics I, SP02 Physics II and SP03 Physics III see under the degree of B.Sc. in the Faculty of Science.



## POLITICS.

There are six subjects in Politics: AP11 Politics IA, AP21 Politics IB, AP32 Politics IIA, AP42 Politics IIB, AP03 Politics IIIA and AP13 Politics IIIB. There is an additional half-subject AP1H Political Sociology IIH which is only available to students taking the half-subject SJ3H Social Biology IIH.

Students in all full subjects in Politics may select one from a number of available options for each subject. No student may present the same or a similar option for more than one course either at the same or at a different level.

The options in Politics listed below will only be offered as staff and enrolments permit either in 1979 or in later years. Quotas may be imposed in some options.

Where the same options are offered at more than one level, either at first and second year or at second and third year level, students undertaking such options at the higher level will be required to undertake additional work in those options.

Essays, written exercises and projects will be the basis of part and, in some options, the whole of the year's assessment. The lists of recommended books are not exhaustive, but are offered as suggested references. Further extended reading lists, details of assessment methods and course guides will be available from the Politics Department early in 1979.

## OPTIONS FOR 1979.

## First Year.

- P701 INTRODUCTION TO POLITICS AND POLITICAL ECONOMY.
- P702 POLITICAL DEVELOPMENT IN AUSTRALIA.\*
- P703 POLITICAL SOCIOLOGY.
- P711 HISTORY OF POLITICAL THOUGHT.
- P712 LIBERAL DEMOCRACY IN AUSTRALIA.

## Second Year.

- P702 POLITICAL DEVELOPMENT IN AUSTRALIA.\*
- P703 POLITICAL SOCIOLOGY.
- P704 THIRD WORLD POLITICAL ECONOMY.
- P705 CHINESE POLITICS.\*
- P706 MARXISM-LENINISM.
- P707 PUBLIC POLICY IN AUSTRALIA.\*
- P708 SOCIOLOGY OF POWER.
- P709 INTERNATIONAL POLITICS.
- P710 CONTEMPORARY SOCIAL THEORY.
- P711 HISTORY OF POLITICAL THOUGHT.
- P712 LIBERAL DEMOCRACY IN AUSTRALIA.

## Third Year.

- P704 THIRD WORLD POLITICAL ECONOMY.
- P705 CHINESE POLITICS.\*
- P706 MARXISM-LENINISM.
- P707 PUBLIC POLICY IN AUSTRALIA.\*
- P708 SOCIOLOGY OF POWER.
- P709 INTERNATIONAL POLITICS.
- P710 CONTEMPORARY SOCIAL THEORY.
- P713 MODERN POLITICAL THOUGHT.

\* It is unlikely that these options will be available in 1979 and students wishing to enrol in any of them should enquire in the Politics Department.

FIRST YEAR.

The following first-year options will be offered, as staff and enrolments allow, and subject to such quotas as may be imposed:

P701 INTRODUCTION TO POLITICS AND POLITICAL ECONOMY.

No pre-requisites.

This course gives an introduction to different ways of approaching the study of politics; to the ideas of some famous political thinkers (Burke, Adam Smith, Malthus, Hegel, Marx); to the modern political parties and the practice of parliament and politicians. It also looks at problems posed by the growing presence of multinational corporations in political life; political tensions involved in policies of rapid economic growth; and demands from the Third World for a new international economic order.

As well as providing an introductory course for those wanting to specialise in Politics in later years, the aim is to meet the interest of students majoring in other disciplines who would like a general introduction to the subject matter of politics. No previous knowledge of political economy or political theory is assumed.

Preliminary reading:

- Dobb, M. H., *Capitalism yesterday and today* (Lawrence and Wishart).
- Wheelwright, E. L. (ed.), *Transcripts on the political economy of development* (Australian Broadcasting Commission).
- Dalton, G., *Economic systems and society: capitalism, communism and the Third World* (Penguin).

Text-books (recommended for purchase):

- Sargent, L. T., *Contemporary political ideologies*, 4th edition (Dorsey).
- Wheelwright, E. L., and Stilwell, F. J. B., *Readings in political economy*, 2 vols. (A.N.Z.)
- Lindbeck, A., *The political economy of the New Left*, 2nd edition (Harper and Row).

Recommended reading:

- Buckley, K. D., and Wheelwright, E. L. (eds.), *Political economy of Australian capitalism* (Penguin).
- Radi, H., and Spearritt, P. (eds.), *Jack Lang* (Hale and Iremonger).
- Catley, R., and McFarlane, B., *From Tweedledum to Tweedledee* (A.N.Z.).
- Lenin, V. I., *Karl Marx* (Foreign Languages Publishing House).
- Marx, K., and Engels, F., *The Communist Manifesto* (any edition).
- Mao Tse Tung, *On ten great relations* (Foreign Languages Publishing House, Peking).
- Robinson, J., *Freedom and necessity* (Allen and Unwin).
- Payer, C., *The debt trap* (Penguin).
- Wheelwright, E. L. (ed.), *Transcripts on the political economy of development* (Australian Broadcasting Commission).

P702 POLITICAL DEVELOPMENT IN AUSTRALIA.

No pre-requisites. Available to students with exemption from lectures, subject to the approval of the Chairman of the Politics Department.

This course will undertake a study of political development in Australia since 1890. Although primary emphasis will be given to national government and politics, attention will also be directed to significant features at the state level.

Some recommended books:

- \*Alexander, F., *Australia since federation*, 3rd edition (Nelson).
- \*Blewett, N., and Jaensch, D. H., *Playford to Dunstan* (Cheshire).
- \*Clark, C. M. H., *A short history of Australia*, 2nd edition (Heinemann).
- \*Crisp, L. F., *Australian national government*, 3rd edition (Longman).
- \*Crowley, F. K. (ed.), *A new history of Australia* (Heinemann).
- \*Encel, S., *Cabinet government in Australia* (Melbourne U.P.).
- \*Lloyd, C. J., and Reid, G. S., *Out of the wilderness* (Cassell).

\* Denotes paperback edition.

## P703 POLITICAL SOCIOLOGY.

No pre-requisites. Available to students with exemption from lectures subject to the approval of the Chairman of the Department.

This introductory course will examine theoretical and empirical approaches to the political aspects of sociology and will consider the contribution of both classical and modern sociologists. It will examine the nature of sociology and sociological method and the various concepts of social order.

The empirical part of the course will include the study of political socialisation, social class, and selected social and political institutions. Case studies will be drawn from Australian and overseas sources, particularly from Europe and North America.

Books recommended for purchase:

- Thompson, K., and Tunstall, J. (eds.), *Sociological perspectives* (Penguin).
- Worsley, P., and others, *Introducing sociology*, 2nd edition (Penguin).
- Worsley, P., and others, *Modern sociology: introductory readings* (Penguin).
- Worsley, P., and others, *Problems of modern society* (Penguin).
- Dowse, R. E., and Hughes, J. A., *Political sociology* (Wiley).

## P711 HISTORY OF POLITICAL THOUGHT.

No pre-requisite. Not available to students with exemption from lectures.

This course will examine the recurring ideas and problems in Western Political thought from the Greek schools to the nineteenth century. The primary emphasis of the course will be the reading and critical analysis of original texts from the ancient medieval and modern periods.

In addition to the following primary texts, supplementary reading lists will provide the student with titles of general historical works and other secondary literature.

Primary texts:

- \*Plato, *The republic* (O.U.P.) and *The Gorgias* (Penguin).
- \*Aristotle, *Nicomachean ethics* (Penguin).
- \*Augustine, Saint, *The city of God* (Penguin).
- Aquinas, Thomas, Saint, *Selected political writings* (Blackwell).
- \*Machiavelli, N., *The prince* (Penguin).
- \*Hobbes, T., *Leviathan* (Penguin).
- \*Locke, J., *Two treatises of government* (Mentor).
- \*Rousseau, J. J., *The social contract and the discourses* (Everyman).
- \*Hegel, G. W. F., *Philosophy of right* (O.U.P.).
- \*Burke, E., *Reflections on the war in France* (Penguin).
- \*Paine, T., *Rights of man* (Penguin).
- Bentham, J., *Principles of morals and legislation* (Blackwell).
- Mill, J. S., *Utilitarianism* et al. (Everyman).

\*Denotes paperback edition.

## P712 LIBERAL DEMOCRACY IN AUSTRALIA.

No pre-requisites. Available to students with exemption from lectures subject to the approval of the Chairman of the Department.

This course is an introduction to Australian politics. It will examine the institutional structure of the Australian political system, the relationship of that system to its socio-economic environment through the political parties and pressure groups and the theory and practice of liberal and social democracy in Australia.

Some useful references:

- Strachey, E. J. S., *The challenge of democracy* (Encounter).
- Solomon, D. H., *Australia's government and parliament* (Nelson).
- Crisp, L. F., *Australian national government* (Longman).
- Lloyd, C. J., and Reid, G. S., *Out of the wilderness* (Cassell).
- Mayer, H., and Nelson, H. (eds.), *Australian politics: a fourth reader* (Cheshire).
- Emy, H. V., *Politics of Australian democracy*, 2nd edition (Macmillan).
- Jaensch, D. H., *The government of South Australia* (U.Q.P.).

The subjects offered in first year are:

**AP11 Politics IA.**

No pre-requisite: Some first-year options will be available to students with exemption from lectures with the approval of the Chairman of the Department.

**AP21 Politics IB.**

Pre-requisite: Pass in AP01 Politics I or in AP11 Politics IA or concurrent enrolment in AP11 Politics IA. Some first-year options will be available to students with exemption from lectures with the approval of the Chairman of the Department.

**SECOND YEAR.**

The following second-year options will be offered, as staff and enrolments allow, and subject to such quotas as may be imposed:

**P702 POLITICAL DEVELOPMENT IN AUSTRALIA.**

Pre-requisite: Pass in any Politics subject or in the option Australian History. Not available to those who have passed the former option Australian Politics. Available to students with exemption from lectures with the approval of the Chairman of the Department.

**P703 POLITICAL SOCIOLOGY.**

Pre-requisite: Pass in any Politics or History subject or EE71 Social Economics or AJ2H Human Geography IH or AA01 Anthropology I or AY01 Psychology I or AL01 Philosophy I or ALIII Philosophy IH(A) or AL3H Philosophy IH(B) and AL2H Logic IH. Available to students with exemption from lectures with the approval of the Chairman of the Department.

**P704 THIRD WORLD POLITICAL ECONOMY.**

Pre-requisites: Pass in one of the following. P701 Introduction to Politics and Political Economy, P704 Third World Political Economy, P705 Chinese Politics, AH31 History IB (Old Societies and New States), H702 Modern and Contemporary History of China and Japan, H710 Indian History, AA01 Anthropology I, AA02 Anthropology IIA, AQ12 Asian Development II, J727 South and South-East Asia, or any other subject acceptable to the Chairman of the Department.

Problems in the study of South and South-East Asia: Under the impact of a number of critical approaches to the study of the third world, many of the fundamental assumptions and interpretations of recent scholarship have been called into question. Several of these debates have emerged in relation to studies of South and South-east Asia, in part at least, because of the comparative wealth of monographic material which exists for these regions. The principal objective of this course will be to consider a number of important political, historical, economic and anthropological studies of South and South-east Asia from the standpoint of political economy. Among the historical issues to be considered will be the penetration of traditional social forms by colonialism, the impact of industrial agriculture on rural social relations, the role of colonial violence, forms of peasant political action such as banditry and millenarianism, as well as agrarian revolt. Among the issues of contemporary politics to be considered will be the emergence of peasant revolutionary movements, the political economy of the Green Revolution, policies of population control, land reform, multi-national corporations and military regimes. Insofar as possible, we will canvass the present state of work in each area and consider the directions in which future research might most profitably be directed.

## Useful books:

- Seal, A., *The emergence of Indian nationalism* (C.U.P.).  
 Irschick, E., *Politics and social conflict in South India* (California U.P.).  
 Hardy, P., *The Muslims of British India* (C.U.P.).  
 Kartodirdjo, S., *Protest movements in rural Java* (O.U.P.).  
 Rudolph, L. I., and Rudolph S. H., *The modernity of tradition* (Chicago U.P.).  
 Brass, P. R., *Factional politics in an Indian State* (California U.P.).  
 Geertz, C., *Agricultural involution* (California U.P.).  
 Jay, R. R., *Religion and politics in rural Central Java* (Yale U.P.).  
 Lyon, M. L., *Bases of conflict in rural Java* (Berkeley U.P.).  
 Constantino, R., *The Philippines: a past revisited* (Monthly Review).

## P705 CHINESE POLITICS.

Pre-requisite: Pass in any Politics subject except in the former option Asian Politics. Only available to students with exemption from lectures in special circumstances with the approval of the Chairman of the Department.

This course will examine the origins, nature and consequences of the Chinese revolution and the state of political life in China today. It will also include an analysis of the thought of Mao Tse-tung, with special reference to its relevance to other societies, including our own.

## Some suggested reading:

- Buchanan, K. M., *The transformation of the Chinese earth* (Bell).  
 Ch'en, J., *Mao and the Chinese revolution* (O.U.P.).  
 Chesneaux, J., *Peasant revolts in China, 1840-1949* (Thames and Hudson).  
 Han, S., *The crippled tree* (Cape).  
 Han, S., *Birdless summer* (Cape).  
 Hinton, W., *Fanshen* (Monthly Review).  
 Hunter, D., and N., *We, the Chinese* (Praeger).  
 Mao, Tse-tung, *Selected works*, 5 vols. (Foreign Languages Press).  
 Myrdal, J., *China, the revolution continued* (Pantheon).  
 Snow, E., *Red star over China* (Gollancz).  
 Wheelwright, E. L., and McFarlane, B. J., *The Chinese road to socialism* (Penguin).

## P706 MARXISM-LENINISM.

Pre-requisites: Pass in any first-year Politics subject or AH31 History IB (Revolutionary Europe 1780-1870), but not available to students who passed the former option Social and Political Theory. Not available to students with exemption from lectures.

This course involves a study of Marxism with particular emphasis on the writing of Marx and later Marxists.

## Preliminary reading:

- Marx, K., and Engels, F., *Selected works*, 2 vols. (Foreign Languages P.H.).  
*Marx and beyond* (Australian Broadcasting Commission).  
 \*Lichtheim, G., *A short history of socialism* (Weidenfeld and Nicolson).  
 \*Lichtheim, G., *Marxism* (Routledge).

## Further reading:

- Braverman, H., *Labor and monopoly capital* (Monthly Review).  
 Nove, A., *Stalinism and after* (Allen and Unwin).  
 Claudin, F., *The Communist movement* (Penguin).  
 Wheelwright, E. L., and Stilwell, F. J. B., *Readings in political economy*, 2 vols. (A.N.Z.).  
 Hill, C., *Lenin and the Russian Revolution* (Hodder and Stoughton).  
 Wheelwright, E. L. (ed.), *Transcripts on the political economy of development* (Australian Broadcasting Commission).  
 Journal of Contemporary Asia, Special Issue, *Development and under-development*, Vol. 7, No. 1, 1977 (Available Politics Department).  
 Wheelwright, E. L., and Buckley, K., *Essays in the political economy of Australian capitalism*, 2 vols. (A.N.Z.).  
 Tucker, R. C. (ed.), *The Marx-Engels reader* (Norton).  
 McLellan, D., *The thought of Karl Marx* (Macmillan).

P707 PUBLIC POLICY IN AUSTRALIA.

Pre-requisites: Pass in AP11 Politics IA. Not available to students with exemption from lectures.

This course will examine the policies of government in Australia, particularly the federal government. It will investigate the origins and content of these policies, the mechanisms through which they are implemented and the obstacles to their fulfilment. This study will be focused upon the arena of federal politics—government, political parties, the public service—but it will be located within the wider social environment of business, trade unions, state governments, the international economy, lobbyists and the press. Contemporary political processes will be placed within their historical, social and institutional environment. Students will be expected to follow current political developments as reported in the daily and weekly press and official publications.

Introductory reading:

Wheelwright, E. L., and Buckley, K. (eds.), *Essays in the political economy of Australian capitalism*, 3 vols. (A.N.Z.).

P708 SOCIOLOGY OF POWER.

Pre-requisites: Pass in the option P703 Political Sociology or in any of the subjects listed as pre-requisites for P703 Political Sociology. Available to students with exemption from lectures only in special circumstances with the approval of the Chairman of the Department.

This is an advanced course in political sociology in which the concept of power will be examined and applied in selected empirical contexts.

Some recommended books:

Castles, F. G., (and others), *Decisions, organisations and society* (Penguin).  
Johnson, T. J., *Professions and power* (Papermac).  
Lukes, S., *Power: a radical view* (Macmillan).  
Thompson, K., and Tunstall, J., *Sociological perspectives* (Penguin).  
Olsen, M. E., *Power in societies* (Macmillan).

P709 INTERNATIONAL POLITICS.

Pre-requisites: Pass in any first year Politics subject, or AH31 History IB, or the History option: H706 War and Peace: Britain and Germany 1870-1945, or any other subject acceptable to the Chairman of the Department. Not available to students with exemption from lectures.

This course will deal with three areas of enquiry:

- (1) Development of relations between the great powers, particularly since 1945;
- (2) The Third World in International Politics during and following the transition to independence with particular emphasis on Asia;
- (3) Australia's role in International Politics.

Preliminary reading:

George, S., *How the other half dies* (Penguin).  
Wheelwright, E. L. (ed.), *Transcripts on the political economy of development* (Australian Broadcasting Commission).  
Barnett, R., and Muller, R., *Global research: the power of the multinational corporation*.  
Mandel, E., *Europe versus America*.  
Horowitz, D., *Yalta to Vietnam*.

P710 CONTEMPORARY SOCIAL THEORY.

Pre-requisites: Any other Politics subject, AL1H Philosophy IH(A), AL3H Philosophy IH(B), AL02 Philosophy II. Not available to students with exemption from lectures.

Any theory of society presupposes a theory of human nature. Conversely, any theory of how society works, and of possible or desirable alternative social forms (means and ends), presupposes a theory of human nature.

The respective writings of Sigmund Freud, Jean-Paul Sartre and Noam Chomsky represent three of the most important attempts to treat the issues involved, since Marx. The questions raised and answers proposed by Psycho-Analysis, Sartrean Existentialism and Chomsky's "Biological Libertarianism" are of profound importance for any serious student of society.

The *primary* purpose of the course is to introduce students to the thought of Freud, Sartre and Chomsky in some systematic, critical detail. However, the compatibility of the three intellectual approaches will also be explored; and in addition, time permitting, their relations to such other traditions as Marxism and Feminism.

Assessment: The standard form of assessment will consist of three essays, each approximately 5,000 words (Third Year level) and 4,000 (Second Year level). Alternative forms of assessment will be available.

Preliminary reading:

Freud:

- The interpretation of dreams* (Penguin or Allen and Unwin).
- Three essays on the theory of sexuality* (Imago).
- Introductory lectures on psychoanalysis* (Allen and Unwin).
- New introductory lectures on psychoanalysis* (Woolf or Norton paperback).
- Civilization and its discontents* (Penguin or Hogarth Press).

Sartre:

- Being and nothingness* (Methuen).
- Saint Genet: actor and martyr* (New American Library (Plume) paperback).
- Search for a method* (Random); also entitled *The problem of method* (Methuen).
- Between Existentialism and Marxism* (New Left Books).

Chomsky:

- Problems of knowledge and freedom* (Barrie and Jenkins).
- For reasons of State* (Fontana).
- Reflections on language* (Temple Smith).
- Language and mind* (Harcourt, Brace).

A *detailed* course reading guide, along with other course details, will be available from the Politics Department before First Term.

#### P711 HISTORY OF POLITICAL THOUGHT.

Pre-requisite: Pass in any full first-year subject in Arts, Law or Science. Not available to students with exemption from lectures.

#### P712 LIBERAL DEMOCRACY IN AUSTRALIA.

Pre-requisite: Pass in any first-year Politics subject other than the former option Australian Politics. Available to students with exemption from lectures with the approval of the Chairman of the Department.

The subjects offered in second year are:

#### AP32 Politics IIA.

Pre-requisites: Pass in AP01 Politics I or AP11 Politics IA or AP21 Politics IB except where special pre-requisites for particular options are cited above. In certain cases alternative pre-requisites may be accepted.

#### AP42 Politics IIB.

Pre-requisites: Pass or concurrent enrolment in AP32 Politics IIA, but certain special pre-requisites are required in some options as set out above under AP32 Politics IIA. In some cases alternative pre-requisites may be accepted by the Chairman of the Department. Some second-year options are available to students with exemption from lectures with the approval of the Chairman of the Department.

### THIRD YEAR.

The following third-year options will be offered, as staff and enrolments allow, and subject to such quotas as may be imposed:

#### P704 THIRD WORLD POLITICAL ECONOMY.

Pre-requisites: Pass in one of the following: P705 Chinese Politics, AH31 History IB (Old Societies and New States), H702 Modern and Contemporary History of China and Japan, H710 Indian History, AA02 Anthropology IIA, AQ12 Asian Development II.

Not available to students with exemption from lectures.

#### P705 CHINESE POLITICS.

Pre-requisites: Pass in any second-year Politics subject. Only available to students with exemption from lectures in special circumstances with the approval of the Chairman of the Department.

#### P706 MARXISM-LENINISM.

Pre-requisite: Pass in any second-year Politics subject. Not available to students with exemption from lectures.

#### P707 PUBLIC POLICY IN AUSTRALIA.

Pre-requisites: Pass in AP32 Politics IIA or the History option: H709 Australia: Outpost of Empire in the Antipodes.

Not available to students with exemption from lectures.

#### P708 SOCIOLOGY OF POWER.

Pre-requisites: Pass in a second-year Politics subject and if the option P703 Political Sociology has not been passed, a pass in one of the following: AY01 Psychology I, AY02 Psychology II, AA01 Anthropology I, AA02 Anthropology II, AJ6H Social Geography III, AJ1H Human Geography III, AL02 Philosophy II. Only available to students with exemption from lectures in special circumstances with the approval of the Chairman of the Department.

#### P709 INTERNATIONAL POLITICS.

Pre-requisites: Pass in any second year Politics subject or AH02 History II (Option: H706 War and Peace—Britain and Germany 1870-1945) or any other subject acceptable to the Chairman of the Department.

#### P710 CONTEMPORARY SOCIAL THEORY.

Pre-requisites: Pass in any second or third-year Politics subject, or AL02 Philosophy II, or, the History option: H712 Social and Political Ideas Since the Seventeenth Century. Not available to students with exemption from lectures.

#### P713 MODERN POLITICAL THOUGHT.

Pre-requisites: Pass in any second or third-year Politics subject, or AL02 Philosophy II, or, the History option: H712 Social and Political Ideas Since the Seventeenth Century. Not available to students with exemption from lectures.

This course is concerned with a study of the political thought of the eighteenth, nineteenth and twentieth centuries. The aim will be to trace the growth and influence of ideas that are of importance to the modern world. This will be done through a study of the key thinkers of each period. The course is designed as a seminar course, with primary emphasis being placed on the presentation of seminar papers. These will be used as the basis for course assessment. There will be three seminars, one each term, and each student will be expected to present a paper in each seminar. The three seminars will be the Political Thought of the Enlightenment; Utilitarians, Liberals and Utopian Socialists—the 19th Century; and Contemporary Political and Social Theory.



Preliminary reading:

- °Sampson, R. V., *Progress in the Age of Reason* (Heinemann).
- °Hazard, P., *European thought in the eighteenth century* (Yale U.P.).
- °Willey, B., *The eighteenth century background* (Chatto and Windus).
- °Hampson, N., *The enlightenment* (Penguin).
- °Manuel, F. E., *The prophets of Paris* (Harper and Row).
- °Brinton, C. C., *English political thought in the 19th century* (Benn).
- °Bowle, J., *Politics and opinion in the 19th century* (Cape).
- °Woodcock, G., *Anarchism* (Penguin).
- °Lichtheim, G., *The origins of socialism* (Weidenfeld and Nicholson).
- °Burns, E. M., *Ideas in conflict* (Norton).
- °Downton, J. V., and Hart, D. K., *Perspectives on political philosophy*, Vol. III: Marx through Marcuse (Holt, Rinehart and Winston).
- °Williams, R., *Culture and Society 1780-1950* (Chatto and Windus).
- °Roszak, T., *The making of a counter culture* (Faber).
- °Anderson, P., *Considerations on Western Marxism* (New Left Books).

The subjects offered in third year are:

#### AP03 Politics IIIA.

Pre-requisites: As set out in the options listed above. In special cases, alternative pre-requisites may be accepted by the Chairman of the Department. Some options may be available to students with exemption from lectures with the approval of the Chairman of the Department.

One of the third-year options not already passed or currently being taken in another Politics subject.

#### AP13 Politics IIIB.

Pre-requisites: Pass or concurrent enrolment in AP03 Politics IIIA, but certain special pre-requisites are required in some options as set out above under AP03 Politics IIIA. Some options may be available to students with exemption from lectures with the approval of the Chairman of the Department.

One of the third-year options not already passed or currently being taken in another Politics subject.

#### APIH Political Sociology IIIB.

This half-subject will only be available to students taking the half-subject SJ3H Social Biology IIIB. Topics will include: sociological method, socialisation, social stratification, authoritarianism, deviance, urbanisation, industrialisation. Not available to students who have previously taken the option Political Sociology.

Recommended reading:

- °Worsley, P., and others, *Introductory sociology* (Penguin).
- °Worsley, P., and others, *Modern sociology* (Penguin).
- °Worsley, P., and others, *Problems of modern society* (Penguin).

### HONOURS DEGREE.

#### AP99 Politics for the Honours degree of B.A.

Students wishing to take Honours in Politics should consult the Chairman of the Department before beginning the third year's work. Admission to the final year Honours course is subject to the express approval of the Chairman.

Students admitted to the final-year Honours course are first required:

- (a) to have passed in AP03 Politics IIIA and three other courses in Politics. Note that in special circumstances, such as the completion of a range of appropriate cognate subjects, this requirement may be modified by the Chairman;
- (b) to have reached a satisfactory standard in their work in the first three years of their course.

## PSYCHOLOGY.

There are three subjects and two half-subjects in Psychology for the Ordinary degree of Bachelor of Arts: AY01 Psychology I, AY02 Psychology II, AY23 Psychology III, AY1H Psychology IIIH(A), and AY2H Psychology IIIH(B).

### AY01 Psychology I.

This course provides a survey of the main fields of modern experimental psychology, and qualifies the student to take further psychology subjects. The topics covered are learning, perception, physiological psychology, personality, social psychology, thinking and language, elementary descriptive and inferential statistics.

The course is made up of three lectures, one tutorial and a one hour laboratory assignment each week. In addition students are required to spend periods not exceeding a total of five hours in the year as participants in psychological experiments.

Preliminary and parallel reading:

Alternative texts, such as the following:

*Psychology today: an introduction* (C.R.M. Books).

Schlesinger, K., and others, *Psychology: a dynamic science* (Brown).

References:

Butcher, H. J., *Human intelligence: its nature and assessment* (Methuen).

Deese, J. E., *Psycholinguistics* (Allyn and Bacon).

Geiwitz, P. J., *Non-freudian personality theories* (Brooks-Cole).

Hochberg, J. E., *Perception* (Prentice-Hall).

Aronson, E., *The social animal* (Freeman).

Millenson, J. R., *Principles of behavioral analysis* (Macmillan).

Miller, G. A., *Psychology, the science of mental life* (Penguin Books).

Munn, N., and others, *Introduction to psychology*, 3rd edition (Houghton Mifflin).

Mussen, P. H., *The psychological development of the child* (Prentice-Hall).

Thompson, R. F., *Foundations of physiological psychology* (Harper and Row).

Butter, C. M., *Neuropsychology: The study of brain and behaviour* (Brooks-Cole).

Brown, H., *Brain and behaviour* (O.U.P.).

Tyler, L. E., *Tests and measurements* (Prentice-Hall).

Blackman, D., *Operant conditioning—an experimental analysis of behavior* (Methuen).

Miller, S., *Experimental design and statistics* (Methuen).

Ludel, J., *Introduction to sensory processes* (Freeman).

Approximately 20 *Scientific American* off-prints will be recommended in lectures during the year.

### AY02 Psychology II.

Pre-requisite subject: AY01 Psychology I at Division I standard or higher.

The course comprises: (i) Theory: three lectures and one tutorial a week; (ii) Laboratory: an average of two hours a week for about 18 weeks spread throughout Terms I, II, and III; (iii) Demonstrations, films, and visits to institutions at times when no practical work is scheduled.

The course is oriented towards the controlled study of human and animal behaviour, both individual and social, and is concerned also with possibilities for the wider application of contemporary psychological theories.

Reference books: Students are expected to retain AY01 Psychology I text-books.

Reference will also be made to the following books. (An indication of the relative emphasis placed on each will be given at the preliminary meeting of the class.)

Bickman, L., and Henchy, T., *Beyond the laboratory: field research in social psychology* (McGraw-Hill).

Campbell, B. A., and Church, R. M. (eds.), *Punishment and aversive behavior* (Appleton-Century-Crofts).

Carkhuff, R. R., and Berenson, B. G., *Beyond counselling and therapy* (Holt, Rinehart and Winston).

- Goldstein, H., and others (eds.), *Controversial issues in learning* (Appleton-Century-Crofts).
- Hilgard, E. R., and Bower, G. H., *Theories of learning*, 4th edition (Appleton-Century-Crofts).
- Honig, W. K., *Operant behavior* (Appleton-Century-Crofts).
- Laing, R. D., and others, *Interpersonal perception* (Tavistock).
- Luria, A. R., *The working brain* (Penguin).
- Miller, E., *Clinical neuropsychology* (Penguin).
- Misiak, H., and Sexton, V. S., *History of psychology: an overview* (Grune and Stratton).
- Murphy, G., and Kovach, J. K., *Historical introduction to modern psychology*, 6th edition (Routledge and Kegan Paul).
- Nevin, J. A., and Reynolds, G. S., *The study of behavior* (Scott, Foreman).
- Piaget, J., and Inhelder, B., *The psychology of the child* (Routledge and Kegan Paul).
- Pribram, K. H., *Languages of the brain* (Prentice-Hall).
- Runyon, R. P., and Haber, A., *Fundamentals of behavioral statistics* (Addison-Wesley).
- Seligman, M. E. P., *Helplessness* (Freeman).
- Thompson, R. F., *Foundations of physiological psychology* (Harper and Row).
- Tyler, L. E., *The psychology of human differences* (Appleton-Century-Crofts).
- Watzlawick, P., Beavin, J., and Jackson, D., *Pragmatics of human communication* (Norton).
- Welford, A. T., *Fundamentals of skill* (Methuen).

### THIRD-YEAR SUBJECTS IN PSYCHOLOGY.

Pre-requisite subject: AY02 Psychology II.

Third-year Psychology is organised on an optional unit system and consists of three groups. A group is normally made up by pairing two related units. The unit Y774 Psychological Statistics is compulsory but it may be paired with any other unit to form one of the three necessary groups. Units normally consist of 12 lectures (one a week), 6 tutorials (one a fortnight), and associated laboratory and practical work.

Units will be offered, as staff and enrolments allow, from among the following:

#### Group A: Personality and Social Psychology.

- Y780 PERSONALITY  
Y781 COGNITIVE ORGANISATION AND SOCIAL BEHAVIOUR  
Y782 SOCIAL PSYCHOLOGY  
Y783 THE PHILOSOPHY AND PSYCHOLOGY OF CONSCIOUSNESS

#### Group B: Human Performance.

- Y784 HUMAN DECISION PROCESSES  
Y785 APPLIED EXPERIMENTAL PSYCHOLOGY  
Y786 ENVIRONMENTAL PSYCHOLOGY

#### Group C: Physiological and Comparative Psychology.

- Y787 PHYSIOLOGICAL PSYCHOLOGY  
Y788 MOTIVATION  
Y789 ANIMAL BEHAVIOUR

#### Compulsory Unit.

- Y774 PSYCHOLOGICAL STATISTICS

Details of the syllabuses of the above units will be available from the Department of Psychology early in 1979.

Units are combined to form the subject AY23 Psychology III or the half-subjects AY1H Psychology IIIH(A) and AY2H Psychology IIIH(B). A pair of units from a single group may also form part of any other scheduled third-year subject which is offered by another department (such as a Science IIM subject) provided that this is jointly approved by the Chairmen of the two departments.

Either AY23 Psychology III or both AY1H Psychology IIIH(A) and AY2H Psychology IIIH(B) may be offered as pre-requisite subjects for Honours Psychology and for the Diploma in Applied Psychology.

**AY23 Psychology III.**

This subject consists of six units: 2 units chosen from two of the Groups A, B or C, plus Unit Y774 Psychological Statistics and one unit from the remaining group.

*Note:* Not more than two units may be selected from each group.

**AY1H Psychology IIIH(A).**

This subject consists of three units, two of which must be selected from the same group, i.e. either group A, B or C, plus unit Y774 Psychological Statistics.

**AY2H Psychology IIIH(B).**

This half subject is available only to students who have made satisfactory progress in AY1H Psychology IIIH(A) and consists of three units, two of which must be selected from the same group, i.e. either from group A, B or C, plus one unit from a different group, providing that none of these options has been taken as part of any other course.

**HONOURS DEGREE.**

**AY99 Psychology for the Honours degree of B.A.**

Pre-requisite subjects: AY01 Psychology I, AY02 Psychology II, and *either* AY23 Psychology III *or* both AY1H Psychology IIIH(A) and AY2H Psychology IIIH(B), including a pass in the unit Y774 Psychological Statistics.

Candidates are required to give their full attendance for an entire academic year to a special course of study in the psychological laboratory. The course will include lectures and discussions on advanced topics. It will also involve the writing of a substantial essay and the presentation of a dissertation embodying the results of, and a survey of the literature relevant to, a research investigation carried out under the supervision of a member of the staff of the Department.

## SOCIAL BIOLOGY.

(FOR THE DEGREE OF BACHELOR OF ARTS)

## SJ3H Social Biology IIIH.

The formal pre-requisites are SJ7H Genetics and Human Variations IH or SJ02 Genetics II and a knowledge of statistics which may be obtained through QT7H Statistics IH or AY02 Psychology II or SJ02 Genetics II or an acceptable mathematical subject. But as the course is intended to investigate various genetical, physiological and medical models of human attributes and behaviour, and in many cases compare them with socially derived models, a background in areas of both the social and biological sciences will clearly be valuable. Students who have taken second-year subjects in these areas will find the course particularly useful.

SJ3H Social Biology IIIH is a third-year half-subject which can be taken in combination with any of the following third-year half-subjects: AJ8H Geography IIIH, AL4H Philosophy IIIH, APIH Political Sociology IIIH, AY1H Psychology IIIH(A) and AY2H Psychology IIIH(B).

There will be one lecture and one tutorial each week throughout the year. The course is identical to the double unit J333 Social Biology available to science students but Arts students will be required to complete an appropriate amount of additional reading and assignments.

The course will investigate and compare the past, present and possible future biological and social evolution of man, paying particular attention to the genetic and social variability present in the human species which is the basic raw material of this evolution. The genesis of certain social problems will be discussed and the relevance or otherwise of biology to their understanding and possible alleviation will be examined. The particular social problems to be examined include race and race differences, social stratification, the heritability of intelligence and scholastic ability, social and antisocial behaviours, aspects of eugenics and genetic engineering, and the biosocial consequences of man's changing environment.

## Preliminary reading:

- Pringle, J. W. S. (ed.), *Biology and the human sciences* (O.U.P.).  
 Fuller, W. (ed.), *The social impact of modern biology* (Routledge and Kegan Paul).  
 Berger, P. L., *Invitation to sociology* (Pelican).

## Text-books:

- Dobzhansky, Th., *Mankind evolving* (Yale U.P.).  
 Bodmer, W. F., and Cavalli-Sforza, L. L., *Genetics, evolution and man* (Freeman).  
 Reynolds, V., *The biology of human action* (Freeman).

## Reference books:

## (a) Mainly biological:

- Dyer, K. F., *The biology of racial integration* (Scientifica).  
 Hinde, R. A., *Biological bases of human social behaviour* (McGraw-Hill).  
 Lerner, I. M., and Libby, W. J., *Heredity, evolution and society*, 2nd edition (Freeman).  
 Wilson, E. O., *Sociobiology* (Harvard U.P.).  
 Young, J. Z., *An introduction to the study of man* (O.U.P.).

## (b) Mainly social:

- Arónson, E., *The social animal*, 2nd edition (Freeman).  
 Swartz, M. J., and Jordan, D. K., *Anthropology: perspective on humanity* (Wiley).  
 Van Den Berghe, *Man in society: a biosocial view* (Elsevier)

HONOURS DEGREE.

Subject to the adequacy of existing resources, there will be opportunity for students to undertake studies leading to an Honours degree in which Social Biology will form a component part. Students will normally be in one of the departments which allow Social Biology as a component of one of their subjects and they must satisfy the pre-requisites for the Honours degree of that department. Intending students should consult the Senior Lecturer in Social Biology and the Chairman of the Department concerned.

## SERVICE COURSES IN FOREIGN LANGUAGES.

In view of the demand for service courses in foreign languages, particularly from honours and higher degree students, courses are offered by the Language Laboratory in 1979 (subject to availability of staff) in French and Russian; the course in Science German will continue to be offered by the Department of German Language and Literature.

None of these courses forms part of the formal requirements of any degree or diploma course although in some honours and higher degree courses the Chairman of a department, or a supervisor, may ask a student to enrol for one or more service courses to assist him in acquiring a knowledge of the language concerned.

## AS74 Service Course in French.

This course is open to members of staff, research students and honours students. The aim is to ensure fluency in the reading of specialised articles and the ability to translate from French into English.

Students who have no previous knowledge of French will be required to attend a two-week intensive course in February. Those who have studied French for at least three years at school, or done equivalent work, are exempt from this. During first and second term, three hours of class-work are required. After that, students will translate in their own field of specialisation. A student who can translate accurately, with the help of a dictionary, at a rate of 300 words per hour, will be regarded as having passed the course.

## Text-books:

For the intensive course: to be announced.

Masselin, J., Delsol, A., Duchaigne, R., *Le Français scientifique et technique*, vols. I and II (Hatier).

## Dictionary:

De Vries, B., *A French-English science dictionary* (McGraw-Hill).

## AG74 Science German.

For syllabus, see above under "German Language and Literature".

## AS84 Service Course in Russian.

This course is open to members of staff, research students and honours students. The aim is to ensure fluency in the reading of specialised articles and the ability to translate from Russian into English.

Students will be required to attend a two-week course in February, followed by three hours of class-work during first and second term possibly continuing into third term if necessary; after that they will be required to translate articles in their own chosen field of study. A student who can translate accurately, with the help of a dictionary, at a rate of 300 words per hour, will be regarded as having passed the course.

No previous knowledge of the language is required.

## Text-books:

Beresford, M., *Complete Russian course for scientists* (O.U.P.).

Cooper, D. M., *Russian science reader* (Pergamon).

*Note:* Details of special dictionaries will be given at the first class meeting.

OF THE  
DIPLOMA IN APPLIED PSYCHOLOGY  
REGULATIONS

1. There shall be a postgraduate Diploma in Applied Psychology.

†2. A candidate for admission to the course for the diploma shall:

- (a) have qualified for admission to a degree of the University or to a degree of another university accepted for the purpose by the University, and
- (b) have obtained the approval of the Head of the Department of Psychology.

\*2A. Subject to the approval of the Council, the Faculty may in special cases and subject to such conditions (if any) as it may see fit to impose in each case accept as a candidate for the diploma a person who does not hold a degree of a university but has given evidence satisfactory to the Faculty of his fitness to undertake work for the diploma.

§3. To qualify for the diploma a candidate shall satisfactorily complete a course of study extending over at least one year and not longer than shall be prescribed in the schedules approved by the Council.

\*\*4. The preliminary work, the course of study to be undertaken and the examinations to be passed, shall be prescribed in the schedules approved by the Council. Such schedules shall take effect as from the date of approval by the Council or such other date as the Council shall determine and shall be published in the next University Calendar which is issued after that approval has been given.

5. A candidate who desires that the examinations which he has passed in the University or elsewhere should be counted *pro tanto* for the Diploma in Applied Psychology, may on written application be granted such exemption from the requirements of these regulations as the Council shall determine.

6. There shall be three classifications of pass at an annual examination in any subject for the diploma: Pass with Distinction, Pass with Credit, and Pass. The names of candidates within each classification shall be arranged in alphabetical order.

7. (a) A candidate who fails to pass the examination in any subject or who fails to complete satisfactorily the prescribed practical work, and who desires to take the subject or practical work again, shall again attend such lectures and satisfactorily do such written and practical work as the professor or lecturer concerned may prescribe, unless specifically exempted therefrom after written application to the Academic Registrar for such exemption.

\* Allowed 28 February, 1974.

† Amended 23 January, 1975.

\*\* Amended 15 January, 1976.

§ Amended 23 December, 1976.



(b) A candidate who has twice failed to pass the examination in any subject or who has twice failed to complete satisfactorily the prescribed practical work, may not enrol for that subject or practical work again except by special permission of the Faculty of Arts to be obtained in writing from the Academic Registrar and then only under such conditions as may be prescribed.

§(c) For the purpose of this regulation a candidate who is refused permission to sit for examination owing to unsatisfactory attendance or work, or who fails to attend all or part of an annual examination (or supplementary examination if granted) without a reason accepted by the Department of Psychology as adequate, shall be deemed to have failed to pass the examination.

8. A candidate who complies with the foregoing conditions and satisfies the examiners shall be awarded the Diploma in Applied Psychology.

Regulations allowed 17 December, 1970.

§ Amended 23 December, 1976.

OF THE  
DIPLOMA IN APPLIED PSYCHOLOGY  
SCHEDULES

(Made by the Council under regulation 4.)

NOTE: Syllabuses of the subjects for the Diploma in Applied Psychology are published below, immediately after these schedules. For syllabuses of subjects taught for other degrees and diplomas see the table of subjects at the end of the volume.

SCHEDULE I: PRELIMINARY WORK

1. Preliminary work must be completed before commencement of the diploma course of study.
2. A candidate who holds an Honours degree of B.A. or B.Sc. in Psychology, or an Ordinary degree of B.A. or B.Sc. with Psychology as a third-year subject, will satisfy the requirements of this schedule.
3. Any other graduate will satisfy the requirements of this schedule if he satisfies the Chairman of the Department of Psychology that his experience in psychology is equivalent to a three-year university sequence in psychology, and is of a kind which will enable him to understand and profit from the course of study for the diploma. If a graduate does not so satisfy the Chairman of the Department, the preliminary work necessary to satisfy the requirements of this schedule will be prescribed by the Chairman of the Department of Psychology.

SCHEDULE II: COURSE OF STUDY

1. A candidate for the Diploma in Applied Psychology shall regularly attend lectures and seminars, do such written work as may be prescribed and, unless exempted under regulations 5 or 7(a), or by special permission of the Chairman of the Department of Psychology shall within a period of three years from the time of commencement of study pass examinations in:

- (a) AY54 Statistics and Methodology  
and any *four* of the following five subjects:
- (b) AY05 Counselling and Psychotherapy
- (c) AY15 Psychological Assessment and Measurement
- (d) AY25 Behaviour Analysis and Modification
- (e) AY35 Applied Social Psychology
- (f) AD35 Educational Psychology IIP.

A candidate may by permission of the Chairman of the Department of Psychology intermit his candidature for a prescribed period.

2. A candidate enrolled in the Diploma before 1976 may present:
  - (g) AY04 Developmental Psychology; *and*
  - (h) AY14 Human Skills*in lieu* of any *one* of the subjects (b) to (f) above.

SCHEDULE III: PRACTICAL WORK

1. A candidate shall complete satisfactorily the prescribed practical work. The practical work will include:

- (a) Practical Work:  
Practical work in applied psychology for a total of at least one hundred and sixty hours, beginning from the commencement of the diploma course of study.
- (b) Research Investigation or Critical Survey:

A written report on either a research investigation or a critical survey on a topic within the field of applied psychology, chosen by himself and approved by the Chairman of the Department of Psychology, to be completed and submitted, except by permission of the Chairman of the Department of Psychology, within six terms from the date of the granting of approval and prepared in accordance with directions given to candidates from time to time.\*

\* Published in "Notes and Instructions to candidates for Higher Degrees" (*see* Table of Contents).

OF THE  
DIPLOMA IN APPLIED PSYCHOLOGY  
SYLLABUSES

*Text-books:*

Students are expected to procure the latest edition of all text-books prescribed.

*Examinations:*

For each subject students may obtain from the department concerned details of the examination in that subject including the relative weights given to the components (e.g. such of the following as are relevant: assessments, term or mid-year tests, essays or other written or practical work, final written examinations *viva voce* examinations).

DIPLOMA IN APPLIED PSYCHOLOGY.

The course is intended primarily for graduates of the Faculty of Arts or the Faculty of Science who have either an Honours degree in Psychology or an Ordinary degree with Psychology as a major subject. Graduates who do not have either of these qualifications but who satisfy the Chairman of the Department of Psychology that they have an equivalent standard of attainment in psychology may also be permitted to proceed to the course.

A quota has been imposed on entry to the course, prospective students are therefore advised to make preliminary enquiries of the Chairman of the Department as early as possible and well in advance of the official enrolment period.

The course may be completed in one year of full-time study but may be taken on a part-time basis provided that the courses listed under schedule II are completed within three years from the time of commencement of study and the Research Investigation or Critical Survey is completed within six terms from the date of the granting of approval of the topic. The course includes lectures, demonstrations, seminars and practical work exercises on the subjects of study listed below together with such additional requirements as may be presented from time to time.

For students attempting the course over two years, subjects 1-4 below are normally examined in the first year of the course. A student enrolled in the course before 1976 may present subjects 5 and 6 below in place of any one of the subjects 1-4 below. All students should commence the practical work in their first year of enrolment although this will not normally be completed by part-time students in one year.

Assessment of students will be made on the basis of attendance, essays, exercises or tests during the year as well as by examination at the end of the year.

The subjects of study are:

- |  |                                    |
|--|------------------------------------|
| 1. AY05 Counselling and Psychotherapy            | 5. AY04 Developmental Psychology   |
| 2. AY15 Psychological Assessment and Measurement | 6. AY14 Human Skills               |
| 3. AY25 Behaviour Analysis and Modification      | 7. AY54 Statistics and Methodology |
| 4. AY35 Applied Social Psychology                | Practical work                     |
|  | Research Investigation or          |
|  | Critical Survey                    |

AD35 Educational Psychology IIP may be taken in place of any one of the subjects 1-4 above.

**AY05 Counselling and Psychotherapy.**

This course will be taken over two terms, with one two-hour session a week, as well as practical work in the student's own time. The course will provide supervised training and practice in developing counselling skills as well as an introduction to (a) the theory and modes of psychotherapeutic intervention and (b) major theories of counselling and psychotherapy.

Topics will include: Theories of individual, interactional and group psychotherapy; interpersonal variables affecting the psychotherapeutic relationships; theories of psychotherapeutic change; core dimensions in the 'helping' relationship; research in psychotherapy.

**AY15 Psychological Assessment and Measurement.**

This course will be given over two terms with one two-hour session a week. A series of practical work exercises is required.

Topics will include: The structure of intelligence; dimensions of personality; development and application of quantitative measures of both general and specific abilities; problems and limitations of measurement.

**AY25 Behaviour Analysis and Modification.**

This course will be given over two terms, with one two-hour session a week. A series of practical work exercises is also required.

Topics will include: Behaviour analysis and problem identification; relaxation training; systematic desensitization, both in imagination and in viva; assertive training.

**AY35 Applied Social Psychology.**

This course will be given over one term with one two-hour session a week. A practical exercise is required.

Topics will include: Attribution theories and behaviour modification; small group interactions; evaluation of interventions in the community and in organisations.

**AY04 Developmental Psychology.**

Lectures will be given for one term, with one two-hour session a week.

Topics will include: Changes in individual capacity and personality through the life-span, from childhood to old age.

**AY14 Human Skills.**

Lectures will be given for one term, with one two-hour session a week.

Topics will include: Basic principles of human performance; the nature of skill, and implications for the design of machines and of working environments; fatigue and boredom.

**AY54 Statistics and Methodology.**

Lectures will be given for three terms, with one two-hour session a week, and these will normally be attended during the second year of the part-time course.

Topics may include: Basic statistical procedures; complex experimental designs; analysis of data from non-experimental intact groups; evaluating the effects of actions taken in the field; uses of regression and covariance; factor analysis; the study of individual cases; the design of questionnaires, and the design and conduct of social surveys.

**AD35 Educational Psychology IIP.**

For syllabus see the Advanced Diploma in Education. Students presenting this subject for the Diploma in Applied Psychology will not be required to complete the Statistical Work or the research project components of AD30 Educational Psychology II, but will be required to complete additional practical work exercises within the Department of Psychology. Students who have completed AD35 Educational Psychology IIP and who wish subsequently to present AD30 Educational Psychology II for the Advanced Diploma in Education or the Degree of Master of Education will need to complete such additional work as is required by the Chairman of the Department of Education.

**Practical Work.**

Practical work in applied psychology will be required for a total of not less than one hundred and sixty hours. This will normally be undertaken both in the form of practical demonstrations, discussions and exercises in the Psychology Department, and in visits to and work with agencies co-operating with the Department. Practical work in the Department will include experience in interviewing and casework. Assessment will be made on the basis of attendance and work during the period of enrolment for the Diploma.

**Research Investigation or Critical Survey.**

A written report will be required of either a research investigation or a critical survey of the literature on a topic within the field of applied psychology, chosen by the student and approved by the Chairman of the Department of Psychology, and submitted for assessment in an approved form within six terms from the date of the granting of approval of the topic.

OF THE  
DIPLOMA IN LIBRARY STUDIES  
REGULATIONS

NOTE: This course has been discontinued and no new enrolments will be accepted.

1. There shall be a postgraduate Diploma in Library Studies.

\*2. Except as provided for in regulation 3, a candidate for admission to the course for the diploma must be qualified for admission to a degree of the University of Adelaide or another university accepted for the purpose by the University of Adelaide.

3. Subject to the approval of the Council, the Faculty may in special cases and subject to such conditions (if any) as it may impose in each case, accept as a candidate for the diploma a person who does not hold a degree of a university but has given evidence satisfactory to the Faculty of his fitness to undertake work for the diploma.

4. To qualify for the diploma a candidate shall satisfactorily complete a course of full-time study extending over at least one year or of part-time study extending over at least two years.

†5. The course of study to be undertaken and the examinations to be passed, shall be prescribed in schedules approved by the Council. Such schedules shall take effect as from the date of approval by the Council or such other date as the Council shall determine and shall be published in the next University Calendar which is issued after that approval has been given.

6. A candidate who desires that the examinations which he has passed in the University or elsewhere should be counted for the Diploma in Library Studies, may on written application be granted such exemption from the requirements of these regulations as the Council shall determine.

7. There shall be three classifications of pass at an annual examination in any subject for the diploma: Pass with Distinction, Pass with Credit, and Pass. The names of the candidates in each classification shall be arranged in alphabetical order.

8. (a) A candidate who fails to pass the examination in any subject or who fails to complete satisfactorily the prescribed practical work, and who desires to take the subject or practical work again, shall again attend such lectures and satisfactorily do such written and practical work as may be prescribed, unless specifically exempted therefrom after written application to the Academic Registrar for such exemption.

\* Amended 23 January, 1975.

† Amended 15 January, 1976.

(b) A candidate who has twice failed to pass the examination in any subject or who has twice failed to complete satisfactorily the prescribed practical work, may not enrol for that subject or practical work again except by special permission of the Faculty of Arts to be obtained in writing from the Academic Registrar and then only under such conditions as may be prescribed.

(c) For the purpose of this regulation, a candidate who is refused permission to sit for examination owing to unsatisfactory attendance or work, or who fails to attend all or part of a final examination (or supplementary examination if granted) without a reason accepted by the Faculty of Arts as adequate, shall be deemed to have failed to pass the examination.

9. A candidate who complies with the foregoing conditions and satisfies the examiners shall be awarded the Diploma in Library Studies.

10. The maximum number of candidates who may be enrolled in any course for the diploma shall be determined from time to time by the Council on the recommendation of the Faculty of Arts; and nothing in these regulations shall be held to bind the Council to provide any or all the courses in any year if for any reason the Council decides to suspend it or them.

11. These regulations shall come into force at a date to be determined by the Council.\*

Regulations allowed 28 February, 1974.

\* The Council authorised the regulations to come into force on 1 January, 1975.

OF THE  
**DIPLOMA IN LIBRARY STUDIES**

**SCHEDULES**

(Made by the Council under regulation 5.)

**SCHEDULE I: COURSES OF STUDY**

A candidate will be expected to attend lectures regularly and, unless exempted therefrom by the Faculty of Arts, shall do such written, practical and tutorial work as may be prescribed, pass examinations, and satisfactorily complete a special assignment. Compulsory subject units, a number of optional units from which (with any additional units that may be offered) an approved selection may be made, the hours of classwork required each week for each unit and the academic term or terms in which each may be taken by approved full-time or part-time students are scheduled below. Not every optional unit will necessarily be offered every year.

Syllabus Number	Subject Units	First Term. Hours a week	Second Term. Hours a week	Third Term. Hours a week
	<b>Compulsory Units</b>			
AB05	Introduction to Library Studies	2		
AB15	Bibliographical Organisation	3	3	
AB25	Reference Service and Resources	2		
AB35	Academic and Research Library Management	2	2	
AB45	Library Applications of Computing I ..	2		
AB55	Research Methods .. .. .			3
AB65	Special Assignment .. .. .			To be completed in Third Term or Summer Vacation.
	<b>Optional Units, Groups I, II and III</b>			
	One First-Term unit shall be taken.			
	Three Second-Term units shall be taken, of which at least one shall be taken from Group I.			
	Three Third-Term units shall be taken, of which at least one shall be taken from Group I.			
	<b>Group I</b>			
AB75	Social Science Bibliography .. ..		3	
AB85	Humanities Bibliography .. .. .		3	
AB95	Pure and Applied Science Bibliography ..		3	
AB86	Special Topics in Bibliography .. ..			3
AB96	Information Storage and Retrieval .. ..			3
	<b>Group II</b>			
AB36	Library History .. .. .	3		
AB46	Book Production and Book Arts .. ..	3		
AB56	Library Applications of Computing II ..		3	
AB07	Information Systems Analysis and Design ..		3	
AB76	Library Planning .. .. .			3
AB17	Non-print Materials .. .. .			3



Syllabus Number	Subject Units	First Term. Hours a week	Second Term. Hours a week	Third Term. Hours a week
	<b>Group III</b>			
	Examples of relevant degree subjects which may be available to students with the prerequisite subjects:			
QA7H	Computing IH .. .. .	3	3	3
QA06	Computing Science IIII .. .. .	3	3	3
QT7H	Statistics IH .. .. .	3	3	3
EC2H	Introduction to Operations Research IIII	1½	1½	1½
EC3H	Information Systems and Data Processing IIII .. .. .	1½	1½	1½
EC23	Industrial Sociology III .. .. .	3	3	3

## SYLLABUSES

For syllabuses of the Diploma in Library Studies, *see* Calendar of the University for 1978, Volume II, pages 668-675.

OF THE  
DIPLOMA IN EDUCATION  
REGULATIONS

1. There shall be a postgraduate Diploma in Education.

†2. Except as provided for in regulation 3 a candidate for admission to the course for the diploma shall have qualified for admission to a degree of the University or to a degree of another university accepted for the purpose by the University.

\*3. Subject to the approval of the Council, the Faculty may in special cases and subject to such conditions (if any) as it may see fit to impose in each case accept as a candidate for the diploma a person who does not hold a degree of a university but has given evidence satisfactory to the Faculty of his fitness to undertake work for the diploma.

4. To qualify for the diploma a candidate shall:

- (a) satisfactorily complete a course of full-time study extending over at least one year or of part-time study extending over at least two years; and
- (b) satisfy the University in a course of practical teaching.

††5. The course of study shall be prescribed in schedules which shall be drawn up from time to time by the Faculty of Arts and approved by the Council. Such schedules shall take effect as from the date of approval by the Council or such other date as the Council shall determine and shall be published in the next University Calendar which is issued after that approval has been given.

6. A candidate who desires that the examinations which he has passed in the University or in another university should be counted *pro tanto* for the Diploma in Education, may on written application be granted such exemption from the requirements of these regulations as the Council shall determine.

7. A candidate for the diploma by part-time study who desires that his experience as a teacher should exempt him from a course of practical teaching may on written application be granted such exemption provided that he satisfies the University that he is a proficient teacher.

\* Allowed 28 February, 1974.

† Allowed 28 February, 1974, and amended 23 January, 1975.

†† Amended 15 January, 1976.

8. A candidate who has twice failed to pass the examination in any subject or division of a subject may not enrol for the subject again except by special permission of the Faculty and then only under such conditions as the Faculty may prescribe.

For the purpose of this regulation a candidate who is refused permission to sit for examination, or who fails, without a reason accepted by the Dean as adequate, to attend all or part of an annual examination (or supplementary examination if granted) after having enrolled for at least two terms in that year, shall be deemed to have failed to pass the examination.

9. A candidate who complies with the foregoing conditions and satisfies the examiners shall be awarded the Diploma in Education.

\*10. These regulations shall come into force, and all existing regulations shall be repealed, on 1 January, 1962. However, a student who matriculated in the University on or before 31 March, 1960, may at his option complete the course for the diploma under the regulations in force in 1960 provided that he satisfies the requirements of regulation 3 of those regulations by 28 February, 1966.

Regulations allowed 16 March, 1961.

\* Amended 4 April, 1963.

OF THE  
DIPLOMA IN EDUCATION  
SCHEDULES

(Made by the Council under regulation 5.)

NOTE: Syllabuses of the subjects for the Diploma in Education are published below, immediately after these schedules. For syllabuses of subjects taught for other degrees and diplomas see the table of subjects at the end of the volume.

SCHEDULE I: COURSES OF STUDY

A candidate shall, unless exempted therefrom by the Faculty, regularly attend lectures, do such written and tutorial work as may be prescribed, and pass examinations in the following subjects:

AD04 Theory of Education I	AD34 Educational Psychology I
AD14 History of Education I	AD44 Curriculum Studies and
AD24 Sociology of Education I	Teaching Practice

provided that a part-time teaching candidate who has had practical teaching experience and who is enrolled in AD44 Curriculum Studies and Teaching Practice may apply in writing by 31 March to the Faculty of Arts, through the Academic Registrar, for exemption from attendance at classes, tutorials, supervised teaching practice and examinations in this subject.

Such an application (which is *in addition* to enrolment for the subject) should be accompanied by a statement giving full details of teaching experience including dates, names and addresses of schools, and names of head teachers. The University will in due course seek a report on the candidate's competence as a teacher.

The Academic Registrar will inform each candidate by 31 July whether his or her application for exemption has been granted.

OF THE  
DIPLOMA IN EDUCATION  
SYLLABUSES

**Text-books:**

Students are expected to procure the latest edition of all text-books prescribed.

**Examinations:**

For each subject students may obtain from the department concerned details of the examination in that subject including the relative weights given to the components (e.g. such of the following as are relevant: assessments, term or mid-year tests, essays or other written or practical work, final written examinations, *viva voce* examinations).

DIPLOMA IN EDUCATION.

The course for the diploma is a single, composite course of full-time study lasting for one year and requiring the whole of a candidate's time to be devoted to it. The work consists of reading, attendance at a number of tutorial and seminar classes each week, such practical and written exercises as may be prescribed, visits to schools and other institutions, periods of supervised teaching practice, and attendance at lecture courses.

Each of the lecture courses consists of one lecture a week.

AD04 Theory of Education I.

The course is divided into two sections:

- A. THEORY.
- B. PHILOSOPHY.

Reading lists will be distributed by the lecturers in charge. Students should consult the departmental handbook.

AD14 History of Education I.

The course is concerned with aspects of the following topics: the social origins of public school systems; education in antiquity and the middle ages; English secondary education since the renaissance; education in Australia; progressive and radical alternatives in education.

Basic text-books:

- Hyams, B. K., and Bessant, B., *Schools for the people?* (Longman).
- Sources in the history of Australian education*, edited by C. Turney (Angus and Robertson).
- Marrou, H. I., *The history of education in antiquity* (Sheed and Ward);
- OR
- Bowen, J., *A history of western education*, Vol. I (Methuen).

Full reading lists will be printed in the departmental course handbook, available in February.

#### AD24 Sociology of Education I.

This is an introductory course and, although its principal aim is to indicate the relationship between education and its social setting, a special emphasis is placed on theoretical sociology before discussing the educational implications of the subject.

In 1979 the course will be divided into three sections:

- A. CULTURE, SOCIETY AND EDUCATION.
- B. SOCIOLOGICAL PERSPECTIVES AND EDUCATIONAL PROBLEMS.
- C. SOCIOLOGY OF LEARNING.

Suggested preliminary reading:

*Sociology of education*, edited by R. K. Browne and D. J. Magin, 2nd edition (Macmillan).

*Melbourne Studies in Education*, 1968-69 (M.U.P.).

Inkeles, A., *What is sociology?* (Prentice-Hall).

Berger, P., *Invitation to sociology: a humanistic perspective* (Penguin).

*Australia 2000: the ethnic impact*, edited by M. Bowen (University of New England Publishing Unit).

Marjoribanks, K. (ed.), *Environments for learning* (N.F.E.R.).

Detailed reading lists will be printed in the departmental handbook available early in 1979.

#### AD34 Educational Psychology I.

The following books should be read as early as possible in the course to provide useful background material:

Lefrançois, G., *Psychology for teaching* (Wadsworth).

Flavell, J. H., *Cognitive development* (Prentice-Hall).

Bradley, J. I., and McClelland, J. N., *Basic statistical concepts: a self-instructional text* (Scott, Foresman).

During the course students will be required also to read a number of articles from journals of psychology and educational psychology and portions of selected books. These will be detailed as required during the course.

#### AD44 Curriculum Studies and Teaching Practice.

(a) A prescribed period of supervised teaching practice is to be undertaken.

(b) Three options of curriculum studies, chosen from the following list, are to be undertaken. Students may choose their options either entirely within one group (e.g. Junior Social Studies, Geography and History) or from two groups (e.g. Junior Science, Physics and Junior Mathematics), but not from more than two groups.

Students should take note of both the conditions attached to particular options and the pre-requisites laid down for them.

At the discretion of the Chairman of the Department students who are precluded from taking more than two may be permitted to take only two.

The Chairman of the Department may dispense with any of the conditions applying to this subject in any particular case.

#### Group 1.

1A CLASSICAL STUDIES MAJOR (double option).

Pre-requisite: A pass at third-year level in one of Classical Studies, Latin, or Greek.

1B CLASSICAL STUDIES MINOR (may not be taken *with* 1A).

Pre-requisite: A pass at second-year level in one of Classical Studies, Ancient History, Latin or Greek.

**Group 2.**

- 2A ENGLISH MAJOR (double option).  
Pre-requisite: A pass in one subject in English at third-year level.
- 2B ENGLISH MINOR (may not be taken *with* 2A).  
Pre-requisite: A pass in one subject in English at second-year level.

**Group 3.**

- 3A JUNIOR MATHEMATICS.  
Pre-requisite: A pass in one subject in Mathematics at first-year level.
- 3B SENIOR MATHEMATICS (may not be taken *without* 3A).  
Pre-requisite: A pass in one subject in Mathematics at third-year level.

**Group 4.**

Students may select at most one double option or two single options from this group.

MODERN LANGUAGES MAJOR (double option).

- 4F FRENCH.  
4G GERMAN.  
4H SPANISH.  
4I ITALIAN.  
4J JAPANESE.

Pre-requisite: A pass in the appropriate language at third-year level.

MODERN LANGUAGES MINOR (single option).

- 4Q FRENCH.  
4R GERMAN.  
4S SPANISH.  
4T ITALIAN.  
4U JAPANESE.

Pre-requisite: A pass in the appropriate language either at second-year level, or, if the student has extensive practical experience of the language, at first-year level.

Note that there are not separate courses for different languages. The distinction between languages is made for the purposes of teaching practice placements in schools.

**Group 5.**

- 5A MUSIC MAJOR (double option).  
5B MUSIC MINOR.  
Both options here are to be considered by the Department in conjunction with the Department of Music.

**Group 6.**

- 6A JUNIOR SCIENCE.  
Pre-requisite: A pass in two first-year subjects in the Physical or Biological Sciences.
- 6B BIOLOGY (may not be taken *without* 6A).  
Pre-requisite: A pass in a third-year subject in Biology.
- 6C CHEMISTRY (may not be taken *without* 6A).  
Pre-requisite: A pass in a third-year subject in Chemistry.
- 6D PHYSICS (may not be taken *without* 6A).  
Pre-requisite: A pass in a third-year subject in Physics.
- 6E EARTH SCIENCE/GEOLOGY (may not be taken *without* 6A).  
Pre-requisite: A pass in a third-year subject in Geology.  
Science students whose subjects can not properly be classified under these headings should see the Chairman of the Department before enrolling.

**Group 7.**

**7A JUNIOR SOCIAL STUDIES.**

**Pre-requisite:** *Either* a pass at second-year level in one of History, Politics, Anthropology, Geography, Economics or Psychology; *or* a pass at first-year level in one of the above, with a second-year Philosophy pass.

**7B HISTORY** (may not be taken *without* 7A).

**Pre-requisite:** A pass in one subject in History at third-year level.

**7C ECONOMICS.\***

**Pre-requisite:** A pass in one subject in Economics at second-year level.

**7D GEOGRAPHY.\***

**Pre-requisite:** A pass in Geography at third-year level.

\* Either 7C or 7D may be taken separately with any other option or options in the list; however, if they are taken together, then 7A must also be taken, i.e. 7A, 7C, 7D is the only permissible combination containing both.

---

Reading lists for the units will be available from the Department.



OF THE  
ADVANCED DIPLOMA IN EDUCATION  
REGULATIONS

1. There shall be a postgraduate Advanced Diploma in Education.
- † 2. A candidate for admission to the course for the diploma shall:
  - (a) have been admitted to a degree of the University or to a degree of another university accepted for the purpose by the University;
  - (b) hold the Diploma in Education of the University or a qualification accepted by the University as equivalent; and
  - (c) have completed such other work as may be prescribed in the schedules.

\*2A. Subject to the approval of the Council the Faculty may, in special cases and subject to such conditions (if any) as it may impose in each case, accept as a candidate for the diploma a person who does not hold a degree of a university but has given evidence satisfactory to the Faculty of his fitness to undertake work for the diploma.

3. To qualify for the diploma a candidate shall satisfactorily complete a course of full-time study extending over at least one year or of part-time study extending over at least two years.

\*\*4. Schedules defining the course of study shall be drawn up from time to time by the Faculty of Arts and shall be approved by the Council. Such schedules shall take effect as from the date of approval by the Council or such other date as the Council shall determine and shall be published in the next University Calendar which is issued after that approval has been given.

5. A candidate who desires that the examinations which he has passed in the University or in another university should be counted *pro tanto* for the Advanced Diploma in Education, may on written application be granted such exemption from the requirements of these regulations as the Council shall determine.

6. A candidate who complies with the foregoing conditions and satisfies the examiners shall be awarded the Advanced Diploma in Education.

7. A candidate who passes the examinations in all the course work subjects prescribed for the degree of Master of Education shall on written application be awarded the Advanced Diploma in Education.

Regulations allowed 21 December, 1972.

\* Allowed 28 February, 1974.

† Amended 23 January, 1975.

\*\* Amended 15 January, 1976.

OF THE  
ADVANCED DIPLOMA IN EDUCATION

SCHEDULES

(Made by the Council under regulation 4.)

NOTE: Syllabuses of the subjects for the Advanced Diploma in Education are published below, immediately after these schedules. For syllabuses of subjects taught for other degrees and diplomas see the table of subjects at the end of the volume.

SCHEDULE I: SUBJECTS OF STUDY

1. The following shall be the subjects of the Advanced Diploma:

GROUP A SUBJECTS

AD00 Theory of Education II      AD50 History and Sociology of  
AD90 Philosophy of Education II      Science

GROUP B SUBJECTS

AD15 History of Education IIA      AD40 Comparative Education  
AD16 History of Education IIB

GROUP C SUBJECTS

AD25 Sociology of Education IIA      AD26 Sociology of Education IIB

GROUP D SUBJECT

AD30 Educational Psychology II

GROUP E SUBJECTS

AD60 Advanced Curriculum Studies      AD70 Honours English (Education)  
in English      AD80 Special Topic: English  
AE92 Linguistics II      Curriculum Development

GROUP F SUBJECTS

AD6H Advanced Curriculum Studies      AD75 Honours Mathematics  
in Mathematics      (Education)

GROUP G SUBJECT

AD65 Advanced Curriculum Studies  
in History and Social Science

2. With the approval of the Chairman of the Department of Education, the following subject may also be counted for the Advanced Diploma:

AD95 Philosophy of Education III.

SCHEDULE II: COURSES OF STUDY

1. A candidate shall, unless exempted therefrom by the Faculty of Arts, regularly attend classes, do such written and tutorial work as may be required by the lecturer, and pass examinations in four subjects, according to one of the combinations specified below.

2. A candidate for the general course in Education shall take four subjects from at least three of the groups A, B, C and D, provided that, in special cases approved in each instance by the Faculty on the recommendation of the Chairman of the Department of Education, a candidate may be permitted to take the four subjects from *two* of the groups A, B, C and D.

3. A candidate for the course in English Curriculum shall take all four subjects in group E. Before being admitted to this course a candidate shall (a) have passed English III or hold an Honours degree in English or other qualification in English accepted by the Chairmen of the Departments of Education and English, and (b) have had at least one year's experience of teaching approved by the Chairman of the Department of Education.

4. A candidate for the course in Mathematics and Education shall take *both* subjects in group F, and the remaining two subjects from two of groups A, B, C and D. Before being admitted to the course a candidate shall (a) hold a degree in Mathematics or other qualification in Mathematics accepted by the Chairman of the Department of Education and by the Chairman of the appropriate Department or Departments in the Faculty of Mathematical Sciences, and (b) have had at least one year's experience of teaching approved by the Chairman of the Department of Education.

5. A candidate for the course in History and Social Science Curriculum shall take (a) the group G subject AD65 Advanced Curriculum Studies in History and Social Science, and (b) two subjects from one or both of groups B and C, (c) one further subject from any of groups A, B, C or D. Before being admitted to this course a candidate shall have passed a third-year History or other relevant subject approved by the Chairman of the Department of Education, and shall have had at least one year's experience of teaching approved by the Chairman of the Department of Education.

OF THE  
ADVANCED DIPLOMA IN EDUCATION  
AND OF THE DEGREE OF  
MASTER OF EDUCATION (PART I)  
SYLLABUSES

*Text-books:*

Students are expected to procure the latest edition of all text-books prescribed.

*Examinations:*

For each subject students may obtain from the department concerned details of the examination in that subject including the relative weights given to the components (e.g. such of the following as are relevant: assessments, term or mid-year tests, essays or other written or practical work, final written examinations, *viva voce* examinations).

THE ADVANCED DIPLOMA IN EDUCATION  
AND  
THE DEGREE OF MASTER OF EDUCATION.

Each of the four courses necessary for the diploma and/or the degree consists of one seminar class a week lasting for an hour and a half and such written and practical work as may be prescribed.

**AD00 Theory of Education II.**

The course is concerned with the humanist tradition in educational thought and practice.

The following books should be read:

- Montaigne, M. E. de, *Essais*.
- Locke, J., *Some thoughts concerning education*.
- Arnold, M., *Culture and anarchy*.
- Dewey, J., *The school and society* (Chicago U.P.).
- Rousseau, J. J., *Emile*.

HISTORY OF EDUCATION.

Five half-year topics are offered, any two of which may be taken as AD15 History of Education IIA, while a further two may be taken as AD16 History of Education IIB. All topics will not necessarily be offered every year.

The five topics are:

- E401 THE HISTORY OF EDUCATION IN AUSTRALIA, with particular reference to South Australia. NOT offered in 1979. (Available in 1980—Second half-year.)

Principal references:

- Austin, A. G. (ed.), *Select documents in Australian education* (Pitman).
- Austin, A. G., and Selleck, R. J. W. (eds.), *The Australian government school, 1830-1914* (Pitman).
- McLaine, A. C., and Selby Smith, R. (eds.), *Fundamental issues in Australian education* (Novak).
- Turney, C. (ed.), *Sources in the history of Australian education* (Angus and Robertson).

- E402 THE HISTORY OF EDUCATION IN FRANCE (a reading knowledge of French is *NOT* required, but will be helpful to those students who have it). (Second half-year.)

Principal references:

- Ariés, P., *Centuries of childhood* (Cape).  
 Barnard, H. C., *The French tradition in education: Ramus to Mme. Necker de Saussure* (C.U.P.).  
 Evennett, H. O., *The spirit of the counter-reformation* (C.U.P.).  
 Ganss, G. E., *St. Ignatius' idea of a Jesuit university* (Marquette U.P.).  
 Barnard, H. C., *Education and the French revolution* (C.U.P.).  
 Arnold, M., *Democratic education* (Michigan U.P.).  
 Debiesse, J., *Compulsory education in France* (UNESCO).  
 Zeldin, T. (ed.), *Conflicts in French society: anti-clericalism, education and morals in the nineteenth century* (Allen and Unwin).  
 Arnold, M., *Schools and universities on the continent* (Michigan U.P.).

- E403 FAMILY, CLASS AND SCHOOLING in western Europe and North America. (Second half-year.)

Principal references:

- Ariés, P., *Centuries of childhood* (Cape).  
 Bowles, S., and Gintis, H., *Schooling in capitalist America* (Routledge).  
 Braudel, F., *Capitalism and material life 1400-1800* (Fontana).  
 de Mause, L. (ed.), *The history of childhood* (Harper).  
 Hobsbawm, E. J., *The age of revolution* (Weidenfeld and Nicolson).  
 Katz, M. B., *Class, bureaucracy and schools* (Praeger).  
 Laslett, P., *The world we have lost* (Methuen).  
 Musgrave, P. W. (ed.), *Sociology, history and education* (Methuen).  
 Rabb, T. K., and Rotberg, R. I., *The family in history* (Harper).  
 Simon, J., *The social origins of English education* (Routledge).

- E404 ENGLISH SECONDARY EDUCATION 1828-1977 as a tradition of culture. (First half-year.)

Reading list will be available from the Department in February.

- E405 EDUCATION, IDEAS AND SOCIETY IN RENAISSANCE ENGLAND. (First half-year.)

The course will focus chiefly upon education and society in England during the Tudor and early Stuart period, but will place it in the context of the main intellectual and social movements of western Europe, commencing with the Italian Renaissance.

Principal references (further reading lists will be available from the Department):

- Burke, P., *The Renaissance* (Longman).  
 Hale, J. R., *Renaissance Europe* (Fontana).  
 Dresden, S., *Humanism in the Renaissance* (W.U.L.).  
 Erasmus, D., *The education of a Christian prince*, ed. L. K. Born (N.Y. Repr.).  
 Erasmus, D., *Concerning the aims and method of education*, ed. W. H. Woodward (Teachers College Press, Columbia U.).  
 Cressy, D. (ed.), *Education in Tudor and Stuart England* (Arnold).  
 Charlton, K., *Education in Renaissance England* (London U.P.).  
 Simon, J., *Education and society in Tudor England*.  
 Hurstfield, J., and Smith, A. G. R. (eds.), *Elizabethan people: state and society* (Arnold).  
 Kearney, H., *Scholars and gentlemen: universities and society in pre-industrial Britain* (Faber).  
 Stone, L. (ed.), *The university in society*, 2 vols. (Princeton U.P.).  
 Prest, W. R., *The Inns of Court 1590-1640* (Longman).  
 Mulcaster, R., *Positions*, ed. R. L. de Molen (Teachers College Press, Columbia U.).  
 Ryan, L. V., *Roger Ascham* (Stanford U.P.).  
 Boas, M., *The scientific Renaissance 1450-1630* (Collins).  
*John Amos Comenius on Education* (intro by J. Piaget) (Teachers College Press, Columbia U.).

The subjects offered are:

**AD15 History of Education IIA.**

Two half-year topics.

**AD16 History of Education IIB.**

Two half-year topics not taken for AD15 History of Education IIA.

**SOCIOLOGY OF EDUCATION.**

Two Sociology of Education II subjects are offered as outlined below.  
In 1979 only AD26 Sociology of Education IIB will be available.

**AD25 Sociology of Education IIA.**

(This subject will not be offered in 1979.)

AD25 Sociology of Education IIA is largely theoretical in emphasis and deals with conceptual models in sociology in relation to aggression and competition; alienation; social class and equality of educational opportunity; culture and tradition, with special reference to cultural pluralism and ethnic education. The theoretical frameworks of structural functionalism and humanistic sociology; Marxism and the sociology of knowledge will also be reviewed in relation to their educational significance.

**AD26 Sociology of Education IIB.**

AD26 Sociology of Education IIB is concerned with the practical application of sociological theory to an examination of the family, the school, educational organisation, the curriculum, alternatives to schooling and the problems of deviance and youth culture. It will also include a consideration of research methodology.

Candidates are expected to be familiar with the books recommended for AD24 Sociology of Education I.

Detailed reading lists will be available at the beginning of the course.

Suggested preliminary reading:

Berger, P., and Luckman, T., *The social construction of reality* (Allen Lane).

Lefebvre, H., *The sociology of Marx* (Allen Lane).

Travers, R. M. W., *Second hand book of research on teaching* (Rand McNally).

Boocock, S. S., *Sociology of learning* (Houghton Mifflin).

Marjoribanks, K., *Environments for learning* (N.F.E.R.).

---

**AD30 Educational Psychology II.**

This course of lectures, tutorials, written and practical exercises will have special reference to educational research and the application of it to teaching in schools.

For many pieces of research it will be necessary to consult several journals of psychology and education. These, together with relevant books for the courses will be detailed as necessary during lectures.

**Statistical Work.**

All students must work through the following programme:

Elzey, F. F., *A programmed introduction to statistics* (Wadsworth).

Books which may be found helpful will be detailed at the beginning of the course.

**AD40 Comparative Education.**

The course refers in particular to education in England, France, the U.S.A. and Eastern European countries.

The following books should be read:

- Hans, N. A., *Comparative education* (Routledge).  
 Kandel, I. L., *Comparative education* (Harrap).  
 Armfelt, R., *The structure of English education* (Cohen and West).  
 Johnson, W. H. E., *Russia's educational heritage* (Carnegie Pr.).  
 Ulich, R., *The education of nations* (Harvard U.P.).  
 Cruickshank, M., *Church and state in English education, 1870 to the present day* (Macmillan).  
 King, E. J., *Other schools and ours* (Holt).  
 Kazamias, A. M., and Epstein, E. H. (eds.), *Schools in transition: essays in comparative education* (Allyn and Bacon).  
 Jones, P. E., *Comparative education* (Queensland U.P.).

**AD50 History and Sociology of Science.**

A study of the development of scientific thought from earliest times to the beginnings of modern science and of selected topics in the development of chemistry and the historical sciences from the seventeenth century to the present. The course will be concerned with the study of the structure of scientific change; the nature of scientific methods, explanation and proof; the cross-fertilization between sciences; the relation between pure science and technology; the influence of non-scientific factors upon the growth of science; and the social and moral responsibilities of scientists. Special emphasis will be placed on the study of the effects of scientific and technological change on man's natural environment and on the structure and function of social institutions. Attention will also be given to the place of the history and sociology of science in the education of scientists at both secondary and tertiary level and to the role of scientific education in helping to control the socially dysfunctional aspects of scientific and technological innovation. Interests of individual students will be taken into account whenever possible.

The course is intended primarily for graduates in science but, with the approval of the Chairman of the Department of Education, in special cases other qualified graduates may be permitted to take the course.

Recommended books for preliminary reading:

- Kuhn, T. S., *The structure of scientific revolutions*, 2nd edition (Chicago U.P.).  
 Lakatos, I., and Musgrave, A., *Criticism and the growth of knowledge* (C.U.P.).  
 Mulkay, M. J., *The social process of innovation* (Macmillan).  
 Barnes, B., *Sociology of science* (Pelican).  
 Ben-David, J., *The scientist's role in society* (Prentice-Hall).

**AD90 Philosophy of Education II.**

The course aim is to apply philosophical techniques to the analysis of problems in education. Although there are no pre-requisites, students will be expected to be familiar with the introductory texts for AD04 Theory of Education. Those without any previous experience of philosophy will also find it useful to read the works on ethics and theory of knowledge listed under Philosophy, First Year, by the Department of Philosophy. Students interested in the philosophy of their teaching subjects should also pay attention to the Diploma in Education reading list for works on their particular topic.

**AD60 Advanced Curriculum Studies in English.**

A detailed study of current research and theory in the teaching of English with particular reference to secondary education. Emphasis is placed upon aspects of a number of linguistic theories, theories of culture and some recent anthropological works.

**AD70 Honours English (Education).**

Two papers, not already passed, from those listed under AE99 Honours English Language and Literature, chosen subject to the approval of the Chairman of the Departments of Education and English.

**AD80 Special Topic—English Curriculum Development.**

A special topic, related to English curriculum development and approved by the Chairman of the Department of Education, which will be the subject of an essay of approximately 12,000 words. Normally the topic would involve an original investigation of an issue which has some practical relevance for the candidate's professional interests.

**AD65 Advanced Curriculum Studies in History and Social Science.**

The course will examine the following topics:

(a) Curriculum theory, with particular reference to history and social studies in secondary education.

(b) Curriculum construction and evaluation, including an analysis of important recent examples of curriculum development.

(c) Aspects of the nature of history and the social sciences.

(d) A critical examination of new methods in teaching history and interdisciplinary social studies courses. Emphasis will be placed on developments in teaching about values, and controversial issues.

Work required will consist of seminar papers, essays and a project in curriculum design or evaluation of a particular teaching method.

**AD6H Advanced Curriculum Studies in Mathematics.**

A study of current research and theory in Mathematics Education.

**AD75 Honours Mathematics (Education).**

Three units, not already taken, from those offered in QM99 Honours Pure Mathematics IV, QN99 Honours Applied Mathematics IV, QT99 Honours Statistics IV, QA99 Honours Computing Science IV, and QF99 Honours Mathematical Physics IV.

*Note:* Neither of the two subjects AD6H Advanced Curriculum Studies in Mathematics and AD75 Honours Mathematics (Education) may be taken without the other. In the case of part-time students, the three units of AD75 Honours Mathematics (Education) need not all be taken within the one year.

**Thesis for the degree of Master of Education.**

A candidate is required to consult the Chairman of the Department about the subject of his thesis.



OF THE DEGREE OF  
MASTER OF EDUCATION  
REGULATIONS

1. There shall be a degree of Master of Education.

§2. A candidate for admission to the course for the degree shall:

- (a) have been admitted to a degree of the University or to a degree of another university accepted for the purpose by the University;
- (b) hold the Diploma in Education of the University or a qualification accepted by the University as equivalent; and
- (c) satisfy such other requirements for admission to the course as are set out in schedules.

2A. Subject to the approval of the Council the Faculty may, in special cases and subject to such conditions (if any) as it may see fit to impose in each case accept as a candidate for the degree a person who does not hold a degree of a university but has given evidence satisfactory to the Faculty of his fitness to undertake work for the degree.

†3. To qualify for the degree a candidate shall:

- (a) satisfactorily complete a course of study extending over at least one year of full-time study or at least two years of part-time study; and
- (b) subsequently either present a satisfactory thesis on a subject approved by the Faculty of Arts, or present a satisfactory dissertation on a subject approved by the Faculty of Arts and also be examined on a second subject approved by the Faculty of Arts.

\*4. Schedules defining the course of study shall be drawn up from time to time by the Faculty of Arts and shall be approved by the Council. Such schedules shall take effect as from the date of approval by the Council or such other date as the Council shall determine and shall be published in the next University Calendar which is issued after that approval has been given.

5. A candidate for the degree by part-time study shall be examined in any year in not more than half the subjects of the course of study.

† Amended 22 December, 1966.

§ Amended 9 January, 1969, 21 December, 1972, 28 February, 1974, and 23 January, 1975.

\* Amended 15 January, 1976.

††6. A candidate shall submit for approval by the Faculty of Arts the subject of his thesis or the subject of his dissertation and the subject on which he desires to be examined. The Faculty shall appoint a supervisor to guide the candidate in his work.

†7. A candidate shall present his thesis, or submit his dissertation and take the examination on his approved subject, within four calendar years, but not earlier than one calendar year, from the date of the approval of his subject or subjects by the Faculty.

\*\*8. On completion of his work the candidate shall lodge with the Academic Registrar three copies of the thesis or of the dissertation prepared in accordance with directions given to candidates from time to time.\*

†9. (a) The Faculty of Arts shall appoint examiners of the thesis or of the dissertation and the approved subject, of whom at least one shall be an external examiner.

(b) At the discretion of the examiners a candidate may be examined orally on his thesis or on his dissertation and may also be required to pass a written examination connected with the subject of his thesis or of his dissertation.

10. A candidate who desires that examinations which he has passed in the University or in another university should be counted *pro tanto* for the degree of Master of Education, may on written application be granted such exemption from the requirements of these regulations as the Council shall determine.

11. A candidate who complies with the foregoing conditions and satisfies the examiners shall, on the recommendation of the Faculty of Arts, be admitted to the degree of Master of Education.

Regulations allowed 16 March, 1961.

† Amended 22 December, 1966.

†† Amended 22 December, 1966 and 28 February, 1974.

\*\* Amended 15 January, 1976.

\* Published in "Notes and Instructions to candidates for Higher Degrees":  
*see* Table of Contents.

OF THE DEGREE OF  
MASTER OF EDUCATION

SCHEDULES

(Made by the Council under regulation 4.)

NOTE: Syllabuses for the courses of study prescribed in schedule I of the degree of Master of Education are published above, immediately after the regulations and schedules of the Advanced Diploma in Education. Syllabuses for the course work component of the degree by dissertation and examination are published below. For syllabuses of subjects taught for other degrees and diplomas see the table of subjects at the end of the volume.

SCHEDULE I: SUBJECTS OF STUDY

1. The following shall be the subjects of part I of the degree:

GROUP A SUBJECTS

AD00 Theory of Education II      AD50 History and Sociology of  
AD90 Philosophy of Education II      Science

GROUP B SUBJECTS

AD15 History of Education IIA      AD40 Comparative Education  
AD16 History of Education IIB

GROUP C SUBJECTS

AD25 Sociology of Education IIA      AD26 Sociology of Education IIB

GROUP D SUBJECT

AD30 Educational Psychology II

GROUP E SUBJECTS

AD60 Advanced Curriculum Studies      AD70 Honours English (Education)  
in English      AD80 Special Topic: English  
AE92 Linguistics II      Curriculum Development

GROUP F SUBJECTS

AD6H Advanced Curriculum Studies      AD75 Honours Mathematics  
in Mathematics      (Education)

2. The following shall be the subjects of part II of the degree in Philosophy of Education.

AD95 Philosophy of Education III      AD96 Philosophy III (Education)

GROUP G SUBJECT

AD65 Advanced Curriculum Studies  
in History and Social Science

SCHEDULE II: PART I OF THE DEGREE

1. A candidate shall, unless exempted therefrom by the Faculty of Arts, regularly attend classes, do such written and tutorial work as may be required by the lecturer, and pass examinations in four subjects, according to one of the combinations specified below.

2. A candidate for the general course in Education shall take four subjects from at least three of the groups A, B, C and D, provided that, in special cases approved in each instance by the Faculty on the recommendation of the Chairman of the Department of Education, a candidate may be permitted to take the four subjects from *two* of the groups A, B, C and D.

3. A candidate for the course in English Curriculum shall take all four subjects in group E. Before being admitted to this course a candidate shall (a) have passed English III or hold an Honours degree in English or other qualification in English accepted by the Chairmen of the Departments of Education and English, and (b) have had at least one year's experience of teaching approved by the Chairman of the Department of Education.

4. A candidate for the course in Mathematics and Education shall take *both* subjects in group F, and the remaining two subjects from two of groups A, B, C and D. Before being admitted to the course a candidate shall (a) hold a degree in Mathematics or other qualification in Mathematics accepted by the Chairman of the Department of Education and by the Chairman of the appropriate Department or Departments in the Faculty of Mathematical Sciences, and (b) have had at least one year's experience of teaching approved by the Chairman of the Department of Education.

5. A candidate for the course in History and Social Science Curriculum shall take (a) the group G subject AD65 Advanced Curriculum Studies in History and Social Science, and (b) two subjects from one or both of groups B and C. (c) one further subject from any of groups A, B, C or D. Before being admitted to this course a candidate shall have passed a third-year History or other relevant subject approved by the Chairman of the Department of Education, and shall have had at least one year's experience of teaching approved by the Chairman of the Department of Education.

6. Before being admitted to part II of the degree a candidate shall pass with Distinction or Credit in at least one of the subjects prescribed in clause 1, with the exception of group E subjects where a distinction or credit in AE92 Linguistics II may not be counted, and in addition, for part II of the degree by thesis, shall pass any pre-requisite subjects prescribed for research in his chosen field, provided that the Faculty may, on the recommendation of the Chairman of the Department of Education, admit a candidate lacking the pre-requisites if he shows other evidence of his fitness to undertake research for the degree.

### SCHEDULE III: PART II OF THE DEGREE IN PHILOSOPHY OF EDUCATION

1. A candidate may, subject to the approval of the Chairman of the Department of Education, proceed to the degree by course work and dissertation in the field of Philosophy of Education.

2. To qualify for the degree, a candidate shall:

(a) regularly attend classes, do such written and tutorial work as may be required, and pass examinations at the prescribed standard in the following subjects unless exempted therefrom by the Faculty:

AD95 Philosophy of Education III      AD96 Philosophy III (Education)

(b) present a satisfactory dissertation of approximately 15,000 to 20,000 words on a subject approved by the Faculty of Arts.

*Pre-requisites* (prescribed under clause 3 of schedule II): At least one subject in part I relevant to the field of the proposed research.

OF THE DEGREE OF  
MASTER OF EDUCATION  
SYLLABUSES

*Text-books:*

Students are expected to procure the latest edition of all text-books prescribed.

*Examinations:*

For each subject students may obtain from the department concerned details of the examination in that subject including the relative weights given to the components (e.g. such of the following as are relevant: assessments, term or mid-year tests, essays or other written or practical work, final written examinations, *viva voce* examinations).

COURSE WORK FOR PART I.

The syllabuses for the course work for part I of the degree of Master of Education are published above, immediately after the schedules of the Advanced Diploma in Education.

COURSE WORK FOR PART II IN  
PHILOSOPHY OF EDUCATION.

AD95 Philosophy of Education III.

The course is designed to assist students with the preparation of their dissertations and to familiarise them with current developments in philosophy of education. Articles and recently published books will be examined, and students will be expected to prepare papers for discussion and to lead seminars. Some of the seminars will be held in conjunction with normal meetings of the South Australian Branch of the Philosophy of Education Society of Australasia.

AD96 Philosophy III (Education).

Three options selected from those listed at third-year level by the Department of Philosophy. Candidates should note that some options have pre-requisites and should consult the Chairman of the Department of Philosophy before enrolling for these. (Candidates who have previously passed AL03 Philosophy IIIA or AL03 Philosophy IIIA and AL13 Philosophy IIIB will be granted exemption from this subject.)

OF THE DEGREE OF  
MASTER OF ARTS  
REGULATIONS

1. The Faculty of Arts may accept as a candidate for the degree of Master of Arts any person who:

- (a) is recommended by a department or departments within the Faculty able and willing to provide facilities for the candidate's work towards the degree; and
- (b) *either*:
  - (i) has obtained an Honours degree, or other qualification accepted by the University as equivalent to an Honours degree, in a subject or subjects to which his proposed field of study relates; *or*
  - (ii) has obtained a degree or other qualification accepted by the University as equivalent to a degree, and has in addition passed a qualifying examination of honours standard in a subject or subjects to which his proposed field of study relates; *or*
  - (iii) submits other evidence that satisfies the Faculty that his case deserves special approval.

2. The form and method of assessment of any qualifying examination under regulation 1(b)(ii) shall be proposed by the department or departments concerned and approved by the Faculty. The proposal may include preliminary work to be undertaken before the qualifying examination is attempted. At least two examiners must contribute to the assessment of the candidate's performance in the qualifying examination.

3. Every candidate shall *either*:

- (a) present a thesis; *or*
- (b) (i) pursue a course of advanced study, which may include practical exercises; and
- (ii) present a thesis or dissertation.

The subject of any thesis or dissertation, and the content and method of assessment of any course of advanced study, shall be approved by the department or departments concerned and by the Faculty. Assessment shall in every case be by not less than two examiners of whom at least one shall be external to the University. The names of the examiners and the relative weighting of any course work and the thesis or dissertation in the overall assessment shall be proposed by the department or departments concerned and approved by the Faculty.

4. (a) Unless the Faculty expressly approve an extension of time in a particular case, the work for the degree shall be completed and the thesis or dissertation submitted:

- (i) in the case of a full-time candidate, not less than one year nor more than three years from the date at which candidature was accepted by the Faculty; *or*
  - (ii) in the case of a part-time candidate, not less than one year nor more than five years from the date at which candidature was accepted by the Faculty.
- (b) On completion of work for the degree the candidate shall:
- (i) inform the Chairman or Chairmen of the department or departments in which his work has been done, and his supervisor or supervisors of his intention to submit his thesis or dissertation. The Chairman or Chairmen shall forthwith propose the names of examiners for approval by the Faculty;
  - (ii) lodge with the Academic Registrar three copies of his thesis or dissertation prepared in accordance with directions given to candidates from time to time.\*

5. The examiners of the thesis or dissertation may recommend that it *either*:

- (a) be accepted, with or without conditions; *or*
- (b) be accepted, with or without conditions subject to satisfactory performance in an examination, either written or oral or both, in the field of study immediately relevant to the subject of the thesis or dissertation; *or*
- (c) be not accepted, but that the candidate be allowed to re-submit it after revision; *or*
- (d) be rejected.

The examiners of a thesis or dissertation re-submitted following recommendation (c) may recommend only (a), (b) or (d).

6. A candidate who fulfils the requirements of these regulations and satisfies the examiners of the thesis or dissertation under regulation 4 and of any course work under regulation 3(b) shall, on the recommendation of the Faculty, be admitted to the degree of Master of Arts.

Regulations allowed 15 January, 1976.

\* Published in "Notes and Instructions to candidates for Higher Degrees":  
*see* Table of Contents.

NOTE (not forming part of the regulations): Any thesis or dissertation is to comprise at least one half of the total requirements for the degree. Departments and candidates are informed that at present Australian Government Postgraduate Research Awards are only available if 70% or more of the work for the degree is towards a dissertation or thesis, and Australian Government Postgraduate Course Awards are only available if 50% or more of the work for the degree is course work of which at least 75% must be at postgraduate level.

OF THE DEGREE OF  
**MASTER OF ARTS**  
NOTES BY DEPARTMENTS

The attention of all candidates is directed to "Notes and Instructions to candidates for higher degrees" which gives general advice to candidates and sets out the specifications for theses. (See Table of Contents.)

*Anthropology:*

1. M.A. Qualifying:

This course will be open to students with no previous training in Anthropology or closely related disciplines and to students holding a degree not considered by the Department to be equivalent to B.A. Honours. Students will do the B.A. Honours course work and must produce a 15,000 word qualifying essay.

2. M.A. Programme:

Students will be eligible for entry to the programme if they hold an Honours degree in Anthropology or closely related social science discipline (for example, Sociology, Political Studies, History).

Candidates for the degree in Anthropology must:

- (a) present a thesis on a subject approved by the Faculty of Arts; between 30,000 and 40,000 words is suggested as the appropriate length, and
- (b) present themselves for examination in a portion of work approved by the Faculty of Arts.

Members of the department will lead a weekly seminar programme which all M.A. candidates will be encouraged to attend. A thesis will be written with the supervision of a department member appointed by the Faculty, and will be assessed by a member of the Anthropology Department and an external examiner. The thesis itself, though expected to be of high standard, need not necessarily contain original field work material.

Potential candidates should consult the Chairman of the Anthropology Department in the first instance.

*Classics:*

Candidates for the degree of M.A. in Classics must:

- (a) present a thesis on a subject approved by the Faculty of Arts; about 20,000 words is suggested as the appropriate length;
- (b) present himself for examination in a portion of work approved by the Faculty of Arts.

The qualifications required of applicants to be admitted as candidates for the degree are set out in the regulations of the degree of Master of Arts. In general, a candidate should have obtained a good Honours degree in Latin or Classics or Classical Studies.

The degree is intended to be obtained normally by one year of full-time or two years of part-time study. Work towards the degree is pursued under a supervisor or supervisors appointed by the Faculty, and consists largely of reading and essay work, until the candidate is ready to begin writing his thesis. The thesis itself, though of an advanced standard, is not intended necessarily to contain material that is a new contribution to knowledge.

Potential candidates should consult the Chairman of the Department of Classics in the first instance.

*English Language and Literature:*

Candidates for the degree of M.A. in English Language and Literature are advised to take the earliest opportunity of consulting the Chairman of the Department about their courses.



Candidates who wish to qualify for the degree of M.A. under regulation 1(b)(ii) are required for their qualifying examination to take six papers (including paper (i)) from the fourth-year honours papers set out in syllabus AE99 above. This involves one year's full-time study or two years' part-time study. Part-time students will take paper (i) at the end of their second year of study. Successful completion of these courses will qualify a student to proceed to the M.A. degree. It will not qualify a student for the honours degree in English unless the other requirements set out in the syllabus are also met.

Candidates who have a satisfactory Honours degree or who have qualified by means of the M.A. qualifying examination should consult the Chairman of the Department as early as possible.

*French Language and Literature:*

Candidates for the degree of M.A. in French Language and Literature are advised to consult the Chairman of the Department at the earliest opportunity.

Candidates who seek to qualify under regulation 1(b)(ii) are required to have already passed at a good standard in French I, II and III, or their equivalents, and, then, to take the fourth-year Honours course in French Language and Literature. At the end of one year, if full-time, or at the end of two years, if part-time, they will be required to pass, at a satisfactory standard, the following examinations:

- (a) the thesis and four out of the five papers required for Honours in French Language and Literature; and
- (b) a paper on whichever one of the following two fields is *not* included in (a):
  - either* Modern French Literature
  - or* Medieval and Renaissance French Language and Literature.

*Geography:*

Candidates for the degree of M.A. in Geography are advised to consult the Chairman of the Department. A good Honours degree in Geography is necessary.

*German Language and Literature:*

Candidates for the degree of M.A. in German Language and Literature are advised to consult the Chairman of the Department.

*History:*

Candidates for the degree of M.A. in History are advised to consult the Chairman of the Department.

*Music:*

Candidates will be expected to undertake a composite master's degree course comprising:

- (i) the presentation of a thesis or a scholastic and performing edition of a major musical work or collection of musical works involving paleographic skills, a substantial editorial introduction and commentaries;
- (ii) four different units of advanced study undertaken in postgraduate seminars.

*Philosophy:*

Candidates for the degree of M.A. in Philosophy are required to consult the Chairman of the Department within the first month of the academic year about the subject and the course of reading for their thesis.

*Politics:*

Candidates for the degree of M.A. in Politics are advised to consult the Chairman of the Department at the earliest opportunity.

*Psychology:*

Candidates for the degree of M.A. in Psychology are advised to consult the Chairman of the Department.

OF THE DEGREE OF  
DOCTOR OF LETTERS  
REGULATIONS

1. (a) The Faculty of Arts may accept as a candidate for the degree of Doctor of Letters a person who has qualified for any degree in the University of Adelaide.

(b) On the recommendation of the Faculty of Arts, the Council may accept as a candidate for the degree a person who (i) has obtained in another university or institution of higher education a qualification accepted for the purpose by the University as equivalent to a degree of the University; and (ii) has, or has had, a substantial association with the University.

(c) No person may be admitted to the degree of Doctor of Letters before the expiration of five years from the date on which he obtained the qualification prescribed in (a) or (b)(i) above.

2. (a) A person who desires to become a candidate for the degree shall give notice of his intended candidature in writing to the Academic Registrar and with such notice shall furnish particulars of his scholarly achievements and of the work which he proposes to submit for the degree.

(b) The Faculty of Arts shall examine the information submitted and decide whether or not to allow the applicant to proceed.

(c) If the Faculty accept the candidature it shall nominate examiners, of whom two at least shall be external examiners.

3. (a) To qualify for the degree the candidate shall furnish satisfactory evidence that he has made an original and substantial contribution of distinguished merit to the knowledge or understanding of any subject with which the Faculty is directly concerned.

(b) The degree shall be awarded primarily on a consideration of such of his published works as a candidate may submit for examination, but the examiners may take into account any unpublished original work that he may submit in support of his candidature.

(c) The candidate in submitting his work shall, where applicable, state generally in a preface and specifically in notes the main sources from which his information is derived and the extent to which he has availed himself of the work of others, especially where joint publications are concerned. He may also signify in general terms the portions of his work which he claims as original.

(d) The candidate shall indicate what part, if any, of his works has already been submitted for a degree in this or any other university.

4. The candidate shall lodge with the Academic Registrar three copies of the works submitted for the degree, any unpublished work being prepared in accordance with the directions given in subparagraph (b) of clause 2B of Chapter XXV of the Statutes. If the work is accepted for the degree the Academic Registrar will transmit two of the copies to the University Library.

5. A candidate who complies with the foregoing conditions and satisfies the examiners may, on the recommendation of the Faculty of Arts, be admitted to the degree of Doctor of Letters.

\*6. Notwithstanding anything contained in the preceding regulations, the Faculty may recommend the award of the degree to any person who is not a member of the staff of the University. Any such recommendation must be accompanied by evidence that the person for whom the award is proposed has made an original and substantial contribution of distinguished merit to the knowledge or understanding of a subject with which the Faculty is directly concerned, of a standard not less than that required by regulation 3.

Regulations allowed 16 December, 1971.

\* Allowed 15 January, 1976.

# FACULTY OF DENTISTRY

## REGULATIONS, SCHEDULES AND SYLLABUSES OF DEGREES

Bachelor of Dental Surgery (B.D.S.)										
Regulations	-	-	-	-	-	-	-	-	-	706
Schedules	-	-	-	-	-	-	-	-	-	708
Syllabuses	-	-	-	-	-	-	-	-	-	711
Bachelor of Science in Dentistry (B.Sc.Dent.)										
Regulations	-	-	-	-	-	-	-	-	-	723
Schedules	-	-	-	-	-	-	-	-	-	725
Syllabuses	-	-	-	-	-	-	-	-	-	726
Master of Dental Surgery (M.D.S.)										
Regulations	-	-	-	-	-	-	-	-	-	729
Doctor of Philosophy (Ph.D.)										
Regulations and Schedules: under "Board of Research Studies"—see Table of Contents.										
Doctor of Dental Science (D.D.Sc.)										
Regulations	-	-	-	-	-	-	-	-	-	732

OF THE DEGREE OF  
BACHELOR OF DENTAL SURGERY  
REGULATIONS

\*1. There shall be a degree of Bachelor of Dental Surgery.

†2. Schedules defining the courses of study, including lectures, clinical practice, laboratory and other practical work to be undertaken, and the examinations to be passed, shall be drawn up by the Faculty of Dentistry and submitted to the Council. Such schedules shall become effective from the date of approval by the Council or from such other date as the Council may determine, and shall be published in the University Calendar.

3. A candidate shall enter for each annual examination on the form and by the date prescribed by the Council, but shall not be eligible to present himself for examination unless he has completed to the satisfaction of the professors and lecturers concerned the course of study and practice prescribed for that examination.

4. Written or practical work done by candidates by direction of the professors and lecturers and the results of terminal or other examinations in any subject may be taken into consideration at the final examination in that subject.

5. All regulations hitherto in force concerning the degree of Bachelor of Dental Surgery are hereby repealed: provided that this repeal shall not affect

- (a) anything done or suffered under any regulation hereby repealed; or
- (b) any right or status acquired, duty imposed, or liability incurred by or under any regulation hereby repealed.

§6. The course of study for the degree of Bachelor of Dental Surgery shall extend over five years. To qualify for the degree a candidate shall regularly attend lectures, tutorials and clinical practice, do written and laboratory or other practical work to the satisfaction of the professors and lecturers concerned, and pass the examinations prescribed in the schedules.

§7. A candidate may intermit his course for one year to proceed to the Honours degree of Bachelor of Science in Dentistry, or he may seek the permission of the Faculty to intermit his course for such time and on such conditions as may in each case be determined by the Faculty.

\* Amended 28 February, 1974.

† Amended 15 January, 1976.

§ Amended 2 February, 1978.

\*8. The annual examination shall be held in or about August or November, as the Council shall in each case determine from time to time. The supplementary examinations shall be held at such times as the Council, on the recommendation of the Faculty, may determine.

‡9. The Board of Examiners may grant a supplementary examination to a candidate who has been prevented by illness or other sufficient cause from attendance at the whole or part of the annual examination or who has failed a part of such examination.

\*10. A candidate shall not be re-examined at a supplementary examination in any subject or group of subjects in which he had passed at the annual examination.

\*11. The annual examination at the end of the fifth year shall be known as the Final Examination. A final examination may also be held in May or June. On the recommendation of the Board of Examiners the Faculty may debar any candidate who has failed in the Final Examination from presenting himself at a subsequent Final Examination until a period of twelve months has elapsed since that failure.

‡12. (a) There shall be three classifications of pass in each component subject of the annual examinations for the degree, as follows: Pass with Distinction, Pass with Credit, Pass. The names of candidates who pass with Distinction or with Credit shall be arranged in order of merit within the relevant classification; the names of candidates who pass shall be arranged in alphabetical order.

(b) A candidate who fails to pass in any subject of an annual examination shall, unless exempted wholly or partially therefrom by the Faculty, again attend lectures, clinical practice, laboratory and other practical work in that subject before presenting himself again for examination. In the case of the third, fourth and fifth years, such a candidate may also be required to attend, concurrently, such lectures, clinical practice, laboratory and other practical work as the Faculty may prescribe, in other subjects of that annual examination.

(c) Except in the case of the First Annual Examination, a candidate who is exempted from part of any subject shall not be granted a classified pass in that subject.

‡13. A candidate who has passed subjects in other faculties or universities or elsewhere, may on written application to the Academic Registrar be granted such exemption from these regulations and from schedules made under them as the Council on the recommendation of the Faculty may determine.

Regulations allowed 16 March, 1961.

\*Amended 17 December, 1970.

‡ Allowed 17 December, 1970; amended 28 February, 1974.

† Amended 21 December, 1972.      \*\* Amended 28 February, 1974.

NOTE (not forming part of the regulations): A candidate who is eligible to re-enrol in the dental course and who fails to do so without faculty permission will be required to apply for re-admission to the course. He will be able to re-enrol only if selected for re-admission.

OF THE DEGREE OF  
**BACHELOR OF DENTAL SURGERY****SCHEDULES**

(Made by the Council under regulation 2.)

NOTES: 1. The dental clinical year begins on the fifth Monday in the year. 2. Students should obtain from the Dental School Office the lists of instruments and equipment required by each student before commencing each year's course. 3. Syllabuses of subjects for the degree of B.D.S. are published below, immediately after these schedules. For syllabuses of subjects taught for other degrees and diplomas see the table of subjects at the end of the volume.

**SCHEDULE I: COURSES OF STUDY****1. Approval of Enrolment**

Students who have been granted, or are seeking, exemption from the requirements of these schedules under regulation 13 must have their course of study approved by the Dean (or his nominee) at the time of enrolment in the year concerned.

**2. Lectures, Practical Work, Clinical Instruction***First Year*

During the first year every student shall attend a course of instruction in: (a) Behavioural Science, (b) Biology, (c) Chemistry, (d) Genetics and (e) Physics.

*Second Year*

During the second year every student shall attend a course of instruction in: (a) General Anatomy, (b) General and Dental Histology, (c) Biochemistry, (d) Human Physiology, (e) Oral Anatomy, (f) Dental Materials and Technics.

*Third Year*

During the third year every student shall attend a course of instruction in: (a) Human Physiology, (b) General Pathology, (c) Microbiology, (d) Oral Pathology, (e) Conservative Dentistry, (f) Prosthetic Dentistry, (g) Pharmacology and Therapeutics, (h) Pain Control; and shall attend at the Dental Department of the Royal Adelaide Hospital for clinical instruction.

*Fourth and Fifth Years*

During the fourth and fifth years every student shall attend a course of instruction in: (a) General Medicine, (b) General Surgery, (c) Preventive Dentistry, (d) Children's Dentistry, (e) Orthodontia, (f) Periodontia, (g) Microbiology, (h) Oral Pathology, (i) Oral Surgery and Anaesthesia, (j) Pharmacology, (k) Conservative Dentistry, (l) Crown and Bridge Prosthesis, (m) Partial Denture Prosthesis, (n) Immediate Replacement Denture Prosthesis, (o) Complete Dental Prosthesis, (p) Principles of Dental Practice, (q) Applied Physiology, (r) Pain Control (Commencing 1980); and shall attend at the Royal Adelaide Hospital courses of clinical instruction in medical and surgical practice; and at the Dental Department of the Royal Adelaide Hospital for clinical instruction.

## SCHEDULE II: EXAMINATIONS

### 1. First Annual Examination

At the First Annual Examination the candidate shall satisfy the examiners in each of the following subjects and half-subjects:

MH71 Behavioural Science	SJ8H Genetics IH(M)
SZ71 Biology I	SP7H Physics IH(M)
SC71 Chemistry IM	

### 2. Second Annual Examination

At the Second Annual Examination the candidate shall satisfy the examiners in each of the following subjects:

SY82 Biochemistry	SS22 Human Physiology
MA72 General Anatomy	DB02 Oral Anatomy
MA82 General and Dental Histology	DR02 Restorative Dentistry II

### 3. Third Annual Examination

At the Third Annual Examination the candidate shall satisfy the examiners in each of the following subjects:

MP73 General Pathology	DB13 Microbiology
SS23 Human Physiology and Pharmacology	DP03 Oral Pathology III
	DR03 Restorative Dentistry III

### 4. Fourth Annual Examination

At the Fourth Annual Examination the candidate shall satisfy the examiners in each of the following subjects:

DH04 Children's Dentistry	DH14 Periodontology IV
MM04 General Medicine	DB24 Pharmacology and Therapeutics
MS04 General Surgery	DR04 Restorative Dentistry IV
DP04 Oral Pathology IV	

### 5. Final Examination (Fifth Year)

At the Final Examination the candidate shall satisfy the examiners in each of the following subjects:

DP25 Oral Medicine	DH15 Periodontology V
DP15 Oral Surgery and Anaesthesia	DH25 Preventive Dentistry
DH35 Orthodontics	DR05 Restorative Dentistry V

### 6. General.

A candidate shall complete each annual examination before entering upon the work of the following year's course of study provided that:

- (a) a candidate who has passed, or has been granted status in all but one subject or its equivalent of an annual examination shall enrol, or re-enrol, in that subject and may, by permission of the Faculty, enrol concurrently for not more than two subjects, specified by the Faculty, from the following year's course of study; but if he fails to pass in the outstanding subject and is permitted to continue with his studies in the Dental course, he shall again enrol for that subject, but shall not be permitted to enrol for any other subject in the Dental course until he has passed in that outstanding subject.
- (b) a candidate may begin the first term's work in the following year's course of study pending the result of any supplementary examination for which he has been permitted to present himself.



RULES FOR THE ADMISSION OF DENTAL STUDENTS TO THE PRACTICE OF THE  
ROYAL ADELAIDE HOSPITAL

1. Each dental student of the University of Adelaide shall attend at the Dental Department and at other Departments of the Royal Adelaide Hospital as directed by the Dean of the Faculty of Dentistry; and each student shall be admitted to the practice of the Hospital under the disciplinary control of the Medical Superintendent or the Administrator, Dental Services, whilst attending a Department of the Hospital.

2. No student may introduce visitors into any department of the Hospital without permission from the Administrator.

3. Every student shall conduct himself with propriety and discharge the duties assigned to him, and pay for or replace any article damaged or lost, or destroyed by him, and make good any loss sustained by his negligence.

4. Each student shall at all times be under the direction and supervision of a duly appointed member of the teaching staff of the University of Adelaide, and shall carry out such work as shall be allotted to him.

5. No student shall administer treatment to any patient without the approval of an appointed teacher.

6. No student shall publish a report on any case without the written permission of the Honorary Medical Officer or Honorary Dental Officer under whose care the patient is or has been.

7. Any student infringing any of these rules, or otherwise misconducting himself, may be temporarily suspended by the Medical Superintendent or the Administrator, Dental Services. In the case of such temporary suspension, written notice shall immediately be given to the Dean of the Faculty of Dentistry and the Administrator of the Hospital.

OF THE DEGREE OF  
**BACHELOR OF DENTAL SURGERY**  
**S Y L L A B U S E S**

*Text-books:*

Students are expected to procure the latest edition of all text-books prescribed.

*Examinations:*

For each subject students may obtain from the department concerned details of the examination in that subject including the relative weights given to the components (e.g. such of the following as are relevant: assessments, term or mid-year tests, essays or other written or practical work, final written examinations, *viva voce* examinations).

FIRST ANNUAL EXAMINATION.

MH71 Behavioural Science.

SZ71 Biology I.

SC71 Chemistry IM.

SJ8H Genetics IH(M).

SP7H Physics IH(M).

---

For syllabuses of the above subjects for the First Annual Examination *see* under the degrees of Bachelor of Medicine and Bachelor of Surgery in the Faculty of Medicine.

---

Introduction to Dentistry—Dental Care I.

The aim of this course is to give students an initial appreciation of the nature of dental practice, and an opportunity to become aware of their own levels of dental health and the factors affecting this. This will lead to a discussion of the nature of the remainder of the course to show how training will enable students to become competent to provide dental care to individual patients and to become involved in community dental care programmes.

Examples of topics included are: the historical development of dental practice, introduction to the structure and function of the oral tissues, factors affecting the health of oral tissues, how these factors can be controlled, dental health of the Australian population, and an initial view of treatment of the most common dental diseases.

## SECOND ANNUAL EXAMINATION.

## SY82 Biochemistry.

A lecture course covering general biochemistry in two terms, followed by a course of audio-visual dental science laboratory-tutorial-units.

The lecture course will include aspects of protein structure and function, blood clotting, metabolism of carbohydrates, lipids and amino acids; porphyrin metabolism; hormone action and metabolic control; biological membranes; nucleic acid and protein synthesis; mutation; control of gene expression; eukaryote chromosomes; biochemistry of cancer. The dental science tutorials will deal with connective tissue, mucopolysaccharides, fibrous structural proteins; protein biosynthesis, and the secretion of body fluids; calcified tissues, the structure of bone, dentine and cementum; the metabolism of calcium and phosphorus, the functions of Vitamin D, parathyroid hormone, calcitonin, the mineralisation process.

## Text-book:

Cole, A. S., and Eastoe, J. E., *Biochemistry and oral biology* (Wright).

## Reference books:

Stryer, L., *Biochemistry* (Freeman).

Montgomery, R., and others, *Biochemistry: A case oriented approach*, 2nd edition (Mosby).

## MA72 General Anatomy.

The course of 80 lectures and 80 hours of practical work and demonstrations extends over three terms. It is arranged to cover the general anatomy of the body and the principles underlying its structure, the topographical anatomy of the head and neck and the dissection of this region, and a brief course in neurobiology.

## Text-books:

General and topographical anatomy:

Cunningham, D. J., *Manual of practical anatomy*, vol. 3 (O.U.P.).

Scott, J. H., and Dixon, A. D., *Anatomy for students of dentistry* (Livingstone).

## Neurobiology:

Noback, C. R., and Demarest, R. J., *The nervous system: introduction and review* (McGraw-Hill).

## MA82 General and Dental Histology.

This course of study extends over three terms and consists of about 50 lectures and 100 hours of practical classes on general histology and cytology, and histology and development of teeth and adjacent structures.

## Text-books:

Junqueira, L. C., and others, *Basic histology*, 2nd edition (Lange).

Orban, B. J., *Oral histology and embryology*, 8th edition (Mosby).

## Atlas (optional):

Reith, E. J., and Ross, M. H., *Atlas of descriptive histology*, 3rd edition (Harper); OR

Fiore, M. S. H. di, *An atlas of human histology* (Lea and Febiger).

## SS22 Human Physiology.

A course of lectures, tutorials and experimental work covering aspects of general and systematic physiology extending over the three terms of second year.

## Text-book:

Guyton, A. C., *Textbook of medical physiology*, 5th edition (Saunders).

### DB02 Oral Anatomy.

A course of instruction on the functional anatomy of the teeth and associated structures consisting of; the morphology of primary and permanent teeth, the anatomy of the tooth supporting tissues and the physiology of dental occlusion.

The teeth and associated structures will be studied in a series of laboratory exercises which include visual representation, tooth reconstruction, and oral examination.

Text-books:

- Wheeler, R. C., *Dental anatomy, physiology and occlusion*, 5th edition (Saunders); OR  
Kraus, B. S., and others, *Dental anatomy and occlusion* (Williams and Wilkins).

Reference books:

- Thomson, H., *Occlusion* (Wright).  
Ramfjord, S. P., and Ash, M. M., *Occlusion*, 2nd edition (Saunders).  
Scott, J. H., and Symons, N. B., *Introduction to dental anatomy*, 7th edition (Livingstone).  
Griffin, C. J., and Harris, R., *The temporomandibular joint syndrome: the masticatory apparatus of man in normal and abnormal function* (Karger).  
Wheeler, R. C., *An atlas of tooth form*, 4th edition (Saunders).

### DR02 Restorative Dentistry II.

The course forms the basis of continuing studies in Conservative Dentistry which extend through the second, third, fourth and fifth years and which form part of integrated studies in Restorative Dentistry. Lectures and practical work in Operative Dentistry are concerned with the basic aetiology of dental disease, and the restoration of teeth with plastic materials. This course includes a series of lectures in Materials Science. A series of tutorials parallels progress in the practical work. Candidates are required to pass in both sections of the course, Operative Dentistry and Materials Science.

Text-books:

- Greener, E. H., and others, *Materials science in dentistry* (Williams and Wilkins).  
Sturdevant, C. M., and others, *The art and science of operative dentistry* (McGraw-Hill).

Reference books:

- Black, G. V., *Operative dentistry*, vol. II (Kimpton).  
Black, G. V., *Operative dentistry*, revised by R. E. Blackwell, 9th edition (Kimpton).  
Gilmore, H. W., *Textbook of operative dentistry* (Mosby).  
Hampson, E. L., *Text-book of operative dentistry* (Heinemann).  
McGehee, W. H. O., and others, *A text-book of operative dentistry* (McGraw-Hill).  
Charbeneau, G. T., and others, *Principles and practice of operative dentistry* (Lea and Febiger).

## THIRD ANNUAL EXAMINATION.

## MP73 General Pathology.

A course of instruction on the general principles of pathology, consisting of: the genetic background of disease; the causation, character and sequelae of inflammation, degeneration, regeneration, repair, hypertrophy, atrophy and hyperplasia; blood coagulation and its disorders; thrombosis, embolism, infarction and ischaemia; the biologic effects of radiant energy and of viruses; the fundamentals of neoplasia. The pathology of systemic disease of importance in dental practice is also briefly studied.

## Text-book:

Walter, J. B., *et al.*, *Principles of pathology for dental students*, latest edition (Churchill).

## Reference book:

Robbins, S. L., and Angell, M., *Basic pathology*, 2nd edition (Saunders).

## SS23 Human Physiology and Pharmacology.

This course in Physiology and Pharmacology is a continuation of the second-year studies (SS22), but with increased emphasis being placed upon aspects of those subjects which are of importance to dental students.

## Text-books:

As for SS22 Human Physiology; and

Goodman, L. S., and Gilman, A., *The pharmacological basis of therapeutics*, 5th edition (Macmillan).

## Reference books:

Melzack, R., *The puzzle of pain* (Penguin).

Mumford, J. M., *Toothache and orofacial pain* (Churchill Livingstone).

Lavelle, C. L. B., *Applied physiology of the mouth* (Wright).

Anderson, D. J., and Matthews, B., *Mastication* (Wright).

Goldstein, A., and others, *Principles of drug action* (Harper and Row).

Meyers, F. H., and others, *Review of medical pharmacology*, current edition (Lange).

Avery, G. S., *Drug treatment* (Adis).

## DB13 Microbiology.

The course emphasises basic principles of microbiology and immunology covering the general areas of: morphology, cytology, metabolism, physiology, ecology, isolation, cultivation and classification of bacteria and viruses. Principles of disinfection, sterilisation and chemotherapy. Microbial genetics. Host-parasite relationships, mechanisms of microbial pathogenicity and principles of immunology and resistance to infective agents. Characteristics of selected groups of micro-organisms and viruses important in medical microbiology. Consideration of the oral microbiota and its relation to dental disease.

## Text-books:

Burnett, G. W., and Scherp, H. W., *Oral microbiology and infectious disease*, 4th edition (Williams and Wilkins).

Jawetz, E., and others, *Review of medical microbiology*, 11th edition (Saunders/Lange).

## Reference books:

Davis, B. D., and others, *Principles of microbiology and immunology* (Hoeber or Harper International).

Nolte, W. A., *Oral microbiology with basic microbiology and immunology*, 3rd edition (Mosby).

### DP03 Oral Pathology III.

A course of lectures and practical classes extending over two terms.

This course of instruction is based on the principles of general pathology and microbiology. Oral manifestations of disease processes are studied, and practical instruction given in clinical aspects and histopathology of diseased oral tissues.

The course deals with pathological processes involving enamel, dentine, cementum and pulp; dental caries; periodontal disease and cysts of the jaws, and healing of oral wounds.

Text-book:

Shafer, W. G., and others, *A textbook of oral pathology*, 3rd edition (Saunders).

Reference books:

Burnett, G. W., and Scherp, H. W., *Oral microbiology and infectious diseases*, 4th edition (Williams and Wilkins).

Thoma, K. H., and Goldman, H. M., *Oral pathology*, 6th edition, ed. R. J. Gorlin and H. M. Goldman (Mosby).

Pindborg, J. J., *Pathology of the dental hard tissues* (Munksgaard).

### DR03 Restorative Dentistry III.

The three disciplines of Conservative Dentistry, Removable Prosthodontics, and Dental Materials Science are given in this course, and candidates must obtain a pass in each of these three sections of the course. Dental Radiology is also included within the subject matter of DR03 Restorative Dentistry III.

#### CONSERVATIVE DENTISTRY:

The course in Conservative Dentistry is an extension of the discipline of Operative Dentistry from the second year. The course is given in two parts: the first consists of an introduction to clinical work and the treatment of patients for simple restorative procedures (soon after the commencement of the course a test is given to see whether students may progress directly to the treatment of patients or whether further preclinical studies are required). The second section deals with preclinical and laboratory stages for direct and indirect inlay work, and some other advanced procedures in Operative Dentistry.

Text-books and Reference books:

As indicated in DR02; and  
Forrest, J. O., *Preventive dentistry* (Wright).

#### REMOVABLE PROSTHODONTICS:

The course consists of lectures, tutorials, demonstrations and laboratory and clinical practice. Studies are concerned with the physiology of occlusion and its relation to restorative dentistry. Instruction is also provided in the laboratory aspects of complete denture prosthodontics and students who complete this section of the course satisfactorily are permitted to commence clinical treatment of edentulous patients. An introduction to the laboratory aspects of removable partial denture prosthodontics is presented during the latter part of the year.

Text-books:

Ramfjord, S. P., and Ash, M. M., *Occlusion* (Saunders).  
Sharry, J. J., *Complete denture prosthodontics* (McGraw-Hill); OR  
Boucher, C. O., and others, *Prosthodontic treatment for edentulous patients*, 7th edition (Mosby).  
Sowter, J. B. (ed.), *Dental laboratory technology: prosthodontic techniques* (North Carolina U.P.).

Reference books:

Henderson, D., and Steffel, V. L., *McCracken's removable partial prosthodontics* (Mosby).  
Thomson, H., *Occlusion* (Wright).  
Dawson, P. E., *Evaluation diagnosis and treatment of occlusal problems* (Mosby).  
Posselt, U., *The physiology of occlusion and rehabilitation* (Blackwell).

## DENTAL MATERIALS SCIENCE:

The course consists of lectures, tutorials and practical work in the science of dental materials and includes applied aspects for clinical and laboratory application. The course is illustrated in a series of practical classes.

## Text-book:

American Dental Association, *Guide to dental materials and devices*, 7th edition.

Phillips, R. W., *Skinner's science of dental materials*, 7th edition (Saunders).

## Reference books:

Anderson, J. N., *Applied dental materials* (Blackwell).

Combe, E. C., *Notes on dental materials*, 2nd edition (Churchill Livingstone).

Craig, R. G., and Peyton, F. A., *Restorative dental materials* (Mosby).

## DENTAL RADIOLOGY:

A series of lectures, demonstrations and tutorials will be given as an introduction to the course which extends over the 3rd, 4th and 5th years.

## Text-books:

Stafne, E. C., and Gibilisco, J. A., *Oral roentgenographic diagnosis*, 4th edition (Saunders); OR

Wuehrmann, A. H., and Manson-Hing, L. R., *Dental radiology*, 4th edition (Mosby).

---

**Pain Control.**

The course in Pain Control commences in the third year of the course. For full details of the course see DP35 Pain Control in the fifth year of the course.

## FOURTH ANNUAL EXAMINATION.

### DH04 Children's Dentistry.

A course of instruction on child management and the materials and methods used in the treatment of injuries and diseases of children's teeth.\*

Text-book:

Finn, S. B., *Clinical pedodontics*, 4th edition (Saunders).

Reference books:

Andreasen, J. O., *Traumatic injuries of the teeth* (Munksgaard).

Brauer, J. C., and others, *Dentistry for children* (McGraw-Hill).

McDonald, R. E., *Dentistry for the child and adolescent*, 2nd edition (Mosby).

\* Clinical instruction in this subject commences in the fourth year and is continued throughout the fifth year until the final examination.

Competence in the management of children's dental problems is included in the overall assessment of the final year students.

### MM04 General Medicine.

A special course of lectures and clinical instructions in the principles of medicine and on the diseases of different organs and systems of the body, with particular reference to the relationship between medical disorders and the oral manifestations of disease.

Text-book:

Kennedy, A. C., *Essentials of medicine for dental students* (Livingstone).

Reference books:

Macleod, J. G., *Davidson's principles and practice of medicine* (Livingstone).

Houston, J. C., and others, *A short text-book of medicine*, 5th edition (English Universities Press).

### MS04 General Surgery.

A course of lectures and clinical demonstrations to illustrate the patterns of behaviour of surgical conditions, and the principles of their treatment.

Text-books:

Egdahl, R. H., and others, *Core textbook of surgery* (Grune and Stratton); OR

Elmslie, R. G., and Ludbrook, J., *An introduction to surgery: 100 topics*, 2nd edition (Heinemann).

### DP04 Oral Pathology IV.

This is a continuation of DP03 Oral Pathology III.

A course of lectures, seminars and practical sessions extending over three terms.

The course considers the principles of diagnosis of oral lesions and deals with the pathology of diseases of the oral mucosa; deep infections; diseases of bone including osteodystrophies; oral neoplasms; diseases of the temporomandibular joint, salivary glands and nasal sinuses.

Text-books and reference books as for DP03 Oral Pathology III, plus the following additional text-book.

Lucas, R. B., *Pathology of tumours of the oral tissues*, 3rd edition (Churchill).



**DH14 Periodontology IV.**

Periodontology is the study of the tooth supporting tissues and of diseases that affect these structures. Instruction covers the recognition, prevention and treatment of periodontal disease and their relationship to other branches of dentistry.

The course of instruction continues through fourth and fifth years. It comprises lectures, seminars, tutorials and clinical practice.

The annual assessment in fourth year is based upon clinical performance, seminars and written papers.

**Text-book:**

Goldman, H. M., and Cohen, D. W., *Introduction to periodontics*, 5th edition (Mosby).

**DB24 Pharmacology and Therapeutics.**

A course of instruction in the principles and application of pharmacology.

**Text-books:**

Meyers, F. H., and others, *Review of medical pharmacology*, current edition (Lange).

Cawson, R. A., and Spector, R. G., *Clinical pharmacology in dentistry*, current edition (Churchill Livingstone); OR

Holroyd, S. V., *Clinical pharmacology in dental practice*, current edition (Mosby).

Pallasch, T. J., and Oksas, R. M., *Synopsis of pharmacology for students in dentistry*, current edition (Lea and Febiger).

**Reference books:**

Bevan, J. A., *Essentials of pharmacology*, current edition (Hoerber).

Goodman, L. S., and Gilman, A., *The pharmacological basis of therapeutics*, current edition (Macmillan).

*Accepted dental therapeutics*, current edition (American Dental Association).

Pallasch, T. J., *Clinical drug therapy in dental practice* (Lea and Febiger).

Kay, L. W., *Drugs in dentistry*, current edition (John Wright).

Goldstein, A., and others, *Principles of drug action*, current edition (Wiley).

**DR04 Restorative Dentistry IV.**

The course extends over the dental clinical year of 32 weeks and it consists of lectures, demonstrations, laboratory work, clinical practice and tutorial instruction in conservative dentistry and removable prosthodontics. The course is designed to provide opportunities for students to gain experience in the simpler clinical procedures of operative dentistry and prosthodontics and to develop the theory and skills enabling them to undertake more complex restorative procedures.

**CONSERVATIVE DENTISTRY:**

*Endodontics:* Lectures and practical work on three sessions a week during the first three weeks of the year.

*Crown and Bridge Prosthodontics:* One lecture and one practical class a week through three terms.

*Clinical Practice and Tutorials:* Rostered attendance for clinical practice and tutorials dealing with operative dentistry timetabled on two sessions a week through three terms.

REMOVABLE PROSTHODONTICS:

The course consists of lectures, tutorials, demonstrations and laboratory and clinical practice in removable prosthodontics.

Text-books:

- Henderson, D., and Steffel, V. L., *McCracken's Removable partial prosthodontics* (Mosby).  
Ingle, J. I., *Endodontics* (Lea and Febiger).  
Johnston, J. F., and others, *Modern practice in crown and bridge prosthodontics* (Saunders).  
Sharry, J. J., *Complete denture prosthodontics* (McGraw-Hill); OR  
Boucher, C. O., and others, *Prosthodontic treatment for edentulous patients*, 7th edition (Mosby).

Reference books:

- In addition to those listed under DR02 and DR03:  
Applegate, O. C., *Essentials of removable partial denture prosthesis* (Saunders).  
Coolidge, E. D., and Kesel, R. G., *A text-book of endodontology* (Lea and Febiger).  
Heartwell, C. M., *Syllabus of complete dentures* (Lea and Febiger).  
Johnston, J. F., and others, *Modern practice in dental ceramics* (Saunders).  
Miller, E. L., *Removable partial prosthodontics* (Williams and Wilkins).  
Osborne, J., and Lammie, G. A., *Partial dentures* (Blackwell).  
Shillingburg, H. T., and others, *Preparations for cast gold restorations* (Quintessence Books).  
Tylman, S. D., *Theory and practice of crown and bridge prosthodontics* (Mosby).

DENTAL RADIOLOGY:

A continuation of the demonstrations and tutorials given in 3rd year, with an increasing emphasis on the clinical aspects of the subject.

Text-books:

- As indicated in DR03.

---

Oral Diagnosis.

A short course of introductory lectures is given at the beginning of fourth year.

Students in fourth and fifth years attend on roster in the Admissions Clinic of the Dental Department. During these sessions the overall as well as the immediate dental needs of the patient are considered and the alternative forms of treatment are discussed. The long term effects of differing forms of emergency treatment are evaluated. Fourth year students are actively involved in the provision of primary dental care.

For further details see fifth year.

Text-book:

- Mitchell, D. F., and others, *Oral diagnosis/oral medicine*, 3rd edition (Lea and Febiger).

## FINAL EXAMINATION (FIFTH YEAR).

## DP25 Oral Medicine.

This course extending over the final year deals with the principles of diagnosis of systemic and local diseases affecting the oral cavity, and instruction is given in the use of clinical and laboratory diagnostic procedures.

Methods of treatment of oral diseases are considered. Emphasis is placed on the effect of dental treatment on medical conditions, and on the management of patients with medical disorders undergoing dental treatment.

Text books and reference books as for Oral Pathology III and IV plus the following additional reference books:

- Alling, C. C., and Mahar, P., *Facial pain*, 2nd edition (Lea and Febiger).  
 Cohen, B., and others, *Oral medicine and diagnosis* (Heinemann).  
 Kay, L. W., *Drugs in dentistry*, 2nd edition (Wright).  
 Kerr, D. A., and others, *Oral diagnosis*, 4th edition (Mosby).  
 Pindborg, J. J., *Atlas of diseases of the oral mucosa* (Munksgaard).  
 Wood, N. K., and Goaz, P. W., *Differential diagnosis of oral lesions* (Mosby).

## DP15 Oral Surgery and Anaesthesia.

A series of lectures and clinical tutorials is given on the principles and practice of oral surgery and the use of local anaesthesia and general anaesthesia.

Clinical practice includes routine exodontia, minor oral surgery and elective oral surgery on out-patients, and observation of major oral surgery on patients admitted as in-patients to the Royal Adelaide Hospital on a theatre list. Instruction is included in the techniques of extra oral radiography and the interpretation of radiographs.

Text-book:

- Moore, J. R., *Principles of oral surgery*, 2nd edition (Manchester U.P.).

Reference books:

- Cohen, B., and others, *Oral surgery and pathology* (Heinemann).  
 Howe, G. L., *The extraction of teeth* (Wright).  
 Killey, H. C., and Kay, L. W., *The impacted wisdom tooth* (Livingstone).  
 Kruger, G. O., *Textbook of oral surgery*, 3rd edition (Mosby).  
 Lee, J. A., *Synopsis of anaesthesia* (Wright).  
 Nevin, M., and Puterbaugh, P. G., *Conduction, infiltration and general anaesthetics in dentistry* (Dental Items of Interest Publishing Co.).  
 Rowe, N. L., and Killey, H. C., *Fractures of the facial skeleton* (Livingstone).  
 Stacy, G. C., *Dental elevators* (Sydney U.P.).

## DH35 Orthodontics.

Lectures and clinical instruction in the growth and development of the cranio-facial complex. The recognition, diagnosis and treatment of malocclusion and associated anomalies of the jaws with orthodontic procedures.

Text-book:

- Graber, T. M., *Orthodontics: principles and practice*, 3rd edition (Saunders).

Reference books:

- Horowitz, S. L., and Hixon, E. H., *The nature of orthodontic diagnosis* (Mosby).  
 Moyers, R. E., *Handbook of orthodontics*, 3rd edition (Year Book Med. Publ.).

### DH15 Periodontology V.

The course in periodontology which commences in fourth year may also be examined in the fifth year. A clinical assessment and *viva voce* examination may be required.

### DH25 Preventive Dentistry.

The course deals with the epidemiology of dental disease and its social implications; methods of control and treatment; the relation of dental disease to systematic disease, and the place of dentistry in public health programmes and their relevance to the community. It comprises lectures, tutorials and project assignments. Competence in clinical practice in paedodontics during the year is included in the overall assessment.

#### Reference books:

- Fluorides and human health* (W.H.O.).  
Dunning, J. M., *Dental care for everyone* (Harvard U.P.).  
Nizel, A. E., *Nutrition in preventive dentistry: science and practice* (Saunders).  
Clements, F. W., and others, *Diet and nutrition for the Australian people* (Angus and Robertson).  
Slack, G. L., *Dental public health* (Wright).

### DR05 Restorative Dentistry V.

The course extends over the dental clinical year of 32 weeks and it consists of lectures, seminars, clinical practice and tutorial instruction. There are two lectures or seminars a week during the first and second terms. Students are rostered for clinical practice to the restorative dentistry clinics timetabled on five sessions a week throughout the year and to the radiology clinic timetabled on one session a week. Tutorials on specific problems of clinical practice are given throughout the year within the time allotted for clinical practice.

The aim of the course is to provide opportunities for students to receive additional training and clinical experience in the comprehensive dental care of patients and aspects of practice management which will fit them for unsupervised general practice on graduation.

#### Text-books:

- Baum, L., *Advanced restorative dentistry—Modern materials and techniques* (Saunders).  
Dunning, J. M., *Dental care for everyone* (Harvard U.P.).  
Roberts, D. H., *Fixed bridge prosthesis* (Wright).

#### Reference books:

- Friedman, J. W., *A guide for the evaluation of dental care*.  
Kilpatrick, H. C., *Work simplification in dental practice* (Saunders).  
McLean, J. W., *The science and art of dental ceramics. Monographs III and IV* (Louisiana State Univ.).

And those text-books and reference books listed under Restorative Dentistry II, III and IV.

### DP35 Pain Control.

This course which commences in the third year is a fully integrated course encompassing the theoretical and practical tuition necessary for the student to become competent in the essential aspects of the management of apprehension and pain in all dental procedures.

#### THIRD YEAR:

Theoretical and practical tuition will cover the introductory psychology, physiology and pharmacology of pain control with detailed instruction in local anaesthesia.

Assessment consists of a short written examination at the end of the course. The mark obtained will contribute a maximum of 25% to the Final Examination (Fifth Year).

## FIFTH YEAR, 1980:

Theoretical and practical tuition will cover the more advanced aspects of pain control including general anaesthesia, relative analgesia and intravenous sedation.

Assessment will consist of a written examination covering the work of both the third and fifth years.

## Text-books:

Mumford, J. M., *Toothache and related pain*, 2nd edition (Churchill Livingstone).

Killey, H. C., and Kay, L. W., *The prevention of complications in dental surgery* (Livingstone).

Roberts, D. H., and Sowray, J., *Local analgesia in dentistry* (Wright).

---

**Advanced Oral Biology.**

A series of weekly lectures/seminars is held in the final term on an informal and elective basis. The subject material is flexible and is largely arranged by consultation with students. Generally topics in advanced pharmacology, immunology, periodontal disease, caries, growth and development are considered in relation to the students' experience to date and the latest developments in these fields.

**Dental Radiology.**

Further demonstrations and tutorials together with a radiology project are given. Emphasis is given to clinical aspects of the subject.

**Oral Diagnosis.**

A short course of introductory lectures is given at the beginning of fourth year.

Students in fourth and fifth years attend on roster in the Admissions Clinic of the Dental Department. During these sessions the overall as well as the immediate dental needs of the patient are considered and the alternative forms of treatment are discussed. The long term effects of differing forms of emergency treatment are evaluated. Fifth-year students are actively involved in the provision of primary dental care.

When patients present with special manifestations of pathology the relationship of the condition to general dental care and preventive and community dentistry is reviewed, though such patients are referred to the appropriate special department(s) for more thorough investigation and treatment.

**Principles of Dental Practice.**

A short course of lectures is given early in the final year on dental jurisprudence, dental ethics and dental practice administration.

OF THE HONOURS DEGREE OF  
**BACHELOR OF SCIENCE IN DENTISTRY**  
REGULATIONS

1. There shall be an Honours degree of Bachelor of Science in Dentistry. Subject to these regulations a candidate may proceed to the degree by undertaking a course of study in one of the following:

- (a) Anatomy
- (b) Biochemistry
- (c) Dental Health
- (d) Genetics
- (e) Histology
- (f) Materials Science
- (g) Microbiology
- (h) Oral Biology
- (i) Oral Pathology
- (j) Oral Surgery
- (k) Pathology
- (l) Pharmacology
- (m) Physiology
- (n) Restorative Dentistry.

2. Before entering upon the course of study for the degree a candidate must:

- (a) have completed the pre-requisite work, or work accepted by the Faculty of Dentistry as appropriate for the proposed course of study; and
- (b) be deemed by the Head of the department concerned to be a suitable candidate for advanced work.

3. To qualify for the degree a candidate shall undertake advanced study extending over one academic year as a full-time candidate, or with the approval of the Faculty of Dentistry, over a period of not more than two academic years as a half-time candidate, in one of the courses listed in regulation 1, and satisfy the examiners therein at the first attempt.

\*4. Schedules defining the pre-requisite work, the course of study, including lectures, laboratory and other practical work to be undertaken, and the examinations to be passed, shall be drawn up by the Faculty of Dentistry, and submitted to the Council. Such schedules shall become effective from the date of approval by the Council or such other date as the Council may determine, and shall be published in the next University Calendar issued after that approval has been given.

\* Amended 15 January, 1976.

5. The candidate shall enter for the examination on the form and by the date prescribed by the Council, but shall not be eligible to present himself for examination unless he has regularly attended the prescribed lectures and has done written and laboratory or other practical work, where required, to the satisfaction of the Head of the department(s) concerned.

6. The names of the candidates who qualify for the degree shall be published in alphabetical order within the following classes and divisions in each subject:

First Class

Second Class

Division A

Division B

Third Class.

\*7. A person who holds the Honours degree of Bachelor of Dental Surgery of the University of Adelaide may, on application to the Academic Registrar, be admitted to the Honours degree of Bachelor of Science in Dentistry, provided:

- (a) that he first surrender the Honours degree of Bachelor of Dental Surgery; and
- (b) that if he has not already been admitted to the Ordinary degree of Bachelor of Dental Surgery he shall be admitted also to that degree.

Regulations allowed 28 February, 1974.

\* Allowed 23 January, 1975.

NOTE (not forming part of the regulations): A candidate permitted to undertake a course over two academic years must be able to devote half of his normal working time to his studies exclusive of evenings and weekends.

OF THE HONOURS DEGREE OF  
**BACHELOR OF SCIENCE IN DENTISTRY**  
**SCHEDULES**

(Made by the Council under regulation 4.)

**SCHEDULE I: PRE-REQUISITE WORK**

The pre-requisite work for admission to the courses listed in regulation 1 shall be as follows:

MA89 Anatomy and Histology	DB99 Oral Biology
SY79 Biochemistry	MP89 Pathology
NH59 Materials Science	SS49 Pharmacology
SK79 Microbiology	SS39 Physiology

A pass in the Third Annual Examination for the degree of Bachelor of Dental Surgery.

---

DH99 Dental Health	DP79 Oral Surgery
DP89 Oral Pathology	DR99 Restorative Dentistry

A pass in the Final Examination for the degree of Bachelor of Dental Surgery.

---

SJ69 Genetics

A pass in the Third Annual Examination for the degree of Bachelor of Dental Surgery and a pass in the subject SJ02 Genetics II as prescribed for the degree of Bachelor of Science.

**SCHEDULE II: COURSES OF STUDY**

A course of study will consist of such of the following as may be required:

- (a) reading in selected fields and submissions of essays;
- (b) attendance at lectures;
- (c) practical work; and
- (d) the undertaking of a research investigation on a topic assigned early in the course.

**SCHEDULE III: EXAMINATIONS**

The examination for the degree may consist of such written, oral and practical examinations as may be required. Assessments of any essays submitted by the candidate, practical work completed during the course, and the report on a research investigation may be taken into account.



OF THE HONOURS DEGREE OF  
**BACHELOR OF SCIENCE IN DENTISTRY**  
SYLLABUSES

*Text-books:*

Students are expected to procure the latest edition of all text-books prescribed.

*Examinations:*

For each subject students may obtain from the department concerned details of the examination in that subject including the relative weights given to the components (e.g. such of the following as are relevant: assessments, term or mid-year tests, essays or other written or practical work, final written examinations, *viva voce* examinations).

HONOURS DEGREE OF  
BACHELOR OF SCIENCE IN DENTISTRY

The following Honours courses are available:

**DB99 Oral Biology.**

Candidates may, with the approval of the Chairman of the Department, enrol in the Oral Biology Honours programmes after they have successfully completed the third year of the B.D.S. Ordinary degree or after they have obtained the Ordinary degree of B.D.S. or its equivalent.

Under certain circumstances candidates who have obtained the Ordinary degree of B.Sc. may be admitted to an honours programme in Oral Biology.

Candidates will be expected to nominate one of the following disciplines as their major subject: Anatomy, Genetics, Histology, Immunology, Pharmacology, Physiology, Microbiology, Pathology.

All candidates will be required to undertake on a full-time basis for one year (unless otherwise determined by the Chairman of the Department) a special course of study, including essays, seminars and laboratory work and a research project under the supervision of staff members of the Department. This project will provide the basis of a research report. Prescribed reading lists provided by the Department will be given to prospective candidates during the long vacation prior to the Honours year.

A candidate may be required to undertake such formal courses of study in related subjects as deemed necessary in each case.

**DH99 Dental Health.**

Candidates may choose one of the sections of Dental Health as a principal subject. The course will begin in the first week of February or earlier and will consist of lectures, tutorials, practical work and reading in advanced aspects of the principal subject and related subjects as prescribed by the Chairman of the Department. Candidates will be required to participate in a research investigation under the direction and supervision of a member of staff and to submit a report on a topic assigned early in the course. A reading list will be provided and candidates will be expected to begin the course of reading during the long vacation prior to the Honours year. Prospective candidates are advised to consult the Chairman of the Department as early as possible in the year preceding the Honours year.

#### DP79 Oral Surgery.

Candidates may choose some area of Oral Surgery. Attendance will be required at prescribed lectures in subjects related to oral surgery such as Anatomy and General Pathology. A minor research project will be undertaken on which a research report will be written.

The course is designed to further a student's knowledge in the relevant subjects and to train him in laboratory research techniques and experimental methodology.

Prospective candidates are advised to contact the Chairman of the department in the year preceding the proposed Honours year.

#### DP89 Oral Pathology.

Candidates may choose some aspect of Oral Pathology or some other area of clinical dentistry.

The course will begin in the first week of February and will require attendance at prescribed lectures in subjects related to oral pathology, such as Anatomy, Physiology and General Pathology. A minor research project will be undertaken on which a research report will be written.

The course is designed to further a student's knowledge in the relevant subjects and to train him in laboratory research techniques and methods of recording the results of experiments.

Prospective candidates are advised to consult the Chairman of the Department in the year preceding the Honours year.

#### DR99 Restorative Dentistry.

Candidates may choose one of the sections of restorative dentistry as a principal subject. The course will begin in the first week of February and will consist of lectures, tutorials, practical work and reading in advanced aspects of the principal subject and related subjects as prescribed by the Chairman of the Department. Candidates will be required to participate in a research investigation under the direction and supervision of a member of staff and to submit a report on a topic assigned early in the course. A reading list will be provided and candidates will be expected to begin the course of reading during the long vacation prior to the Honours year. Prospective candidates are advised to consult the Chairman of the Department in the year preceding the Honours year.

#### SK79 Microbiology.

Candidates may choose one of two fields, Molecular Biology or Immunology. The course will begin in February and consists of seminars, tutorials and a research project under the supervision of a member of staff. A detailed reading list will be provided and candidates should begin the course of reading during the long vacation prior to the Honours year. Prospective candidates are advised to consult the Head of the Department in the year preceding the Honours year.

#### SY79 Biochemistry.

Intending students should consult the Head of the Department. The course will consist of a research project under the supervision of a member of the Department of Biochemistry, together with such reading and participation in lectures and seminars and other work as shall be prescribed by the Head of the Department. A candidate for the degree will be required to write a thesis on his research and pass such examinations as shall be prescribed by the Head of the Department.

**MA89 Anatomy and Histology.**

The course includes seminars, reading and essay preparation in any anatomical discipline such as gross anatomy, neurobiology, histology, cytology or embryology. Emphasis is placed on the relation of structure to function. A candidate is expected to study one topic in depth. He would normally undertake a research project on this topic under the supervision of a member of staff and would be required to submit a written report on this work.

Candidates should consult the Chairman of the Department before undertaking the course.

**MP89 Pathology.****NH59 Materials Science.****SJ69 Genetics.****SS39 Physiology.****SS49 Pharmacology.**

Prospective students should consult the appropriate Head/Chairman of Department in the year preceding that in which they wish to take the course.

OF THE DEGREE OF  
MASTER OF DENTAL SURGERY  
REGULATIONS

†1. (a) The Faculty of Dentistry may accept as a candidate for the degree any person who:

- (i) has qualified in the University of Adelaide for the degree of Bachelor of Dental Surgery and for the Honours degree of Bachelor of Science in Dentistry with First or Second Class Honours;
- (ii) has qualified in another university for a degree or degrees which the Faculty regards as equivalent to those degrees specified in sub-section (i) hereof; or
- (iii) has qualified for a degree in dentistry and whose qualifications are regarded by the Faculty as equivalent to those specified in sub-section (i) hereof.

(b) The Faculty of Dentistry may accept provisionally as a candidate for the degree any other person who has qualified for a degree in dentistry of the University of Adelaide or of another university and who satisfies the Faculty that he is a suitable candidate for advanced work.

(c) With the approval of the Council, the Faculty may accept as a candidate for the degree, provisionally or otherwise, and subject to such conditions as it may see fit to impose, a person who does not hold a degree of a university but holds a dental qualification for which he has followed a course of study acceptable to the Faculty and who satisfies the Faculty that he is a suitable candidate for advanced work.

\* (d) (i) A candidate accepted provisionally shall pass a qualifying examination before his acceptance as a candidate will be confirmed. The provisional candidature of a candidate who fails the qualifying examination at the first attempt shall be cancelled unless the Faculty decides otherwise.

(ii) The Faculty shall approve the scope of any qualifying examination under regulation 1(d) and the means by which it shall be conducted. The Faculty may require a candidate to undertake such course of advanced study as it sees fit, before he sits for the qualifying examination.

† Amended 28 February, 1974.

\* NOTE (not forming part of the regulations): It is the intention of the Faculty of Dentistry that candidates should normally have qualified for the Honours degree of Bachelor of Dental Surgery or the Honours degree of Bachelor of Science in Dentistry with First or Second Class Honours. Any qualifying examination will therefore be at the same standard as that for the Honours degree of Bachelor of Science in Dentistry for which one year of full-time study is normally the required preparation. Any course of advanced study prescribed under regulation 1(d)(ii) will be designed to ensure that the candidate has had equivalent preparation.

(e) A candidate shall not be admitted to the degree before the expiration of one year from his admission to a degree specified in section (a) above or the expiration of two years from his admission to the degree or other qualification accepted by the Faculty under sections (b) or (c) above.

2. To qualify for the degree a candidate shall either:

(a) complete satisfactorily an approved programme of research work and submit a satisfactory thesis thereon; or

† (b) (i) pass an examination set after completion of an approved course of postgraduate study in the University; and

(ii) complete satisfactorily an approved research project and submit a satisfactory report thereon:

provided that a candidate accepted provisionally shall first pass the qualifying examination as required under regulation 1(d) above.

3. (a) A person who wishes to become a candidate for the degree shall apply to the Academic Registrar indicating in general terms the subject and outline of his proposed research or investigation and where applicable his proposed course of study for examination.

(b) For each candidate, including a candidate accepted provisionally, the Faculty shall appoint a supervisor or supervisors to guide him in his work.

\*\*4. A candidate shall submit a thesis or present himself for examination under regulation 2 above not earlier than one academic year and except by permission of the Faculty not later than three academic years after his admission to candidature, or confirmation of candidature if accepted provisionally, under regulation 1.

5. A candidate's progress shall be reviewed by the Faculty at the end of each academic year. If, in the opinion of the Faculty, a candidate is not making satisfactory progress the Faculty may, with the consent of the Council, terminate the candidature.

6. (a) On completion of his work the candidate shall lodge with the Academic Registrar three copies of his thesis or research report which shall be prepared in accordance with directions given from time to time.\*

(b) The Faculty shall nominate examiners of the thesis or research report, one of whom may be an external examiner.

(c) The examiners may recommend that a candidate by thesis under regulation 2(a) be examined orally or otherwise on the subject of his thesis and the general field of knowledge in which it falls.

\*\* Amended 2 February, 1978.

† Amendment awaiting allowance.

\* Published in "Notes and Instructions to candidates for Higher Degrees":  
see Table of Contents.

7. (a) For each candidate the Faculty shall appoint a Board of Examiners which shall:

- (i) consider the reports of the examiners of the thesis or research report and the results of any examination;
  - (ii) examine a candidate proceeding under regulation 2(b);
  - (iii) examine a candidate under regulation 6(c) if it concurs with a recommendation by examiners under that regulation; and
  - (iv) examine under regulation 1(d)(i), a candidate accepted provisionally.
- (b) The Board of Examiners may recommend that the candidate:
- (i) be awarded the degree subject to such minor amendments of the thesis or research report as the examiners may have suggested;
  - (ii) be not awarded the degree but be allowed to revise and resubmit his thesis or research report within such period as the Faculty may allow; or
  - (iii) be not awarded the degree.

8. A candidate who complies with the foregoing conditions and satisfies the Board of Examiners shall, on the recommendation of the Faculty, be awarded the degree of Master of Dental Surgery.

9. All regulations hitherto in force concerning the degree of Master of Dental Surgery are hereby repealed. Candidates enrolled for the degree under the regulations hereby repealed may *either*:

- (a) complete the requirements of the degree under those regulations, provided that they do so by 31 December, 1974;
- (b) be granted such status under these regulations as the Council, on the recommendation of the Faculty of Dentistry, shall decide.

Regulations allowed 16 December, 1971.

OF THE DEGREE OF  
DOCTOR OF DENTAL SCIENCE  
REGULATIONS

1. A candidate for the degree of Doctor of Dental Science shall not be admitted to the degree until the expiration of at least four years from his admission to the degree of Bachelor of Dental Surgery in the University of Adelaide: Provided that, in the case of a graduate in dentistry of another university who has been admitted *ad eundem gradum* in the University of Adelaide, the period of four years shall be reckoned from the date of his first graduation in dentistry.

2. Except in special cases approved by the Council only persons who have been admitted to the degree of Master of Dental Surgery may become candidates for the degree of Doctor of Dental Science.

3. To qualify for the degree a candidate shall submit a satisfactory thesis embodying the results of original research or investigation by the candidate on a subject approved by the Faculty of Dentistry. The thesis may be written specially for the degree, or may be an already published work, or may be a series of papers. It shall not be a compilation from books, nor a mere compendium of cases, nor merely observational. The candidate shall indicate in a preface or in a separate statement wherein he considers that it advances dental knowledge or practice, and shall furnish a history of the progress of dental knowledge in the subject of the thesis. A candidate may be required to undergo examination in the subject matter of, or in subjects cognate to, his thesis.

4. The degree shall not be awarded unless in the opinion of the examiners the thesis makes an original and substantial contribution to knowledge in some branch of Dental Science.

†5. The candidate shall lodge with the Academic Registrar three copies of the work prepared in accordance with the directions given in sub-paragraph (b) of clause 2B of Chapter XXV of the Statutes. If the work is accepted for the degree the Academic Registrar will transmit two of the copies to the University Library.

6. On receipt of the reports of the examiners appointed to adjudicate upon the thesis the Faculty of Dentistry will recommend whether the degree be granted or withheld or delayed.

\*7. Notwithstanding anything contained in the preceding regulations, the Faculty may recommend the award of the degree to any person who is not a member of the staff of the University. Any such recommendation must be accompanied by evidence that the person for whom the award is proposed has made an original and substantial contribution of distinguished merit to some branch of dental science.

Regulations allowed 10 December, 1942.

† Allowed 16 March, 1961.

\* Allowed 15 January, 1976.

# FACULTY OF ECONOMICS

## REGULATIONS, SCHEDULES AND SYLLABUSES OF DEGREES

### Bachelor of Economics (B.Ec.)

Regulations	-	-	-	-	-	-	-	-	-	734
Schedules	-	-	-	-	-	-	-	-	-	737
Syllabuses	-	-	-	-	-	-	-	-	-	740
Economics	-	-	-	-	-	-	-	-	-	740
Commerce	-	-	-	-	-	-	-	-	-	754

### Master of Business Management (M.B.M.)

Regulations	-	-	-	-	-	-	-	-	-	760
Schedules	-	-	-	-	-	-	-	-	-	762
Syllabuses	-	-	-	-	-	-	-	-	-	764

### Master of Economics (M.Ec.)

Regulations	-	-	-	-	-	-	-	-	-	770
-------------	---	---	---	---	---	---	---	---	---	-----

### Doctor of Philosophy (Ph.D.)

Regulations and Schedules: under "Board of Research Studies"—see Table of Contents.



OF THE DEGREE OF  
**BACHELOR OF ECONOMICS**  
REGULATIONS

1. There shall be an Ordinary and an Honours degree of Bachelor of Economics. A candidate may obtain either degree or both.

\*2. The course of study for the Ordinary degree shall extend over three years and that for the Honours degree over four years. A candidate for the Ordinary degree shall attend lectures and pass examinations in accordance with the provisions of schedule II; a candidate for the Honours degree shall attend lectures and pass examinations in accordance with the provisions of schedule III.

†3. The names of candidates who pass at an annual examination in any subject or division of a subject for the Ordinary degree shall be published in alphabetical order in the following classifications:

Pass with Distinction

Pass with Credit

Pass.

If the pass lists be published in two divisions, a pass in the higher division may be prescribed in the syllabuses as a pre-requisite for admission either to further courses in that subject or to other subjects.

4. The names of candidates who qualify for the Honours degree shall be published in alphabetical order within the following classes and divisions:

First Class

Second Class

Division A

Division B

Third Class

A candidate who fails to obtain Honours may be awarded the Ordinary degree provided that he has in all other respects completed the work for the Honours degree.

5. No graduate who has obtained the Honours degree of Bachelor of Arts in the School of Economics may obtain the Honours degree of Bachelor of Economics.

6. Except by permission of the Faculty a candidate shall not proceed to a subject for which he has not completed the pre-requisite subjects or preparatory work as prescribed in the syllabuses.

\* Amended 4 November, 1965.

† Amended 16 December, 1971.

7. A candidate shall do such written or practical work in any subject as may be prescribed by the professor or lecturer concerned.

\*8. The annual examinations shall be held towards the end of each academic year. A candidate shall enter for examination on the form and by the date prescribed by the Council, but shall not be eligible to present himself for examination unless he has attended such tutorials and seminars, and has done such written or other work as may be required, to the satisfaction of the professors and lecturers concerned.

9. Written or practical work done by candidates by direction of the professor or lecturer concerned and the results of terminal or other examinations held during the year may be taken into consideration at the final examination in any subject.

\*10. A candidate who fails to pass in any subject shall again attend tutorials and seminars and do written or practical work in that subject to the satisfaction of the professor or lecturer concerned, unless granted exemption from doing so by the Faculty.

11. A candidate who has twice failed to pass the annual examination in any subject or division of a subject may not present himself again for instruction or examination therein unless his plan of study is approved by the Dean. If he fails a third time he may not proceed with the subject again except by special permission of the Faculty and under such conditions as the Faculty may prescribe.

For the purpose of this regulation a candidate who has failed to comply with the provisions of regulation 8 shall be deemed to have failed to pass the examination.

12. A candidate who has passed equivalent examinations in the University or otherwise and who desires that the examinations which he has passed should be counted *pro tanto* for the degree of Bachelor of Economics, may, on written application, be granted such exemption from the requirements of these regulations as the Council may determine.

†13. A graduate in another faculty who wishes to proceed to the degree of Bachelor of Economics:

- (a) may present for the degree not more than four subjects or their equivalent which he has already presented for another degree or in which he has been granted status or exemption on account of work done for another degree;
- (b) shall present a range of subjects which fulfils in all respects the requirements of the schedules made under regulation 15 below;
- (c) shall present two third-year subjects or their equivalent not presented for another degree.

\* Allowed 20 December, 1956, and amended 24 December, 1969.

† Amended 4 October, 1962, 4 April, 1963, 4 November, 1965 and 16 December, 1971.

A candidate who holds a diploma may be granted such status in the course for the degree of Bachelor of Economics as the Faculty shall in each case determine; provided that if status be granted for more than four subjects the candidate shall surrender his diploma before being admitted to the degree.

14. If in any year the number of students desiring to attend lectures in any subject be fewer than a minimum fixed by the Council, the course of lectures in that subject may be suspended for that year.

\*15. Schedules defining the course of study, including lectures and practical work to be undertaken, and the examinations to be passed, shall be drawn up by the Faculty of Economics and be submitted to and approved by the Council. Such schedules shall become effective as from the date of approval by the Council or such other date as the Council may determine and shall be published in the next University calendar which is issued after that approval has been given.

Regulations allowed 17 January, 1952.

\* Amended 15 January, 1976.

OF THE DEGREE OF  
**BACHELOR OF ECONOMICS**  
**SCHEDULES**

(Made by the Council under regulations 2 and 15.)

NOTE: Syllabuses of subjects for the degree of B.Ec. are published below, immediately after these schedules. For syllabuses of subjects taught for other degrees and diplomas see the table of subjects at the end of the volume.

**SCHEDULE I: GENERAL**

1. (a) The following may be presented for the Ordinary degree:

**ECONOMICS AND COMMERCE SUBJECTS AND HALF-SUBJECTS**

**Subjects**

EC01 Accounting I	EE22 Economic Statistics II
EC02 Accounting II	EE32 Economic Statistics IIA
EC03 Accounting III	EE33 Economics IIIA
LL92 Commercial Law IIA§	EC23 Industrial Sociology III
EE13 Economic Development III	

**Half-subjects: First-year**

LL2H Commercial Law IH	EE4F Economic History IH
EE1C Macroeconomics IH	EE5F Economic Institutions and Policy IH
EE1F Mathematics for Economists III	EE2G Microeconomics IH
EE2F Mathematical Economics IH	

**Half-subjects: Second-year**

LL3H Commercial Law IIIH	EE3F Mathematical Economics IIIH
EE6F Economic History IIIH(A)	EE4G Microeconomics IIIH
EE7F Economic History IIIH(B)	LL1H Income Tax IIIH
EE3G Macroeconomics IIIH	

**Half-subjects: Third-year\***

EE4H Agricultural Economics IIIH	EE3H Economics of Labour IIIH
EC4H Business Finance IIIH	EC2G Management Decision Analysis IIIH
EC1G Computerised Accounting and Systems IIIH	EE7H Managerial Economics IIIH
EE8H Econometrics IIIH	EC5H Marketing IIIH
AJ9H Economic Geography IIIH	EE9H Mathematical Economics IIIH
EE8G Economic History IIIH	EE2H Public Finance IIIH
EE8F Economic Theory IIIH	

**ARTS SUBJECTS AND HALF-SUBJECTS**

Such of the subjects and half-subjects set out in schedule I of the regulations of the degree of B.A., as are not included in the list of Economics and Commerce subjects and half-subjects above.†

(b) No candidate will be permitted to count for the degree any subject or half-subject together with any other subject or half-subject which, in the opinion of the Faculty, contains a substantial amount of the same material; and no subject, or half-subject, may be counted twice towards the degree.\*\*

(c) No candidate may present the same half-subject, section of a subject, unit of a subject or option, in more than one subject for the degree.

(d) A candidate may present QT02 Mathematical Statistics II in place of EE32 Economic Statistics IIA.

\* Not all half subjects will be offered every year.

† See page 575 for schedule I of the degree of B.A.

§ Available only to students who first enrolled for the B.Ec. course prior to 1979.

\*\* A table of unacceptable combinations of subjects and half-subjects is given towards the end of this Volume (see Table of Contents).

2. A graduate may be exempted by the Dean from EE2F Mathematical Economics IH and EE1F Mathematics for Economists IH and two other full subjects and one half-subject from schedule I referred to in schedule II.†

3. Courses of study must be approved by the Dean (or his nominee) at enrolment each year.

4. Candidates who have completed subjects for the degree prior to 1974 may continue under the schedules then in force, with such modifications (if any) as shall be prescribed by the Dean.

5. For the purpose of completing the requirements of the degree, a candidate shall not, except with permission of the Faculty, retain credit for any subject or half-subject for more than ten years.

6. A candidate who has presented himself for the annual examinations in any subject may, at the discretion of the examiners, be required subsequently to present himself for an additional examination, which may be either oral or written; and his results at such an additional examination shall be taken into account in determining his results at the annual examination.

## SCHEDULE II: THE ORDINARY DEGREE

Except as provided for in clause 2 of schedule I a candidate for the Ordinary degree shall pass in seven subjects and six half-subjects or the equivalent.

1. (a) (i) EE1G Macroeconomics IH.  
(ii) EE2G Microeconomics IH.
  - (b) EE2F Mathematical Economics IH or EE1F Mathematics for Economists IH and another half-subject from schedule I (or two other half-subjects or one full subject approved by the Dean).
  - (c) EC01 Accounting I.
  - (d) Another full subject or two half-subjects from schedule I which may be first-year subjects.
2. (a) (i) EE3G Macroeconomics III.  
(ii) EE4G Microeconomics III.
  - (b) EE22 Economic Statistics II or EE32 Economic Statistics IIA.
  - (c) Another full subject or combination of two half-subjects from schedule I which may not be a first-year subject or half-subject.
3. (a) EE33 Economics IIIA.
  - (b) EE13 Economic Development III or EC03 Accounting III or two third-year half-subjects other than EC5H Marketing IIIH (or, in special cases approved by the Dean, another subject).
  - (c) Two other half-subjects or another subject from schedule I which may not be a first-year subject or half-subject. (Except with permission of the Dean, a candidate who wishes to proceed to Honours must in this section take EE8F Economic Theory IIIH and another third-year half-subject. If presented for the Ordinary degree, EE8F Economic Theory IIIH shall be counted *in lieu* of a third-year half-subject.)

† See schedule II, 1(d) and 3(c).

NOTES (not forming part of the schedules): Students taking subject 1(b) will be permitted to take any full subject or two half-subjects from schedule I, but are advised that a knowledge of mathematics is helpful for economics and commerce courses and is essential for some second- and third-year options.

A student may count towards his degree both EC02 Accounting II and two of the half-subjects EE6F Economic History III(A), EE7F Economic History III(B) and EE3F Mathematical Economics III, if one is counted as subject 2(c) and the other as subject 3(c).

Second- and third-year optional subjects and half-subjects except EC01 Accounting I, EC02 Accounting II and EC03 Accounting III, will be offered subject to the availability of staff and sufficient enrolments.

*Work required to complete an Adelaide degree*

To qualify for the degree of Bachelor of Economics a student granted status under regulation 12 or 13 must pass at least the equivalent of a full year's work from subjects taught in the Departments of Economics or Commerce at the University of Adelaide and this must include at least two third-year half-subjects (or the equivalent) which could be counted towards sections 3(a) or 3(b) of schedule II of the degree.

*Study for the degrees of LL.B. and B.Ec. concurrently*

Candidates who wish to study for the degrees of LL.B. and B.Ec. concurrently should take their subjects according to one of the schemes outlined in the notes following the schedules of the degree of Bachelor of Laws (*see* Table of Contents).

### SCHEDULE III: THE HONOURS DEGREE

A candidate for the Honours degree shall:

1. Except as provided in clause 2 of schedule I, pass in five subjects and four half-subjects or their equivalent as prescribed for the Ordinary degree under sections 1 and 2 of schedule II and complete the requirements of the Ordinary degree by passing in:

- (a) EE33 Economics IIIA.
- (b) EE13 Economic Development III or two third-year half-subjects [or in special cases approved by the Dean, another subject from schedule I, not being a first-year subject or half-subject, which is one of a group of closely related subjects and which would lead to a suitable set of options in fourth year].
- (c) (i) EE8F Economic Theory IIIH,  
(ii) A third-year half-subject other than EC5H Marketing IIIH.

2. The work of the Final Honours year must be completed in one year of full-time study, save that on the recommendation of the Dean, the Faculty may permit a candidate to spread the work over two years, but not more, under such conditions as it may determine.

OF THE DEGREE OF  
**BACHELOR OF ECONOMICS**  
SYLLABUSES

*Text-books:*

Students are expected to procure the latest edition of all text-books prescribed.

*Examinations:*

For each subject students may obtain from the department concerned details of the examination in that subject including the relative weights given to the components (e.g. such of the following as are relevant: assessments, term or mid-year tests, essays or other written or practical work, final written examinations, *viva voce* examinations).

### ECONOMICS

The main courses in Economics forming a sequence for the degrees of Bachelor of Agricultural Science, Bachelor of Arts and Bachelor of Economics are the half-subjects EE1G Macroeconomics IH and EE2G Microeconomics IH, EE3G Macroeconomics IIIH and EE4G Microeconomics IIIH and EE33 Economics IIIA.

Students who have passed with credit in EE71 Social Economics I may, with the approval of the Dean of the Faculty of Economics, enrol in EE3G Macroeconomics IIIH and EE4G Microeconomics IIIH.

The compulsory first, second, and third-year subjects and half-subjects are given annually, lectures in the second- and third-year subjects being given alternately at day and evening classes. Other third-year half-subjects may not be offered every year, but, as far as possible, a selection will be given each year as evening lectures.

It is proposed at present to give these lectures as follows:

	1979	1980	1981
Macroeconomics III	Day and	Day and	Day and
and Microeconomics IIIH } Macroeconomics IIIH	Evening	Evening	Evening
Microeconomics IIIH	Day	Evening	Day
Economics IIIA	Evening	Day	Evening
	Day	Evening	Day

This arrangement will permit a student to complete these subjects in successive years as a sequence either of day or of evening lectures, according to the year in which he commences.

#### FIRST-YEAR HALF-SUBJECTS.

##### EE1G Macroeconomics IH.

No pre-requisite subjects.

The course consists of one lecture a week and one tutorial a fortnight throughout the year. The course is offered in both evening and day lectures.

The course provides an introductory study of the theory of short run fluctuations in the level of employment and production for the economy as a whole. It also provides, in an introductory way, an account of the way that money, debt, borrowing and lending relate to production, investment and saving. The impact of governments and international trade on the level of production and income is examined. A preliminary study is made of the determination of the general level of prices.

Text-books:

Harcourt, G. C., Karmel, P. H., and Wallace, R. H., *Economic activity* (C.U.P.).

Samuelson, P. A., Hancock, K. J., and Wallace, R. H., *Economics*. 2nd Australian edition (McGraw-Hill).

Reference books:

Hancock, K. J., Hughes, B., and Wallace, R. H., *Applied economics: readings for Australian students* (McGraw-Hill).

Heilbroner, R. L., and Thurow, L. C., *Understanding macro-economics*, 5th edition (Prentice-Hall).

Hogendorn, J. S., *Managing the modern economy*, 2nd edition (Winthrop).

Additional references will be prescribed by the lecturers.

### EE2G Microeconomics IH.

No pre-requisite subjects.

The course consists of one lecture a week and one tutorial a fortnight throughout the year. The course is offered in both evening and day lectures.

This course is concerned primarily with the theory of price, developed through consideration of the behaviour of individual consumers and firms in a 'mixed-capitalist' economy. Emphasis is given to theories of consumer behaviour, real-world applications of the theory of price (such as price control, sales tax and price support arrangements in agriculture), production economics and the pricing and output behaviour of firms operating under different forms of industrial organisation.

Preliminary reading:

North, D. C., and Miller, R. L., *The economics of public issues*, 2nd edition (Harper and Row).

Text-book:

Leftwich, R. H., *The price system and resource allocation*, 6th edition (Holt, Rinehart and Winston); OR

Mansfield, E., *Microeconomics: theory and application*, 2nd edition (Norton).

Reference books:

James, D. E., and Throsby, C. D., *Introduction to quantitative economics* (Wiley).

Lipsey, R. G., *An introduction to positive economics*, 4th edition (Weidenfeld and Nicolson).

Morley, R., *Mathematics for modern economics* (Fontana).

Tisdell, C. A., *Economics of markets* (Wiley).

Salvatore, D., *Microeconomic theory* (Schaum Outline Series, McGraw-Hill).

For an alternative approach to aspects of the course see:

Hunt, E. K., and Sherman, H. J., *Economics: an introduction to traditional and radical views*, 2nd edition (Harper and Row).

### EE1F Mathematics for Economists IH.

This course is designed for students who have not taken Mathematics at Matriculation level, and who wish to obtain a knowledge of mathematical techniques suitable for economic analysis, but who do not wish to proceed with further study of mathematics. Students are required to be taking concurrently, or have done, EE1G Macroeconomics IH and EE2G Microeconomics IH.

This half-subject is offered as two lectures a week for the first two terms and one lecture a week for third term. There is one tutorial a fortnight. The course is given as day lectures in even years and as evening lectures in odd years.

The course comprises introductory calculus, analysis and matrix algebra with applications to economic problems.

A text-book will be prescribed by the lecturer.



**EE2F Mathematical Economics IH.**

A knowledge of Matriculation Mathematics IS is assumed (Matriculation Mathematics I and II would also provide a suitable background).

This half-subject is offered as one lecture a week in first term and two lectures a week in second and third terms. There is one tutorial a week.

This course develops mathematical techniques particularly suitable for use in economic analysis. The main emphasis will be on calculus of several variables, integral calculus, matrix algebra, differential and difference equations, introduction to linear programming and game theory, with applications of each to economic problems.

## Text-book:

Chiang, A. C., *Fundamental methods of mathematical economics*, 2nd edition (McGraw-Hill).

Draper, J. E., and Klingman, J. S., *Mathematical analysis: business and economic applications*, 2nd edition (Harper and Row); OR

Weber, J. E. Draper, *Mathematical analysis: business and economic applications*, 3rd edition (Harper and Row). Note: this is an updated version of Draper and Klingman, by the married first author.

## Reference books:

Archibald, G. C., and Lipsey, R. G., *An introduction to a mathematical treatment of economics* (Weidenfeld and Nicolson).

James, D. E., and Throsby, C. D., *Introduction to quantitative methods in economics* (Wiley).

Peston, M. H., *Elementary matrices for economics* (Routledge and Kegan Paul).

Pfouts, R. W., *Elementary economics: a mathematical approach* (Wiley).

Yamane, T., *Mathematics for economists*, 2nd edition (Prentice-Hall).

**EE4F Economic History IH.**

No pre-requisite subjects.

The course consists of one lecture a week and one tutorial a fortnight.

Economic historians are generally concerned with patterns of economic growth and development. The fastest growth has been observed in those economies which have industrialised. This course studies the causes, nature, spread and implications of the world's first industrialisation process which began in Britain in the 18th Century. After considering why this process occurred when and where it did, the actual pattern of development is then traced and the British experience is followed into the 20th century with analysis of why it lost ground in the international growth tables.

(This course provides a useful basis for studies of the Australian, Russian and American economies in second and third years.)

## Preliminary reading:

Heilbroner, R. L., *The making of economic society*, 5th edition (Prentice-Hall).

Hill, C., *Reformation to industrial revolution* (Pelican).

Hobsbawn, E. J., *Industry and Empire* (Pelican).

## Text-books:

Hughes, Jonathan, *Industrialization and economic history! Theses and conjectives* (McGraw-Hill).

Mathias, P., *The first industrial nation* (Methuen).

Additional references will be prescribed during the course.

**EE5F Economic Institutions and Policy IH.**

Pre-requisite subjects: Concurrent enrolment in EE2G Microeconomics IH or EE1G Macroeconomics IH or EE71 Social Economics I, or permission from the lecturer in charge.

The course consists of one lecture a week and one tutorial a fortnight throughout the year.

The course is designed to equip students with a knowledge of the development and operation of some of the major economic institutions in Australia. As a background to the Australian political economy of today, the opening lectures study the contributions of some of the great economists, both past and present. The course then goes on to examine the functions and performance of institutions such as the Arbitration Commission, the Trade Practices Commission, the Prices Tribunal, government-funded education and social welfare programmes and the operation of the major monetary institutions in Australia. For example, the role of the Industries Assistance Commission is viewed in terms of the structural changes taking place in Australian agriculture. Finally, some lectures will be given on the division of financial responsibility between the Commonwealth and the States and their relationship with local government, with emphasis upon specific aspects, such as housing, transport and urban development.

Preliminary reading:

To be prescribed by the lecturers.

Reference books:

To be prescribed by the lecturers.

## SECOND-YEAR SUBJECTS AND HALF-SUBJECTS.

### EE3G Macroeconomics III.

Pre-requisite subject: Pass in EE1G Macroeconomics IH and achievement of an acceptable standard in EE2G Microeconomics IH.

EE3G Macroeconomics III is given as day lectures in odd years and as evening lectures in even years. It comprises one lecture a week and one tutorial fortnightly.

This course expands the EE1G Macroeconomics IH analysis by introducing the monetary sector and the general level of prices. In this course we examine first the operations of the major financial institutions, and the role of money and finance in economic activity. This material is then integrated with the first-year macroeconomic analysis to make a more comprehensive model of an economy. The model is used to analyse the quantity theory of money, inflation and the role of inflation expectations. The role of monetary policy is examined as an instrument of demand management.

Preliminary reading:

Galbraith, J. K., *Money: whence it came, where it went* (Penguin).  
Ritter, L. S., and Silber, W. L., *Money* (Basic Books).  
McCulloch, J. H., *Money and inflation* (Harcourt, Brace, Jovanovich).

Text-books:

Dernburg, T. F., and McDougall, D. M., *Macro-economics* (McGraw-Hill); or  
Glahe, F. R., *Macroeconomics* (Harcourt, Brace, Jovanovich).  
Hirst, R. R., and Wallace, R. H., *The Australian capital market* (Cheshire).  
Laidler, D. E. W., *The demand for money*, 2nd edition (Dun-Donnelley, New York).

Reference books:

Arndt, H. W., and Stammer, D. W., *The Australian trading banks*, 4th edition (Cheshire).  
Bain, A. D., *The control of the money supply* (Penguin).  
Ball, R. J., and Doyle, P., *Inflation* (Penguin).  
Boorman, J. T., and Havrilesky, T. M., *Money supply, money demand and macroeconomic models* (Allyn and Bacon).  
Gruen, F. (ed.), *Surveys of Australian economics*, Vol. I (Allen and Unwin).  
Harcourt, G. C., Karmel, P. H., and Wallace, R. H., *Economic activity* (C.U.P.).

- Kennedy, P. E., *Macroeconomics* (Allyn and Bacon).  
 Mayer, T., *Monetary policy in the United States* (Random House).  
 Moore, B. J., *An introduction to the theory of finance* (Free Press).  
 Nevile, J. W., and Stammer, D. W., *Inflation and unemployment* (Pelican).  
 Rose, P. J. B., *Australian securities markets* (Cheshire).  
 Runcie, N. (ed.), *Australian monetary and fiscal policy* (London U.P.).  
 Shapiro, E., *Macroeconomic analysis* (Harcourt, Brace and World).  
 Shaw, G. K., *An introduction to the theory of macro-economic policy* (Martin Robertson).  
 Smith, W. L., and Teigen, R. (eds.), *Readings in money, national income and stabilization policy* (Irwin).  
 Stanford, J. D., *Money banking and economic activity* (Wiley).  
 Thorn, R. S. (ed.), *Monetary theory and policy* (Random House).  
 Walters, A. A., *Money and banking* (Penguin).

Additional references will be prescribed by the lecturers.

#### EE4G Microeconomics III.

Pre-requisite subject: Pass in EE2G Microeconomics IH and achievement of an acceptable standard in EE1G Macroeconomics IH.

One lecture a week and one tutorial a fortnight.

This subject will comprise two sections.

(i) *Nine lectures on Applied Allocation Theory.*

The aim of this course is to elucidate on what economists mean by efficiency. Re-distribution of income aspects and the notion of compensation will also be studied. The assumptions of the formal Pareto analysis will be criticised with particular emphasis on the fact that externalities and increasing returns to scale are widespread in real world situations. These situations will be analysed in the context of pollution and resource allocation problems. Possible solutions, taxes, subsidies, bans *etc.* will be discussed.

(ii) *Seventeen lectures on Industrial Organisation.*

This course will be centred round an analysis of market structure, conduct and performance in the context of oligopolistic markets. Emphasis will be placed on those observable aspects of structure, conduct and performance, which can be shaped through appropriate public policy. The development of a suitable norm for evaluating structure, conduct and performance will be discussed. Some time will be spent on a critical evaluation of government attempts to improve market behaviour, especially through restrictive trade practices legislation. In this context, theoretical predictions and Australian evidence will be looked at with regard to concentration, barriers to entry, advertising, pricing, diversification and collusion.

Text-books:

- (i) Tisdell, C., *Microeconomics: the theory of economic allocation* (Wiley); OR Seneca, J. J., and Taussig, M. K., *Environmental economics* (Prentice-Hall).  
 (ii) Scherer, F. M., *Industrial market structure and economic performance* (Rand McNally).

Reference books:

- (i) Barkley, P. W., and Seckler, D. W., *Economic growth and environmental decay* (Harcourt, Brace, Jovanovich).  
 Collard, D., *Prices, markets and welfare* (Faber).  
 Dolan, E. G., *TANSTAAFL—The economic strategy for environmental crisis* (Holt, Rinehart and Winston).  
 Haveman, R. H., *The economics of the public sector*, 2nd edition (Wiley).  
 Mishan, E. J., *Elements of cost benefit analysis* (Allen and Unwin).

- (ii) Needham, D., *Economic analysis and industrial structure* (Holt, Rinehart and Winston).  
Devine, P. J., and others, *An introduction to industrial economics* (Allen and Unwin).  
Asch, P., *Economic theory and the antitrust dilemma* (Wiley).  
George, K., *Industrial organisation*, 2nd edition (Allen and Unwin).  
Shaw, R. W., and Sutton, C. J., *Industry and competition* (Macmillan).  
Hawkins, C. J., *Theory of the firm* (Macmillan).  
Rowley, C. K., *Antitrust and economic efficiency* (Macmillan).  
Nieuwenhuysen, J. P., and Norman, N. R., *Australian competition and prices policy* (Croom-Helm).  
Curwen, P. J., *The theory of the firm* (Macmillan).

Additional references will be prescribed by the lecturers.

#### EE6F Economic History III(A).

Pre-requisite: Pass or achievement of an acceptable standard in EE71 Social Economics I or EE1G Macroeconomics IH and EE2G Microeconomics IH.

This course, comprises one lecture a week and one tutorial a fortnight.

The course covers the development of the Australian economy from its initial origins in the British imperial design of the late 18th century, through its emergence as a world trader, to its relatively integrated, industrialised form after World War II. In the process the economy's institutional framework is analysed including the marketing, financial and arbitration systems.

Preliminary reading:

- Blainey, G., *The tyranny of distance* (Sun) and, for those who lack background historical knowledge of Australia,  
Ward, R., *Australia* (Ure Smith).

Text-books:

- Boehm, E. A., *20th Century economic development in Australia* (Longmans).  
Jackson, R. V., *Australian economic development in the nineteenth century* (A.N.U.P.).  
Sinclair, W. A., *The Process of Economic Development in Australia* (Cheshire).

Additional references will be prescribed during the course.

#### EE7F Economic History III(B).

Pre-requisite subjects: EE1G Macroeconomics IH and EE2G Microeconomics IH or (with the approval of the lecturer) EE71 Social Economics I.

This half-subject consists of one lecture a week and one tutorial a fortnight throughout the year.

The course examines the evolution of the Russian economy from the 1860's through to 1917, and of the economy of the Soviet Union to the 1970's.

Emphasis is given to the distinctive character of that evolution, and to the circumstances, ideas, events and processes which have conditioned its direction and progress. Some analysis of the development and operation of the Soviet planning system under Stalin and subsequently is included.

Preliminary reading:

- Kochan, L., *The Making of modern Russia* (Penguin).  
Wolfe, B., *Three who made a revolution* (Penguin).  
Grossman, G., *The Industrialisation of Russia*, Vol. IV, Chap. 7 (Fontana Economic History of Europe).

Text-books:

- Dobb, M. H., *Soviet economic development since 1917* (Routledge).  
Falkus, M. E., *The industrialisation of Russia, 1700-1914* (Macmillan).  
Nove, A., *An economic history of the U.S.S.R.* (Allan Lane Penguin).  
Nove, A., *The Soviet economic system*.

Reference books will be prescribed by the lecturer.

**EE22 Economic Statistics II.**

Pre-requisite subject: EE2G Microeconomics IH, unless the Chairman of the Department of Economics determines otherwise.

This course is given as day lectures in even years and as evening lectures in odd years. It comprises two lectures and one tutorial a week.

The course provides an introduction to statistical methods with special reference to applications in the field of economics. It includes discussion of the available Australian economic statistics and of the methods of compilation. The principal topics are: collection, presentation and description of data, with special reference to frequency distributions; an introduction to probability, sampling, significance and elementary decision theory, including the use of the normal,  $t$  and  $\chi^2$  distributions; linear regression and correlation; time series; sample surveys; quality control; index numbers of prices and volume; elementary demography.

Preliminary reading:

Runyon, R. P., *Winning with statistics* (Addison-Wesley).

Text-books:

Hamburg, M., *Statistical analysis for decision making*, 2nd edition (Harcourt, Brace and World) (for mathematically oriented students); OR Stevenson, W. J., *Business statistics* (Harper and Row), plus the *Study guide* for this book.

Reference books:

Huff, D., *How to take a chance* (Collanz, Penguin).

Karmel, P. H., and Polasek, M., *Applied statistics for economists* (Pitman).

Kazmier, L. J., *Statistical analysis for business and economics* (McGraw-Hill).

Koosis, D. J., *Probability* (Wiley).

Mason, R. D., *Programmed learning aid for business and economic statistics* (Learning Systems).

Palmer, G. R., *A guide to Australian economic statistics* (Macmillan).

Spiegel, M. R., *Theory and problems of statistics* (Schaum).

Additional references will be prescribed by the lecturers.

**EE32 Economic Statistics IIA.**

Pre-requisite subject: EE2G Microeconomics IH. An adequate mathematics background is also required; either a good pass in EE2F Mathematical Economics IH, QM01 Mathematics I or another approved mathematics course.

Students may enrol for this subject only with the permission of the Chairman of the Department of Economics.

The course comprises two lectures and one tutorial a week. The course is given as day lectures in even years and as evening lectures in odd years.

Students will be required to prepare class exercises.

The course will deal with an essentially mathematical approach to probability and statistical inference with economic applications. The topics covered will include: probability and probability distributions, expectation theory, estimation and statistical inference, simple and multiple regression, sampling theory, demography, time series, index numbers, introduction to electronic computing.

Text-books will be prescribed by the lecturers.

**EE3F Mathematical Economics III.**

Pre-requisite subjects: Pass in EE2F Mathematical Economics IH or QM01 Mathematics I or QM11 Mathematics IM. Students should also be taking concurrently or have passed EE3G Macroeconomics IIIH and EE4G Microeconomics IIIH.

This half-subject is offered as one lecture a week throughout the year and one tutorial every fortnight.

The course concentrates on the investigation of economic models utilising the tools of mathematical analysis developed in EE2F Mathematical Economics IH. Topics studied include mathematical analysis of consumer behaviour, theory of the firm, macroeconomic models, linear models and general equilibrium, choice under uncertainty.

There is no single text-book suitable for the whole course. The following are referred to at various stages.

Reference books:

- Allen, R. G. D., *Mathematical economics*.  
Baumol, W. J., *Economic theory and operations analysis*, 2nd or later edition (Prentice-Hall).  
Burrows, P., and Hitiris, T., *Macroeconomic theory: a mathematical introduction* (Wiley).  
Chiang, A. C., *Fundamental methods of mathematical economics*, 2nd edition (McGraw-Hill).  
Heal, G., Hughes, G., and Tarling, R., *Linear algebra and linear economics* (Macmillan).  
Henderson, J., and Quandt, R., *Microeconomic theory* (McGraw-Hill).

THIRD-YEAR SUBJECTS AND HALF-SUBJECTS.

EE13 Economic Development III.

Pre-requisite: Students should have passed both EE3G Macroeconomics IIIH and EE4G Microeconomics IIIH.

The course comprises two seminars a week throughout the year; it is given as day classes in even years and as evening classes in odd years.

Students will be expected to produce case studies on selected countries, write two essays and prepare some discussion papers for seminars.

The course is concerned primarily with the problems of development in less-developed countries. Topics to be discussed include: the meaning of under-development, industrialisation, foreign aid, employment, theories and techniques of planning, relevant growth theories.

Preliminary reading:

- Bauer, P. T., and Yamey, B. S., *The economics of underdeveloped countries* (C.U.P.).  
Livingstone, I. (ed.), *Economic policy for development* (Penguin).  
Singer, H., and Ansari, J., *Rich and poor countries* (Allen and Unwin).

Text-books:

- Little, I. M. D., and others, *Industry and trade in some developing countries* (O.U.P.).  
Meier, G. M. (ed.), *Leading issues in economic development*, 3rd edition (O.U.P.).  
Thirlwall, A. P., *Growth and development* (Macmillan).

Reference books:

- Meier, G. M., *Employment, trade and development* (Sijthoff).  
Myrdal, G., *Asian drama* (Penguin or Random House).  
Elkan, W., *An introduction to development economics* (Penguin).  
Bauer, P. T., *Dissent on development* (Weidenfeld and Nicolson).  
Sutcliffe, R. B., *Industry and underdevelopment* (Addison-Wesley).  
Griffin, K. B., and Enos, J. L., *Planning development* (Addison-Wesley).  
Jolly, R., and others, *Third world employment* (Penguin).  
Streeten, P., *Frontiers of development studies* (Macmillan).  
Hughes, H. (ed.), *Prospects for partnership* (Johns Hopkins).  
Yotopoulos, P. A., and Nugent, J. B., *Economics of development* (Harper and Row).  
Todaro, M. P., *Economic development in the third world* (Longman).  
Aharoni, Y., *Markets, planning and development* (Ballinger).

## EE8G Economic History IIIB.

Pre-requisite subjects: EE02 Economics II or EE3G Macroeconomics III and EE4G Microeconomics III. Note: EE6F Economic History III(A) or EE7F Economic History III(B) are not pre-requisite half-subjects.

The course consists of one lecture a week and one tutorial a fortnight throughout the year, and is given as day lectures.

The course provides an historical perspective to current economic problems through an examination of the twentieth century experience of the United States and international economies. Topics covered include the evolution of the international monetary system since the gold standard, economic aspects of the two world wars, the inter-war depression, monetary and fiscal policies in Britain and the United States, the German hyperinflation, international trade patterns and policies, the changing role of the government in the United States economy, and an analysis of economic growth in the 1950's and 1960's.

Preliminary reading:

Gordon, R. A., *Economic growth and instability: the American record* (Harper and Row).

Kenwood, A. G., and Lougheed, A. L., *The growth of the international economy, 1820-1960* (Allen and Unwin).

Reference books:

Aldcroft, D. H., *From Versailles to Wall Street, 1919-29* (California U.P.).  
Chandler, L. V., *America's greatest depression, 1929-1941* (Harper and Row).

Cipolla, G. M., (ed.), *Fontana economic history of Europe*, vols. 5 and 6 (Fontana).

Kindelberger, C. P., *The world in depression, 1929-1939* (Allen Lane).

Milward, A. S., *War, economy and society, 1939-1945* (California U.P.).

Stein, H., *The fiscal revolution in America* (Chicago U.P.).

Winch, D., *Economics and policy: a historical study* (Fontana).

Yeager, L. B., *International monetary relations: theory, history, policy*, 2nd edition (Harper and Row).

## EE33 Economics IIIA.

Pre-requisite subject: EE02 Economics II or EE3G Macroeconomics III and EE4G Microeconomics III.

This course consists of two lectures and one tutorial a week throughout the year. It is given as day lectures in odd years and as evening lectures in even years.

The general purpose of the course is both to build on the theory developed in the first and second year "core" courses, and to integrate the international sector with this theory. The course comprises three sections, macroeconomics, microeconomics and international economics. All three sections aim to develop theory appropriate to the analysis of policy issues.

The macroeconomics section covers such topics as investment, consumption and trade cycle theory, problems of economic management of the Australian economy, and elementary growth theory.

Topics covered in the microeconomics section include consumer theory, production theory, factor markets and income distribution, the economics of information and research and technological change.

The section on international economics discusses the gains from trade, exchange rate policy and balance of payments adjustment mechanisms, and international monetary systems.

Reference books:

There is no single book or short list of books which is a text-book for the course.

Australian Bureau of Statistics,

*Australian balance of payments* (latest issue).

*Australian economy* (latest issue).

Branson, W. H., and Litvack, J. M., *Macroeconomics* (Harper); OR

Branson, W. H., *Macroeconomic theory and policy* (Harper).

Cohen, B. J., *Balance of payments policy* (Penguin modern economics).

Davidson, P., *Money and the real world* (Macmillan).

- Grubel, H. G., *The international monetary system* (Penguin modern economics).
- Kindleberger, C. P., *International economics* (Irwin).
- Laidler, D., *Introduction to microeconomics* (Allen); OR
- Lancaster, K., *Introduction to modern microeconomics*, 2nd edition (Rand McNally).
- Machlup, F., *International monetary economics* (Allen and Unwin).
- Meade, J. E., *Theory of international economic policy*, volume I. *The balance of payments* (O.U.P.).
- Mitchell, W. E., Hand, J. H., and Walter, I., *Readings in macroeconomics* (McGraw-Hill).
- Mueller, M. G., *Readings in macro-economics* (Holt).

Additional references will be prescribed by the lecturers.

### EE2H Public Finance IIIH.

Pre-requisite subject: EE02 Economics II or EE3G Macroeconomics IIIH and EE4G Microeconomics IIIH.

This half-subject is given once a week as late afternoon lectures. In addition day and evening tutorials will be offered every two to three weeks.

The course is concerned with the theory and practice of public finance with emphasis on its application in the Australian economy. The public sector will be discussed in its role as an allocating, distributing and regulating body. The major sections of the course will therefore cover taxation, public goods, cost-benefit analysis, federal-state fiscal relations and the theory and operation of economic policy, with special reference to fiscal policy.

Text-books:

- Musgrave, R. A., and Musgrave, P. B., *Public finance in theory and practice* (McGraw-Hill).
- Nevile, J. W., *Fiscal policy in Australia*, 2nd edition (Cheshire).

Additional references will be prescribed by the lecturers.

### EE3H Economics of Labour IIIH.

Pre-requisite subject: EE02 Economics II or EE3G Macroeconomics IIIH and EE4G Microeconomics IIIH.

EE3H Economics of Labour IIIH is given as day lectures in odd years and as evening lectures in even years. It comprises one lecture a week and one tutorial fortnightly.

This course is essentially a study of the interaction of economic and institutional factors in the labour market. The topics studied will include processes of wage determination; factors influencing the relative wage structure; industrial relations systems; unemployment and the labour force; basic theories of inflation; and wages and incomes policies. Emphasis will be given to the role of the Australian arbitration system in relation to general economic policy.

Text-books:

- Niland, J. R., and Isaac, J. E., *Australian labour economics: readings*, 2nd edition (Sun Books).
- Rees, A. E., *The economics of work and pay* (Harper and Row).

Reference books:

- Burton, J., *Wage inflation* (Macmillan studies in economics).
- Doeringer, P. B., and Piore, N. J., *Internal labour markets and manpower analysis* (Heath).
- Fisher, M. R., *The economic analysis of labour* (Weidenfeld and Nicolson).
- Fleisher, B. M., *Labor economics: theory and evidence* (Prentice-Hall).
- Hicks, J. R., *The theory of wages*, 2nd edition (Papermac).
- McCormick, B. J., and Smith, E. O., *The labour market* (Penguin).
- Niland, J. R., and Isaac, J. E., *Australian labour relations: readings*, 2nd edition (Sun Books).



- O'Dea, R., *Industrial relations in Australia* (West).  
 Phelps Brown, E. H., *The inequality of pay* (O.U.P.).  
 Pohlman, J. E., *Economics of wage and price control* (Grid).  
 Portus, J. H., *Australian compulsory arbitration* (Hicks Smith).  
 Wootton, B., *The social foundations of wage policy*, 2nd edition (Allen and Unwin).

#### EE4H Agricultural Economics IIIH.

Pre-requisite subject: EE02 Economics II or EE3G Macroeconomics IIIH or EE4G Microeconomics IIIH.

This course consists of one lecture a week and a tutorial every second week throughout the year and is offered as day lectures in odd years and as evening lectures in even years.

The prime purpose of this course is to provide a basis for critical appraisal of Australian Agricultural Policy. Emphasis is given to the characteristics of agriculture (capital formation and technological innovation, production instability and price uncertainty, supply responses); the role of agriculture in the Australian economy; policy objectives and measures in support of the farm sector (such as price stabilisation arrangements, duty free entry under by-law and tax concessions); recent and current problems in the farm sector (such as the cost-price squeeze on income, protection of the dairy industry, the reserve price scheme and operations of the Wool Corporation, quota restrictions on wheat production and rural reconstruction) as well as the nature and implications of recent changes in farm policy.

##### Text-books:

- Campbell, K. O., *Agricultural marketing and prices* (Cheshire).  
 Throsby, C. D., *Agricultural policy* (Pelican).

##### Reference books:

- The principles of rural policy in Australia* (A.G.P.S.).  
 Williams, D. B., *Agriculture in the Australian economy* (Sydney U.P.).

Most of the reading is drawn from selected journal articles and Commonwealth publications. Where possible, copies of this material will be available in the Napier Birks room and on reserve in the Barr Smith Library.

#### EE7H Managerial Economics IIIH.

Pre-requisite subject: EE02 Economics II or EE4G Microeconomics IIIH.

The course, comprising one lecture a week and one tutorial a fortnight, is given as day lectures in even years and as evening lectures in odd years.

This course considers some economic concepts concerning the structure and growth of firms, demand analysis, advertising, cost analysis and linear programming.

##### Preliminary reading:

- Wildsmith, J. R., *Managerial theories of the firm* (Martin Robertson).

##### Text-book:

- Dean, J., *Managerial economics* (Prentice-Hall).

##### Reference books:

- Breit, W., and Hochman, H. M., *Readings in microeconomics* (Holt, Rinehart and Winston).  
 Haynes, W. W., *Managerial economics: analysis and cases* (Business Publications).  
 Marris, R., *The economic theory of 'managerial' capitalism* (Macmillan).

Additional references will be prescribed by the lecturer.

### EE8H Econometrics IIIH.

Pre-requisite subjects: EE32 Economic Statistics IIA, EE3G Macroeconomics IIIH and EE4G Microeconomics IIIH, and one of EE2F Mathematical Economics IH, QM01 Mathematics I or QM11 Mathematics IM.

Students may enrol for this half-subject only with the approval of the Chairman of the Department. The course consists of one lecture/seminar a week of one and a half hours duration throughout the year.

The econometrics course deals with the estimation of economic relationships. It includes the following topics: single equation and multiple equation estimation in econometric models, in particular the effects of violation of the classical least squares assumptions; use of distributed lags and dummy variables and the development of multiple equation estimation procedures; the identification problem in multiple equation systems; the application of econometric techniques to applied problems.

A text-book will be recommended from:

- Johnston, J., *Econometric methods* (McGraw-Hill, International Student Edition).  
Kmenta, J., *Elements of econometrics* (Macmillan).  
Koutsoyiannis, A., *Theory of econometrics* (Macmillan).

Reference books:

- Christ, C. F., *Econometric models and methods* (Wiley).  
Common, M. S., *Basic econometrics* (Longman).  
Desai, M., *Applied econometrics* (Philip Allan).  
Kelejian, H. H., and Oates, W. E., *Introduction to econometrics principles and applications* (Harper and Row).  
Murphy, J. L., *Introductory econometrics* (Irwin).  
Pindyck, R. S., and Rubinfeld, D. L., *Econometric models and economic forecasts* (McGraw-Hill).  
Theil, H., *Principles of econometrics* (Wiley).  
Walters, A. A., *An introduction to econometrics* (Macmillan).  
Wonnacott, R. J., and T. H., *Econometrics* (Wiley, International Edition).

### EE9H Mathematical Economics IIIH.

Pre-requisite subjects: EE3G Macroeconomics IIIH and EE4G Microeconomics IIIH and one of EE41 Mathematics (Economics) I, QM01 Mathematics I or QM11 Mathematics IM.

The course consists of one lecture a week and a tutorial every second week. The course attempts to show how some of the main ideas of economic theory can be clarified, rigorised and extended via the use of mathematical techniques. Three broad areas can be distinguished: (a) orthodox macroeconomics including orthodox Keynesian analysis, trade cycle theory, the theory of economic growth. (b) microeconomics including the theory of consumer behaviour, the theory of the firm and leading up to (c) general equilibrium theory including competitive equilibrium theory (the ultimate statement of neoclassical economics) and consequent recent developments concerning the foundations of macroeconomics, especially Keynesian economics.

There is no single text-book suitable for the whole course. The following are referred to at various stages.

Reference books:

- Allingham, M., *General equilibrium*.  
Chiang, A. C., *Fundamental methods of mathematical economics* (McGraw-Hill).  
Gandolfo, G., *Mathematical methods and models in economic dynamics*.  
Henderson, J., and Quandt, R., *Microeconomic theory* (McGraw-Hill).  
Lancaster, K., *Mathematical economics* (Macmillan).  
Sen, A., *Growth economics* (Penguin).  
Takayama, A., *Mathematical economics*.

**AJ9H Economic Geography IIIH.**

This course, which is offered by the Department of Geography, is concerned with locational characteristics of economic activity and examines the nature and causes of spatial inequality in economic growth and development at various scales. Though the course is developed from AJ5H Economic Geography IIIH, students with a background in economics and an interest in location may take the course.

## Reference books:

- Blunden, J., and others (eds.), *Regional analysis and development* (Harper and Row).  
Found, W. C., *A theoretical approach to rural land use patterns* (Arnold).  
Haggett, P., and others, *Locational methods* (Arnold).  
Smith, D. M., *Industrial location* (Wiley).  
Smith, D. M., *Human geography: a welfare approach* (Arnold).

**EE8F Economic Theory IIIH.**

Students may enrol for this half-subject only with the permission of the Chairman of the Department of Economics.

The course comprises two lectures a week. The purpose of the course is to introduce students to more advanced theory. Wide reading is not expected, instead intensive study is made of a few selected books and articles. Areas for study include, welfare economics, history of economic thought, choice under uncertainty, value, production and distribution theory.

## HONOURS DEGREES.

Detailed arrangements for classes will depend on enrolments, and students are advised to communicate with the Dean of the Faculty of Economics well before the beginning of the academic year. Students will be admitted to honours classes only with the approval of the Dean. The honours work falls into two divisions. Interim honours classes are conducted for students in the third year and final honours classes in the fourth year.

### INTERIM HONOURS:

Interim Honours B.Ec. students must take the course EE8F Economic Theory IIIH.

The subject EE03 Economics III for other students intending to take honours in Economics must include EE33 Economics IIIA and EE8F Economic Theory IIIH.

### EE99 Economics for the Honours degrees of B.A. and B.Ec.

#### FINAL HONOURS:

(i) Final honours students are required to undertake a research project and present a thesis of approximately 10,000 words. An absolute upper limit of 15,000 words will apply and theses in excess of this will be penalised and/or returned to be reduced to this length. The thesis will form part of the final honours examination. Students must have the subject of their theses approved by the Dean of the Faculty and be allotted to supervisors before the end of the academic year preceding their final honours year. Students must commence work on their projects during the long vacation preceding their final honours year and must report to their supervisors not later than during the first week of February. They will be required to keep in touch with their supervisors during the term. A complete draft of the thesis is to be submitted to the supervisor for comment no later than the last day of first term and a final draft must be ready for typing at the end of the second week of the first vacation. Four copies of the thesis typed double spaced on A4 paper must be presented not later than the first day of the second term. Students will be required to submit themselves to an oral examination on their theses during the second term.

(ii) Each student will select three options from a range of courses which, subject to the availability of staff and sufficient enrolments, will consist of the following list. Classes in these subjects will take place in second and third terms.

Accounting Theory	International Monetary Issues
Business Statistics	International Trade
Capital and Growth	Mathematical Economics
Development	Money
Econometrics	Principles of Economics
Economic History	Radical Economics
Economics of the Firm	Transport and Urban Economies

(iii) Seminars in Applied Economics will be held throughout the year.

(iv) The examination will consist of:

- (a) The thesis.
- (b) Two papers in Applied Economics.
- (c) One paper in each of the three optional subjects.

### ADDITIONAL SUBJECTS.

The Department also provides the following subjects for other faculties.

EE71 Social Economics I for the degree of B.A.

EE43 Economics of Natural Resource Use for the degrees of B.Ag.Sc. and M.Env.St.

EE53 Farm Management for the degree of B.Ag.Sc.

EE63 Farm Prices and Policy for the degree of B.Ag.Sc.

## COMMERCE.

## EC01 Accounting I.

No pre-requisite subjects.

The course comprises two lectures and one tutorial class each week throughout the academic year. Students are required to submit written assignments (approximately one a fortnight) at tutorials.

A self contained course designed to provide future economists with an understanding of the strengths and limitations of accounting, and to serve as an introduction to the study of accounting for future accountants. Topics include the accounting process; introduction to the theory of valuation and income measurement; consolidations; sources and uses of funds; function of the auditor; information for external parties; alternative valuation and income measurement systems.

Preliminary reading (optional):

Anthony, R. N., *Essentials of accounting* (Addison-Wesley).

Text-books:

Anthony, R. N., *Essentials of accounting* (Addison-Wesley).

Gordon, M. J., and Shillinglaw, G., *Accounting: a management approach*, 5th edition (Irwin).

Henderson, M. S., and Peirson, C. G., *An introduction to financial accounting theory* (Longman Cheshire).

Reference books:

Barton, A. D., *The anatomy of accounting*, 2nd edition (Queensland U.P.).  
Harrison, J., and others, *Accounting—a direct approach*, 3rd edition (Longman Cheshire).

Ma, R., and Mathews, R. L., *The accounting framework—a contemporary emphasis* (Longman Cheshire).

## EC02 Accounting II.

Pre-requisite subjects: Except with permission of the Chairman of the Department of Commerce, to be obtained before attempting to enrol, EC01 Accounting I and either EE01 Economics I or EE2G Microeconomics IH.

The course consists of two lectures plus one tutorial each week. Day lectures are given in odd years, evening lectures in even years. Day tutorials are given every year, but evening tutorials in even years only.

A general course in management accounting which serves two purposes: it seeks to teach future managers what they need to know about accounting and finance, whilst at the same time teaching future accountants what might be expected of them by managers. The course is broadly divided into four sections covering elements of organisation theory, an introduction to cost accounting, accounting information for tactical decisions and business finance.

Text-books:

Hornigren, C. T., *Cost Accounting: a managerial emphasis*, 4th edition (Prentice-Hall).

Schall, L. D., and Haley, C. W., *Introduction to financial management* (McGraw-Hill).

Reference books:

Bromwich, M., *The economics of capital budgeting* (Penguin).

Koontz, H., and O'Donnell, C., *Management: a systems and contingency analysis of managerial functions* (McGraw-Hill).

Peirson, C. G., and Bird, R. G., *Business finance*, 2nd edition (McGraw-Hill).

Richards, M. D., and Nielander, W. A. (eds.), *Readings in management* (South-Western).

Shillinglaw, G., *Cost accounting, analysis and control*, 4th edition (Irwin).

Solomons, D. (ed.), *Studies in cost analysis*, 2nd edition (Sweet and Maxwell).

Van Horne, J. C., *Financial management and policy*, 4th edition (Prentice-Hall).

### EC03 Accounting III.

Pre-requisite subject: Except with permission of the Chairman of the Department of Commerce, to be obtained before attempting to enrol, EC02 Accounting II.

The course comprises two lectures and one tutorial a week. Day lectures are given in even years, evening lectures in odd years. Day tutorials are provided every year, but evening tutorials only in odd years.

The course consists of three parts. The first part covers a number of topics in financial accounting, including an introduction to professional standards, accounting for subsidiaries and associated companies, liquidation, bankruptcy and take-overs. The second part is concerned with the function of auditing and the development of auditing ideas and practices. Topics include responsibilities of an auditor; auditing principles and standards; auditing procedures and practices, internal control; and computer-based systems. The third part deals with a number of current issues in accounting, such as accounting for the effect of price changes, accounting for leases; income tax allocation; accounting for instalment credit; and human resources accounting.

Text-books:

- Henderson, M. S., and Peirson, C. G., *Issues in financial accounting* (Cheshire).  
Fraser, D. J., and Aiken, M. E., *Stetler's systems based audits* (Prentice-Hall).

Reference books:

- Bowra, R. L., and Clarke, F. L., *Holding companies and group accounts in Australia and New Zealand*, 6th edition revised (Butterworth).  
Hendriksen, E. S., *Accounting theory*, 3rd edition (Irwin).  
Johnston, I. R., Jager, M. O., and Taylor, R. B., *The law and practice of company accounting in Australia*, 3rd edition revised (Butterworth).  
Willingham, J. J., and Carmichael, D. R., *Auditing concepts and methods*, 2nd edition (McGraw-Hill).

### EC23 Industrial Sociology III.

Except with the permission of the Chairman of the Department of Commerce, to be obtained before attempting to enrol, not normally available to students before completion of the second full-time year or its equivalent.

The course comprises two lectures and one tutorial class of one and a half hours each week throughout the academic year. Students are required to prepare exercises and essays, and permission to sit for the final examination will not be granted unless a satisfactory standard in them has been reached.

This subject is offered as a day-time course in even years, and as an evening course in odd years.

Culture, subcultures, socialisation, social control. Interpersonal behaviour: interactions, activities, sentiments, transactions, symbols. Sociology of work. Membership and structure of groups, workgroup and intergroup behaviour, leadership, supervision, motivation, worker satisfaction and morale, productivity. Organisational change, management succession. Technology and organisation structure, socio-technical systems. Selected research studies in organisational behaviour, detailed critical analysis of selected theories.

Text-books:

- Congalton, A. A., and Daniel, A. E., *The individual in the making* (Wiley).  
Dunphy, D., *The challenge of change* (Australian Broadcasting Commission).  
Lansbury, R., and Gilmour, P., *Organizations: an Australian perspective* (Longman Cheshire).  
Mead, M., *Cultural patterns and technical change* (Mentor).  
Shepherd, C. R., *Small groups: some sociological perspectives* (Chandler).  
Sofer, C., *Organizations in theory and practice* (Heinemann Educational Books).  
Vroom, V. H., and Deci, E. L., *Management and motivation* (Penguin).

## Reference books:

- Argyle, M., *The psychology of interpersonal behaviour* (Pelican).  
 Burns, T., and Stalker, G. M., *The management of innovation* (Tavistock Publications).  
 Homans, G. C., *The human group* (Routledge).  
 Landsberger, H. A., *Hawthorne revisited* (Cornell U.P.).  
 Likert, R., *The human organisation* (McGraw-Hill).  
 Roethlisberger, F. J., and Dickson, W. J., *Management and the worker* (Wiley).  
 Woodward, J., *Industrial organization: theory and practice* (O.U.P.).

**LL1H Income Tax IHH.**

Pre-requisite subjects: Except with the permission of the Chairman of the Department of Commerce, to be obtained before attempting to enrol, LL82 Commercial Law II (before 1979); alternatively, LL3H Commercial Law IHH must be taken concurrently.

The course comprises one lecture a week and a tutorial class each fortnight.

A basic course in the method and content of Australian income tax law—including historical background, statutory provisions and cases, and the function of the accountant as an adviser on income tax matters. Discussion will cover income tax administration and procedure, the interpretation of taxing statutes, jurisdiction to tax, the nature of income and taxable income, the computation of tax and income tax as it relates to partners, trusts, companies and superannuation funds.

Text-books and reference books will be notified before the commencement of lectures.

**LL2H Commercial Law IHH.**

No pre-requisite subjects.

This half-subject comprises one lecture a week and a tutorial each fortnight throughout the year.

An introduction to the legal system and legal concepts as used in Australia, including an examination of the sources of law in Australia (the system of courts and the legislative authorities) and of the rules of statutory interpretation.

A statement of the general principles of the law of contract, including agency.

A general examination of consumer protection legislation applying in South Australia.

Preliminary reading:

First three chapters of the text-book.

Text-book:

Vermeesch, R. B., and Lindgren, K. E., *Business law of Australia*, 3rd edition (Butterworth).

A list of the required statutes will be given at the first lecture.

Reference material will be advised at the first lecture.

**LL3H Commercial Law IHH.**

Pre-requisite subject: Except with the permission of the Chairman of the Department of Commerce, LL2H Commercial Law IHH.

The course comprises one lecture a week and a tutorial each fortnight throughout the year.

Aspects of agency.

The law of partnership.

The law relating to limited liability companies with discussion of some or all of the following topics: The concept of corporate personality, the corporate constitution, delimitation of the corporate entity, ultra vires, company contracts and dispositions, a company's liability for wrongs and crimes, a company's capacity to sue and be sued, company finance, share capital, classes of shares, dividends membership and shareholding, loan finance, regulation of invitations to the public, officers of a company, duties of officers, accounts and audit, protection of minorities, meetings of companies, re-organisations and take-overs of companies, official management and liquidations.

The text-book, required statutes and reference material will be advised at the first lecture.

#### LL92 Commercial Law IIA.

No pre-requisite subjects.

This subject consists of the two half-subjects LL2H Commercial Law IH and LL3H Commercial Law IHH. It is available only to students who first enrolled in the B.Ec. course *before* 1979. For syllabuses, see above.

#### THIRD-YEAR HALF-SUBJECTS.

##### EC1G Computerised Accounting and Systems IIHH.

Pre-requisite subjects: Except with the permission of the Chairman of the Department of Commerce, to be obtained before attempting to enrol, EC01 Accounting I and EE22 Economic Statistics II or EE32 Economic Statistics IIA.

The course consists of one, one and one-half hour lecture/tutorial period a week throughout the year.

The course provides an appreciation of the process of analysing, designing and implementing computerised accounting and administrative systems.

The course consists of three parts. The first part provides an introduction to data processing in accounting and administration, an analysis of data editing and the creation and maintenance of commercial data files. The second part consists of the design and programming in BASIC of computerised accounting and administrative systems such as general ledger, financial reports, sales order entry, accounts receivable and costing. The third part deals with the methodology of systems analysis and design, implementation, computer security and related social issues.

##### Text-books:

Cook, G. A., Wade, B. J., and Upton, C. C., *Computer accounting methods* (Petrocelli).

Senn, J. A., *Information systems in management* (Wadsworth).

##### Reference books:

Diehr, G., *Business programming with BASIC* (Wiley).

Eliason, A. L., and Kitts, K. D., *Business computer systems and applications* (Science Research Associates).

Gotlieb, G. C., and Borodin, A., *Social issues in computing* (Academic Press).

Jancura, E. G., *Audit and control of computer systems* (Petrocelli/Charter).

National Computing Centre, *Basic training in systems analysis*, edited by Daniels, A., and Yeates, D. (Pitman).



**EC2G Management Decision Analysis IIIH.**

Pre-requisite subject: Except with the permission of the Chairman of the Department of Commerce, to be obtained before attempting to enrol, EE22 Economic Statistics II or EE32 Economic Statistics IIA.

The course consists of one, one and one-half hour lecture/tutorial period each week throughout the year.

The course provides an overview of quantitative methods for management decision making, including practice in the use of representative methods. The topics covered include decision analysis (subjective probability, utility, decision trees), linear methods (linear programming, transportation, assignment, critical path analysis), forecasting (naive methods, smoothing, curve fitting), simulation (discrete event simulation, financial modelling) and inventory management (EOQ, demand analysis and forecasting, inventory management systems). Computerised methods will be used, but computer programming will not be required.

## Text-book:

Johnson, R. D., and Siskin, B. R., *Quantitative techniques for business decisions* (Prentice-Hall).

## Reference books:

Holden, I., and Mellroy, P. K., *Network planning management control systems* (Hutchinson).

Littlechild, S. C. (ed.), *Operational research for managers* (Philip Allan).

Stanton, H. F., *Australian case studies in business statistics and operations research* (Cassell).

Turban, E., and Loomba, N. P., *Readings in management science* (Business Publications).

**EC4H Business Finance IIIH.**

Pre-requisite subjects: Except with the permission of the Chairman of the Department of Commerce, to be obtained before attempting to enrol, EC02 Accounting II, EE22 Economic Statistics II or EE32 Economic Statistics IIA.

The course comprises one lecture a week and one tutorial a fortnight.

The course consists of two parts. The first part deals with capital market theory, and comprises study of securities markets including fundamental and technical analysis and the efficient marketing hypothesis; portfolio theory and the capital asset pricing model; and investment management. The second part is concerned with the integration of the major financial decisions of the firm, and the incorporation of risk and uncertainty into the analysis of project evaluation; optimum financial structure; and dividend policy.

## Text-book:

Sharpe, W. F., *Portfolio theory and capital markets* (McGraw-Hill).

## Reference books:

Francis, J. C., *Investments: analysis and management*, 2nd edition (McGraw-Hill).

Lorie, J. H., and Hamilton, M. T., *The stock market: theories and evidence* (Irwin).

Sharpe, W. F., *Investments* (Prentice-Hall).

Van Horne, J. C., *Financial management and policy*, 4th edition (Prentice-Hall).

Weston, J. F., and Brigham, E. F., *Managerial finance*, 5th edition (Holt, Rinehart and Winston).

**EC5H Marketing IIIH.**

Pre-requisite subjects: Except with permission of the Chairman of the Department of Commerce, to be obtained before attempting to enrol, EE22 Economic Statistics II or EE32 Economic Statistics IIA.

Students who have not completed EC02 Management Accounting II will be required to do additional readings.

The course comprises one lecture a week and one tutorial class every second week. Practical exercises will be required.

Marketing tasks, the broadened concept of marketing; consumer behaviour; research marketing, multivariate data analysis, marketing experimentation; distribution channels; marketing-mix; organisation, planning, marketing information system control.

Text-books:

- Dalrymple, D., and Parsons, L., *Marketing management* (Wiley).  
Mathew, M., and Steidl, P. (eds.), *Australian marketing readings* (Market Research Society of Australia).

Reference books:

- Aaker, D. (ed.), *Multivariate analysis in marketing: theory and application* (Wadsworth, paperback).  
Aaker, D. (ed.), *Advertising management: practical perspectives* (Prentice-Hall, paperback).  
Brion, J. M., *Corporate marketing planning* (Wiley).  
Jolson, M. A., and Hise, R. T., *Quantitative techniques for marketing decisions* (Macmillan, paperback).  
Sheth, J. N., *Models of buyer behavior: conceptual, quantitative and empirical* (Harper and Row).  
Spitz, E., *Product planning* (Averbach).

OF THE DEGREE OF  
MASTER OF BUSINESS MANAGEMENT  
REGULATIONS

1. There shall be a degree of Master of Business Management.

‡2. (a) The Faculty of Economics may accept as a candidate for the degree a graduate of the University of Adelaide or of another university recognised for the purpose by the University of Adelaide.

(b) Subject to the approval of the Council the Faculty may, in special cases and subject to such conditions (if any) as it may see fit to impose in each case, accept as a candidate for the degree a person who does not hold a degree of a university but has given evidence satisfactory to the Faculty of his fitness to undertake work for the degree.

(c) A candidate will not be permitted to proceed to part II of the course until he has had at least two years' experience in business, public service or other field of employment approved by the Faculty of Economics.

3. The maximum number of candidates which may be enrolled in any course for the degree shall be determined from time to time by the Council on the recommendation of the Faculty of Economics; and courses will not be provided unless a sufficient number of students has enrolled.

\*4. To qualify for the degree a candidate shall attend classes and satisfy the examiners in courses and project work as prescribed in the schedules.

5. If in the opinion of the Faculty of Economics a candidate for the degree is not making satisfactory progress the Faculty may with the consent of the Council withdraw its approval of his candidature and the candidate shall cease to be enrolled for the degree.

‡6. A candidate shall not be permitted to present himself for examination or final assessment in any course, unless he has regularly attended the prescribed classes and has completed satisfactorily such written and practical work as may be required.

‡7. The Faculty of Economics shall appoint a Board of Examiners to conduct the examinations and other assessments required under regulation 4.

‡ Amended 28 February, 1974, and 15 January, 1976.

\*Allowed 15 January, 1976.

‡ Amended 15 January, 1976.

\*\*8. Schedules defining the courses of study and the project work for the degree shall be drawn up from time to time by the Faculty of Economics and approved by the Council.

\*\*9. A candidate who has completed courses of study for the degree before 31 March, 1976 may continue under the schedules in force in 1975, with such modifications (if any) as may be prescribed by the Faculty of Economics, provided that he qualifies for the degree by 31 March, 1979.

†10. A candidate who holds the Diploma in Business Management shall surrender his diploma before being admitted to the degree.

11. A candidate who complies with the foregoing conditions and satisfies the examiners shall, on the recommendation of the Faculty of Economics, be admitted to the degree.

Regulations allowed 16 March, 1961.

† Allowed 28 February, 1974.

\*\* Allowed 15 January, 1976.

OF THE DEGREE OF  
**MASTER OF BUSINESS MANAGEMENT**

**SCHEDULES**

(Made by the Council under regulations 4 and 9.)

NOTE: Syllabuses of subjects for the degree of M.B.M. are published below, immediately after these schedules. For syllabuses of subjects taught for other degrees and diplomas see the table of subjects at the end of the volume.

**COURSES OF STUDY AND PROJECT WORK**

1. The courses of study for the degree of Master of Business Management shall comprise:

PART I

EC00 Accounting (Business Management)	EC26 Industrial Sociology
EC16 Economics (Business Management)	EC36 Quantitative Methods I

PART II

EC07 Business Policy	Two elective subjects chosen from the list of optional subjects available (see footnote to schedules).
EC17 Financial Management	
EC27 Government and Administration	
EC37 Organisation Theory and Behaviour	
EC47 Quantitative Methods II	EC57 Supervised project work on an approved topic.

2. (a) A candidate shall pass in each subject of part I and shall attain an overall standard in that part at least equivalent to that required for Second Class Honours (see footnote to schedules). He shall also complete the prescribed course work subjects of part II, other than the project work, at an overall standard at least equivalent to that required for Second Class Honours. The project shall also be completed at this standard.

(b) The Faculty of Economics may grant such status in any subject as it may determine.

3. The names of those who pass in any subject of part I, or overall in the course work subjects of part II, other than the project work, shall be published in alphabetical order within the following classifications: pass with distinction, pass with credit, pass. The project shall be classified as satisfactory or unsatisfactory and, if satisfactory, shall be graded Distinction, Credit or Pass.

4. Subject to the following exceptions a candidate shall complete the subjects in part I before proceeding with any of the subjects in part II:

(a) The Chairman of the Department of Commerce (or his nominee) may permit a candidate to proceed with not more than two part II subjects before he has completed all of the subjects of part I.

(b) The Faculty of Economics may allow a candidate who has completed all but one of the subjects in part I to proceed to part II and to take the part I subject concurrently with his part II studies.

5. The Faculty of Economics shall review the academic performance of each candidate on his completion of part I, and a candidate whose performance in part I is deemed by the Faculty to be unsatisfactory shall not be permitted to proceed to part II.

6. Except with the specific advance approval of the Faculty of Economics in each case, a candidate for the degree by part-time study shall complete the course-work subjects in part II in two years; provided that, in the case of a candidate proceeding under one of the provisos in clause 3, the year in which he is completing part I shall not be counted. If the Faculty permits a longer time it may impose such conditions as it sees fit.

7. A candidate's programme of study must be approved by the Chairman of the Department of Commerce (or his nominee) at enrolment each year.

8. Each candidate will be required to undertake during university vacations such studies as may be prescribed.

9. A candidate shall, before commencing the course-work of part II, submit for approval to the Chairman of the Department of Commerce (or his nominee), a written outline of the project work he proposes to undertake and shall submit a written report on the project work not later than six months from the date on which he completes the course-work of part II.

10. A candidate who interrupts his candidature may re-enrol only with the approval of the Faculty and under such conditions as the Faculty may impose in each case. Approval should be sought in advance for any proposed interruption.

NOTES (not forming part of the schedules):

1. The optional subjects from which the two elective subjects in part II may be chosen are:
  - EC67 Business Finance.
  - EC18 Management and Information Systems.
  - EC77 Marketing Management.
  - EC08 Personnel Management.
  - EC87 Quantitative Methods III (1)—Control of Operations.
  - EC97 Quantitative Methods III (2)—Planning and Decision Analysis.
2. Normally part I subjects must be passed at the first attempt with credits in at least two subjects.

OF THE DEGREE OF  
MASTER OF BUSINESS MANAGEMENT  
S Y L L A B U S E S

*Text-books:*

Students are expected to procure the latest edition of all text-books prescribed.

*Examinations:*

For each subject students may obtain from the department concerned details of the examination in that subject including the relative weights given to the components (e.g. such of the following as are relevant: assessments, term or mid-year tests, essays or other written or practical work, final written examinations, *visa voce* examinations).

PART I.

EC00 Accounting (Business Management).

This course comprises two, one and one-half hour classes a week for the whole of the academic year and covers three major areas:

(a) BASIC FINANCIAL ACCOUNTING.

Basic accounting processes; the assumptions and principles underlying conventional accounting reports; income determination and asset valuation; analysis of accounting reports; statements of changes in financial position.

(b) BASIC COST AND MANAGEMENT ACCOUNTING.

Planning and budgeting; costs for management decisions; product costing; standard costing; overhead costs; cost control; management reports.

(c) BASIC BUSINESS FINANCE.

Financial mathematics; capital budgeting techniques and investment decisions; financial structure and the cost of capital; dividend policy.

Text-books:

Gordon, M. J., and Shillinglaw, G., *Accounting, a managerial approach*, 5th edition (Irwin).

Weston, J. F., and Brigham, E. F., *Essentials of managerial finance*, 4th edition (Dryden Press).

Reference books:

Barton, A. D., *The anatomy of accounting*, 2nd edition (Queensland U.P.).

Harrison, J., Horrocks, J., and Newman, R. L., *Accounting—a direct approach*, 3rd edition (Longman Cheshire).

Horngren, C. T., *Cost accounting; a managerial emphasis*, 4th edition (Prentice-Hall).

Peirson, C. G., and Bird, R. G., *Business finance*, 2nd edition (McGraw-Hill).

## EC16 Economics (Business Management).

This course is an introduction to the basic principles of modern theory. The first half of the course deals with microeconomic theory and the second half with macroeconomic theory. In the first half, the market system of pricing is examined. Using the methodology of comparative statics and partial equilibrium, the basic theory of supply and demand is analysed in order to determine the long-run equilibrium position of the firm under perfect competition. Then the market structures of monopoly, oligopoly and monopolistic competition are introduced. Throughout this section the role of market prices in influencing resource allocation within the economy is highlighted and the implications of the analysis for management decision making is stressed. The second half of the course begins with a brief overview of the Keynesian approach to income determination. Then the theory of the supply and demand for money is analysed leading to a discussion of the appropriate balance between fiscal and monetary policies. Finally, the classical and modern theories of inflation are briefly reviewed. Throughout this section special emphasis is placed on the institutions and features of the Australian economy.

## Text-books:

Harcourt, G. C., Karmel, P. H., and Wallace, R. H., *Economics activity* (C.U.P.).

Tisdell, C. A., *Economics of markets* (Wiley).

Trevithick, J. A., *Inflation* (Penguin).

## Reference books:

Samuelson, P. A., Hancock, K. J., and Wallace, R. H., *Economics*, 2nd Australian edition (McGraw-Hill).

Shapiro, E., *Macroeconomic analysis*, 3rd edition (Harcourt, Brace and Jovanovich).

## EC26 Industrial Sociology.

The course comprises two lectures and one tutorial class of one and one-half hours each week throughout the academic year. Students are required to prepare exercises and essays, and permission to sit for the final examination will not be granted unless a satisfactory standard in them has been reached.

This subject is offered as a day-time course in even years, and as an evening course in odd years.

Culture, subcultures, socialisation, social control. Interpersonal behaviour: interactions, activities, sentiments, transactions, symbols. Sociology of work. Membership and structure of groups, workgroup and intergroup behaviour, leadership, supervision, motivation, worker satisfaction and morale, productivity. Organisational change, management succession. Technology and organisation structure, socio-technical systems. Selected research studies in organisational behaviour, detailed critical analysis of selected theories.

## Text-books:

Congalton, A. A., and Daniel, A. E., *The individual in the making* (Wiley).

Dunphy, D., *The challenge of change* (Australian Broadcasting Commission).

Lansbury, R., and Gilmour, P., *Organizations: an Australian perspective* (Longman Cheshire).

Mead, M., *Cultural patterns and technical change* (Mentor).

Shepherd, C. R., *Small groups: some sociological perspectives* (Chandler).

Sofer, C., *Organizations in theory and practice* (Heinemann Educational Books).

Vroom, V. H., and Deci, E. L., *Management and motivation* (Penguin).

## Reference books:

Argyle, M., *The psychology of interpersonal behaviour* (Pelican).

Burns, T., and Stalker, G. M., *The management of innovation* (Tavistock Publications).

Homans, G. C., *The human group* (Routledge).

Landsberger, H. A., *Hawthorne revisited* (Cornell U.P.).

Likert, R., *The human organization* (McGraw-Hill).

Roethlisberger, F. J., and Dickson, W. J., *Management and the worker* (Wiley).

Woodward, J., *Industrial organisation: theory and practice* (O.U.P.).



**EC36 Quantitative Methods I.****A. MATHEMATICS.**

*Finite Mathematics and Computing.* Sets, logic, relations, sequences, series, permutations and combinations, programming.

*Linear Algebra.* Matrix algebra, linear equations, determinants, games.

*Calculus.* Differential and integral calculus of one or more variables, difference and differential equations, power series.

**B. STATISTICS.**

*Probability and Statistics.* Probability of discrete events, continuous probability functions, estimation, inference, Bayesian inference sampling, bias, index numbers, random numbers, time series, autocorrelation, simple and multiple regression.

**Text-books:**

Boot, J. C. G., and Cox, E. B., *Statistical analysis for managerial decisions* (McGraw-Hill).

Derman, C., Gleser, L. J., and Olkin, I., *A guide to probability theory and application* (Holt-Rinehart).

Hamming, R. W., *Introduction to applied numerical analysis* (McGraw-Hill).

Mizrabi, A., and Sullivan, M., *Mathematics for business and social sciences* (Wiley).

**PART II.****EC07 Business Policy.**

The course consists of one seminar a week during the second half of the year.

Cases in business policy.

**Text-book:**

*Business policy: text and cases*, ed. C. R. Christensen and others, 3rd edition (Irwin).

**EC17 Financial Management.**

The course consists of nine seminars in financial management and four seminars in marketing or managerial economics during the first half of the year.

Topics include the management of current assets; forecasting funds requirements; capital budgeting; short-term and long-term sources of finance; capital structure; marketing planning and research; marketing organisation and control; supply and demand analysis and pricing.

**Text-books:**

Weston, J. F., and Brigham, E. F., *Essentials of managerial finance*, 4th edition (Dryden).

Scott, D. F., and others, *Cases in finance* (Prentice-Hall).

**Reference books:**

Hunt, P., and others, *Basic business finance, text and cases*, 4th edition (Irwin).

Brigham, E. F., and others, *Cases in managerial finance*, 3rd edition (Dryden).

Brigham, E. F., and Johnson, R. E., *Issues in managerial finance* (Dryden).

Butters, J. K., and others, *Case problems in finance*, 7th edition (Irwin).

Peirson, C. G., and Bird, R. G., *Business finance*, 2nd edition (McGraw-Hill).

Day, G. S., and others, *Cases in computer and model assisted marketing* (Hewlett Packard).

Haynes, W. W., and Henry, W. R., *Managerial economics: analysis and cases*, 3rd edition (Business Publications).

Kotler, P., *Marketing management: analysis, planning and control*, 3rd edition (Prentice-Hall).

**EC27 Government and Administration.**

The course consists of one seminar a week during the first half of the year.

A knowledge of EC16 Economics (Business Management) is assumed in this course. Project work will be required.

Australian resources and the structure of the Australian economy.

Australian data sources, official and other.

Non-economic factors in policy making, including the Australian federal structure and constitution, political organisations, social values and institutions.

The structure and operation of important Australian and State institutions and policies under the general headings; government regulation (including fiscal policy), monetary operations, overseas trade and socio-economic activities (including communication, urban development, health and social welfare).

Reference books:

Official Year Book of Australia.

The student will be asked to read a number of smaller books by authoritative writers and to consult relevant statements of policy, in order to gain a broad perspective of issues, rather than a more specialised insight into the theory of economic policy formation. Suggested titles include:

Cameron, B., *The elements of economic policy* (Hodder and Stoughton).

Coombs, H. C., *The fragile pattern* (Australian Broadcasting Commission).

Grant, J. McB., and others, *Economic institutions and policy* (Cheshire).

Saver, G., *Australian government today* (M.U.P.).

Annual Reports of statutory bodies and government departments.

#### EC37 Organisation Theory and Behaviour.

A knowledge of EC26 Industrial Sociology is assumed in this course.

The course consists of one seminar a week normally conducted during the first half of the year but in 1979 it will be held in the second half of the year. The following topics will be covered: organisational structure and design, organisational assessment, organisational control, action research and organisational change.

Text-books:

Clark, P. A., *Action research and organizational change* (Harper and Row).

Dalton, G. W., and others, *Organizational change and development* (Irwin-Dorsey).

Dalton, G. W., and others, *Organizational structure and design* (Irwin-Dorsey).

Thompson, J. D., *Organizations in action* (McGraw-Hill).

Reference books:

Argyris, C., *The applicability of organizational sociology* (C.U.P.).

Clark, P. A., *Organizational design* (Tavistock).

Pugh, D. S., and Hickson, D. J., *Organizational structure in its context* (Saxon House).

#### EC47 Quantitative Methods II.

The course consists of one seminar a week during the first half of the year.

A knowledge of EC36 Quantitative Methods I, including the ability to write BASIC computer programmes, is assumed in this course.

Model building for planning and control decision making, including linear and non-linear models, involving linear programming, networks, efficient searching and population models, forecasting models, involving time series analysis, naive, causative and qualitative forecasting, and simulation models, involving computer methods.

Reference books:

Emshoff, J. R., and Sisson, R. L., *Design and use of computer simulation models* (Macmillan).

Naylor, T. H., and others, *Introduction to linear programming* (Wadsworth).

Wheelwright, S. C., and Makridakis, S., *Forecasting methods for management* (Wiley).

Students will find it convenient to have access to a general reference on methods of operations research, such as one of the following:

Phillips, D. T., and others, *Operations research principles and practice* (Wiley).

Taha, H. A., *Operations research: an introduction* (Macmillan).

Wagner, H. M., *Principles of operations research with applications to managerial decisions* (Prentice-Hall).

**EC67 Business Finance.**

The course consists of one seminar a week normally conducted during the second half of the year, but in 1979 it will be held in the first half of the year.

The course consists of two parts. The first part deals with investments, and comprises study of securities markets including fundamental and technical analysis and the efficient market hypothesis; portfolio theory and the capital asset pricing model; and investment management. The second part is concerned with the financial decisions of the firm. The objective of this part of the course is to incorporate risk and uncertainty into the analysis of project evaluation; optimum financial structure; dividend policy; and mergers and takeovers.

Reference books:

- Francis, J. C., *Investments: analysis and management*, 2nd edition (McGraw-Hill).  
 Lorie, J. H., and Hamilton, M. T., *The stock market: theories and evidence* (Irwin).  
 Sharpe, W. F., *Portfolio theory and capital markets* (McGraw-Hill).  
 Van Horne, J. C., *Financial management and policy*, 4th edition (Prentice-Hall).  
 Weston, J. F., and Brigham, E. F., *Managerial finance*, 5th edition (Holt, Rinehart and Winston).

**EC77 Marketing Management.**

The course consists of one seminar a week during the second half of the year. Marketing systems; market research; organisation; planning; product-policy decision, price decision, channel decision, communication-promotion decision, advertising decision, sales-force decision; marketing control.

Text-books:

- Baker, M. J., *Marketing: an introductory text*, 2nd edition (Macmillan).

Reference books:

- Aaker, D., and Myers, J. G., *Advertising management* (Prentice-Hall).  
 Cravens, D. W., and others, *Marketing decision making: concepts and strategy* (Irwin).  
 Midgley, D. F., *Innovation and new product marketing* (Croom Helm).  
 Zaltmann, G., and Burger, P., *Marketing research fundamentals and dynamics* (Dryden Press).

**EC87 Quantitative Methods III(1) — Control of Operations.**

The course consists of one seminar a week during the second half of the year. A knowledge of EC47 Quantitative Methods II will be assumed in this course. Project work will be required. Course and project work will be conducted in a simulated computer based production system environment.

Control of operations, including production, inventory and distribution management.

Reference books:

- Starr, M. K., *Systems management of operations* (Prentice-Hall).  
 Eilon, S., and others, *Distribution management: mathematical modelling and practical analysis* (Griffin).  
 Orlicky, J., *Material requirements planning* (McGraw-Hill).

**EC97 Quantitative Methods III(2) — Planning and Decision Analysis.**

The course consists of one seminar a week during the second half of the year. A knowledge of EC47 Quantitative Methods II will be assumed in this course. Project work will be required.

Statistical decision analysis, project planning and assessment.

Reference books:

- Schlaifer, R., *Probability and statistics for business decisions* (McGraw-Hill).  
 Byrnes, W. G., and Chesterton, B. K., *Decisions, strategies and new ventures* (Allen and Unwin).  
 MANECON—Programmes for elementary decision analysis (Harvard University).

**EC08 Personnel Management.**

A knowledge of EC37 Organisation Theory and Behaviour is assumed in this course.

The course consists of one seminar a week during the second half of the year.

The following topics will be covered: selection and placement, assessment, training and development, participative systems of management, conflict and stress.

## Text-books:

- Dalton, C. W., and others, *Organizational change and development* (Irwin).  
 Blum, M. L., and Naylor, J. C., *Industrial psychology: its theoretical and social foundations* (Harper and Row).  
 Pateman, C., *Participation and democratic theory* (C.U.P.).

## Reference books:

- Campbell, P., and others, *Managerial behaviour, performance and effectiveness* (McGraw-Hill).  
 Davis, L. E., and Cherns, A. B., *The quality of working life* (Free Press).  
 Miner, J. B., *The challenge of managing* (Saunders).

**EC18 Management and Information Systems.**

The course consists of one seminar a week during the second half of the year.

A knowledge of EC36 Quantitative Methods I, including the ability to write BASIC computer programmes, is assumed in this course.

A study of the process of systems analysis and design prior to the installation of an information system, information system selection, the social problems surrounding the planning and implementation of computerised information systems and the managerial implications of computer usage. Topics include on-line systems, service bureaux, computer utilities, privacy, centralisation, staffing, computer security. Accounting and administrative systems will be used as illustrative examples.

## Reference books:

- Adams, E. B., *Management of information technology—case studies* (Petrolcelli/Charter).  
 Arbib, M. A., *Computers and the cybernetic society* (Academic Press)  
 Gotlieb, C. C., and Borodin, A., *Social issues in computing* (Academic Press).  
 Kanter, J., *Management-oriented management information systems* (Prentice-Hall).  
 Sanders, D. H., *Computers and management* (McGraw-Hill).  
 Van Tassel, D., *Computer security management* (Prentice-Hall).

**EC57 Supervised Project Work.**

Supervised project work on an approved topic.

The course consists of two units

- C471 M.B.M. Project, Stage I  
 C472 M.B.M. Project, Stage II

Full-time students are required to enrol for both units.

Part-time students will enrol for Unit C471 M.B.M. Project, Stage I in the first year and Unit C472 M.B.M. Project, Stage II in the second year.

OF THE DEGREE OF  
MASTER OF ECONOMICS  
REGULATIONS

1. (a) The Faculty of Economics may accept as a candidate for the degree any graduate who:

- (i) has obtained the Honours degree of Bachelor of Economics of the University of Adelaide with First or Second-Class Honours; or
- (ii) has obtained an Honours degree of another university, which degree the Faculty regards as being equivalent to a First- or Second-Class Honours degree in Economics of the University of Adelaide.

(b) The Faculty of Economics may accept provisionally as candidates for the degree other graduates of the University of Adelaide or of other universities whose qualifications satisfy the Faculty that they are likely to be able satisfactorily to undertake the work for the degree.

(c) A provisionally-accepted candidate shall, within such time as the Faculty shall in each case prescribe or allow, undertake an approved course of advanced study and pass an examination at First or Second-Class Honours standard before his acceptance as a candidate will be confirmed. Failure to pass the qualifying examination at the required standard at the first attempt shall, unless the Faculty decides otherwise, cancel the provisional acceptance.

(d) A candidate shall not be admitted to the degree before the expiration of one year from his admission to the Honours degree specified in section (a) (i) above, or to the degree which the Faculty accepts as equivalent thereto under section (a) (ii) above, or before the expiration of two academic years from his admission to the degree accepted by the Faculty under section (b) above.

(e) Subject to the approval of the Council the Faculty may, in special cases and subject to such conditions (if any) as it may see fit to impose in each case, accept as a candidate for the degree a person who, irrespective of whether or not he is a university graduate, has given evidence satisfactory to the Faculty of his fitness to undertake work for the degree.

2. A candidate may qualify for the degree by *either*:

(a) satisfactorily completing an approved programme of research work on an approved topic and submitting a satisfactory thesis thereon; *or*

(b) (i) passing an examination set after completion of an approved course of postgraduate study; and

(ii) satisfactorily completing an approved programme of research work on an approved topic and submitting a satisfactory dissertation thereon.

3. (a) A person who wishes to become a candidate for the degree shall apply to the Academic Registrar indicating in general terms the subject of any research work to be undertaken, and where applicable, his proposed course of study for examination.

(b) If it accepts him, provisionally or otherwise, as a candidate for the degree, the Faculty may appoint a supervisor to guide him in his work.

4. A candidate's progress shall be reviewed by the Faculty at the end of each academic year. If, in the opinion of the Faculty of Economics, a candidate is not making satisfactory progress the Faculty may, with the consent of the Council, withdraw its approval of his candidature and the candidate shall cease to be enrolled for the degree.

†5. On completion of his work, the candidate shall lodge with the Academic Registrar three copies of his thesis or dissertation prepared in accordance with directions given to candidates from time to time.\*

6. The Faculty shall appoint examiners to report upon the thesis or dissertation. The examiners shall report to the Faculty and may recommend:

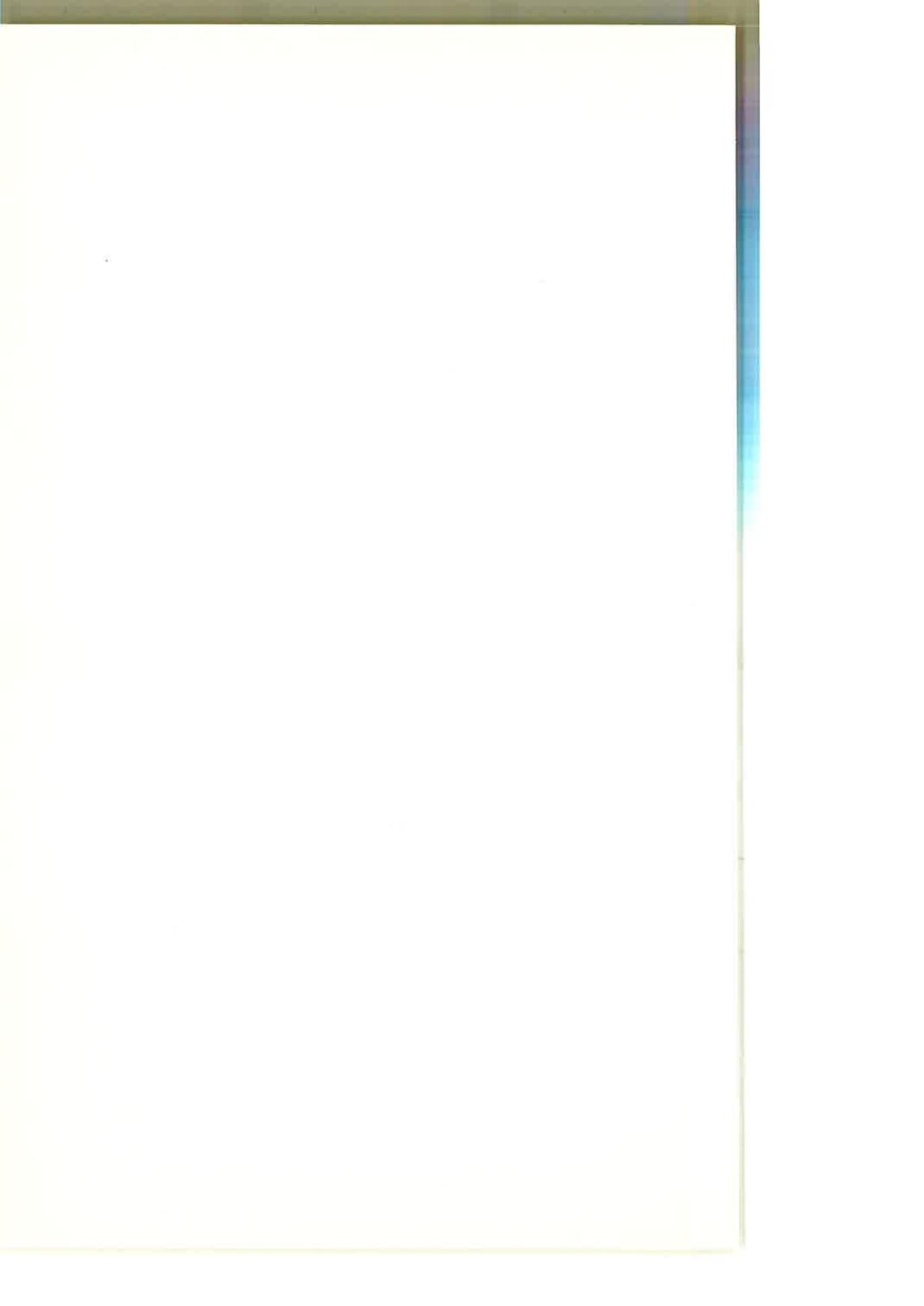
- (a) that the degree be awarded; *or*
- (b) that the thesis or dissertation be returned to the candidate for revision and resubmission; *or*
- (c) that the degree be not awarded.

7. A candidate who complies with all the foregoing conditions and satisfies the examiners of his thesis or dissertation may, on the recommendation of the Faculty of Economics, be admitted to the degree.

Regulations allowed 22 December, 1966.

† Amended 15 January, 1976.

\* Published in "Notes and Instructions to candidates for Higher Degrees":  
*see* Table of Contents.



# FACULTY OF ENGINEERING

## REGULATIONS, SCHEDULES AND SYLLABUSES OF DEGREES

### Bachelor of Engineering (B.E.)

Regulations	-	-	-	-	-	-	-	-	-	774
Schedules	-	-	-	-	-	-	-	-	-	777
Syllabuses	-	-	-	-	-	-	-	-	-	784
Chemical Engineering	-	-	-	-	-	-	-	-	-	784
Civil Engineering	-	-	-	-	-	-	-	-	-	791
Electrical Engineering	-	-	-	-	-	-	-	-	-	798
Mechanical Engineering	-	-	-	-	-	-	-	-	-	805
Engineering II and III	-	-	-	-	-	-	-	-	-	812
Honours Degree	-	-	-	-	-	-	-	-	-	816

### Master of Engineering (M.E.)

Regulations	-	-	-	-	-	-	-	-	-	818
-------------	---	---	---	---	---	---	---	---	---	-----

### Master of Engineering Science (M.Eng.Sc.)

Regulations	-	-	-	-	-	-	-	-	-	820
Schedules	-	-	-	-	-	-	-	-	-	823
Syllabuses	-	-	-	-	-	-	-	-	-	824

### Master of Applied Science (M.App.Sc.)

Regulations	-	-	-	-	-	-	-	-	-	826
Schedules	-	-	-	-	-	-	-	-	-	829

### Doctor of Philosophy (Ph.D.)

Regulations and Schedules: under "Board of Research Studies"—see Table of Contents.

### Doctor of Engineering (D.E.)

Regulations	-	-	-	-	-	-	-	-	-	830
-------------	---	---	---	---	---	---	---	---	---	-----



OF THE DEGREE OF  
**BACHELOR OF ENGINEERING**  
REGULATIONS

1. There shall be an Ordinary and an Honours degree of Bachelor of Engineering.

\*2. Schedules defining the courses of study, including lectures, laboratory and other practical work to be undertaken, and the examinations to be passed, shall be drawn up by the Faculty of Engineering and be submitted to the Council.

Such schedules shall become effective as from the date of approval by the Council or such other date as the Council may determine, and shall be published in the next University Calendar which is issued after that approval has been given.

†3. Except by permission of the Faculty a candidate shall not be admitted to the class in any subject for which he has not completed the pre-requisite work prescribed in the syllabus for that subject.

THE ORDINARY DEGREE.

‡4. (a) To qualify for the Ordinary degree a candidate shall regularly attend lectures and do written, laboratory, and other practical work (where such is required), and pass examinations in the subjects prescribed for one of the following Engineering courses:

- (i) Chemical Engineering;
- (ii) Electrical Engineering;
- (iii) Mechanical Engineering;
- (iv) Civil Engineering.

††(b) Before being admitted to the degree a candidate shall also submit satisfactory evidence that he has completed a period of practical experience in work approved by the Faculty of Engineering as appropriate to the course which he has followed.

\*5. (a) Examinations in any subject or part of a subject shall be held in accordance with the provisions of the relevant schedule made under these regulations.

‡‡(b) A candidate shall enter for examination on the form and by the date prescribed by the Council, but shall not be eligible to present himself for examination unless he has regularly attended the prescribed lectures and has done written and laboratory or other practical work, where required, to the satisfaction of the professors and lecturers concerned.

‡‡ Allowed 20 December, 1956.

† Allowed 9 January, 1958.

†† Allowed 21 December, 1967.

‡ Amended 8 December, 1949, 15 January, 1959, 4 April, 1963, and 28 January, 1965.

\* Amended 15 January, 1976.

\* Amended 2 February, 1978.

°(c) In determining a candidate's final result in a subject (or part of a subject) the examiners may take into account oral, written, practical and examination work, provided that the candidate has been given adequate notice of the way in which work will be taken into account and of its relative importance in the final result.

‡(d) There shall be three classifications of pass at an annual examination in any subject for the Ordinary degree, as follows: Pass with Distinction, Pass with Credit, Pass. The names of candidates who pass with Distinction or with Credit shall be arranged in order of merit within the classification; the names of other candidates who pass shall be arranged in alphabetical order either in one list or in two divisions as the Council may, on the recommendation of the Faculty, determine. If the pass list be published in two divisions, a pass in the higher division may be prescribed in the syllabuses as pre-requisite for admission either to further courses in that subject or to other subjects.

(e) A candidate who fails to pass in any subject shall again attend lectures and do practical work in that subject, to the satisfaction of the professors and lecturers, unless exempted by the Faculty of Engineering. Any such exemption shall hold for one academic year only.

(f) Supplementary examinations will be held only in special circumstances approved by the Faculty after consideration of individual cases.

6. Except in case of illness or other sufficient cause allowed by the Council, no candidate shall be credited in any year with attendance at lectures or laboratory work in a subject unless he has attended at least three-fourths of the lectures and laboratory work respectively in that subject.

7. No candidate shall be granted exemption from attendance at lectures or practical work in any subject, except upon grounds approved by the Council.

8. A candidate who has twice failed to pass the examination in any subject or division of a subject may not present himself again for instruction or examination therein unless his plan of study is approved by the Dean. If he fails a third time he may not proceed with the subject again except by special permission of the Faculty, and under such conditions as the Faculty may prescribe.

For the purpose of this regulation a candidate who is refused permission to sit for examination in any subject or division of a subject shall be deemed to have failed to pass the examination.

9. A student who has passed examinations *in pari materia* in another faculty or otherwise, or who desires that his work at other universities or technical schools should be counted *pro tanto* for the degree of Bachelor of Engineering, may on application be granted such exemption from the requirements of these regulations as the Council shall determine.

\* Amended 2 February, 1978.

‡ Amended 22 December, 1955 and 2 February, 1978.

THE HONOURS DEGREE.

†10. The Honours degree shall be available in each of the following courses:

- (a) Chemical Engineering;
- (b) Electrical Engineering;
- (c) Mechanical Engineering;
- (d) Civil Engineering.

\*11. (a) A candidate desiring to enrol for the Honours degree shall obtain the approval of the department concerned.

§(b) A candidate for the Honours degree must in the one academic year satisfactorily complete the courses of study prescribed in the schedule for the Honours degree. Where these studies include any subject or part of a subject which is prescribed as part of the course of studies for the Ordinary degree the candidate shall complete such subject or part thereof at a standard generally higher than that required of a candidate for the Ordinary degree.

\*\* (c) Notwithstanding the provisions of section (b), the Faculty may in exceptional cases, and subject to such conditions (if any) as it may see fit to impose in each case, accept as a candidate for the Honours degree a person who has previously completed a minor part of the work of the final year of the course for the Ordinary degree.

‡(d) The names of candidates who pass with Honours shall be arranged alphabetically in the following classes under each department: First Class, Second Class Division A, Second Class Division B. A candidate who fails to obtain first or second class Honours may be awarded the Ordinary degree provided he has in all other respects completed the work for that degree.

††(e) Before being admitted to the degree a candidate shall also submit satisfactory evidence that he has completed a period of practical experience in work approved by the Faculty of Engineering as appropriate to the course which he has followed.

Regulations allowed 11 December, 1947.

† Allowed 11 November, 1954; amended 4 April, 1963, and 28 January, 1965.

\* Allowed 11 November, 1954; amended 28 January, 1965, 4 November, 1965, and 23 December, 1976.

‡ Amended 4 October, 1962.

†† Allowed 9 January, 1958; amended 21 December, 1967.

§ Amended 24 December, 1969, and 23 December, 1976.

\*\* Amended 23 December, 1976.

OF THE DEGREE OF  
**BACHELOR OF ENGINEERING**

**SCHEDULES**

(Prescribed by the Council under regulation 2.)

NOTE: Syllabuses of subjects for the degree of B.E. are published below, immediately after these schedules. For syllabuses of subjects taught for other degrees and diplomas see the table of subjects at the end of the volume.

**SCHEDULE I: ARRANGEMENT OF COURSES**

The courses shall occupy four years of full-time study. Details of these courses are set out in schedules IV, V, VI and VII.

**SCHEDULE II: COMPLETION OF SUBJECTS**

It is not necessary for a candidate to take all the subjects of any one year simultaneously or to complete all the subjects set out for one year before enrolling for any subject of the following year provided that the pre-requisite subjects have been passed. But a candidate who desires to take a third-year subject before completing the first year, or a fourth-year subject before completing the second year, must obtain the permission of the Faculty.

**SCHEDULE III: APPROVAL OF SUBJECTS**

During the enrolment period before the beginning of each academic year each candidate must obtain the approval of the Assistant to the Dean of the Faculty of Engineering to enrol for the subjects he wishes to study.

### SCHEDULE IV: CIVIL ENGINEERING

#### FIRST YEAR

NX01 Engineering I	AJ2H Human Geography IH
QM01 Mathematics I	AL2H Logic IH
SP01 Physics I	EE1G Macroeconomics IH
<i>Either</i>	EE2G Microeconomics IH
SG3H Geology IH(E)	AL1H Philosophy IH(A)
And ONE of the following half- subjects having a compatible time- table:	AJ1H Physical Geography IH
SB5H Environmental Biology IH	<i>or</i>
	SC01 Geology I

#### SECOND YEAR

QN12 Applied Mathematics II	NX12 Engineering IIC
NC02 Civil Engineering II	

#### THIRD YEAR

NC03 Civil Engineering IIIA	NX53 Engineering IIIC
NC13 Civil Engineering IIIB	

#### FOURTH YEAR

NC14 Civil Engineering IVA	NC34 Civil Engineering IVC
NC44 Civil Engineering IVB	NC64 Civil Engineering IVD

### SCHEDULE V: ELECTRICAL ENGINEERING

#### FIRST YEAR

SC01 Chemistry I	QM01 Mathematics I
NX01 Engineering I	SP01 Physics I

#### SECOND YEAR

QN12 Applied Mathematics IIB	SP02 Physics II
NE02 Electrical Engineering II	

#### THIRD YEAR

NE13 Electrical Engineering III	<i>Either</i>
NX23 Engineering IIIE	QA12 Computing Science IIC*
	<i>or</i>
	QM02 Pure Mathematics II

#### FOURTH YEAR

NE14 Electrical Engineering IVA	NE34 Electrical Engineering IVC
NE24 Electrical Engineering IVB	

\* Or such other subject offered by the Faculty of Science or the Faculty of Mathematical Sciences as may be approved in individual cases by the Faculty of Engineering.

NOTE: A candidate of high academic ability who has completed the Third Year is recommended to spend an additional year at this stage to qualify for the degree of Bachelor of Science, in order to improve his qualifications to undertake research in engineering science. He is not required to apply to SATAC for admission to the Science course.

## SCHEDULE VI: MECHANICAL ENGINEERING

### FIRST YEAR

NX01 Engineering I	AY01 Psychology I
QM01 Mathematics I	<i>or</i>
SP01 Physics I	EE1G Macroeconomics IH
<i>And ONE of the following:</i>	<i>AND</i>
SC01 Chemistry I	EE2G Microeconomics IH

### SECOND YEAR

QN12 Applied Mathematics IIB	NM02 Mechanical Engineering II
NX42 Engineering IIM	

### THIRD YEAR

NM03 Mechanical Engineering IIIA	<i>Either</i>
NM13 Mechanical Engineering IIIB	NX73 Engineering IIIM A
	<i>or</i>
	NX83 Engineering IIIM B

### FOURTH YEAR

NM85 Engineering Management IV	NM34 Mechanical Engineering IVB
NM24 Mechanical Engineering IVA	NM44 Mechanical Engineering IVC

## SCHEDULE VII: CHEMICAL ENGINEERING

### FIRST YEAR

SC01 Chemistry I	QM01 Mathematics I
NX01 Engineering I	SP01 Physics I

### SECOND YEAR

QN12 Applied Mathematics IIB	<i>Either</i>
NH12 Chemical Engineering III	SC22 Chemistry IIE
	<i>or</i>
	SC02 Physical and Inorganic Chemistry II

NOTE: A candidate who has completed the Second Year of the Chemical Engineering course and who wishes to qualify for the B.Sc. and B.E. degrees concurrently is recommended to undertake one year of full-time study within the Faculty of Science before proceeding to further studies within the Faculty of Engineering. He is not required to apply to SATAC for admission to the Science course.

### THIRD YEAR

NH13 Chemical Engineering IIIA	<i>Either</i>
NH23 Chemical Engineering IIIB	NX93 Engineering IIIM A
	<i>or</i>
	NY93 Engineering IIIM B

### FOURTH YEAR

NH14 Chemical Engineering IVA	NH24 Chemical Engineering IVB
	NH34 Chemical Engineering IVC

### SCHEDULE VIII: CHEMICAL ENGINEERING

(FOR CANDIDATES TRANSFERRING FROM A SCIENCE OR MATHEMATICAL SCIENCES COURSE)

**(a) Transfer after First Year of a B.Sc. course.**

A candidate who has not passed in NX01 Engineering I but who has passed QM01 Mathematics I, SP01 Physics I, and SC01 Chemistry I, and one other first-year subject acceptable to the Faculty of Engineering may complete the academic requirements for the degree of Bachelor of Engineering in Chemical Engineering by passing in the following subjects:

#### SECOND YEAR

Normal second year of Chemical Engineering course.

#### THIRD YEAR

NH13 Chemical Engineering IIIA	NX01 Engineering I
NH23 Chemical Engineering IIIB	NX52 Engineering IIIH

#### FOURTH YEAR

Normal fourth year of Chemical Engineering course.

**(b) Transfer after Second Year of a B.Sc. course.**

A candidate who has passed in QM01 Mathematics I, SP01 Physics I, SC01 Chemistry I, QN22 Applied Mathematics IIA or QN12 Applied Mathematics IIB and SC02 Physical and Inorganic Chemistry II, plus one other first-year subject and one other second-year subject acceptable to the Faculty of Engineering may complete the academic requirements for the degree of Bachelor of Engineering in Chemical Engineering by passing in the following subjects.

Before embarking on the work of the third year of the Chemical Engineering course:

NH62 Chemical Engineering IIS

#### THIRD YEAR

NH13 Chemical Engineering IIIA	NX01 Engineering I
NH23 Chemical Engineering IIIB	NX52 Engineering IIIH

#### FOURTH YEAR

NH14 Chemical Engineering IVA	NH34 Chemical Engineering IVC
NH64 Chemical Engineering IVB S	

**(c) Transfer after completing a B.Sc. course.**

A candidate who has completed the academic requirements for the degree of B.Sc. including the subjects listed in the first paragraph of (b) above plus Reaction Kinetics as part of a third-year subject in Physical and Inorganic Chemistry may proceed to the degree of B.E. in Chemical Engineering by passing in the subjects listed in Schedule VIII (b) or by passing in the following subjects:

Before embarking on the work of the third year of the Chemical Engineering course:

NH62 Chemical Engineering IIS

#### THIRD YEAR

NH13 Chemical Engineering IIIA	NX01 Engineering I
NH63 Chemical Engineering IIIBS	NX52 Engineering IIIH

#### FOURTH YEAR

Normal fourth year of the Chemical Engineering course.

## SCHEDULE IX: ENGINEERING I, II AND III

(SUBJECTS TAUGHT BY MORE THAN ONE DEPARTMENT)

### (a) Engineering I

#### NX01 Engineering I

This subject is taken in First Year by all Engineering candidates.

### (b) Engineering II and III

These are made up of selected parts from the following list:

C201 Stress Analysis A	E202 Electronics
C202 Stress Analysis B	H201 Engineering Materials
C203 Structural Engineering	H202 Materials Engineering
M201 Vibration, Control and Heat Transfer	Q201 Mathematics III (Engineering)
M202 Machine Design	C204 Numerical Analysis in Engineering
E201 Electrical Circuits and Machines	C205 Engineering Economics and Planning

A candidate from the Civil Engineering Department will do NX12 Engineering IIC and NX53 Engineering IIC; from Electrical Engineering, NX23 Engineering IIE; from Mechanical Engineering, NX42 Engineering IIM and NX73 Engineering IIM A or NX83 Engineering IIM B; and from Chemical Engineering, NX93 Engineering IIIH A or NY93 Engineering IIIH B.

The parts making up each of these subjects are listed below.

NX12 Engineering IIC (E201, E202, H201)	NX83 Engineering IIM B (E201, E202, H202)
NX53 Engineering IIC (M201, M202, C204, C205)	NX52 Engineering IIIH (E201)
NX23 Engineering IIE (C201, M202)	NX93 Engineering IIIH A (C201, M202, E201)
NX42 Engineering IIM (C202, C203, H201)	
NX73 Engineering IIM A (E201, E202, Q201)	NY93 Engineering IIIH B (C201, E201, Q201)

A pass in Engineering I, II or III will be granted on the subject as whole and not in individual parts.



## SCHEDULE X: EXAMINATIONS

(a) Final examinations in any subject or part of a subject will be held in one of the examination periods defined by the Council following the course of instruction in that subject or part of a subject.

(b) An examination counting as part of a final examination may be held in a part of a subject if the Faculty so approves. Such examinations will be held during one of the examination periods defined by the Council.

(c) Notwithstanding (a) and (b) above, in special circumstances and with the permission of Council, an examination may be held outside the examination period as defined by the Council.

## SCHEDULE XI: PRACTICAL EXPERIENCE

### (a) General

A total of sixteen weeks' practical experience is required under regulations 4(b) and 11(e), and this should be completed during the university vacations before beginning the work of the fourth year of the course. A candidate should normally complete the requirements of this schedule before enrolling in the fourth year of the course.

The Faculty may grant either partial or total exemption from the requirements of this schedule to a candidate who produces satisfactory evidence of practical experience obtained before he first enrolled in the Faculty; and in special cases, the Faculty may grant dispensation from the requirements.

Credit will not normally be given for periods of less than three consecutive weeks.

A candidate should seek a variety of practical experience appropriate to his academic level.

Service with a reserve unit of the Australian Defence Forces may be counted as suitable practicable experience up to a maximum period of eight weeks. In special circumstances this period may be extended.

Before beginning a period of practical experience, a candidate may ensure that it will be satisfactory to the Faculty by consulting the Chairman of the department concerned. In doubtful cases an inquiry should be addressed to the Dean through the Academic Registrar.

Before the end of the first term in each year of his course, a candidate should submit to the Academic Registrar, on the prescribed form, a certificate from his employer of the practical experience gained during the preceding year.

### (b) Chemical Engineering

At least eight weeks of the required sixteen weeks must be spent in an approved chemical factory or research establishment on plant operation or industrial research or development. In addition, during the May vacation in the fourth year, each student must visit at least eight chemical plants.

### (c) Electrical Engineering

As part of the sixteen weeks' practical experience specified in clause (a), candidates must complete the two week Vacation Course in Workshop Practice arranged by the Faculty, and this will usually be taken in the second year of the course.

### (d) Mechanical Engineering

As part of the sixteen weeks' practical experience specified in clause (a), candidates must complete the course of Workshop Practice arranged by the Faculty, and this will normally be taken in the second year of the course. For the purpose of assessing practical experience, this course will have an equivalent duration of one week.

## SCHEDULE XII: HONOURS DEGREE IN ENGINEERING

A candidate for the Honours degree shall complete the final year of the course for the Ordinary degree and in addition shall satisfactorily complete an advanced course of lectures, seminars and project work as set out in the syllabuses for one of the following subjects:

NH99 Chemical Engineering	NE99 Electrical Engineering
NC99 Civil Engineering	NM99 Mechanical Engineering

## SCHEDULE XIII: TRANSFERS BETWEEN COURSES

In special circumstances, and by decision of the Faculty of Engineering in each case, a student who wishes to transfer from one Engineering course, or from any other course in the University or elsewhere, to either the Civil or Electrical or Mechanical Engineering course may present a first-year subject already passed instead of one of the first-year subjects (other than QM01 Mathematics I, SP01 Physics I or NX01 Engineering I) shown in schedules IV, V and VI. A student wishing to transfer to the Chemical Engineering course may, with permission of the Faculty, present a first- (or later) year subject in place of SP01 Physics I. Such permission will be granted only in special circumstances.

Any student contemplating such transfer should consult the Assistant to the Dean of the Faculty of Engineering.

OF THE DEGREE OF  
**BACHELOR OF ENGINEERING**  
S Y L L A B U S E S

*Text-books:*

Students are expected to procure the latest edition of all text-books prescribed.

*Pre-requisite subjects:*

Unless otherwise stated, a pass in a pre-requisite subject will mean a pass at Division I or higher standard.

*Examinations:*

For each subject students may obtain from the department concerned details of the examination in that subject including the relative weights given to the components (e.g. such of the following as are relevant: assessments, term or mid-year tests, essays or other written or practical work, final written examinations, *viva voce* examinations).

**CHEMICAL ENGINEERING COURSE**

**FIRST-YEAR SUBJECTS.**

**QM01 Mathematics I.**

**SP01 Physics I.**

**SC01 Chemistry I.**

For syllabuses see under the degree of B.Sc. in the Faculties of Mathematical Sciences and Science respectively.

**NX01 Engineering I.**

The syllabus for this subject is presently under review by the Faculty of Engineering. Students are advised to obtain a copy of the revised syllabus from an Assistant to the Dean at or before the time of enrolment. *As an indication only* of the type of material likely to be included in the revised syllabus, the 1978 syllabus is printed below.

**1. ENGINEERING MECHANICS.**

Nature of mechanics. Logic and method. Particles and rigid bodies. Rectilinear motion; speed, velocity, acceleration, rest state. Forces at rest, static equilibrium; forces in motion, moving equilibrium; Newton's laws.

Resultant of coplanar forces and spatial force and couple systems. Vectorial representation. Solution of pinjointed frames. Transverse and axial loadings. Bending moment and shear force diagram. Centroid, centre of pressure. Moments and products of inertia and related theorems. Elements of hydrostatics. Virtual work.

Kinematics of particles and rigid bodies: rectilinear, and curvilinear motion; motion relative to moving axis. Kinetics of particles and rigid bodies: work, energy, power, momentum in mechanical and electromechanical systems. Conservation of energy and momentum.

Behaviour and uses of electromagnetic fields and their interaction with charges and current. Elementary transducers. Energy conversion, stored energy. Induced fields.

## 2. ENGINEERING DRAWING AND DESIGN.

The course, of one lecture and a three-hour drawing office tutorial a week, aims to develop in the student an ability to read and understand engineering drawings, an appreciation of the process of engineering design and its relationship to drawing, and an understanding of the limitations of technical drawing as a medium for communicating information and specifying technical ideas. The course includes: first and third angle projection; pictorial projection; sketching; drawing conventions; geometry of manufacturing processes; functional dimensioning; limits and fits; interchangeable assemblies; standards and standardisation; design method.

### Preliminary reading:

Krick, E. V., *Introduction to engineering: methods, concepts and issues* (Wiley).

### Text-books:

Beer, F. P., and Johnston, E. R., *Mechanics for engineers*, 3rd edition (McGraw-Hill); OR

Meriam, J. L., *Dynamics*, 2nd edition, S.I. version (Wiley); AND

Meriam, J. L., *Statics*, 2nd edition, S.I. version (Wiley).

The Institution of Engineers, Australia, *Australian engineering drawing handbook: basic principles and techniques* (AS CZ1, Part 1—1977).

Giesecke, F. E., and others, *Technical drawing*, 6th International Student Edition (Collier-Macmillan).

Chiswell, B., and Grigg, E. C. M., *S.I. units* (Wiley).

Imperial College of Science and Technology, *Data and formulae for engineering students*, 2nd edition, by J. C. Anderson and others (Pergamon).

### Reference books:

*How things work*, vols. I and II (Paladin).

Jude, D. V., *Civil engineering drawing* (McGraw-Hill).

Lowe, J. F., *Electrical and electronic drawing*, vols. 1 and 2 (McGraw-Hill).

## 3. GENERAL ENGINEERING.

A series of lectures and tutorials on the broad scope of Engineering including its method, historical background and sociological implications.

Students are given an opportunity during the course to inspect the facilities and learn something of the research objectives of the Engineering Departments of the University.

## SECOND-YEAR SUBJECTS.

### QN12 Applied Mathematics IIB.

For syllabus see under the degree of B.Sc. in the Faculty of Mathematical Sciences.

### SC22 Chemistry III.

OR

### SC02 Physical and Inorganic Chemistry II.

For syllabuses see under the degree of B.Sc. in the Faculty of Science.

### NH12 Chemical Engineering II.

Pre-requisite subjects: Pass at Division I or higher standard in SC01 Chemistry I, QM01 Mathematics I and SP01 Physics I.

This subject is divided into two parts:

(a) MATERIALS SCIENCE.

The course consists of two lectures a week throughout the year and three hours a week laboratory work for not more than fifteen weeks.

It covers the following topics: Mechanical and rheological properties of real and idealised materials, atomic arrangements in solids, crystallography, imperfections in crystals. Phase equilibria in metals and alloys, the structure and properties of ceramic phases, plastic deformation of crystalline materials. Phase transformations and heat treatment of steels. Polymer structure, composition and mechanical properties, methods of testing, methods of processing. Corrosion theory and application. Composite materials.

Text-book:

Wyatt, O. H., and Dew-Hughes, D., *Metals, ceramics and polymers* (C.U.P.).

(b) CHEMICAL ENGINEERING PRINCIPLES.

One lecture a week throughout the year; one three hour tutorial a week for two terms; and three hours laboratory work a week for one term covering an introduction to Chemical Engineering calculations, equilibrium stage operations, fuels and energy, and instrumentation. Twelve hours a week for three weeks devoted to an elementary design problem.

Text-books:

Himmelblau, D. M., *Basic principles and calculations in chemical engineering*, 3rd edition (Prentice-Hall).

Harker, J. H., and Allen, D. A., *Fuel science* (Oliver and Boyd).

### THIRD-YEAR SUBJECTS.

#### NH13 Chemical Engineering IIIA.

Pre-requisite subjects: Pass at Division I or higher standard in NH12 Chemical Engineering II or NH62 Chemical Engineering IIS and either QN02 Applied Mathematics II or QN12 Applied Mathematics IIB.

LECTURES: Three hours a week throughout the year dealing with the general theory of molecular and turbulent transport of properties, fluid mechanics, heat transfer processes and mechanical processes.

TUTORIALS: Two hours a week throughout the year devoted to problems designed to illustrate the practical applications of the theory covered in lectures.

LABORATORY WORK: Three hours a week throughout the year on quantitative laboratory work designed to illustrate the principles of transport theory and fluid mechanics as applied to unit operations.

Text-books:

Holman, J. P., *Heat transfer*, 4th edition (McGraw-Hill).

A further text-book to be advised.

Foust, A. S., *Principles of unit operations* (Wiley).

#### NH23 Chemical Engineering IIIB.

Pre-requisite subjects: Pass at Division I or higher standard in NH12 Chemical Engineering II, SC22 Chemistry IIE or SC02 Physical and Inorganic Chemistry II and either QN02 Applied Mathematics II or QN12 Applied Mathematics IIB.

This subject is divided into three parts:

(a) THERMODYNAMICS AND KINETICS.

LECTURES: Two lectures a week throughout the year devoted to chemical engineering thermodynamics, reaction kinetics and reactor design.

TUTORIALS: Two hours a week for three terms devoted to problems designed to illustrate the practical applications of the theory covered in lectures.

Text-books:

Smith, J. M., and Van Ness, H. C., *Introduction to chemical engineering thermodynamics*, 3rd edition (McGraw-Hill).

Laidler, K. J., *Reaction kinetics*, 2 vols. (Pergamon).

Smith, J. M., *Chemical engineering kinetics*, 2nd edition (McGraw-Hill).

Hamblin, F. D., *Abridged thermodynamic and thermochemical tables, S.I. units* (Pergamon).

(b) INTRODUCTION TO PROCESS CONTROL.

LECTURES: One lecture a week for two terms devoted to an introduction to the elements of process control and process dynamics.

TUTORIALS: One hour a week for two terms.

LABORATORY WORK: Three hours a week for two terms.

Text-book:

Weber, T. W., *An introduction to process dynamics and control* (Wiley).

(c) SEMINAR.\*

Three hours a week in first and second terms. Each student is required to submit an essay at the end of first term and present it at a seminar in second term.

\* For students enrolled under Schedule VIII a written report on vacation experience will be required in lieu of part (c) of NH23 Chemical Engineering IIB.

**NX93 Engineering IIIH A**

Pre-requisite subjects: Pass at Division I or higher standard in QM01 Mathematics I and NX01 Engineering I.

Parts C201, M202 and E201. Refer schedule IX(b).

**OR**

**NY93 Engineering IIIH B.**

Pre-requisite subjects: As for NX93 Engineering IIIH A.

Parts C201, E201 and Q201. Refer schedule IX(b).

For syllabuses see below under Engineering II and III immediately after the Mechanical Engineering syllabuses.

**FOURTH-YEAR SUBJECTS.**

**NH14 Chemical Engineering IVA.**

Pre-requisite subject: NH13 Chemical Engineering IIIA.

LECTURES: Three hours a week for two terms devoted to applications of transport theory and of fluid and particle mechanics in the unit operations of chemical engineering.

TUTORIALS: Three hours a week for two terms. Problems studied are of a practical nature, but involve the application of fundamental principles rather than the use of handbooks.

PRACTICAL WORK: Eight hours a week for two terms; a series of projects based on the course of lectures and providing exercise in the preparation of engineering reports.

Text-book:

Students are expected to own a copy of *Chemical engineers' handbook*, 5th edition (McGraw-Hill).

### NH24 Chemical Engineering IVB.

This subject is divided into four parts from which the student must take *either* Parts (a), (b) and (c) or Parts (b) and (d). A choice may not be available every year.

#### (a) REACTOR DESIGN.

LECTURES: One hour a week for two terms dealing with advanced kinetics and reactor design.

TUTORIALS: One hour a week for two terms.

PRACTICAL WORK: A total of twenty-four hours to be completed in two terms.

Text-book:

Smith, J. M., *Chemical engineering kinetics*, 2nd rev. edition (McGraw-Hill).

#### (b) PROCESS DYNAMICS AND CONTROL.

LECTURES: Two hours a week for the first two terms dealing with the principles of (a) process dynamics and simulation, and (b) process control. The theory is developed to a stage where it may be applied to a wide variety of practical problems in design and operation of chemical process plant.

TUTORIAL: Two hours a week for the first two terms.

PRACTICAL WORK: A total of forty-eight hours to be completed in two terms with experiments illustrating problems in process dynamics simulation and control of simple process plant.

Text-book:

Harriott, P., *Process control* (McGraw-Hill).

#### (c) SEMINAR.

Three hours a week in first and second terms. Each student is required to submit an essay at the end of first term and present it at a seminar in second term.

#### (d) MATERIALS ENGINEERING.

LECTURES: Two lectures a week for two terms dealing with the following topics: The selection properties and fabrication of materials for engineering applications involving corrosive and high temperature environments, structural and low alloy steels. The relation of structural variables in polymers to their engineering properties, engineering properties of specific polymers. Processing and selection of plastics.

PRACTICAL WORK: Six hours a week for two terms. The course will involve laboratory techniques and experiments related to the lecture course.

Text-books:

Candidates are advised to consult the lecturers about text and reference books in this subject before the beginning of first term.

### NH34 Chemical Engineering IVC.

Pre-requisite or concurrent subjects: NH14 Chemical Engineering IVA and NH24 Chemical Engineering IVB.

This subject is divided into two parts.

#### (a) INDUSTRIAL ECONOMICS AND OPERATIONS RESEARCH.

LECTURES: Two hours a week for two terms dealing with topics in Industrial Economics and Operations Research.

The lectures deal generally with:

(1) The allocation of scarce economic resources between a number of competing ends; more specifically these lectures deal with the effective allocation of land, labour, capital and enterprise during all phases of the development and operation of a chemical manufacturing enterprise. The treatment includes research and development, patents, market analysis, plant location, process development, pre-investment estimation, capital investment evaluation, selection and purchase of labour and equipment, construction planning and control, production planning and control, cost planning and control, basic management principles, industrial safety, company control, capital procurement, company finance, and a general treatment of the structure and environment of industry.

(2) A review of the potentialities of the methods of operations research, with special reference to problems arising in Chemical Engineering practice.

(b) PLANT DESIGN.

**TUTORIALS:** One tutorial a week for two terms dealing with sources and estimation of data, costing and economic analysis of alternative proposals, the application of Process Engineering and Operations Research techniques to the selection, sizing, design and optimisation of equipment and processes, project scheduling and control, and plant operation and safety considerations.

**PROJECT:** The project occupies approximately 300 hours of full-time work during the months of September-November after the normal Departmental examinations. It involves the economic comparison of alternative processes for the manufacture of a nominated chemical product, the study of a selected process, calculation of material and energy balances, preparation of flow sheets, design of selected plant items, estimation of plant cost and process economics, preparation of a design report and drawing of plant lay-out.

Preliminary reading:

Jones, D. G., *Chemistry and industry* (O.U.P.).

Text-book:

Peters, M. S., and Timmerhaus, K. D., *Plant design and economics for chemical engineers*, 2nd edition (McGraw-Hill).

**NOTE:** Students who have completed one or more years' work in the Faculty of Science: refer Schedule VIII.

Certain courses differing from those listed in the preceding pages are prescribed for students who, having completed one or more years' work in suitable subjects in the Faculty of Science, wish to qualify for the degree of Bachelor of Engineering in Chemical Engineering. These are as follows:

**NH62 Chemical Engineering IIS.**

This course is NH12 Chemical Engineering II, part (b) (Chemical Engineering Principles); it is available throughout the year and will also be offered as a special short course of about four weeks' duration towards the end of each long vacation.

For syllabus see NH12 Chemical Engineering II above.

**NH63 Chemical Engineering IIIBS.**

This subject is divided into three parts.

(a) Materials Science. The syllabus for this part of the subject is as for NH12 Chemical Engineering II, part (a).

(b) Introduction to Process Control. The syllabus for this part of the subject is as for NH23 Chemical Engineering IIIB, part (b).

(c) Written report on vacation experience.



**NH64 Chemical Engineering IVBS.**

This subject is divided into four parts of which the student must take either parts (a), (b) and (c), or parts (b) and (d). No student who has previously passed NH12 Chemical Engineering II may take the latter option.

- |                        |  |
|------------------------|--|
| (a) Reactor Design.    | } See NH24 Chemical Engineering IVB above. |
| (b) Process Control.   |  |
| (c) Seminar.           |  |
| (d) Materials Science. |  |
- The syllabus for this part of the subject is as for NH12 Chemical Engineering II, part (a).

**NX52 Engineering III.**

This course consists of part E201 of Engineering II and III, Electrical Circuits and Machines (*see* Schedule IX(b)).

For syllabus see below under Engineering II and III immediately after the Mechanical Engineering syllabuses.

## CIVIL ENGINEERING COURSE.

### FIRST-YEAR SUBJECTS.

#### NX01 Engineering I.

For syllabus see under Chemical Engineering course, first year.

#### QM01 Mathematics I.

#### SP01 Physics I.

For syllabuses see under the degree of B.Sc. in the Faculties of Mathematical Sciences and Science respectively.

#### AND EITHER

#### SG3H Geology IH(E).

For syllabus, see below.

#### AND

One of the following half-subjects having a compatible time-table:

#### AJ1H Physical Geography.

#### AJ2H Human Geography.

#### AL1H Philosophy IH(A).

#### AL2H Logic IH.

#### EE1G Macroeconomics IH.

#### EE2G Microeconomics IH.

#### SB5H Environmental Biology IH.

#### OR

#### SG01 Geology I.

For syllabuses see the table of subjects at the end of this volume.

---

#### SG3H Geology IH(E).

A half-subject comprising thirty-six lectures and forty-two hours of practical spread over three terms.

The course is intended for students of engineering who do not propose to continue with geology. It is concerned with the study of geological materials, structures and processes which are relevant to the making of engineering decisions.

#### Lectures.

Mineralogy and petrology including the weathering of rocks and formation of soils. Geological structures and processes including erosion and deposition, principles of stratigraphy, geological time scale, rock structures, underground water, and geomorphology.

#### Practical work.

Study of earth materials, interpretation of geological maps and of aerial photographs. Field excursions.

#### Text-book:

Blyth, F. G. H., and de Freitas, M. H., *A geology for engineers*, 6th edition (Arnold).

#### Reference books:

Ernst, W. G., *Earth materials* (Prentice-Hall).

Bloom, A. L., *The surface of the earth* (Prentice-Hall).

Dana, J. D., *Manual of mineralogy*, 18th edition, revised by C. S. Hurlbut (Wiley).

Talbot, J. L., and Nesbitt, R. W., *Geological excursions in the Mount Lofty Ranges and Fleurieu Peninsula* (Angus and Robertson).

Press, F., and Siever, R., *Earth* (Freeman).

SECOND-YEAR SUBJECTS.

NC02 Civil Engineering II.

Pre-requisite subjects: Pass at Division I or higher standard in QM01 Mathematics I and NX01 Engineering I; and Pass at Division II or higher standard in SP01 Physics I.

The course consists of four lectures a week and seven hours of tutorial, drawing office and practical work each week for three terms.

(a) *Stress Analysis*. Five lecture terms on: stress and strain; statically indeterminate problems involving axially loaded members; torsion of circular shafts—bending moments and shearing forces in beams; normal and shearing stresses—elastic and plastic ranges; deflections of beams; simple statically indeterminate beams; short and long columns; buckling; equilibrium equations—combined stresses—strain energy—failure criteria; compatibility equations—experimental stress analysis; dynamic loading of simple elements; composite beams; unsymmetrical bending; shear centre.

(b) *Structural Analysis and Design*. Three lecture terms on: concepts of structural design; beams and plane frame structures; determinacy and stability; deflection of trusses; three pin arch; influence line for determinate beams. Design of steel tension, compression, and flexural members; welding and design of welded members; bolting and design of bolted connections. Design in timber; properties of timber; connections.

(c) *Surveying*. Two lecture terms on: the level and theodolite; linear measurement; slopes and intersections; areas and volumes; C.O.G.O.; tacheometry; circular, parabolic, and spiral curves.

(d) *Hydraulics*. Two lecture terms on: steady fluid flow as an introduction to hydraulic engineering; description and properties of fluid flow; hydrostatics; laws of inviscid fluid flow; elements of simple models; steady uniform and non-uniform flow in closed conduits; normal flow in open channels.

LABORATORY AND OTHER WORK.

One hour of tutorial each week for three terms and three hours of practical and two hours of drawing office for one term will be given to stress analysis. Three hours a week for two terms will be given to surveying. Three hours a week for one term will be given to hydraulics, and two hours a week for two terms to drawing office studies of a civil engineering structure including its design.

Text-books:

- Clark, D., *Plane and geodetic surveying for engineers*, vol. 1, 6th edition (Constable).  
 Higon, A., and others, *Mechanics of materials*, 3rd edition (Wiley); OR  
 Case, J., and Chilver, A. H., *Strength of materials and structures*, 2nd edition (Arnold).  
 Bresler, B., and Lin, T., *Design of steel structures*, 2nd edition (Wiley).  
 Nash, W. A., *Theory and problems of strength of materials* (Schaum).  
 Vennard, J. K., and Street, R. L., *Elementary fluid mechanics*, 5th edition, S.I. version (Wiley); OR  
 Streeter, V. L., and Wylie, E. B., *Fluid mechanics*, 6th edition (McGraw-Hill).  
 Norris, C. H., and Wilbur, J. B., *Elementary structural analysis*, 3rd edition (McGraw-Hill).  
 Standards Association of Australia (Metric Units) as advised.

NX12 Engineering IIC.

Pre-requisite subjects: Pass at Division I or higher standard in QM01 Mathematics I; Pass at Division II or higher standard in SP01 Physics I. A knowledge of matriculation Chemistry will be assumed.

NX12 Engineering IIC is made up of parts E201, E202 and H201 of Engineering II and III. Refer Schedule IX(b).

For syllabuses see under Engineering II and III immediately after the Mechanical Engineering syllabuses.

### QN12 Applied Mathematics IIB.

For syllabus see under the degree of B.Sc. in the Faculty of Mathematical Sciences.

### THIRD-YEAR SUBJECTS.

#### NC03 Civil Engineering IIIA.

Pre-requisite subjects: Pass in NC02 Civil Engineering II; pass in NX12 Engineering IIC; pass at Division II or higher standard in QN12 Applied Mathematics IIB.

This course consists of three lectures a week for three terms, six hours practical or tutorial work a week for two terms, and four hours practical or tutorial work a week for one term.

##### (a) HYDRAULICS.

*Lectures.* A course of six lecture terms on introductory fluid mechanics: stream functions; non-uniform steady flow in open channels, surface curvature, transitions; unsteady flow in closed conduits; elements of design of pipe lines and networks; hydraulic machines, specific speed, selection of pumps; elements of pumped storage; water resources, hydrologic assessment, hydraulic structures, dissipators, water and waste water treatment; flow around immersed bodies, boundary layer, lift, drag, moment and flutter; measurement of flow.

*Practical.* Three hours practical or tutorial a week for two terms and one hour a week for one term.

##### (b) INSTRUMENTATION.

*Lectures.* A course of three lecture terms on: elements of system engineering applied to instrumentation and data collection and recording; physical measurements, detailed examination of transducers for engineering measurements of strain, displacement, pressure, velocity, acceleration, flow discharge, time, temperature and radio activity; input circuits and signal processing facilities; elements of suitable electronic circuits (amplifiers, oscillators, counting and triggering circuits, filters, etc.); recording media chart, magnetic tape (F.M., digital), C.R.O.; analogue—digital conversion, digital transducers, digital data handling and recording techniques for computer entry; specialised measurement procedures, high speed photography (single shot and cine), radio isotope tagging procedures.

*Practical.* Laboratory experiments, demonstrations, design seminars and field exercises are intended to illustrate the application of the lecture subject matter.

##### Text-books:

- Rouse, H. (ed.), *Engineering hydraulics* (Wiley); OR  
Vennard, J. K., and Street, R. L., *Elementary fluid mechanics*, 5th edition, S.I. Units (Wiley); OR  
Streeter, V. L., and Wylie, E. B., *Fluid mechanics*, 6th edition (McGraw-Hill).

#### NC13 Civil Engineering IIIB.

Pre-requisite subjects: Pass in NC02 Civil Engineering II; pass at Division II or higher in QN12 Applied Mathematics IIB.

This course consists of three lectures a week throughout the year and six hours of practical or drawing office a week for two terms and eight hours a week for one term. In addition students will be required to attend a five days practical survey course in the second vacation and a two week survey camp after the end of year examinations.

LECTURES.

(a) *Structural Analysis*. Three lecture terms on: analysis and design of continuous beams and rigid frames by moment distribution and mechanistic plastic concepts; deflection of pin jointed frames; analysis of redundant pin jointed frames; an introduction to principles of virtual work, strain energy, and minimum potential energy concepts.

(b) *Concrete Structures*. Three lecture terms on: materials in and properties of concrete; philosophy of limit state design; bending and shear in beams and slabs; analysis and design by working stress and ultimate load methods; reinforced concrete and masonry walls and columns; elastic and ultimate load methods of design of prestressed and composite concrete beams; loss of stress; bond and anchorage; statically indeterminate prestressed concrete structures.

(c) *Soil Mechanics*. Two lecture terms on: the nature and classification of soils; permeability; shear strength parameters; active and passive Rankine states; earth thrust and resistance; elementary analysis of sheet piled walls and one dimensional consolidation of soils.

(d) *Surveying*. One lecture term on: aerial photographs, determination of camera location, the photo-theodolite, and on spherical trigonometry, calculations on the spheroid and the Australian Map Grid.

DESIGN PROJECTS.

The analysis and design of (a) a steel and (b) a concrete structure will each occupy three hours a week for half a year.

LABORATORY WORK.

Practical work in the concrete, soils and structural laboratory will each occupy three hours a week for one term.

SURVEY CAMPS.

In the practical survey course students will carry out survey tasks in the neighbourhood of the University. In the survey camp students will carry out field and design tasks, at a site away from the University.

Text-books:

- Smith, G. N., *Elements of soil mechanics for civil and mining engineers*, 3rd rev. edition (Crosby-Lockwood).
- Design; control and characteristics of concrete* (Cement and Concrete Association of Australia).
- Hughes, B. P., *Limit state theory for reinforced concrete*, 2nd edition (Pitman).
- Australian reinforced concrete design handbook*, 2nd rev. edition (Cement and Concrete Association of Australia).
- Warner, R. F., and others, *Reinforced concrete* (Pitman).
- Norris, C. H., and Wilbur, J. B., *Elementary structural analysis*, 3rd edition (McGraw-Hill).
- Bresler, B., and Lin, T., *Design of steel structures*, 2nd edition (Wiley).
- National Association of Australian State Road Authorities, *NAASRA bridge design specifications*, 5th edition.
- Moffitt, F. H., *Photogrammetry*, 2nd edition (International Textbook Co.).
- Australia. National Mapping Council, *Australian map grid, technical manual*, 2nd edition (A.G.P.S.).

Standards Association of Australia:

- S.A.A. *loading code*. AS. 1170-1971.
- S.A.A. *steel structures code*. AS. 1250-1975.
- S.A.A. *code for welding in building*. AS. 1554-1974.
- S.A.A. *code for prestressed concrete*. AS. 1481-1974.
- S.A.A. *code for concrete structures*. AS. 1480-1974.

*Reinforced concrete detailing manual* (Cement and Concrete Association of Australia).

### **NX53 Engineering IIIC.**

Pre-requisite subjects: Pass in NC02 Civil Engineering II and NX12 Engineering IIC, pass at Division II or higher standard in QN12 Applied Mathematics IIB.

This course consists of four lectures a week and five hours of drawing office and tutorial.

NX53 Engineering IIIC is made up of parts M201, M202, C204 and C205 of Engineering II and III. Refer Schedule IX(b).

For syllabuses see under Engineering II and III immediately after the Mechanical Engineering syllabuses.

---

### **FOURTH-YEAR SUBJECTS.**

Pre-requisite subjects: NC03 Civil Engineering IIIA, NC13 Civil Engineering IIIB and NX53 Engineering IIIC.

#### **CORE COURSE.**

The following three subjects will occupy two terms:

### **NC14 Civil Engineering IVA.**

#### **STRUCTURES.**

(a) Two lecture terms on: the application of stiffness and flexibility concepts to beams and grillages, two and three dimensional pin-jointed and rigid frames; introduction to the concepts of the finite element method.

(b) Two lectures terms on: the analysis and design of columns; stability of beams; structural behaviour of thin walled members; geometrically non-linear structures.

(c) Two lecture terms on: vibration of structures; design for earthquake and wind; introduction to plate theory; plate buckling.

(d) Tutorials one hour a week for two terms and practical three hours a week for one term.

#### Reference books:

- Biggs, J. M., *Introduction to structural dynamics* (McGraw-Hill).  
Hall, A. S., and Woodhead, R. W., *Frame analysis* (Wiley).  
Hoff, N. J., *The analysis of structures* (Wiley).  
Ghali, A., and Neville, A. M., *Structural analysis*, chapters 20 and 24 (Intext).  
Livesley, R. K., *Matrix methods of structural analysis*, 2nd edition (Pergamon).  
Timoshenko, S. P., *Theory of plates and shells*, 2nd edition (McGraw-Hill).  
Timoshenko, S. P., *Theory of elastic stability*, 2nd edition (McGraw-Hill).  
Warburton, G. B., *The dynamical behaviour of structures*, 2nd edition (Pergamon).  
Zienkiewicz, O. C., *Finite element method in engineering science*, 2nd edition (McGraw-Hill).

### NC44 Civil Engineering IVB.

#### (a) SOIL MECHANICS.

Three lecture terms on: physico-chemical aspects of soils; local types of soils; soil stabilisation; stress deformation properties of soils; movement of water in saturated and unsaturated soils; elastic theory applied to soils; bearing capacity of shallow footings; analysis of the stability of slopes, dynamics of soils; computation of settlement.

Experimental work in the laboratory occupies three hours a week for one term.

Text-book:

Lambe, T. W., and Whitman, R. V., *Soil mechanics* (Wiley).

#### (b) TRANSPORTATION.

Two lecture terms and nine tutorials or practicals on: transportation tasks and net works; nodes and links; modes of transport and interchanges; segregation of traffic, parking facilities; intersections. Use will be made of systems engineering and economic and operational analysis.

Reference books:

Blunden, W. R., *Land-use/transport system* (Pergamon).

Hennes, R. G., and Eske, M., *Fundamentals of transportation engineering*, 2nd edition (McGraw-Hill).

Hutchinson, B. G., *Principles of urban transport systems planning* (McGraw-Hill).

#### (c) HYDRAULICS.

Two lecture terms and twenty-seven hours of tutorials/practicals and site visits on: turbulence; flow through porous media; elements of stratified flow, cavitation, steady and unsteady fluid flow forces, dispersion and wind loads.

Reference books:

Rouse, H., *Engineering hydraulics* (Wiley).

Ippen, A. T. (ed.), *Estuary and coastline hydrodynamics* (McGraw-Hill).

Wiegel, R. L., *Oceanographical engineering* (Prentice-Hall).

Streeter, V. L., *Handbook of fluid dynamics* (McGraw-Hill).

### NC34 Civil Engineering IVC.

#### (a) MANAGEMENT AND PROFESSIONAL PRACTICE.

Two lecture terms on: tenders, contracts and their variation, labour and human relations, site organisation and elements of cost control; private and government engineering organisations; trusts and boards; relations between professionals and specialists; professional ethics, responsibilities and liabilities; acts and powers; arbitration; the engineer and the law; responsibility to the community and employer, environmental impacts and their assessment, legislation controlling building, planning and public health; regulations under acts.

Reference books:

Gersth, J. E., and Hutton, S. P., *Engineers: the anatomy of a profession* (Tavistock).

Greenwood, N. H., and Edwards, J. M. B., *Human environments and natural systems* (Duxbury Press).

#### (b) DESIGNS, PROJECT AND SEMINARS.

Students will be required to carry out two design tasks for which nine hours a week are available in the first one and a half terms.

Students will be required to submit a report on a project of an experimental nature, and give a seminar on a related subject.

Students will be required to satisfactorily complete the work of the survey camps normally held at the end of NC13 Civil Engineering IIIB.

NC64 Civil Engineering IVD.

Each option consists of two lectures and one tutorial a week during the third term. Students will select (subject to approval of the chairman of the Department) three options from the following:

(a) THEORY OF PLATES AND SHELLS.

A course of sixteen lectures and eight tutorials on: simply supported rectangular plates, and plates with arbitrary boundary conditions, vibration and stability of plates, design of flat slabs, yield line theory; membrane shell action; cylindrical shells.

(b) FINITE ELEMENT METHOD.

A course of sixteen lectures and eight tutorials on: finite element procedures, stiffness formulation through energy methods, beam elements, displacement functions, triangular in-plane element, C.S.T. and L.S.T., rectangular plate bending element, triangular element for flow problems.

(c) SOIL MECHANICS.

A course of sixteen lectures and eight tutorials on: beams on elastic foundations, applications of plasticity theory to soils, advanced analysis of slope stability; flow of bulk solids, piled foundations, site investigation, earth anchors.

(d) HYDRAULICS EI.

(See note under (e) below.)

(e) HYDRAULICS EII.

Note: Any two of the following topics may comprise an elective option, however, in any year not more than four of the topics will be offered.

- (i) *River Engineering*: sediment transport; regime flow and meanders; river training works; flood routing; models.
- (ii) *Coastal and Ocean Engineering*: coastal processes; wave climate and processes; wind and rain effects; coastal structures, groynes, bypassing etc.; wave forces.
- (iii) *Irrigation*: types; crop needs, frequency, layouts, conjunctive supply; supplementary irrigation.
- (iv) *Advanced hydraulic analysis and modelling*: numerical analysis; continuous system simulation; wind tunnel static and dynamic modelling; elements of aero-elasticity; advanced hydraulic models.
- (v) *Advanced Fluid Mechanics*: convective—diffusion analysis; free surface flow instabilities; MAC analysis; finite elements method applications.
- (vi) *Applied Hydrology*: drainage and urban hydrology—wide surface drainage, parking lots, runways, roads; slug flow; gutter entry problems; R.R.L. method and large system analysis.

(f) TRANSPORTATION.

A course of sixteen lectures and eight tutorials in transportation planning; aims, objectives, philosophy; planning as a process; data collection and analysis; models for transportation generation, distribution and modal split; traffic flow and interaction; model of traffic; delays and queuing theory; interaction of land use and transport.



## ELECTRICAL ENGINEERING COURSE.

### FIRST-YEAR SUBJECTS.

#### **NX01 Engineering I.**

For syllabus see under Chemical Engineering course, first year.

#### **QM01 Mathematics I.**

#### **SP01 Physics I.**

#### **SC01 Chemistry I.**

For syllabuses see under the degree of B.Sc. in the Faculties of Mathematical Sciences and Science respectively.

### SECOND-YEAR SUBJECTS.

#### **QN12 Applied Mathematics IIB.**

#### **SP02 Physics II.**

For syllabuses see under the degree of B.Sc. in the Faculties of Mathematical Sciences and Science respectively.

#### **NE02 Electrical Engineering II.** [Formerly NE03 Electrical Engineering II.]

Pre-requisite subjects: Pass at Division I or higher standard in NX01 Engineering I, QM01 Mathematics I and SP01 Physics I.

Pre-requisite or concurrent subject: QN12 Applied Mathematics IIB.

*Lectures.* An average of three lectures a week throughout the year.

*Tutorial.* Two hours a week throughout the year devoted to the working and discussion of problems, and the discussion of practical and theoretical topics.

*Practical.* Three hours practical a week throughout the year, comprising a series of experiments and exercises designed to support the subject matter of the lectures.

#### (a) NETWORK THEORY (35 lectures).

Kirchoff's laws, mesh and element equations, mesh, node and mixed methods of analysis, free and forced response of networks, convolution, network theorems, steady state a.c. methods, transformers, polyphase systems, resonance and complex frequency, two ports, Laplace and Fourier Transform methods.

#### (b) ELECTRONICS (26 lectures).

A brief treatment of solid state and vacuum electronics. Solid state devices, their characteristics and equivalent circuits. In particular, rectifiers, limiters, clamps and gates. Single stage amplifiers with resistive and reactive loads. Multi-stage amplifiers with RC, LC and transformer coupling. High frequency equivalent circuits and frequency response. Class A, AB and B operation, power amplifiers, Feedback amplifiers. Controlled rectifiers.

#### (c) ENERGY STORAGE AND CONVERSION (18 lectures).

Physical aspects; the magnetic circuit; a.c. excitation of magnetic structures; transformers. Electromechanical energy conversion principles, stored energy, forces and torques of electromagnetic origin. Theory and operation of d.c. machines.

Text-books:

Gourishankar, V., and Kelly, T., *Electromechanical energy conversion*, 2nd edition (International Textbook Co.).

And EITHER:

Angelo, E. J., *Electronic circuits*, 2nd edition (McGraw-Hill); OR

Alley, C. L., and Atwood, K. W., *Electronic engineering*, 3rd edition (Wiley); OR

Ryder, J. D., *Electronic fundamentals and applications*, 5th edition (Pitman).

Reference books:

Lowenberg, E. C., *Theory and problems of electronic circuits* (Schaum).  
Fitzgerald, A. E., Kingsley, C., and Kusko, A., *Electric machinery*, 3rd edition (McGraw-Hill).

Gray, P. E., and Searle, C. L., *Electronic principles* (Wiley).

Trick, T. N., *Introduction to circuit analysis* (Wiley).

Vacation Course in Workshop Practice.

(See Schedule X.)

The course consists of the equivalent of two weeks full-time instruction in an approved engineering workshop partly during a vacation as arranged by the Faculty. The course deals with the basic machine-tools and processes with the aim of developing an understanding of fabrication techniques necessary to modern production processes.

Text-book:

*Introduction to manufacturing techniques* (S.A. Inst. of Tech., School of Mech. Eng.).

Reference book:

Begeman, M. L., and Amstead, B. H., *Manufacturing processes*, 6th edition (Wiley).

THIRD-YEAR SUBJECTS.

NE13 Electrical Engineering III.

Pre-requisite subjects: Pass in NE03 Electrical Engineering II; pass at Division I or higher standard in QN12 Applied Mathematics IIB.

Pre-requisite or concurrent subject: SP02 Physics II.

*Lectures.* Four lectures a week throughout the year.

*Tutorial.* Two hours a week throughout the year devoted to the working and discussion of problems, and the discussion of practical and theoretical topics.

*Practical.* Practical work of six hours a week, comprising a series of experiments and exercises.

(a) FIELDS, LINES AND GUIDES (26 lectures).

An elementary treatment of transmission lines, plane waves, guided waves and radiation using circuit and field concepts where appropriate. An introduction to waveguides and microwave components.

(b) ENERGY CONVERSION (26 lectures).

Transient analysis of d.c. machines. Steady state performance of three phase induction and synchronous machines. Single phase motors. Symmetrical components.

(c) ELECTRONICS (26 lectures).

A further development of amplifier techniques. Modulation and detection. Introduction to analogue computers and computer logic circuits. Multivibrators, astable, bistable and monostable.

(d) CONTROL (18 lectures).

Transfer functions; transient and steady state analyses; root locus; Bode and Nyquist plots; absolute and relative stability; series compensation using root locus and frequency response techniques.

(e) NETWORKS (8 lectures).

An introduction to image parameters and filter theory; convolution; topological methods.

Text-books:

- D'Azzo, J. J., and Houpis, C. H., *Feedback control system analysis and synthesis*, 2nd edition (McGraw-Hill).  
Alley, C. L., and Atwood, K. W., *Electronic engineering*, 3rd edition (Wiley); OR  
Ryder, J. D., *Electronic fundamentals and applications*, 5th edition (Pitman).  
Gourishankar, V., and Kelly, T., *Electromechanical energy conversion*, 2nd edition (International Textbook Co.).

Reference books:

- As for NE02 Electrical Engineering II; and  
Adler, R. B., and others, *Electromagnetic energy transmission and radiation* (Wiley).  
Dorf, R. C., *Modern control systems*, 2nd edition (Addison Wesley).  
International Telephone and Telegraph Corporation, *Reference data for radio engineers*, 6th edition.  
Plonsey, R., and Collin, R. E., *Principles and applications of electromagnetic fields* (McGraw-Hill).  
Ginzton, E. L., *Microwave measurements* (McGraw-Hill).  
Lindmayer, J., and Wrigley, C. Y., *Fundamentals of semi-conductor devices* (Van Nostrand).  
Nashelsky, L., *Introduction to digital computer technology* (Wiley).  
Millman, J., and Halkias, C. C., *Integrated electronics* (McGraw-Hill).  
Kuo, Tsung-i, *Linear networks and systems* (McGraw-Hill).  
Smol, G., and others, *Telecommunications: a systems approach* (Allen and Unwin).  
Terman, F. E., *Radio engineers' handbook* (McGraw-Hill).  
Thaler, G. J., and Wilcox, M. L., *Electric machines* (Wiley).  
Van Valkenburg, M. E., *Network analysis*, 3rd edition (Prentice-Hall).  
Johnson, W. C., *Transmission lines and networks* (McGraw-Hill).  
Wait, J. V., and others, *Introduction to operational amplifier theory and applications* (McGraw-Hill).  
Zeines, B., *Introduction to network analysis* (Prentice-Hall).  
Zverev, A. I., *Handbook of filter synthesis* (Wiley).  
Additional references may be given during the course.

### NX23 Engineering IIIE.

Pre-requisite subjects: Pass at Division II or higher standard in SP01 Physics I, pass at Division I or higher standard in QM01 Mathematics I and NX01 Engineering I.

NX23 Engineering IIIE is made up of parts C201 and M202 of Engineering II and III. Refer Schedule IX(b).

For syllabuses see under Engineering II and III immediately after the Mechanical Engineering syllabuses.

**QA12 Computing Science IIC.**

OR

**QM02 Pure Mathematics II.**

For syllabuses see under the degree of B.Sc. in the Faculty of Mathematical Sciences.

**FOURTH-YEAR SUBJECTS.**

**NE14 Electrical Engineering IVA:**

Pre-requisite subjects: Pass in NE13 Electrical Engineering III; pass at Division II or higher standard in SP02 Physics II.

*Lectures.* Five lectures a week throughout the year, divided approximately as follows:

(a) **MICROWAVE ENGINEERING (18 lectures).**

Electromagnetic theory, propagation in free space and in waveguides, fields in guides, modes, coupling, microwave circuit theory, directional couplers, cavities, periodic structures, non-reciprocal components.

(b) **ANTENNAS AND PROPAGATION (18 lectures).**

Advanced electromagnetism, antenna parameters, theoretical methods: assumed circuit distribution, modal analysis and synthesis, integral equations, geometrical optics; applications to particular antennas, ground wave propagation, ionospheric propagation.

(c) **DIGITAL SYSTEMS (27 lectures).**

Number systems, arithmetic and logical operations, combinational logic, minimisation techniques, arithmetic units, organisation of a computer, instructions sets and addressing modes, parallel adder, carry look ahead, sequential circuits (asynchronous and clocked), J.K. flip flop, BCD and Gray codes, A/D conversion, memory systems, MSI and LSI logic circuits.

(d) **COMMUNICATION THEORY (18 lectures).**

Signals and spectra; network theory; random signals and noise; noise in amplifiers; modulation systems; sampling; pulse code modulation; information theory; coding.

(e) **DESIGN FOR INTEGRATED CIRCUITS (27 lectures).**

Semiconductor preparation, processing and properties, planar technology, component formation and isolation, thick and thin film technology, equivalent circuits, interconnections, design of circuits suitable for integration.

(f) **MINI AND MICRO COMPUTERS (9 lectures).**

Computers as system components, structure of mini computers, instructions, assemblers and loaders, input and output and interrupt features.

**Text-books:**

Allison, J., *Electronic integrated circuits—their technology and designs* (McGraw-Hill).

Blakeslee, T. R., *Digital design with standard MSI and LSI* (Wiley).

Carlson, A. B., *Communication systems* (McGraw-Hill); OR

Ziener, R. E., and Tranter, W. H., *Principles of communication* (Houghton Mifflin).

Collin, R. E., *Foundations for microwave engineering* (McGraw-Hill).

Grove, A. S., *Physics and technology of semi-conductor devices* (Wiley).

Reference books:

- As for NE13 Electrical Engineering III; and  
 Bartee, T., *Digital computer fundamentals*, 4th edition (McGraw-Hill).  
 Doyle, J. M., *Thin film and semiconductor integrated circuitry* (McGraw-Hill).  
 Harrington, R. F., *Time harmonic electromagnetic fields* (McGraw-Hill).  
 Haykin, S. S., *Synthesis of RC active filter networks* (McGraw-Hill).  
 Hill, F. J., and Peterson, G. R., *Introduction to switching theory and logical design* (Wiley).  
 Hill, F. J., and Peterson, G. R., *Digital systems: hardware organisation and design* (Wiley).  
 Hoernes, G. E., and Heilveil, M. F., *Introduction to Boolean algebra and logic design* (McGraw-Hill).  
 Hoeschele, D. F., *Analog-to-digital, digital-to-analog conversion techniques* (Wiley).  
 Jasik, H., *Antenna engineering handbook* (McGraw-Hill).  
 Kraus, J. D., *Antennas* (McGraw-Hill).  
 Ledley, R. S., *Digital computer and control engineering* (McGraw-Hill).  
 Lewin, D., *Logical design of switching circuits*, 2nd edition (Nelson).  
 Lewin, D., *Theory and design of digital computers* (Nelson).  
 Lynn, D. K., and others, *Analysis and design of integrated circuits* (McGraw-Hill).  
 Marcus, M. P., *Switching circuits for engineers*, 3rd edition (Prentice-Hall).  
 Mitra, S. K., *Active inductorless filters* (I.E.E.E. Press).  
 Mitra, S. K., *Analysis and synthesis of linear active networks* (Wiley).  
 Morris, N. M., *Logic circuits*, 2nd edition (McGraw-Hill).  
 Terman, F. E., and Pettit, J. M., *Electronic measurements*, 2nd edition (McGraw-Hill).  
 Roddy, D., *Introduction to microelectronics* (Pergamon).  
 Wickes, W. E., *Logic design with integrated circuits* (Wiley).

NE24 Electrical Engineering IVB.

Pre-requisite subjects: Pass in NE13 Electrical Engineering III; pass at Division II or higher standard in SP02 Physics II.

*Lectures.* Four lectures a week throughout the year, chosen from the following topics, some of which may be presented as options. Different topics may be substituted according to circumstances.

(a) NETWORKS (18 lectures).

Synthesis of passive and active networks: LC and RC immittances, transfer functions, approximation theory and active RC circuits.

(b) POWER SYSTEMS (18 lectures).

Network representation, components of power systems, network analysis and load flow, power and frequency control, voltage and reactive power control, "steady state" and "transient" stability, protection.

(c) CONTROL SYSTEMS (18 lectures).

Performance specifications for control system design. Small signal analysis and describing function techniques for non-linear systems. Introduction to state variable methods. Phase plane techniques. Design of state variable feedback controllers.

(d) ANALOGUE TECHNIQUES (9 lectures).

Linear computing circuits, function generators, multipliers, system simulation, operational amplifiers, hybrid computer techniques.

\* (e) MICROWAVE SOLID STATE ELECTRONICS (9 lectures).

Principles and application of varistors, varactors, negative resistance diodes, controllable impedance diodes, avalanche diodes, transferred electron devices.

\* (f) RELIABILITY (9 lectures).

Reliability as a performance characteristic, definitions, types of failure, probability, confidence levels and limits of mean time between failures, prediction from life test data, testing.

\* (g) PHYSIOLOGY (9 lectures).

Cell membranes, nerve conduction, sensory neurophysiology, retinal processes, colour vision, control system analysis.

\* (h) ELECTRON DYNAMICS.

Properties of the atom. Emission and deflection of electrons. The C.R.O., cyclotron, mass spectrometer etc.

\* (i) POWER ELECTRONICS (18 lectures).

Commutation, voltage controllers, controlled rectifiers, inverters. Applications to the control of electrical machines. This course is provided for M.Eng.Sc. candidates but is available for degree candidates.

(j) SPECIALIST LECTURES (20 lectures).

Given by practising engineers from industry and government establishments on topics such as operation of power systems, television techniques, telecommunication and radar.

(k) MACHINE DYNAMICS (18 lectures).

Mathematical modelling of electrical machinery and associated control equipment. Dynamic analysis of industrial drives and generators. Principles and simulation of solid-state motor controllers.

\* (l) USING A MICROPROCESSOR (6 lectures and 4 laboratory sessions).

Designed to give the student "hands on" experience in using a microprocessor and to give a general background to this area of design.

\* Optional topics; TWC to be selected by candidate.

Reference books:

- As for NE13 Electrical Engineering III; and  
Adkins, B., and Harley, R. G., *General theory of alternating current machines* (Chapman and Hall).  
Bazovsky, I., *Reliability theory and practice* (Prentice-Hall).  
Blackman, P. F., *Introduction to state variable analysis* (Macmillan).  
Carlson, A. B., *Communication systems*, 2nd edition (McGraw-Hill).  
Crary, S. B., *Power system stability*, 2 vols. (Wiley).  
Dummer, G. W. A., and Griffin, N. B., *Electronics reliability—calculation and design* (Pergamon).  
Huskey, H. D., and Korn, G. A. (eds.), *Computer handbook* (McGraw-Hill).  
*Introduction to microprocessors* by D. Aspinall and others (Pitman).  
Kuo, Fa-k'un, *Network analysis and synthesis*, 2nd edition (Wiley).  
Osborne, A., *An introduction to microcomputers, Vol. 1 basic concepts* (Adam Osborne Associates).  
Peatman, J. B., *Microcomputer based design* (McGraw-Hill).  
Smith, C. O., *Introduction to reliability in design* (McGraw-Hill).  
Hughes, W. L., *Nonlinear electrical networks* (Ronald Press).  
Weedy, B. M., *Electric power systems*, 2nd edition (Wiley).

NE34 Electrical Engineering IVC.

Pre-requisite subjects: Pass in NE13 Electrical Engineering III; pass at Division II or higher standard in SP02 Physics II.

(a) MANAGEMENT AND INDUSTRIAL ORGANISATION (27 lectures).

Given by visiting lecturers on industrial relations, occupational safety, trade unions, decision making, management accounting, personnel management, industrial legislation, industrial development, international trade, organisation structures, nature of management etc.

Reference book:

Bethel, L. L., and others, *Industrial organisation and management*, 5th edition (McGraw-Hill).

(b) EXPERIMENTAL INVESTIGATION AND SEMINAR (300 hours).

Each candidate will be required to submit reports on one or more projects carried out during the year. This will involve theoretical surveys and the design, development and testing of equipment. The candidate will also be required to present the results of his investigation in the form of seminars and demonstrate his equipment where appropriate.

Reference books:

Wearne, S. H. (ed.), *Control of engineering projects* (Edward Arnold).

Candidates should consult the books listed under Section II of the Notes and Instructions to Candidates for Higher Degrees (by thesis).

## MECHANICAL ENGINEERING COURSE.

### FIRST-YEAR SUBJECTS.

#### **NX01 Engineering I.**

For syllabus see under Chemical Engineering course, first year.

#### **QM01 Mathematics I.**

#### **SP01 Physics I.**

*EITHER*

#### **SC01 Chemistry I.**

For syllabuses see under the degree of B.Sc. in the Faculty of Mathematical Sciences and Science respectively.

*OR*

#### **AY01 Psychology I.**

For syllabus see under the degree of B.A. in the Faculty of Arts.

*OR*

#### **EE1G Macroeconomics IH.**

*AND*

#### **EE2G Microeconomics IH.**

For syllabuses see under the degree of B.Ec. in the Faculty of Economics.

### SECOND-YEAR SUBJECTS.

#### **QN12 Applied Mathematics IIB.**

For syllabus see under the degree of B.Sc. in the Faculty of Mathematical Sciences.

#### **NM02 Mechanical Engineering II.**

Pre-requisite subjects: Pass at Division I or higher standard in SP01 Physics I, QM01 Mathematics I and NX01 Engineering I; pre-requisite or concurrent subject: NX42 Engineering IIM.

Introductory courses in the basic laws of thermodynamics and in the analysis of machine elements and manufacturing processes. The course comprising three lectures and six hours' laboratory and tutorial work a week throughout the year, is presented in three parts:

Part 1. Thermodynamics.

Part 2. Production technology.

Part 3. Machine design.

Preliminary reading:

Street, A., and Alexander, W., *Metals in the service of man*, 4th edition (Penguin).

*How things work*, 2 vols. (Paladin).

Krick, E. V., *Introduction to engineering: methods, concepts and issues* (Wiley).

Angrist, S. W., and Hepler, L. G., *Order and chaos: laws of energy and entropy* (Basic Books).



**Text-books:**

As for NX01 Engineering I, plus  
Shigley, J. E., *Mechanical engineering design*, 3rd edition (McGraw-Hill).  
Van Wylen, G. J., and Sonntag, R. E., *Fundamentals of classical thermodynamics*, S.I. version, 2nd edition (Wiley).  
Schey, J. A., *Introduction to manufacturing processes* (McGraw-Hill).

**Reference books:**

Siegel, M. J., and others, *Mechanical design of machines*, 4th edition (International Text-book Co.).  
The Institution of engineers, Australia, *Australian engineering drawing and design handbook: basic principles and techniques* (AS CZ1 Part 1—1977).  
Kalpakjian, S., *Mechanical processing of materials* (Van Nostrand).  
Cook, N. H., *Manufacturing analysis* (Addison-Wesley).

**NX42 Engineering IIM.**

Pre-requisite subjects: Pass at Division I or higher standard in SP01 Physics I, QM01 Mathematics I and NX01 Engineering I.

NX42 Engineering IIM is made up of parts C202, C203 and H201 of Engineering II and III. Refer Schedule IX(b).

For syllabuses see under Engineering II and III immediately after the Mechanical Engineering syllabuses.

**THIRD-YEAR SUBJECTS.**

**NM03 Mechanical Engineering IIIA.**

Pre-requisite subjects: Pass in NM02 Mechanical Engineering II and NX42 Engineering IIM; pass at Division I or higher standard in QN12 Applied Mathematics IIB.

An introductory course in heat transfer, fluid mechanics, automatic control, and in the engineering applications of thermodynamics, including about 104 lectures and tutorials and 80 hours' laboratory work.

**(a) THERMODYNAMICS AND HEAT TRANSFER.**

Behaviour of gases, gas mixtures and gas-vapour mixtures. Introduction to combustion. Ideal cycle analysis of engineering systems. Introduction to the three modes of heat transfer, i.e. conduction, convection and radiation.

**Text-books:**

Van Wylen, G. J., and Sonntag, R. E., *Fundamentals of classical thermodynamics*, S.I. version, 2nd edition (Wiley).  
Haywood, R. W., *Thermodynamic tables—S.I. units*, 2nd edition (C.U.P.).  
Kreith, F., *Principles of heat transfer*, 3rd edition (Intext Educational Publishers); OR  
Holman, J. P., *Heat transfer*, 4th edition (McGraw-Hill).

**Reference books:**

Rogers, G. F. C., and Mayhew, Y. R., *Engineering thermodynamics; work and heat transfer*, S.I. edition (Longmans).  
Faires, V. M., *Thermodynamics*, 6th edition (Macmillan).  
Reynolds, W. C., and Perkins, H. C., *Engineering thermodynamics* (McGraw-Hill).  
Reynolds, A. J., *Thermofluid dynamics* (Wiley).  
Brinkworth, B. J., *An introduction to experimentation*, 2nd edition (English U.P.).

(b) FLUID MECHANICS.

A course of lectures and experiments which includes: forces and acceleration in fluid flows; conservation laws applied to fluid flow; flow systems and incompressible flow machines; dimensional analysis and similarity; potential flow; circulation and aerofoil theory; an introduction to turbulence and boundary layer theory.

Text-books:

- Sabersky, R. H., and others, *Fluid flow: a first course in fluid mechanics*, 2nd edition (Macmillan).  
Duncan, W. J., and others, *Mechanics of fluids*, S.I. Unit edition (Arnold).

(c) AUTOMATIC CONTROL.

An introductory course of eighteen lectures which includes: properties of closed loop systems; Laplace transform and transfer functions; block diagrams; transfer functions of real systems; synthesis of control loops; characteristic equation roots, and Routh's criterion; transient response of first and second order systems; proportional, derivative and integral action.

Text-book:

- Dorf, R. C., *Modern control systems* (Addison-Wesley).

NM13 Mechanical Engineering IIIB.

Pre-requisite subjects: Pass in NM02 Mechanical Engineering II and NX42 Engineering IIM; pass at Division I or higher standard in QN12 Applied Mathematics IIB.

An introductory course in mechanical system dynamics and design, including lectures, tutorials, design tutorials and laboratory work.

(a) MECHANICAL DYNAMICS.

Kinematics and dynamics of machinery, including spur bevel, helical and worm gearing; universal couplings; governors; gyroscopes; flywheel crank effort diagrams; synthesis; force analysis of plane mechanisms; dynamic balancing of rotating and reciprocating systems; free and forced vibrations; whirling of shafts. Theory of instrumentation for dynamic measurements.

Text-book:

- Martin, G. H., *Kinematics and dynamics of machines* (McGraw-Hill).

Reference books:

- Steidel, R. F., *An introduction to mechanical vibrations* (Wiley).  
Shigley, J. E., *Kinematic analysis of mechanisms*, 2nd edition (McGraw-Hill).  
Thomson, W. T., *Theory of vibration with applications* (Prentice-Hall).  
Phelan, R. M., *Dynamics of machinery* (McGraw-Hill).

(b) MECHANICAL DESIGN.

A course of lectures and tutorials on the design of machine elements and power transmission systems. The application of technical design factors when influenced by economic factors, current practice and manufacturing methods. Materials and their use; fabrication processes; the use of stock components; the application of combined stresses and theories of failure; fatigue and creep; factors of safety and design stresses; applications of basic principles in the design of shafts subject to combined loading; bearings, couplings and clutches; belt drives, gearing, brakes and other machine components and assemblies.

Text-books:

- Shigley, J. E., *Mechanical engineering design*, 3rd edition (McGraw-Hill).  
Standard specifications and codes of practice as required.

Reference book:

- Baumeister, T., and Marks, L. S. (eds.), *Standard handbook for mechanical engineers*, 8th edition (McGraw-Hill).

**NX73 Engineering IIIM A.**

Pre-requisite subjects: Pass in NM02 Mechanical Engineering II and NX42 Engineering IIM; pass at Division I or higher standard in QN12 Applied Mathematics IIB.

Parts E201, E202 and Q201. Refer schedule IX(b).

OR

**NX83 Engineering IIIM B.**

Pre-requisite subjects: As for NX73 Engineering IIIM A.

Parts E201, E202 and H202. Refer schedule IX(b).

For syllabuses see under Engineering II and III immediately after the Mechanical Engineering syllabuses.

**FOURTH-YEAR SUBJECTS.**

Except by special permission of the Faculty of Engineering a student shall not proceed to any subject in the fourth year of the course until he has completed the first three years of the course.

**NM24 Mechanical Engineering IVA.**

Pre-requisite subjects: All subjects included in the first three years of the Mechanical Engineering course, except by special permission of the Faculty of Engineering.

An advanced course in fundamental and applied thermodynamics, heat transfer and fluid mechanics. The course is covered by about 90 lectures and tutorials and 120 hours' of laboratory or project work.

**(a) THERMODYNAMICS.**

A course of lectures and laboratory work in thermodynamics. Including advanced thermodynamics of fluids with application to internal combustion engines, gas turbines, steam turbines, refrigeration, psychrometry and air conditioning, compressed air; fuels and combustion.

**Text-books:**

Van Wylen, G. J., and Sonntag, R. E., *Fundamentals of classical thermodynamics*, S.I. version, 2nd edition (Wiley).

Threlkeld, J. L., *Thermal environmental engineering*, 2nd edition (Prentice-Hall).

**Reference books:**

Faires, V. M., *Thermodynamics*, 6th edition (Macmillan).

Rogers, G. F. C., and Mayhew, Y. R., *Engineering thermodynamics work: and heat transfer, S.I. units* (Longmans).

Reynolds, A. J., *Thermofluid dynamics* (Wiley).

Haywood, R. W., *Thermodynamic tables in S.I. units*, 2nd edition (C.U.P.).

Obert, E. F., *Internal combustion engines* (International Text Book Co.).

Pye, D. R., *Internal combustion engine*, 2nd edition, 2 vols. (O.U.P.).

Taylor, C. F., *The internal combustion engine in theory and practice*, 2nd edition, Vol. I (Wiley).

Cohen, H., and others, *Gas turbine theory*, 2nd edition (Longmans).

Kearon, W. J., *Steam turbine theory and practice*, 7th edition (Pitman).

Kanury, A. M., *Introduction to combustion phenomena* (Gordon and Breach).

Bilger, R. W., *Combustion and air pollution*, 2 vols. (Dept. of Mechanical Engineering, University of Sydney).

Eckert, E. R. G., and Drake, R. M., *Heat and mass transfer*, 2nd edition (McGraw-Hill).

Stoecker, W. F., *Refrigeration and air conditioning* (McGraw-Hill).

American Society of Heating, Refrigerating and Air-conditioning Engineers,  
*Ashrae handbook: Fundamentals, Systems, Equipment, Applications.*

(b) FLUID MECHANICS.

A course of lectures and laboratory work in fundamental and applied fluid dynamics including: laminar and turbulent boundary layers; compressible fluid flow; compressible flow machines.

Text-books:

- Liepman, H. W., and Roshko, A., *Elements of gas dynamics* (Wiley).  
Duncan, W. J., Thom, A. S., and Young, A. D., *Mechanics of fluids*,  
S.I. version, 2nd edition (Arnold).  
Sabersky, R. H., and others, *Fluid flow, a first course in fluid mechanics*,  
2nd edition (Macmillan).

Reference books:

- Goldstein, S., *Modern developments in fluid dynamics* (Dover).  
Prandtl, L., *The essentials of fluid dynamics* (Blackie).  
Tietjens, O. G., and Prandtl, L., *Applied hydro and aero mechanics*  
(Dover).  
Ower, E., and Pankhurst, R. C., *The measurement of air flow*, 4th edition  
(Pergamon).  
Pankhurst, R. C., and Holder, D. W., *Wind-tunnel technique* (Pitman).  
Howarth, L., *Modern developments in fluid dynamics—high speed flow*,  
2 vols. (Clarendon).  
Courant, R., and Friedrichs, K. O., *Supersonic flow and shock waves*  
(Interscience).  
Cox, R. N., and Crabtree, L. F., *Elements of hypersonic aerodynamics*  
(English U.P.).  
Schlichting, H., *Boundary layer theory*, 6th edition (McGraw-Hill).  
Rosenhead, L. (ed.), *Laminar boundary layers* (O.U.P.).  
Landau, L. D., and Lifshitz, E. M., *Fluid mechanics* (Pergamon).

NM34 Mechanical Engineering IVB.

Pre-requisite subjects: All subjects included in the first three years of the Mechanical Engineering course, except by special permission of the Faculty of Engineering.

An advanced course of lectures, tutorials and laboratory work in mechanical system dynamics and design, involving lectures and tutorials and laboratory and drawing office tutorial work.

(a) MECHANICAL DYNAMICS.

A course in system dynamics including *Mechanical vibrations*: Two-degree-of-freedom systems, dynamic absorbers, vehicle suspension; multi-degree-of-freedom systems, normal coordinates and principal modes, matrix iteration methods, Holzer method for torsional systems; analysis of continuous systems; application of Lagrange's equation; non-linear and self-excited vibrations.

*Automatic control*: Frequency response of linear dynamic systems; poles and zeros; Nyquist stability criterion, and Bode diagrams; compensation; closed-loop frequency response; analogue computing.

*Engineering acoustics*: Acoustic fields, acoustic wave propagation; transmission of sound through walls; sound sources and sound radiation; room acoustics.

Text-books:

- As for Mechanical Engineering IIIB, together with  
Thomson, W. T., *Theory of vibration with applications* (Prentice-Hall).  
Dorf, R. C., *Modern control systems* (Addison-Wesley).  
Ford, R. D., *Introduction to acoustics* (Elsevier); OR  
Meyer, E., and Neumann, E. G., *Physical and applied acoustics* (Academic Press).

Reference books:

- Newland, D. E., *An introduction to random vibrations and spectral analysis* (Longman).  
Den Hartog, J. P., *Mechanical vibrations*, 4th edition (McGraw-Hill).  
Hatter, D. J., *Matrix computer methods of vibration analysis* (Butterworth).  
Di Stefana, J. J., and others, *Theory and problems of feedback and control systems* (Schaum).  
Harrison, H. L., and Bollinger, J. G., *Introduction to automatic controls* (Intertext).  
Harris, C. M., *Handbook of noise control* (McGraw-Hill).  
Kinsler, L. E., and Frey, A. R., *Fundamentals of acoustics*, 2nd edition (Wiley).  
*Noise and vibration control*, ed. by L. L. Beranek (McGraw-Hill).

(b) MECHANICAL DESIGN.

A course of lectures and drawing office tutorial work on advanced aspects of the design of machine members, mechanical assemblies and systems; mathematical and experimental stress analysis, fatigue, creep, design for high speed operation; the economics of product design, and design in relation to manufacturing method.

The work includes a design project involving many aspects of engineering science and practice including thermodynamics, fluid mechanics, dynamics of machines, stress analysis, social and economic factors.

Text-books:

- As for Mechanical Engineering IIA, IIIA and IIB and IIIB, together with Timoshenko, S. P., and Goodier, I. N., *Theory of elasticity*, 3rd edition (McGraw-Hill).

Reference books:

- As for Mechanical Engineering IIB, together with the following:  
Dixon, J. R., *Design engineering* (McGraw-Hill).  
Rogowski, A. R., *Elements of internal combustion engines* (McGraw-Hill).  
Howarth, M. H., *The design of high speed diesel engines* (Constable).  
Timoshenko, S. P., *Theory of elastic stability*, 2nd edition (McGraw-Hill).  
Timoshenko, S. P., *Theory of plates and shells*, 2nd edition (McGraw-Hill).  
Durelli, A. J., and Riley, W. F., *Introduction to photomechanics* (Prentice-Hall).  
Heywood, R. B., *Photoelasticity for designers* (Pergamon).

**NM44 Mechanical Engineering IVC.**

Pre-requisite subjects: All subjects included in the first three years of the Mechanical Engineering course, except by special permission of the Faculty of Engineering.

1. Two seminars are to be presented by each final-year student on selected topics, one sociological and one technical.

2. A limited research-type project is undertaken by each student during the final year, and involves a written thesis submitted by the end of November.

3. A major design project is undertaken by each student during the final year and is to be presented by the end of November.

**NM85 Engineering Management IV.**

Pre-requisite subjects: All subjects included in the first three years of the Mechanical Engineering course, except by special permission of the Faculty of Engineering.

This course, covering certain of the more important managerial and non-technical factors that regulate the practice of Engineering, has been designed to meet the requirements of the engineering student about to enter professional practice.

The course is given in two parts which must be taken concurrently. Part A is concerned with the principles of organisation and management and Part B with accounting principles from an engineering viewpoint.

PART A. INDUSTRIAL ORGANISATION AND MANAGEMENT.

Part A comprises one lecture a week throughout the year and several visits to engineering works. The course gives an introduction to economic development, forms of business ownership, business finance, industrial organisation, industrial engineering, quality control, plant location and layout, industrial relations, and linear programming as an aid to business decision making.

Text-book:

Riggs, J. L., *Production systems: planning, analysis, and control*, 2nd edition (Wiley).

PART B. ESSENTIALS OF ACCOUNTING.

Part B comprises one lecture a week and one tutorial a fortnight for two terms. Written assignments will be set each fortnight. The scope of the course is as follows:

The double-entry framework and the recording of business transactions; preparation of accounting reports for different kinds of accounting entities; analysis and interpretation of accounting reports; introduction to financial mathematics; limitations of accounting data.

Text-book:

Anthony, R. N., *Essentials of accounting*, 2nd edition (Addison-Wesley).

Reference books:

Mathews, R. L., *The accounting framework*, 3rd edition (Cheshire).

Gordon, M. J., and Shillinglaw, G., *Accounting, a management approach*, 5th edition (Irwin).

## ENGINEERING II AND III.

### CHEMICAL ENGINEERING:

NX52 Engineering III.  
E201.

NX93 Engineering IIIH A.  
C201, M202, E201.

NY93 Engineering IIIH B.  
C201, E201, Q201.

### CIVIL ENGINEERING:

NX12 Engineering IIC.  
E201, E202, H201.

NX53 Engineering IIIC.  
M201, M202, C204, C205.

### ELECTRICAL ENGINEERING:

NX23 Engineering IIIE.  
C201, M202.

### MECHANICAL ENGINEERING:

NX42 Engineering IIM.  
C202, C203, H201.

NX73 Engineering IIIM A.  
E201, E202, Q201.

NX83 Engineering IIIM B.  
E201, E202, H202.

### C201 STRESS ANALYSIS A.

The course consists of one lecture a week throughout the year and the equivalent of three hours a week of laboratory work for one term.

The following topics will be covered:

Stress and strain, normal and shear. Tensile, compressive, and torsion tests to destruction. Elastic and plastic states. Load deformation relation for bars and columns. Torsion of tubes and shafts. Bolted and rivetted joints. Thin walled pressure vessels. Distribution of stress due to bending, curvature moment relations, and deflections of simply supported and encastré beams by integration and moment area methods. Shear. Introduction to composite and reinforced beams. Plastic moments, simple plastic analyses of redundant beams. Buckling of columns.

Text-books:

Stephens, R. C., *Strength of materials* (Arnold); OR  
Case, J., and Chilver, A. H., *Strength of materials and structures*, 2nd  
edition (Arnold).

### C202 STRESS ANALYSIS B.

The course consists of one lecture a week throughout the year and the equivalent of three hours a week of laboratory work for one term.

The following topics will be covered:

Mechanical properties of materials, stresses and strains, normal and shear, stress-strain relationships, temperature stresses, elastic theory. Cylinders; thick and thin walled theories. Torsion in round shafts and tubes. Beams; distribution of stress due to bending, curvature-moment relationships. Beams; longitudinal and normal shear stresses. Beams; composite and reinforced bending stresses. Beams; deflections of simply supported and encastré beams by integration and moment area methods. Statically indeterminate beams. Columns; short, eccentric loads; long, buckling loads, tie-bars. Combined stresses, failure theories, stress concentration. Experimental stress analysis to illustrate the above.

Text-books:

Stephens, R. C., *Strength of materials* (Arnold); OR  
Case, J., and Chilver, A. H., *Strength of materials and structures*, 2nd  
edition (Arnold).

### C203 STRUCTURAL ENGINEERING.

The course consists of one lecture a week throughout the year and three hours' practical or design work a week for two terms.

The following topics will be covered:

Design of tension and compression members. Statically indeterminate problems in tension and compression. R.C. columns. Riveted, bolted and welded joints. Beams; built-up beams, composite beams, R.C. and prestressed concrete beams. Statically indeterminate beams—moment distribution—slope deflection equations. Simple trusses and rigid jointed frames, simple foundations, slabs.

#### Text-books:

Standards Association of Australia:

S.A.A. code for concrete structures, AS. 1480-1974.

S.A.A. steel structures code, AS. 1250-1975.

### M201 VIBRATION, CONTROL AND HEAT TRANSFER.

A course of three lecture terms and nine tutorials.

#### Reference books:

Holman, J. P., *Heat transfer*, 4th edition (McGraw-Hill); OR

Kreith, F., *Principles of heat transfer*, 3rd edition (Intext).

Prentis, J. M., *Dynamics of mechanical systems* (Longmans).

### M202 MACHINE DESIGN.

The course consists of one lecture and three hours of drawing-office tutorial work a week throughout the year on the fundamentals of design of machine elements and power transmission systems.

#### Text-book:

Shigley, J. E., *Mechanical engineering design*, 3rd edition (McGraw-Hill).

#### Reference books:

Faires, V. M., *Design of machine elements*, 4th edition (Macmillan).

Siegel, M. J., and others, *Mechanical design of machines* (International Textbook Co.).

### E201 ELECTRICAL CIRCUITS AND MACHINES.

The course consists of one lecture a week throughout the year and the equivalent of three hours a week of laboratory work for one term.

The lecture course comprises:

(a) One lecture a week for one term devoted to network theory, including transient and steady state analysis of simple networks, network theorems, and the solution of three-phase networks.

(b) One lecture a week for one term devoted to self and mutual inductance and coupled coils, magnetic circuits and the calculation of m.m.f. transformers, direct current motors and generators.

(c) One lecture a week for one term devoted to synchronous motors, and generators, single phase and three-phase induction motors, and machine characteristics.

Practical work in the laboratory is designed to illustrate the subject matter of the lectures.

#### Text-book:

Smith, R. J., *Circuits, devices and systems*, 3rd edition (Wiley).

### E202 ELECTRONICS.

The course consists of one lecture a week throughout the year and the equivalent of three hours a week laboratory work for one term.

Conduction in solids. The junction diode. Rectifier circuits, filtering. Detector circuits. Wave shaping circuits. Diode logic circuits and symbols, truth tables. Integrated logic circuits.



Bipolar junction transistors, construction, operation and characteristics curves. Common emitter amplifier circuits. Small signal parameters, equivalent circuits, large signal analysis. Field effect transistors and thyristors, construction and operation. Control methods in thyristor circuits.

Two-port networks and parameters. Feedback in amplifiers, effect on stability and performance. Operational amplifiers, characteristics and use. Analog computer circuits. Microprocessors, architecture and machine language. Use for process control.

Practical work in the laboratory is designed to illustrate the subject matter of the lectures.

Text-book:

Smith, R. J., *Circuits, devices and systems*, 3rd edition (Wiley).

H201 ENGINEERING MATERIALS.

The course consists of one lecture a week throughout the year and the equivalent of three hours a week of laboratory work for one term.

The following topics will be covered:

Stress strain behaviour in the real and idealised state; atomic bonding and packing; crystal structure; X-rays; the formation of polycrystalline materials; structure and properties of ceramics; equilibrium and non-equilibrium phase reactions; heat treatment; metallography and selection of steels, cast irons, aluminium alloys and copper alloys; deformation and failure of crystalline materials; corrosion; the structure, properties and applications of polymeric materials.

Text-book:

Wyatt, O. H., and Dew-Hughes, D., *Metals, ceramics and polymers* (C.U.P.).

H202 MATERIALS ENGINEERING.

A course of lectures and practical work from the following topics:

The metallography, properties and heat treatment of steels, cast irons, aluminium alloys and copper-based alloys; the selection of tool steels; the processes and metallurgy of welding; the plastic deformation and failure of metals and alloys; corrosion; the structure and properties of polymeric materials.

Q201 MATHEMATICS III (ENGINEERING).

Pre-requisite to this part: A pass in QN12 Applied Mathematics IIB at Division I or higher standard.

The course consists of eighteen lectures each term throughout the year. The course is taken from units on differential equations, optimisation and complex analysis that are offered in the subjects QN03 and QM03 in the Faculty of Mathematical Sciences.

Reference books:

Crandall, S. H., *Engineering analysis* (McGraw-Hill).

Adby, R. R., and Dempster, M. A. H., *Introduction to optimization methods* (Chapman and Hall).

Rabenstein, A. L., *Introduction to ordinary differential equations*, 2nd edition (Academic Press).

Stephenson, G., *An introduction to partial differential equations for science students*, 2nd edition (Longman).

Churchill, R. V., and others, *Complex variables and applications*, 3rd edition (McGraw-Hill).

C204 NUMERICAL ANALYSIS IN ENGINEERING.

Three lecture terms and 13 tutorials on numerical methods in solving civil engineering problems.

Text-book:

Crandall, S. H., *Engineering analysis* (McGraw-Hill).

C205 ENGINEERING ECONOMICS AND PLANNING.

Three lecture terms and 13 tutorials on: criteria for decision making and economic analysis including cost benefit, present value, and discounted net benefits; P.E.R.T.-C.P.M. with constraints and resource scheduling; analysis of systems including organisation, models and their validation, input-output relations and sensitivity analysis; economics; examples from engineering practice; concepts of safety in engineering.

Reference books:

- Antill, J. M., and Woodhead, R. W., *Critical path methods in construction practice*, 2nd edition (Wiley).
- Antill, J. M., *Civil engineering management*, 2nd edition (Angus and Robertson).
- de Neufville, R., and Stafford, J. H., *Systems analysis for engineers and managers* (McGraw-Hill).
- James, L. D., and Lee, R. R., *Economics of water resources planning* (McGraw-Hill).
- Design and planning of engineering systems*, by D. D. Meredith and others (Prentice-Hall).
- Wohl, M., and Martin, B. V., *Traffic system analysis for engineers and planners* (McGraw-Hill).
- Grant, E. L., and Ireson, W. G., *Principles of engineering economy*, 6th edition (Ronald Press).
- Clough, R. H., *Construction project management* (Wiley).

## HONOURS DEGREE OF BACHELOR OF ENGINEERING

The additional work for the Honours degree, required under schedule XI, is taken concurrently with that of the final year of the Ordinary degree course. The total amount of it is intended to be equivalent to a work load of about 100 hours, although the relative emphasis placed on lectures, seminars and project work is not the same in all departments.

### NH99 Chemical Engineering for the Honours degree of B.E.

Candidates are required:

(a) To complete satisfactorily a series of nine lectures at an advanced level on each of two topics to be selected from a list which will be made available to Honours candidates before the commencement of each academic year.

(b) To undertake additional project work of at least fifty hours more than that prescribed for the Ordinary degree.

### NC99 Civil Engineering for the Honours degree of B.E.

Candidates are required:

(a) To complete satisfactorily a course of sixteen lectures and eight tutorials, on one of the topics listed below, or other topics selected by the Department:

- (i) Theory of Plates and Shells.
- (ii) Finite Element Method.
- (iii) Advanced Soil Mechanics.
- (iv) Advanced Hydraulics I.
- (v) Advanced Hydraulics II.
- (vi) Advanced Transportation.

(b) To undertake a project which is more demanding and which will require approximately fifty hours additional project work than that prescribed for the Ordinary degree.

### NE99 Electrical Engineering for the Honours degree of B.E.

Candidates are required:

(a) To complete satisfactorily a series of about two lectures a week at an advanced level on the topics listed below or on other topics, depending on circumstances.

- (i) *Optical Electronics*. Electroluminescence, light emitting diodes, lasers, modulation, guiding structures, detectors, noise, communication.
- (ii) *Communication Theory*. Detection of signals in noise, classification of signals and receivers, coherent or synchronous detection, matched filter, minimum mean square error filters, decision theory, Bayes criterion, ideal observer, minimax criterion, Neyman-Pearson criterion, operating characteristic, best estimates.
- (iii) *Signal Processing*. Orthogonal functions and transforms, ubiquity of convolution, exponential transforms—Fourier, Laplace,  $z$ , sources of orthogonal functions, discrete and fast transforms, circular convolution, time-bandwidth product, spectral estimation, Fourier transforms in nature, holography, spectral analysis, digital filters.

Text-book:

- Oppenheim, A. V., and Schaffer, R. W., *Digital signal processing* (Prentice-Hall); OR  
Childers, D. G., and Durling, A., *Digital filtering and signal processing* (West).

Reference book:

- Bogner, R. E., and Constantinides, A. G., *Introduction to digital filtering* (Wiley).

(iv) *Control*. Decoupled systems, observability and controllability. Introduction to multi-variable control theory.

Reference:

- Rosenbrock, H., *Computer-aided control system design* (Academic Press).

- (v) *Generalised Systems*. Nature of systems engineering. Classification methods for complex systems. Effective computability, the quantal limit. Linear programming. Theory of games. Dynamic programming. Integer programming. Nonlinear optimisation methods. Factor analysis of data matrices.
- (b) To undertake a project which is in general more demanding than that prescribed for the Ordinary degree.

**NM99 Mechanical Engineering for the Honours degree of B.E.**

Candidates are required:

- (a) To complete satisfactorily one course of eighteen lectures from the following:

- (i) Applied Acoustics and Noise Control.
- (ii) Advanced Heat Transfer.
- (iii) Vibration and Random Processes.
- (iv) Automobile Dynamics.
- (v) Fluid Power Control.
- (vi) Advanced Automatic Control.

- (b) To undertake more demanding design and research projects, involving at least 50 hours of additional work over and above that required for the Ordinary degree.

OF THE DEGREE OF  
MASTER OF ENGINEERING  
REGULATIONS

1. Subject to these regulations, a person who has been admitted in the University of Adelaide to either the Ordinary or the Honours degree of Bachelor of Engineering may proceed to the degree of Master of Engineering; provided that persons who have or have had a substantial association with the University may be accepted as candidates for the degree on such conditions as the Faculty may prescribe.

2. To qualify for the degree a candidate shall:

- (a) submit in writing to the Academic Registrar for approval by the Faculty of Engineering the subject on which he proposes to present a thesis;
- (b) not earlier than three academic terms after the approval of the subject by the Faculty, present a thesis which should be a significant contribution to the practice of engineering.\* The thesis may be:
  - (i) an original design for some engineering work; *or*
  - (ii) an account, giving evidence of ability on the part of the candidate to cope successfully with engineering difficulties, of some engineering work for the design or construction of which the candidate has been largely responsible; *or*
  - (iii) an account of some original research, development, inquiry or investigation made by him into some matter involved with engineering;
- (c) if so required by the Faculty, adduce evidence to its satisfaction of the originality of, and the degree of his responsibility for, the work embodied in his thesis; and
- (d) if so required by the Faculty pass an examination, written or oral or both, in the field of study immediately relevant to his thesis.

3. (a) On completion of his work the candidate shall lodge with the Academic Registrar three copies of his thesis prepared in accordance with directions given to candidates from time to time.†

(b) Unless the Faculty expressly approve an extension of time in a particular case the thesis shall be submitted within twelve academic terms from the date of approval of the candidate's subject by the Faculty.

\* FOOTNOTE (not forming part of the regulations): Contributions should be clearly recognisable as more than competent applications of standard engineering practice.

† Published in "Notes and Instructions to candidates for Higher Degrees":  
*see* Table of Contents.

(c) On submission of the thesis the Faculty shall nominate examiners, who may recommend that the thesis:

- (i) be accepted, with or without conditions; *or*
- (ii) be sent back to the candidate for revision, and re-submission within such time as the Faculty may allow; *or*
- (iii) be rejected.

4. A candidate who fulfils the requirements of these regulations and satisfies the examiners under regulations 2 and 3 may, on the recommendation of the Faculty, be admitted to the degree of Master of Engineering.

Regulations allowed 15 January, 1976.

OF THE DEGREE OF  
**MASTER OF ENGINEERING SCIENCE**  
**REGULATIONS**

1. There shall be a degree of Master of Engineering Science.
2. The following may be accepted as a candidate for the degree:
  - (a) a person who has qualified in the University of Adelaide for the Honours degree of Bachelor of Engineering; *or*
  - (b) a person who holds in another university a qualification accepted by the Faculty of Engineering as being equivalent† to the Honours degree of Bachelor of Engineering in the University of Adelaide; *or*
  - (c) a person who has qualified in the University of Adelaide for the degree of Bachelor of Engineering or who holds in another university a qualification accepted by the Faculty of Engineering as being equivalent† to the degree of Bachelor of Engineering in the University of Adelaide, and who has had at least three years of appropriate practical experience approved by the Faculty.
- \*3. With the approval of the Council the Faculty may, in exceptional circumstances and subject to such conditions (if any) as it may see fit to impose in each case, accept as a candidate for the degree a person who does not qualify under regulation 2, but who has given evidence satisfactory to the Faculty of his fitness to undertake work for the degree.
4. A candidate shall be admitted on probation. The period of probation shall not exceed six months in the case of a full-time candidate nor twelve months in the case of a part-time candidate. At the end of the period each candidate's performance shall be reviewed by the Faculty of Engineering and his candidature confirmed, with or without special conditions, or terminated.
5. A candidate's progress shall be reviewed by the Faculty at the end of each academic year. If, in the opinion of the Faculty of Engineering, a candidate is not making satisfactory progress the Faculty may, with the consent of the Council, terminate his candidature.
- \*\*6. To qualify for the degree a candidate shall:
  - (a) on completion of any preliminary work which may be prescribed in the schedules and after consultation with the

\* Amended 15 January, 1976.

\*\* Amended 23 December, 1976, and 2 February, 1978.

† "Equivalent" shall refer to both academic and professional equivalence.

Chairman of the department in which the majority of his work falls, submit in writing to the Academic Registrar, for approval by the Faculty, the programme of advanced study and project work as prescribed in the schedules and designed to extend over either one calendar year if taken full-time or not less than two and not more than five calendar years if taken part-time;

- \*\* (b) undertake an approved programme of advanced study and project work under the direction of a supervisor or supervisors who shall be members of the full-time academic staff of the University and appointed by the Faculty, but in special circumstances the Faculty may also appoint an external supervisor;
- (c) pass such examinations on his course of advanced study as may be required by the Faculty; and
- (d) present a thesis embodying the results of his project work.

†7. (a) Except by permission of the Faculty, the whole of the work for the degree must be completed within the University.

(b) If for academic reasons the Faculty so permits, parts of the study may be undertaken at other tertiary educational institutions, but such parts shall not however count for more than one-sixth of the work for the degree.

\*\* (c). Subject to such conditions as it may determine in each case, the Faculty may permit project work to be undertaken outside the University provided that it can be satisfied:

- (i) that this will result in mutual academic benefit to the candidate and his supervising department;
- (ii) that there will be adequate contact and interaction between the candidate and his supervising department; and
- (iii) that the supervisor's access to any experimental work, the candidate's availability for seminars and other discussions, and the publication of results will not thereby be prejudiced.

8. A candidate may not count a subject or closely related subject or part of a subject already presented for another degree or diploma.

9. (a) On completion of his work the candidate shall lodge with the Academic Registrar three copies of his thesis prepared in accordance with directions given to candidates from time to time.\*

† Amended 23 December, 1976, and 2 February, 1978.

\*\* Amendment awaiting allowance.

\* Published in "Notes and Instructions to candidates for Higher Degrees":  
see Table of Contents.



(b) Unless the Faculty expressly approves an extension of time in a particular case the thesis shall be submitted within six months of the completion of the candidate's programme.

(c) On submission or re-submission of the thesis the Faculty shall nominate examiners who may recommend that it:

- (i) be accepted, with or without conditions; *or*
- (ii) be accepted, with or without conditions, subject to satisfactory oral examination; *or*
- (iii) be sent back to the candidate for revision; *or*
- (iv) be rejected.

10. A candidate who fulfils the requirements of these regulations may, on the recommendation of the Faculty, be admitted to the degree of Master of Engineering Science.

Regulations allowed 23 January, 1975.

OF THE DEGREE OF  
MASTER OF ENGINEERING SCIENCE

SCHEDULES

(Made by the Council under regulation 6.)

SCHEDULE I: PRELIMINARY WORK

1. A person whose qualifications have been accepted under either section (a) or section (b) of regulation 2 shall be deemed to have satisfied the requirements of this schedule.
2. Before being admitted either under section (c) of regulation 2 or under regulation 3 a person shall complete the requirements of this schedule by undertaking, and satisfying the examiners in, such courses of study and/or other work as may in his case be prescribed by the Faculty of Engineering.

SCHEDULE II: COURSES OF STUDY AND PROJECT WORK

The programme of study and project work shall consist of:

- (a) supervised project work which may make up the whole of the work but which shall be not less than one-third of the work for the degree;
- (b) graduate courses and seminars which may make up not more than two-thirds of the work for the degree; and
- (c) other relevant courses, which may make up not more than one-third of the work for the degree, as may be prescribed by the Faculty of Engineering.

OF THE DEGREE OF  
**MASTER OF ENGINEERING SCIENCE**  
(COURSE WORK)

**S Y L L A B U S E S**

*Text-books:*

Students are expected to procure the latest edition of all text-books prescribed.

*Examinations:*

For each subject students may obtain from the department concerned details of the examination in that subject including the relative weights given to the components (e.g. such of the following as are relevant: assessments, term or mid-year tests, essays or other written or practical work, final written examinations, *viva voce* examinations).

**MASTER OF ENGINEERING SCIENCE.**

This degree is awarded on the satisfactory completion of a programme of work, normally undertaken within the University, designed to extend over either one calendar year if taken full-time, or not less than two and not more than five calendar years if taken part-time. It will involve supervised project work, and may also include advanced study. The credit obtained for advanced study courses shall not make up more than two-thirds of the work for the degree. A thesis embodying the results of the project work, shall be submitted within six months of the completion of the candidate's programme.

Courses for each candidate are selected in consultation with an adviser to graduate students, and may, within limits, include undergraduate and post-graduate courses given in other faculties. Courses available in departments within the Faculty of Engineering are listed below, and will be offered according to demand. Additional courses may be available in special circumstances.

NH05 Chemical Engineering for M.Eng.Sc. (One-third Course Work).

NH06 Chemical Engineering for M.Eng.Sc. (Two-thirds Project Work).

NH08 Chemical Engineering for M.Eng.Sc. (By Thesis Only).

NC05 Civil Engineering for M.Eng.Sc. (One-third Course Work).

NC15 Civil Engineering for M.Eng.Sc. (Two-thirds Course Work).

C521 Concrete Properties and Structural Design.

C522 Coastal Zone Dynamics.

C523 Geotechnical Engineering.

C524 Plastic Analysis of Structures.

NC06 Civil Engineering for M.Eng.Sc. (Two-thirds Project Work).

NC07 Civil Engineering for M.Eng.Sc. (One-third Project Work).

NC08 Civil Engineering for M.Eng.Sc. (By Thesis Only).

NE05 Electrical Engineering for M.Eng.Sc. (One-third Course Work).

NE15 Electrical Engineering for M.Eng.Sc. (Two-thirds Course Work).

E541 Computer Aided Circuit Design.

E542 Digital Systems.

E543 Power System Dynamics.

E544 Signal Processing-Linear Prediction.

E545 Stochastic Processes in Communication Systems.

E546 Synthesis of Passive and Active Networks.

E547 Power Electronics.

E548 Numerical Solution of Electromagnetic Fields.

- NE06 Electrical Engineering for M.Eng.Sc. (Two-thirds Project Work).  
NE07 Electrical Engineering for M.Eng.Sc. (One-third Project Work).  
NE08 Electrical Engineering for M.Eng.Sc. (By Thesis Only).  
NM05 Mechanical Engineering for M.Eng.Sc. (One-third Course Work).  
NM15 Mechanical Engineering for M.Eng.Sc. (Two-thirds Course Work).  
M561 Vibration and Random Processes.  
M562 Automobile Dynamics.  
M563 Applied Acoustics and Noise Control.  
M564 Advanced Heat Transfer.  
M565 Fluid Power Control.  
M566 Automatic Control.  
NM06 Mechanical Engineering for M.Eng.Sc. (Two-thirds Project Work).  
NM07 Mechanical Engineering for M.Eng.Sc. (One-third Project Work).  
NM08 Mechanical Engineering for M.Eng.Sc. (By Thesis Only).

OF THE DEGREE OF  
MASTER OF APPLIED SCIENCE  
REGULATIONS

1. There shall be a degree of Master of Applied Science.
2. The following may be accepted as a candidate for the degree:
  - (a) a person who has qualified in the University of Adelaide for the Honours degree of Bachelor of Engineering, Science, Applied Science or Agricultural Science;
  - (b) a person who holds a qualification accepted by the Faculty of Engineering as being equivalent to that of (a) above; *or*
  - (c) a person who has qualified in the University of Adelaide for the degree of Bachelor of Engineering, Science, Applied Science or Agricultural Science or who holds another academic qualification accepted by the Faculty of Engineering as being sufficient. Persons admitted under this sub-clause may not be awarded the degree before the expiration of two years from the date of qualification for candidature, and will normally be required to carry out preliminary work at Honours standard as set out in schedule I.\*
3. With the approval of the Council the Faculty may, in exceptional circumstances and subject to such conditions (if any) as it may see fit to impose in each case, accept as a candidate for the degree a person who does not qualify under regulation 2 but who has given evidence satisfactory to the Faculty of his fitness to undertake work for the degree.
4. A candidate shall be admitted on probation. The period of probation shall not exceed six months in the case of a full-time candidate nor twelve months in the case of a part-time candidate. At the end of the period each candidate's performance shall be reviewed by the Faculty of Engineering and his candidature confirmed, with or without special conditions, or terminated.
5. A candidate's progress shall be reviewed by the Faculty at the end of each academic year. If, in the opinion of the Faculty of Engineering, a candidate is not making satisfactory progress the Faculty may, with the consent of the Council, terminate his candidature.

\* NOTE (not forming part of the regulations): The purpose of this requirement is to allow a candidate who does not have qualifications acceptable under (a) or (b) above to acquire additional competence through study or experience.

\*6. To qualify for the degree a candidate shall:

- (a) on completion of any preliminary work which may be prescribed in the schedules and after consultation with the Chairman of the Department in which the majority of his work falls, submit in writing to the Academic Registrar, for approval by the Faculty, the programme of advanced study and project work as prescribed in the schedules and designed to extend over either one calendar year if taken full-time or not less than two and not more than five calendar years if taken part-time;
- \*\* (b) undertake an approved programme of advanced study and project work under the direction of a supervisor or supervisors who shall be members of the full-time academic staff of the University and appointed by the Faculty, but in special circumstances the Faculty may also appoint an external supervisor;
- (c) pass such examination on his course of advanced study as may be required by the Faculty; and
- (d) present a thesis embodying the results of his project.

\*7. (a) Except by permission of the Faculty, the whole of the work for the degree must be completed within the University.

(b) If for the academic reasons the Faculty so permits, parts of the study may be undertaken at other tertiary educational institutions, but such parts shall not however count for more than one-sixth of the work for the degree.

\*\* (c) Subject to such conditions as it may determine in each case, the Faculty may permit project work to be undertaken outside the University provided that it can be satisfied:

- (i) that this will result in mutual academic benefit to the candidate and his supervising department;
- (ii) that there will be adequate contact and interaction between the candidate and his supervising department; and
- (iii) that the supervisor's access to any experimental work, the candidate's availability for seminars and other discussions, and the publication of results will not thereby be prejudiced.

8. A candidate may not count a subject or closely related subject or part of a subject already presented for another degree or diploma.

9. (a) On completion of his work the candidate shall lodge with the Academic Registrar three copies of his thesis prepared in accordance with directions given to candidates from time to time.†

(b) Unless the Faculty expressly approves an extension of time in a particular case the thesis shall be submitted within six months of the completion of the candidate's programme.

\* Amended 2 February, 1978.

\*\* Amendment awaiting allowance.

† Published in "Notes and Instructions to candidates for Higher Degrees":  
see Table of Contents.

(c) On submission or re-submission of the thesis the Faculty shall nominate examiners who may recommend that it:

- (i) be accepted, with or without conditions; *or*
- (ii) be accepted, with or without conditions, subject to satisfactory oral examination; *or*
- (iii) be sent back to the candidate for revision; *or*
- (iv) be rejected.

10. A candidate who fulfils the requirements of these regulations may, on the recommendation of the Faculty, be admitted to the degree of Master of Applied Science.

Regulations allowed 23 December, 1976.

OF THE DEGREE OF  
**MASTER OF APPLIED SCIENCE**

**SCHEDULES**

(Made by the Council under regulation 6.)

**SCHEDULE I: PRELIMINARY WORK**

1. A person whose qualifications have been accepted under either section (a) or section (b) of regulation 2 shall be deemed to have satisfied the requirements of this schedule.

2. Before being admitted either under section (c) of regulation 2 or under regulation 3 a person shall complete the requirements of this schedule by undertaking, and satisfying the examiners in, such courses of study and/or other work as may in his case be prescribed by the Faculty of Engineering. The purpose of this schedule is that the person should demonstrate his ability to perform at Honours standard.

**SCHEDULE II: COURSES OF STUDY AND PROJECT WORK**

The programme of study and project work shall consist of:

- (a) supervised project work which may make up the whole of the work but which shall be not less than one-third of the work for the degree;
- (b) graduate courses and seminars which may make up not more than two-thirds of the work for the degree; and
- (c) other relevant courses, which may make up not more than one-third of the work for the degree, as may be prescribed by the Faculty of Engineering.

Where the programme consists of both study and project work, the course of study shall normally constitute either one-third or two-thirds of the requirements for the degree.

**SYLLABUSES**

The Syllabuses prescribed for the degree of Master of Applied Science are the same as those for the degree of Master of Engineering Science.



OF THE DEGREE OF  
**DOCTOR OF ENGINEERING**  
REGULATIONS

1. (a) Subject to these regulations a person who has been admitted in the University of Adelaide to an Honours degree of Bachelor or a degree of Master in Science, Agricultural Science, Applied Science, Engineering or Engineering Science, or to the degree of Doctor of Philosophy in a field of study approved by the Faculty of Engineering, may proceed to the degree of Doctor of Engineering.

(b) On the recommendation of the Faculty of Engineering the Council may accept as a candidate for the degree a person who has been admitted to a degree in the University of Adelaide other than one named in section (a) of this regulation, or who is a graduate of another university or institution of higher education recognised by the University of Adelaide and has a substantial association with the University; provided that in each case the graduate concerned has, in the opinion of the Faculty of Engineering, had an adequate engineering training.

(c) On the recommendation of the Faculty of Engineering the Council may, in special cases, accept as a candidate for the degree a person who does not hold a degree of a university or institution of higher education, provided that in each case the candidate concerned has a substantial association with the University and has, in the opinion of the Faculty of Engineering, adequate engineering credentials.

(d) Except where a person has been accepted as a candidate under regulation 1(c), no person shall be accepted as a candidate for the degree of Doctor of Engineering before the expiration of five years from the date of his original graduation.

2. (a) A person who desires to become a candidate for the degree shall give notice of his intended candidature in writing to the Academic Registrar and with such notice shall furnish particulars of his engineering achievements and of the work which he proposes to submit for the degree.

(b) The Faculty of Engineering shall appoint a committee to examine the information submitted and to advise the Faculty on whether the Faculty should: (i) allow the applicant to proceed, and approve the subject or subjects of the work to be submitted; or (ii) advise the applicant not to submit his work; and the Faculty's decision shall be conveyed to the applicant.

(c) If it accepts the candidature and approves the subject or subjects of the work to be submitted the Faculty shall nominate examiners of whom one at least shall be an external examiner.

3. (a) To qualify for the degree the candidate shall furnish satisfactory evidence that he has made an original contribution of distinguished merit adding to the knowledge, understanding or practice of any subject with which the Faculty is directly concerned.

(b) The degree shall be awarded primarily on a consideration of such of his published works as the candidate may submit for examination.

(c) The candidate in submitting his published works shall state generally in a preface and specifically in notes the main sources from which his information is derived and the extent to which he has availed himself of the work of others, especially where joint publications are concerned. He may also signify in general terms the portions of his work which he claims as original.

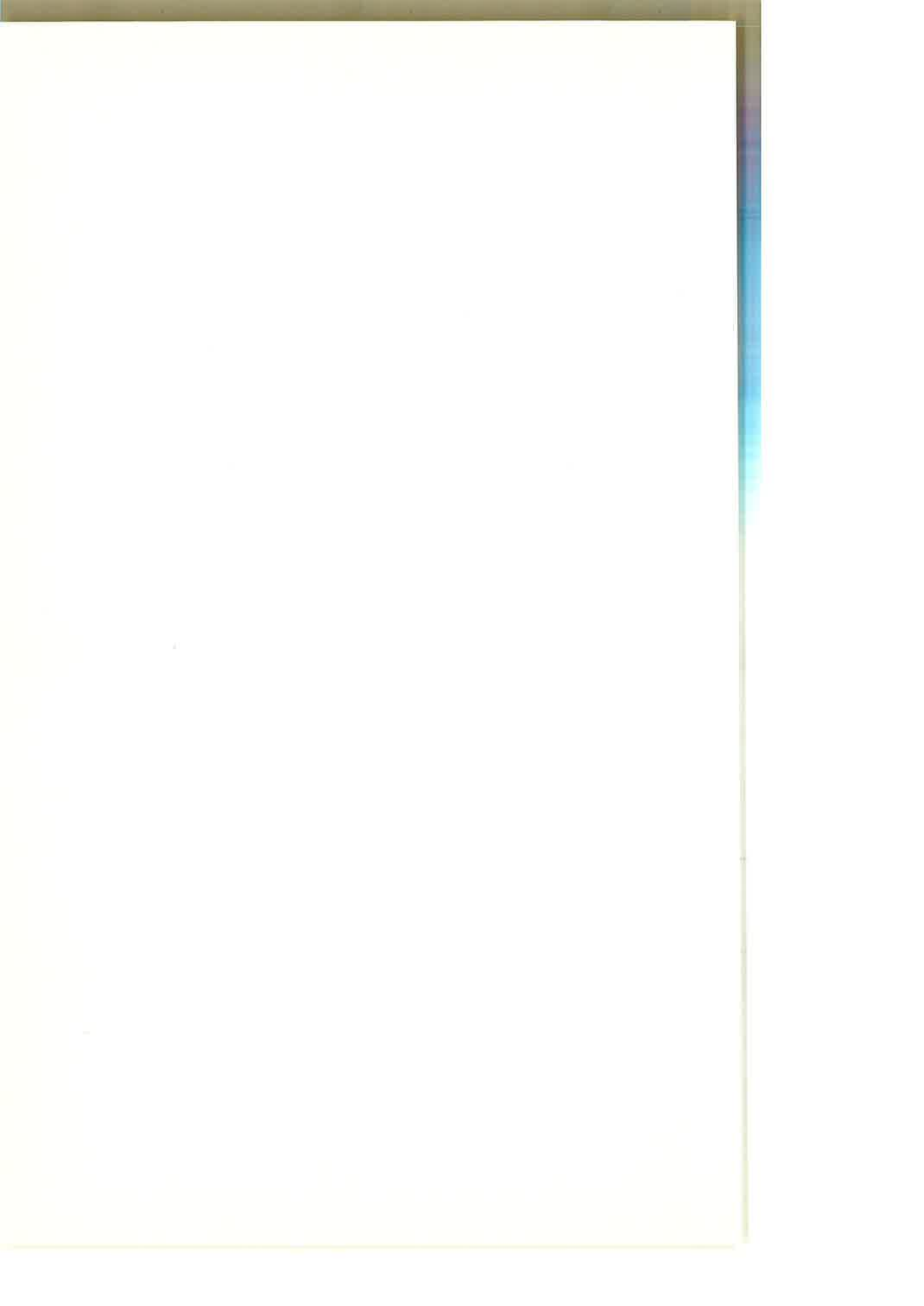
(d) The candidate is required to indicate what part, if any, of the work he has submitted for a degree in this or any other university.

4. The candidate shall lodge with the Academic Registrar three copies of the work prepared in accordance with the directions given in sub-paragraph (b) of clause 2B of Chapter XXV of the Statutes. If the work is accepted for the degree the Academic Registrar will transmit two of the copies to the University Library.

5. A candidate who complies with the foregoing conditions and satisfies the examiners may, on the recommendation of the Faculty of Engineering, be admitted to the degree of Doctor of Engineering.

6. Notwithstanding anything contained in the preceding regulations, the Faculty may recommend the award of the degree to any person who is not a member of the staff of the University. Any such recommendation must be accompanied by evidence that the person for whom the award is proposed has made an original and substantial contribution of distinguished merit to the knowledge or understanding of a subject with which the Faculty is directly concerned, of a standard not less than that required by regulation 3.

Regulations allowed 15 January, 1976.



# FACULTY OF LAW

## REGULATIONS, SCHEDULES AND SYLLABUSES OF DEGREES

### Bachelor of Laws (LL.B.)

Regulations	-	-	-	-	-	-	-	-	834
Schedules	-	-	-	-	-	-	-	-	837
Syllabuses	-	-	-	-	-	-	-	-	840

### Master of Laws (LL.M.)

Regulations	-	-	-	-	-	-	-	-	847
-------------	---	---	---	---	---	---	---	---	-----

### Doctor of Philosophy (Ph.D.)

Regulations and Schedules: under "Board of Research Studies"—*see* Table of Contents.

### Doctor of Laws (LL.D.)

Regulations	-	-	-	-	-	-	-	-	849
-------------	---	---	---	---	---	---	---	---	-----

OF THE DEGREE OF  
**BACHELOR OF LAWS**  
REGULATIONS

1. There shall be an Ordinary and an Honours degree of Bachelor of Laws.

\*2. (a) The Council after receipt of advice from the Faculty shall from time to time prescribe schedules (i) defining the subjects of study for the degree to be provided by the University and the post-graduate subjects to be offered; (ii) defining the range of subjects satisfactorily to be completed; and (iii) providing for, or empowering the Faculty to provide for, the subject or subjects to be pre-requisite for, or concurrent with, any subject, and the lectures, seminars, tutorials, moot court work, examinations, written and other work to be satisfactorily undertaken by candidates, provided that the following subjects of study shall always be offered: Elements of Law, Constitutional Law, Criminal Law, The Law of Contract, The Law of Torts, The Law of Property, Trusts and Succession, Commercial Transactions, Family Law, The Law of Evidence, and The Law of Procedure.

(b) The syllabuses of subjects shall be specified by the Chairman of the Department of Law, and shall be submitted to the Faculty and the Council for approval.

(c) Schedules made and syllabuses approved by the Council shall become effective from the date of prescription by the Council or such other date as the Council may fix, and shall be published in the next edition of the University Calendar.

3. To qualify for the Ordinary degree a candidate shall comply with the provisions of schedules made under regulation 2 hereof.

4. (a) To qualify for the Honours degree a candidate shall comply with the provisions of schedules made under regulation 2 hereof.

(b) A candidate who satisfies the requirements of sub-regulation (a) of this regulation shall be awarded the Honours degree of Bachelor of Laws, but the Faculty shall decide within which of the following classes and divisions the degree shall be awarded:

First Class

Second Class

Division A

Division B

Third Class.

\* Amended 16 December, 1971, 23 January, 1975, 15 January, 1976, and 23 December, 1976.

(c) A candidate who has been granted status by virtue of clause 7 of Chapter XXV of the University Statutes, or by virtue of regulation 10 of these regulations, may be awarded the Honours degree of Bachelor of Laws if the Council so decides, notwithstanding that he has not completely satisfied the requirements of sub-regulation (a) of this regulation.

\*5. Students shall enter for annual and supplementary examinations on the form and by the date prescribed by the Council. Except in cases approved by the Faculty, every candidate, in each subject, shall have the opportunity to complete all assessment requirements by the end of November in the year of enrolment. Except in cases approved by the Faculty, all work to be assessed in each subject must be submitted by the end of the second week of February of the year succeeding the year of a candidate's enrolment in the subject.

\*6. Except in cases approved by the Faculty, if a candidate in a subject has not submitted work of at least pass standard by the end of the second week of February of the year following the candidate's enrolment in the subject, the candidate shall again comply with the requirements of regulation 5 before again presenting himself for assessment in that subject.

\*7. (a) In determining a candidate's final result in a subject, the assessors may take into account assessments of the candidate's oral, written, practical or examination work in that subject, provided that the candidate has been given notice at the beginning of the course of the circumstances in which the work may be taken into account and its relative importance in the final result.

(b) A candidate may be required by the assessors in any subject to do essays or other written work in a satisfactory manner as prerequisite to being assessed in that subject, provided that candidates are given precise information about those requirements at the beginning of the course.

\*8. The Faculty may grant to any student such exemption from regulations 6 and 7, and under such conditions, as it shall decide.

\*9. There shall be three classifications of pass in any subject or division of a subject for the Ordinary degree (whether the result be obtained at the first or a subsequent attempt at the assessment tasks required), as follows: Pass with Distinction, Pass with Credit, Pass. The final results in all subjects shall be transmitted by the Academic Registrar to the Chief Justice of the Supreme Court of South Australia.

10. A candidate may, at any time, apply to the Faculty for status under these regulations or under schedules made in accordance with regulation 2 and may be granted such status, and upon such conditions, as the Council on the recommendation of the Faculty, determines.

\* Allowed 23 December, 1976.

11. All previous regulations concerning the degree of Bachelor of Laws and the Final Certificate in Law are hereby repealed, provided that:

- (a) a candidate who has completed subjects under the repealed regulations shall have status in the equivalent subjects under schedules made under these regulations; and
- (b) a candidate who first enrolled in the Faculty of Law before 1967, shall, in order to qualify for the degree, in addition to complying with the requirements of regulation 3 or 4, pass in two subjects, other than Science subjects, available for the degree of Bachelor of Arts and approved by the Faculty of Law.

Regulations allowed 17 December, 1970.

OF THE DEGREE OF  
BACHELOR OF LAWS

SCHEDULES

(Made by the Council under regulation 2.)

NOTE: Syllabuses of subjects for the degree of LL.B. are published below, immediately after these schedules. For syllabuses of subjects taught for other degrees and diplomas see the table of subjects at the end of the volume.

SCHEDULE I: THE ORDINARY DEGREE

1. A candidate for the Ordinary degree shall:

(a) Pass in the following subjects:

- |                                |                                   |
|--------------------------------|-----------------------------------|
| (i) LL01 Elements of Law       | (vi) LL22 The Law of Property     |
| (ii) LL11 Constitutional Law I | (vii) LL32 Constitutional Law II  |
| (iii) LL21 Criminal Law        | (viii) LL43 Trusts and Succession |
| (iv) LL31 The Law of Torts     | (ix) LL73 Commercial Transactions |
| (v) LL02 The Law of Contract   | (x) LL44 The Law of Evidence      |

(b) Pass in five of the following subjects, provided that the Faculty may direct that a subject or subjects may not be offered in any one year:

- |  |  |
|--|--|
| (i) LL07 Administrative Law                        | (ix) LL37 International Law                  |
| (ii) LL54 Associations                             | (x) LL97 International Trade Law             |
| (iii) LL77 Comparative Law                         | (xi) LL47 Jurisprudence                      |
| (iv) LL57 Conflict of Laws                         | (xii) LL28 Legal History                     |
| (v) LL87 Criminology                               | (xiii) LL67 Roman Law                        |
| (vi) LL17 Family Law                               | (xiv) LL84 Taxation Law                      |
| (vii) LL27 Industrial Law                          | (xv) LL74 The Law of Procedure               |
| (viii) LL64 Institutional<br>Business Transactions | (xvi) LL38 Environmental and<br>Planning Law |

(c) Satisfy the Board of Examiners (normally by production of a certificate from the lecturer in charge or from the Dean) that he has satisfactorily participated in one seminar course (LL08 Seminar Course A) to be arranged by the Faculty.

(d) Pass in one further subject listed in clause 1(b),

or satisfy the Board of Examiners that he has satisfactorily participated in a second seminar course (LL18 Seminar Course B) for which he has enrolled with the approval of the Dean,

or (for an Honours candidate who has not qualified for the Honours degree) present an Honours dissertation considered by the Board of Examiners to be sufficient for the purpose of satisfying this requirement.

(e) In place of any of the five subjects required by clause (b) and the additional subject required by clause (d) a candidate may pass in a law subject or subjects offered outside the Faculty and approved by the Faculty.

2. In place of any of the five subjects required by clause 1(b) and the additional subject required by clause 1(d) a candidate may pass in a law subject or subjects offered outside the Faculty and approved by the Faculty.

3. Candidates who have completed subjects for the degree prior to 1973 may continue under the schedules then in force, with such modification (if any) as shall be prescribed by the Dean.

4. A candidate who passed in LL28 Legal History prior to March 1974 shall count that subject in lieu of a seminar course and not as a subject listed in clause 1(b).



## SCHEDULE II: THE HONOURS DEGREE

1. A candidate for the Honours degree of Bachelor of Laws shall:
  - (a) pass in the subjects listed in clause 1(a) of schedule I;
  - (b) pass in five of the subjects listed in clause 1(b) of schedule I;
  - (c) satisfy the Board of Examiners in respect of one seminar course (LL08 Seminar Course A) pursuant to clause 1(c) of schedule I; and
  - (d) complete satisfactorily the Honours dissertation.

Provided that a candidate who passed in LL28 Legal History prior to March 1974 shall count that subject in lieu of a seminar course and not as a subject from clause 1(b) of schedule I.

2. (a) Except with the permission of the Faculty, to be granted only in special cases, a candidate may enrol for the Honours dissertation if he has obtained:
  - (i) six or more Honours points in the subjects (i)-(ix) listed in clause 1(a) of schedule I and the first two of the subjects listed in clause 1(b) of schedule I completed by the candidate; *or*
  - (ii) four or more Honours points in the subjects (v)-(ix) listed in clause 1(a) of schedule I and the first two of the subjects listed in clause 1(b) of schedule I completed by the candidate; *or*
  - (iii) eight or more Honours points in the subjects listed in clause 1(a) of schedule I and five of the subjects listed in clause 1(b) of schedule I.

(b) For the purpose of clause 2(a)(i) and (ii) of this schedule, where a candidate has completed more than two subjects listed in clause 1(b) of schedule I, he shall count such points for those subjects as the Faculty may determine.

(c) For the purpose of clause 2(a)(iii) of this schedule, where a candidate has completed more than five of the subjects listed in clause 1(b) of schedule I, he shall count such points for those subjects as the Faculty may determine.

(d) No points shall be counted for a subject previously failed except with the permission of the Faculty.

(e) Honours points shall be calculated on the basis that a credit equals one and a distinction equals one and a half Honours points.

3. For the purposes of this schedule subjects listed in clause 1(b) of schedule I shall include any subjects substituted in accordance with clause 2 of schedule I.

## SCHEDULE III: POSTGRADUATE SUBJECTS

Courses in LL05 Estate and Tax Planning and in LL15 Legal Ethics and Accounts will be offered as postgraduate subjects. Students for the degree of Bachelor of Laws may, with the approval of the Dean, attend one or both of these courses in their final year.

## SCHEDULE IV: RESTRICTION OF COURSES

1. Except with the permission of the Dean or his nominee the following subjects are pre-requisite subjects:

- (a) LL01 Elements of Law, LL11 Constitutional Law I, LL21 Criminal Law and LL31 The Law of Torts for all other subjects; and
- (b) LL02 The Law of Contract, LL22 The Law of Property and LL32 Constitutional Law II for all other subjects except those listed in clause (a); and
- (c) LL73 Commercial Transactions for the subjects LL64 Institutional Business Transactions, LL97 International Trade Law, and LL84 Taxation Law.

2. Courses of study must be approved by the Dean or his nominee at enrolment each year.

NOTES (not forming part of the regulations or schedules):

1. *Scheme of study.*

The Faculty of Law recommends that candidates for the LL.B. degree take their subjects according to the following scheme:

- First Year:* LL01 Elements of Law, LL11 Constitutional Law I, LL21 Criminal Law, LL31 The Law of Torts.  
*Second Year:* LL02 The Law of Contract, LL22 The Law of Property, LL32 Constitutional Law II.  
*Third Year:* LL43 Trusts and Succession, LL73 Commercial Transactions, LL08 Seminar Course A, and two of the following subjects: LL07 Administrative Law, LL54 Associations, LL77 Comparative Law, LL57 Conflict of Laws, LL87 Criminology, LL38 Environmental and Planning Law, LL17 Family Law, LL27 Industrial Law, LL37 International Law, LL47 Jurisprudence, LL28 Legal History, LL67 Roman Law.  
*Fourth Year:* LL44 The Law of Evidence and *either* four of the following subjects, or three of the following subjects together with an honours dissertation or LL18 Seminar Course B: LL07 Administrative Law, LL54 Associations, LL77 Comparative Law, LL57 Conflict of Laws, LL87 Criminology, LL38 Environmental and Planning Law, LL17 Family Law, LL27 Industrial Law, LL64 Institutional Business Transactions, LL37 International Law, LL97 International Trade Law, LL47 Jurisprudence, LL28 Legal History, LL67 Roman Law, LL84 Taxation Law, LL74 The Law of Procedure. Provided that no subject shall be a subject for which the candidate has previously obtained credit.

2. *Candidates undertaking study for the degrees of LL.B. and B.A. or LL.B. and B.Ec. concurrently.*

Candidates may enrol for the degrees of LL.B. and B.A. or LL.B. and B.Ec. concurrently if they apply for and are admitted to both the Faculty of Law and either the Faculty of Arts or the Faculty of Economics. Alternatively, candidates for the degree of LL.B. wishing to proceed to the degrees of LL.B. and B.A. or LL.B. and B.Ec. concurrently may apply at the end of their first or second year in the Faculty of Law for admission to the B.A. or the B.Ec. course in the following year.

The Faculty of Law recommends that candidates who wish to take the degrees of LL.B. and B.A. or LL.B. and B.Ec. concurrently should, timetable permitting, take their subjects according to one of the following schemes:

(a) Candidates enrolling for the degrees of LL.B. and B.A. or LL.B. and B.Ec. in their first year:

- First Year:* LL01 Elements of Law, LL11 Constitutional Law I and *either* two subjects (or their equivalents) from group A in schedule I of the degree of Bachelor of Arts or the subjects listed in schedule II(1)(a) and II(1)(c) of the degree of Bachelor of Economics.  
*Second and Third Years:* LL21 Criminal Law, LL31 The Law of Torts, LL02 The Law of Contract, LL22 The Law of Property, LL32 Constitutional Law II, and *either* two subjects (or their equivalent) from group B in schedule I of the degree of Bachelor of Arts or the subjects listed in schedule II(2)(a) together with one of the subjects listed in schedule II(2)(b) and II(2)(c) of the degree of Bachelor of Economics.  
*Fourth Year:* The subjects listed under note 1 for the third year of the Bachelor of Laws course.  
*Fifth Year or Sixth Year:* In the case of a candidate proceeding to the degrees of LL.B. and B.A. concurrently: *either* the subjects listed under note 1 for the fourth year of the Bachelor of Laws course, or two subjects from group C in schedule I of the degree of Bachelor of Arts.  
 In the case of a candidate proceeding to the degrees of LL.B. and B.Ec. concurrently: *either* the subjects listed under note 1 for the fourth year of the Bachelor of Laws course, or the subjects listed under schedule II(3)(a) and II(3)(b), together with one of the subjects listed under schedule II(2)(b) and II(2)(c) (but to be chosen from (c) if the other subject from these groups has been chosen from (b) and *vice-versa*) of the degree of Bachelor of Economics.

(b) Candidates enrolling for the degree of B.A. or B.Ec. after completing one or two years' work towards the degree of LL.B.:

- First Year:* The subjects listed under note 1 for the first year of the LL.B. course.  
*Second, Third and Fourth Years:* The subjects listed under note 1 for the second and third years of the LL.B. course and *either* four subjects listed under sections 1, 2 and 3 of group A and group B in schedule I of the degree of Bachelor of Arts or the subjects listed in schedule II(1)(a), II(1)(c) and II(2)(a), together with one of the subjects listed in schedule II(2)(b) and II(2)(c) of the degree of Bachelor of Economics.  
*Fifth Year or Sixth Year:* In the case of a candidate proceeding to the degrees of LL.B. and B.A. concurrently: *either* the subjects listed under note 1 for the fourth year of the LL.B. course or two subjects from group C of schedule I of the degree of Bachelor of Arts.  
 In the case of a candidate proceeding to the degrees of LL.B. and B.Ec. concurrently: *either* the subjects listed under note 1 for the fourth year of the LL.B. course or the subjects listed under schedule II(3)(a) and II(3)(b), together with one of the subjects listed under schedule II(2)(b) and II(2)(c) (but chosen from (c) if the other subject from these groups has been chosen from (b) and *vice-versa*) of the degree of Bachelor of Economics.

Candidates intending to enrol concurrently or enrolled concurrently for the degrees of LL.B. and B.A., or LL.B. and B.Ec. are advised to consult the Faculty advisers of both Faculties before final determination of their course of study each year.

OF THE DEGREE OF  
BACHELOR OF LAWS  
SYLLABUSES

*Text and Case-books:*

Students are expected to procure the latest editions of all text and case-books listed in the syllabuses of subjects for which they enrol. Occasionally new editions of law books are published after the Calendar goes to press; as a general rule, lecturers will use these rather than the ones listed. However, there are important exceptions and students should make inquiries at the Law Library desk before buying such later editions.

*Reference books and other materials:*

These will be listed in the Student Guide issued to all law students when they enrol.

*Examinations:*

For each subject students may obtain from the Department of Law details of the examination in that subject including the relative weights given to the components (e.g. assessments, term or mid-year tests, essays or other written work, final written examinations, *viva voce* examinations).

FIRST-YEAR SUBJECTS.

LL01 Elements of Law.

An introduction to the study of law. The course is divided into two main parts. The first involves an introduction to the system of courts, case-reading, law-making (including the rules of precedent), and statutory interpretation. The second consists of fairly detailed study of two or three selected topics which are of concern to the law in various ways, with a comparison between the different forms of legal regulation. There is a programme of legal writing and research exercises.

Glanville Williams, *Learning the law*, 9th edition, with Australian supplement (Stevens, 1973) (essential preliminary reading).

LL11 Constitutional Law I.

Sources of law for the running of government in Australia including an examination of the role of conventions in the working of a constitution; general concepts including parliamentary sovereignty, separation of powers and the rule of law; a detailed examination of legislative and executive powers under the South Australian constitution; a preliminary examination of Australian federalism; the relationship between the state and the individual with particular reference to the principles of Australian administrative law and the liberty of the individual.

LL21 Criminal Law.

A general introduction to the criminal law.

Howard, C., *Criminal law*, 3rd edition (Law Book Co., 1977).

Brett, P., and Waller, P. L., *Criminal law, text and cases*, 4th edition (Butterworth, 1978).

**LL31 The Law of Torts.**

Principles of civil liability. The tort of negligence and related areas. Defences. Nominated torts. Damages. Purpose and future of the law of torts.

*Winfield and Jolowicz on Tort*, ed. W. V. H. Rogers, 10th edition (Sweet and Maxwell, 1975); OR

Fleming, J. E., *The law of torts*, 5th edition (Law Book Co., 1977).

Morison, W. L., Sharwood, R. L., and Phegan, C. S., *Cases on torts*, 4th edition (Law Book Co., 1973).

**SECOND-YEAR SUBJECTS.**

**LL02 The Law of Contract.**

General principles of the law of contract, including agency.

Cheshire, G. C., and Fifoot, C. H. S., *The law of contract*, 3rd Australian edition (Butterworth, 1974).

McGarvie, R. E., Pannam, C. L., and Hocker, P. J., *Cases and materials on contract*, 3rd edition (Law Book Co., 1975).

**LL22 The Law of Property.**

A study of the principles of the law of real and personal property. The nature of property; title to land and chattels; types of proprietary interests in land and chattels; enjoyment of land and chattels and restrictions on use; acquisition and transfer of proprietary rights; remedies for interference with proprietary rights.

Sackville, R., and Neave, M. A., *Property law*, 2nd edition (Butterworth, 1975).

Recommended for preliminary reading:

Lawson, F. H., *Introduction to the law of property* (O.U.P., 1958).

**LL32 Constitutional Law II.**

The constitution of the Commonwealth of Australia.

Sawer, G., *Cases on the constitution of the Commonwealth of Australia*, 3rd edition (Law Book Co., 1964) (and supplement).

Sawer, G., *Australian federalism in the courts* (M.U.P., 1967).

**THIRD-YEAR SUBJECTS.**

**LL43 Trusts and Succession.**

General principles of the law of trusts; such individual topics within the law of trusts as may be chosen by the lecturer; general principles of the law of wills, of testate and intestate succession and the administration of estates.

Hanbury, H. G., *Modern equity*, 10th edition (Stevens, 1976).

Hardingham, I. J., Neave, E. M. A., and Ford, H. A. J., *The law of wills* (Law Book Co., 1977).

**LL73 Commercial Transactions.**

This course concentrates on transactions affecting the individual and emphasises those aspects of the law providing consumer protection. A study of the law relating to agency, sale of goods and land, leases of goods and land, consumer credit, recovery of debts and bankruptcy.

Recommended for preliminary reading:

Borrie, G., and Diamond, A. L., *The consumer, society and the law*, 3rd edition (Penguin, 1973).

**FOURTH-YEAR SUBJECTS.****LL44 The Law of Evidence.**

A study of the law of evidence as it applies in South Australia.

**LL74 The Law of Procedure.**

Pleading and practice in the Supreme Court and Local Court. Criminal procedure in the Supreme Court, District Criminal Court and in Courts of Summary Jurisdiction.

*Hannan's Local Court practice*, 2nd edition (Law Book Co., 1973).

Odgers, *Principles of pleading*, 20th edition (Law Book Co., 1971).

**LL64 Institutional Business Transactions.**

This course concentrates on, but is not exclusively devoted to, transactions in which financial institutions may be involved. It is a study of: the control by law of financial institutions; restrictive trade practices; the financing of business transactions; bankers' securities and the relationship of banker and customer; negotiable instruments with particular reference to cheques; guarantees and indemnities; insurance contracts.

**LL84 Taxation Law.**

(This subject will not be offered in 1979.)

A basic course in the method and content of Australian income tax law—including historical background, statutory provisions and cases, and a consideration of proposals for reform of the tax system, and the function of the lawyer as an adviser on income tax matters. Discussion will cover income tax administration and procedure, the interpretation of taxing statutes, jurisdiction to tax, the measurement of income and taxable income, and the computation of tax. Aspects peculiar to corporate taxation are dealt with in only an introductory way.

*Income Tax Assessment Act* and *Income Tax Act* (current C.C.H. edition).

Baxt, Gelski, Grbich, Marks and Pose, *Cases and materials on taxation*, current edition (Butterworth).

*Master tax guide* (current C.C.H. edition).

SUBJECTS WHICH MAY BE TAKEN IN THIRD OR FOURTH YEAR.

NOTE: It is possible that one or more of the following subjects will not be available in 1979.

**LL38 Environmental and Planning Law.**

The constitutional and legal framework governing resource management in Australia, with particular reference to the functions of legislative, administrative and arbitral machinery, to the roles of international law, of Federal, State and local government and of public participation and the problems of co-ordinating decision-making processes. The development of planning legislation and of planning controls; planning authorities and the planning process in South Australia; alternative modes of planning used in South Australia and elsewhere; land tenure, land acquisition and compensation; housing. The history of the environmental movement; legal aspects of conservation and the use of natural resources, with particular reference to water and mining; forms of pollution and the legal mechanisms for their control; controls of toxic substances; noise, particular problems of environmental law as chosen by the lecturers from time to time.

**LL54 Associations.**

A critical analysis of the law relating to partnerships, companies and unincorporated associations.

Afterman, A. B., and Baxt, R., *Cases and materials on corporations and associations*, 2nd edition (Butterworth, 1975).

Ford, H. A. J., *Principles of company law*, 2nd edition (Butterworth, 1978).

**LL07 Administrative Law.**

Aspects of the historical and contemporary growth of the administrative process, its structure and its function; parliamentary and administrative review of administrative action including delegated legislation; the ombudsman; the main principles of judicial review of administrative discretionary powers and of delegated legislation; the principles of natural justice as applied to administrative adjudication, the main remedies for securing judicial review; the legal liability of the Crown; reform of administrative law.

Whitmore, H., and Aronson, M., *Review of administrative action* (Law Book Co., 1978).

**LL77 Comparative Law.**

Comparison with other legal systems raises many fundamental questions which Australian lawyers may be called upon to answer. Should a bill of rights be embodied in the constitution? Does the common law still meet the needs of contemporary society or should it be replaced by codes? Should the letter or the spirit of legislation govern its interpretation? The emphasis in this course will be on a comparison between the Australian and the German legal systems although frequent reference will be made to the laws of other jurisdictions. German legislation and legal scholarship have been influential in many countries and are, therefore, suitable points of departure for a comparative evaluation of common law and civil law methods of settling disputes.

**LL57 Conflict of Laws.**

The course deals with the general issues of jurisdiction and service of process, choice of law and recognition of foreign judgments in the context of contract and tort, but with relevance to most actions *in personam*. Some emphasis is given to the conflictual aspects of recent legislation in the areas of consumer protection and motor accidents. Once that coverage is achieved, students are encouraged to select topics from a list provided for further study. Thus, one may, for example, study the conflict of laws *qua* federal jurisdiction, the *Family Law Act*, criminal law, agency, movable and immovable property, the notion of full faith and credit and more general jurisprudential considerations.

Kelly, D. St. L., *Localising rules in the conflict of laws* (Woodley Press, 1974).

Nygh, P. E., *Conflict of laws in Australia*, 3rd edition (Butterworth, 1976).

Sykes, E. I., and Pryles, M. C., *International and interstate conflict of laws* (Butterworth, 1975).

**LL87 Criminology.**

An analysis of the etiological theories of criminal behaviour. In this context consideration will be given to a number of widely differing approaches including those of: the biological positivists, the analytical individualists, the social reactionists, the naturalists and phenomenologists, the Marxists and the "new" conflict theorists. The epidemiology of criminal behaviour including the techniques, uses and interpretation of criminal statistics. The law and practice of sentencing analysed and evaluated in the context of the varying theories of punishment. The historical and contemporary forms of Australian penal and corrective measures and the philosophy behind their use.

Chappell, D., and Wilson, P., *The Australian criminal justice system*, 2nd edition (Butterworth, 1977).

Criminal Law and Penal Methods Reform Committee of South Australia (Mitchell Committee), *Sentencing and corrections* (First Report, 1973).

**LL17 Family Law.**

Introduction: the family in society; purpose of legal rules. The court system. The law of husband and wife: formation of marriage, dissolution of marriage, financial aspects of marriage and divorce. The law of children: status and maintenance, guardianship, custody and adoption. Selected topics of private international law.

**LL27 Industrial Law.**

A study of the contract of employment, breach of confidence, industrial accidents, conciliation and arbitration, trade unions.

**LL37 International Law.**

(This subject will not be offered in 1979.)

The general principles of the law of peace, including treaties, states, territory, sovereignty, jurisdiction, immunities, responsibility and claims; the United Nations Charter, international organisations and the International Court of Justice. Emphasis will be placed on case studies in which the operation of international law is an issue, and on the relationship between international law and international politics.

Akehurst, M. B., *A modern introduction to international law*, 3rd edition (Allen and Unwin, 1977); OR

Brownlie, I., *Principles of public international law*, 2nd edition (O.U.P., 1973).

Recommended for preliminary reading (available in library):

Chayes, A., *The Cuban missile crisis* (O.U.P., 1974).

**LL97 International Trade Law.**  
(This subject will not be offered in 1979.)

Laws governing international sales; agency in international transactions; finance and credit in international transactions; an outline of the law relating to marine insurance, the carriage of goods, and the international protection of copyrights, patents, enterprises and investments; arbitration and litigation.

**LL47 Jurisprudence.**

The philosophy of law. Law as a part of social reality. The analysis of legal thought.

Berger, P. L., and Luckmann, T., *The social construction of reality* (Penguin, 1967).

Hart, H. L. A., *The concept of law* (O.U.P., 1961).

Raz, J., *Practical reason and norms* (Hutchinson, 1975).

**LL28 Legal History.**

The chief emphasis in this course is on the development of legal institutions and law in Australia, including reference to the main political, philosophical, social and economic influences which have contributed to the working of the law in this country. The first part of the course consists of a detailed study of the English background relevant to the establishment and growth of the Australian legal system. This consists of an examination of the growth of English courts later used as models for the establishment of courts in Australia, the procedural methodology of English courts, the attributes of English legal thinking, and the structure and practices of the English legal profession. The second part of the course relates the adaptation of features of the English legal system to the Australian context with variations created by local conditions. It examines the relevance of English law reforms in the nineteenth century, and the philosophical attitudes involved in this, to the processes of legal change in Australia in the nineteenth century and beyond. A study is made of special legal developments in Australia and the reasons for these, including the development of land laws and industrial law. Special studies are made of the position of Aborigines under the law since 1788 and of the establishment and working of the legal profession in Australia.

Castles, A. C., *An introduction to Australian legal history*, 2nd edition (Law Book Co.).

**LL67 Roman Law.**

1. The history and sources of Roman law.
2. An outline of Roman family law and of the laws relating to the acquisition of property, to contracts, and to delicts.
3. A comparative study of the Roman law of sale and the South Australian law relating to the sale of goods.
4. A comparative study of the Roman law of damage to property and the South Australian law of negligence.

Nicholas, J. K. B., *Introduction to Roman law* (O.U.P., 1962).

**LL08 Seminar Course A.**

Seminar courses will be arranged by the Faculty of Law from time to time. For further details concerning seminar courses to be offered in 1979 students should consult the departmental notice board. The entry LL08(A) should be used by students who have not completed a seminar course previously.



**LL18 Seminar Course B.**

This entry should be used by students who have completed a seminar course previously and, for their second seminar course, by those students who wish to enrol for two seminar courses in 1979.

**LL15 Legal Ethics and Accounts.**

A course of fourteen lectures on the rules and etiquette of professional practice, and on certain basic accounting procedures in the practitioner's office. This subject is available to graduates in law and, with the Dean's permission, to law students in their final year.

---

**HONOURS DEGREE OF BACHELOR OF LAWS.****LL99 The Honours Dissertation.**

Candidates for the Honours degree of Bachelor of Laws are required to complete satisfactorily a dissertation on a topic approved by the Department of Law. Candidates are strongly urged to commence working not later than 1 February, 1979; they will be required to submit the dissertation on or before 3 September, 1979.

**ADDITIONAL SUBJECTS.**

- LL1H Income Tax IHH for the degree of B.Ec.**
- LL2H Commercial Law IHH for the degree of B.Ec.**
- LL3H Commercial Law IHH for the degree of B.Ec.**
- LL92 Commercial Law IIA for the degree of B.Ec.**

OF THE DEGREE OF  
MASTER OF LAWS  
REGULATIONS

1. The Faculty of Law may accept as a candidate for the degree of Master of Laws any person who:

- (a) has become entitled to receive the Honours degree of Bachelor of Laws of the University of Adelaide;
- (b) has obtained in another university qualifications which in the opinion of the Faculty of Law are at least equivalent to those of the Honours degree of Bachelor of Laws at the University of Adelaide.

2. (a) The Faculty may accept as a probationary candidate for the degree any other graduate of the University of Adelaide or of another university if his qualifications are such as to satisfy the Faculty that he is likely to be able satisfactorily to undertake work for the degree.

(b) Every person who is accepted as a probationary candidate for the degree shall within such time as the Faculty shall in his case prescribe or allow pass at Honours standard and at the first attempt such examinations formal or informal or both as the Faculty may prescribe: should he fail so to pass such examinations his probationary candidature shall lapse, unless the Faculty under such conditions as it thinks fit determines that it be allowed to continue.

\*3. Subject to the approval of the Council the Faculty may, in special cases and subject to such conditions as it may see fit to impose in each case, accept as a candidate or as a probationary candidate for the degree a person who does not hold a university degree, if it is satisfied that he is likely to be able satisfactorily to undertake work for the degree of Master of Laws.

4. To obtain the degree a candidate shall demonstrate in a thesis on a subject approved by the Faculty his ability to carry out independent research, to marshal logically and appropriately, and to analyse and assess, the material produced by that research, and to express clearly and effectively the conclusions to be drawn from that analysis and assessment. He shall on submission of the thesis adduce sufficient evidence that the thesis, which shall be prepared under the guidance of a supervisor or supervisors appointed by the Faculty, is his own work.

\*\* Allowed 28 February, 1974.

5. Unless the faculty in any particular case expressly approve an extension of time the thesis of a full-time candidate for the degree shall be submitted within two calendar years, and the thesis of a part-time or external candidate shall be submitted within four calendar years, from the date of the commencement of his candidature or probationary candidature. No thesis may be submitted earlier than one calendar year from the date of the commencement of candidature.

\*\*6. A candidate's progress shall be reviewed by the Faculty each academic year under the provisions of clause 4c of Chapter XXV of the Statutes.

7. The candidature of every candidate shall commence on the approval by the Faculty of the subject of his research, unless the Faculty in special circumstances determines that it shall commence on some other specified date.

8. On the completion of this work the candidate shall lodge with the Academic Registrar three copies of his thesis prepared in accordance with directions given to candidates from time to time.\*

9. The Faculty shall appoint examiners to report on the thesis. The examiners shall report to the Faculty and may recommend (i) that the degree be awarded; or (ii) that the thesis be returned to the candidate for revision and resubmission; or (iii) that the degree be not awarded.

10. If a thesis submitted for the degree of Doctor of Laws or Doctor of Philosophy be considered by the Faculty, after a final report by the examiners appointed to adjudicate upon it, not sufficiently meritorious to qualify the candidate submitting that thesis for the award of the degree the Faculty may if in its opinion the thesis submitted is of a standard sufficient to comply with the relevant requirements for the award of the degree of Master of Laws recommend that the latter degree be awarded.

Regulations allowed 9 January, 1969.

\*\* Allowed 23 January, 1975, and 15 January, 1976.

\* Published in "Notes and Instructions to candidates for Higher Degrees":  
*see* Table of Contents.

OF THE DEGREE OF  
DOCTOR OF LAWS  
REGULATIONS

1. Subject to these regulations the Council may, on the recommendation of the Faculty of Law, accept as a candidate for the degree of Doctor of Laws any person who, in the opinion of the Faculty of Law, is a fit and proper person to be so accepted.

2. To qualify for the degree a candidate may either (a) submit for assessment all or some of his scholarly work, including work not previously published; or (b) present a thesis on a subject approved by the Faculty of Law.

3. (a) A person who desires to qualify for the degree in accordance with alternative (a) of regulation 2 shall give notice of his intended candidature in writing to the Academic Registrar and with such notice shall furnish particulars of his scholarly achievements and of the work which he proposes to submit for the degree.

(b) The Faculty of Law shall examine the information submitted and shall decide whether to recommend to the Council that the applicant be accepted as a candidate.

4. (a) To qualify for the degree according to alternative (a) of regulation 2 a candidate shall submit work which constitutes an original and substantial contribution of distinguished merit to legal knowledge or understanding.

(b) If any of the material submitted represents work carried out conjointly, the candidate shall state the extent to which he was responsible for such work.

(c) The candidate shall indicate what part, if any, of his works has already been presented for a degree in this or any other university.

5. A person who desires to qualify for the degree in accordance with alternative (b) of regulation 2 may be accepted as a candidate if he (a) holds or has qualified for the Honours degree of Bachelor of Laws; or (b) holds or has qualified for the degree of Master of Laws: provided that the Faculty of Law may accept *in lieu* of the foregoing an equivalent qualification obtained in any other university recognised by the University of Adelaide; or (c) has passed an examination approved by the Faculty of Law.

6. (a) To qualify for the degree according to alternative (b) of regulation 2 a candidate shall present a thesis which (i) contains an original and substantial contribution of distinguished merit to legal knowledge or understanding, and (ii) merits publication as a book or monograph (other than as a collection of separate articles), whether or not it has been previously published in full or in part. A thesis previously presented for a degree in this or in any other university may not be submitted under this regulation.

(b) A candidate may also present in support of his candidature other published books, monographs, or articles. If any of these publications record work carried out conjointly, the candidate shall state the extent to which he was responsible for the initiation and presentation of such publications.

(c) A candidate proceeding in accordance with alternative (b) of regulation 2 and with this regulation shall not be admitted to the degree until the expiration of the fourth academic year from his admission to the degree by virtue of which he was accepted as a candidate.

7. The candidate shall lodge with the Academic Registrar three copies of the work submitted or of the thesis presented, as the case may be, prepared in accordance with the directions given in subparagraph (b) of clause 2B of Chapter XXV of the Statutes. If the work is accepted for the degree the Academic Registrar will transmit two of the copies to the University Library.

8. The Faculty of Law shall nominate examiners. Normally there will be three examiners, two of them external to the University; but exceptions may be made in special cases recommended by the Faculty and approved by the Council.

9. The examiners may, if they think fit, examine the candidate either orally or by written questions on the material presented for the degree.

10. A candidate who complies with the foregoing conditions and satisfies the examiners may, on the recommendation of the Faculty of Law, be admitted to the degree of Doctor of Laws.

Regulations allowed 15 January, 1976.

# FACULTY OF MATHEMATICAL SCIENCES

## REGULATIONS, SCHEDULES AND SYLLABUSES OF DEGREES AND DIPLOMA

### Bachelor of Science in the Faculty of Mathematical Sciences (B.Sc.)

Regulations	-	-	-	-	-	-	-	-	-	852
Schedules	-	-	-	-	-	-	-	-	-	855
Syllabuses	-	-	-	-	-	-	-	-	-	860
Computing Science	-	-	-	-	-	-	-	-	-	860
Economics and Commerce (for B.Sc.(Math.Sc.))	-	-	-	-	-	-	-	-	-	865
Mathematical Physics	-	-	-	-	-	-	-	-	-	867
Mathematics (Pure and Applied)	-	-	-	-	-	-	-	-	-	869
Statistics	-	-	-	-	-	-	-	-	-	881

### Diploma in Computing Science (Dip.Comp.Sc.)

Regulations	-	-	-	-	-	-	-	-	-	884
Schedules	-	-	-	-	-	-	-	-	-	886
Syllabuses	-	-	-	-	-	-	-	-	-	887

### Master of Science in the Faculty of Mathematical Sciences (M.Sc.)

Regulations	-	-	-	-	-	-	-	-	-	888
-------------	---	---	---	---	---	---	---	---	---	-----

### Doctor of Philosophy (Ph.D.)

Regulations and Schedules: under "Board of Research  
Studies"—*see* Table of Contents.

### Doctor of Science in the Faculty of Mathematical Sciences (D.Sc.)

Regulations	-	-	-	-	-	-	-	-	-	890
-------------	---	---	---	---	---	---	---	---	---	-----

OF THE DEGREE OF  
**BACHELOR OF SCIENCE**  
IN THE FACULTY OF MATHEMATICAL SCIENCES

R E G U L A T I O N S

1. There shall be an Ordinary and an Honours degree of Bachelor of Science in the Faculty of Mathematical Sciences. A candidate may obtain either degree or both.

2. The course of study for the Ordinary degree shall extend over three years of full-time study or the equivalent and that for the Honours degree over one additional year.

\*3. (a) In these regulations and in schedules made under them by the Council the following definitions shall apply:

“Subject” means a course of study at the University normally completed in one academic year.

“Unit” means a course of study at the University on a prescribed topic normally completed in one academic term.

(b) The Council, after receipt of advice from the Faculty of Mathematical Sciences, shall from time to time prescribe schedules defining (i) the subjects and units of study for the degree, (ii) the range of subjects and units to be satisfactorily completed and the examinations to be passed by candidates.

(c) Such schedules shall become effective from the date of prescription by the Council or such other date as the Council may fix.

(d) The syllabuses of subjects and units shall be specified by the Head of the department concerned and submitted to the Faculty and Council for approval.

(e) Schedules made and syllabuses approved by the Council shall be published in the next edition of the University Calendar.

4. (a) Except by permission of the Faculty, a candidate shall not be admitted to the class in any subject or unit, for which he has not satisfactorily completed the pre-requisite studies as prescribed in the syllabus for that subject or unit.

(b) Exemption from any part of the course on the first occasion on which a candidate takes a subject or unit will be granted only in special cases and on grounds approved by the Faculty.

†5. (a) Examinations in any subject or unit shall be held in accordance with the provision of the relevant schedule made under these regulations.

\* Amended 15 January, 1976.

† Amended 23 December, 1976.

(b) A candidate shall enter for examination in a subject on a form and by a date prescribed by the Council, but shall not be eligible to present himself for examination unless he has done prescribed work to the satisfaction of the teaching staff concerned.

(c) In determining a candidate's final results in a subject (or unit), the assessors may take into account oral, written, practical or examination work, provided that the candidate has been given notice at the beginning of the course of the way in which the work will be taken into account and of its relative importance in the final result.

(d) A candidate will be permitted to take a supplementary examination only in circumstances approved by the Faculty.

6. The names of the candidates who pass in any subject for the Ordinary degree shall be published in three classifications: Pass with Distinction, Pass with Credit, Pass. The names of candidates in each of the classifications shall be published in accordance with the provision of the relevant schedule made under the regulations. If the list of candidates who pass be published in two divisions, a pass in the higher division may be prescribed in the appropriate syllabuses as pre-requisite for admission to another subject. A candidate with a lower division pass who wishes to gain a higher division pass shall be allowed to repeat the course, subject to the provisions of regulation 7.

7. (a) A candidate who fails to pass in a subject (or unit) or who obtains a lower division pass and who desires to take the subject or unit again shall, unless exempted wholly or partially therefrom by the Head of the department concerned, do written or other work in that subject or unit to the satisfaction of the teaching staff concerned.

(b) A candidate who has twice failed to obtain a Division I pass or higher in the examination in any subject shall not enrol for the subject again except by permission of the Faculty and under such conditions as the Faculty may prescribe. For the purpose of this clause a candidate who fails to receive permission to sit for or absents himself from the examination in any subject after having attended substantially the full course of instruction in it, shall be deemed to have failed to pass the examination. A candidate who obtains a higher division pass only after being granted permission to enrol for the third time shall not take a subject for which that higher division pass is a pre-requisite, save in exceptional circumstances and with the permission of the Faculty.

8. (a) A candidate who has passed subjects in other faculties or universities or elsewhere, may on written application to the Academic Registrar be granted such exemption from these regulations and from schedules made under them as the Council on the recommendation of the Faculty may determine.

(b) A graduate in another faculty, who wishes to proceed to the degree of Bachelor of Science in the Faculty of Mathematical Sciences and to count towards that degree subjects which he has already presented for another degree may do so, subject to the following conditions:



- (i) he shall present a range of subjects which fulfils the requirements of the relevant schedule made under regulation 3, and
- (ii) he shall present two third-year subjects not presented for any other degree.

9. (a) A candidate desiring to enter for an honours subject must obtain the approval of the Head of the department concerned. The final examination may not, except by special permission of the Faculty, be taken until four years of study have been completed after matriculation.

(b) The work of the Honours year must be completed in one year of full-time study, save that on the recommendation of the Head of the department concerned, the Faculty may permit a candidate to spread the work over two years, but no more, under such conditions as it may determine.

(c) The names of the candidates who qualify for the Honours degree shall be published in alphabetical order within the following classes and divisions in each subject:

First Class

Second Class

Division A

Division B

Third Class.

(d) A candidate who is unable to complete the course for the Honours degree within the time allowed, or whose work is unsatisfactory at any stage of the course, or who withdraws from the course shall be reported to the Faculty, which may permit him to re-enrol for the Honours degree under such conditions (if any) as it may determine.

(e) A candidate may not enrol a second time for the Honours course in the same subject if he (i) has already qualified for Honours in that subject; or (ii) has presented himself for examination in that subject but has failed to obtain Honours; or (iii) withdraws from his course, unless the Faculty under paragraph (d) hereof permits him to re-enrol.

10. A graduate who has obtained the Honours degree of Bachelor of Arts may not proceed to the Honours degree of Bachelor of Science in the same subject.

11. A graduate who has obtained the Ordinary degree of Bachelor of Arts and has fulfilled the requirements of clause 9 for the Honours degree of Bachelor of Science in the Faculty of Mathematical Sciences shall be awarded the Honours degree of Bachelor of Arts.

12. Applications for approval under clauses 4(a), 4(b), 7(a), 7(b) or 8 shall be submitted in writing to the Academic Registrar.

Regulations allowed 21 December, 1972.

OF THE DEGREE OF  
**BACHELOR OF SCIENCE**  
IN THE FACULTY OF MATHEMATICAL SCIENCES

**SCHEDULES**

(Made by the Council under regulation 3.)

NOTE: Syllabuses of subjects for the degree of B.Sc. in the Faculty of Mathematical Sciences are published below, immediately after these schedules. For syllabuses of subjects taught for other degrees and diplomas see the table of subjects at the end of the volume.

**SCHEDULE I: SUBJECTS OF STUDY**

**FIRST-YEAR SUBJECTS AND HALF-SUBJECTS**

**1. Mathematical Sciences subjects**

QM01 Mathematics I

**Mathematical Sciences half-subjects**

QA7H Computing IH

QT7H Statistics IH

**2. Arts subjects**

AA01 Anthropology I  
AQ01 Chinese I  
AC31 Classical Studies I  
UA11 Drama I  
AJ71 Economic Geography I  
AE01 English I  
AF01 French I  
AF11 French IA  
AJ01 Geography I  
AG01 German I  
AG11 German IA  
AC11 Greek I  
AC71 Greek IA

AH01 History IA  
AH31 History IB  
AH41 History IC  
AQ21 Japanese I  
AQ31 Japanese IA  
AC01 Latin I  
AC41 Latin IA  
UA51 Music I  
UA61 Music IA  
AP11 Politics IA  
AP21 Politics IB  
AY01 Psychology I

**Arts half-subjects**

AJ2H Human Geography IH  
AL2H Logic IH  
AL1H Philosophy IH(A)

AL3H Philosophy IH(B)  
AJ1H Physical Geography IH  
SP9H Physics, Man and Society IH

**3. Economics subjects**

EC01 Accounting I

**Economics half-subjects**

EE1G Macroeconomics IH

EE2G Microeconomics IH

**4. Engineering subjects**

NX01 Engineering I

**5. Science subjects**

SZ71 Biology I  
SC01 Chemistry I  
SG01 Geology I

QM11 Mathematics IM<sup>o</sup>  
SP01 Physics I

**Science half-subjects**

SP8H Astronomy IH  
SB6H Botany IH<sup>†</sup>  
SB5H Environmental Biology IH

SG7H Environmental Geology IH  
SJ7H Genetics and Human Variation IH

<sup>o</sup> With permission of the Faculty, QM11 Mathematics IM may be counted as a Mathematical Sciences subject in place of QM01 Mathematics I for the purpose of schedule II.

<sup>†</sup> See schedule II, paragraph 6(f).

SECOND-YEAR SUBJECTS AND HALF-SUBJECTS

1. Mathematical Sciences subjects

QN22 Applied Mathematics IIA	QA12 Computing Science IIC
QN12 Applied Mathematics IIB	QT02 Mathematical Statistics II
QA02 Computing Science II	QM02 Pure Mathematics II

2. Arts subjects

AE82 American Literature II	AG12 German IIA
AC72 Ancient History II (Roman)	AG87 German IIB
AA02 Anthropology IIA	AC12 Greek II
AA12 Anthropology IIB	AC82 Greek IIA
AA22 Anthropology IIC	AC92 Greek Art and Archaeology II
AQ42 Asian Civilisations: Past and Present II	AH02 History IIA
AQ12 Asian Development II	AH22 History IIB
AE72 Australian Literary Studies II	AQ22 Japanese II
AQ02 Chinese II	AC02 Latin II
AC32 Classical Studies II	AC42 Latin IIA
UA12 Drama II†	AE92 Linguistics II
AE02 English II	AL22 Logic II
AF02 French II	UA52 Music II
AF12 French IIA	AE87 Old and Middle English II
AF72 French IIB	AL02 Philosophy II
AJ12 Geography IIA	AP32 Politics IIA
AJ22 Geography IIB	AP42 Politics IIB
AG02 German II	AY02 Psychology II

Arts half-subjects

AJ7H Geography IIIH

3. Economics subjects

EC02 Accounting II

Economics half-subjects

EE6F Economic History IIIH(A)	EE3G Macroeconomics IIIH
EE7F Economic History IIIH(B)	EE4G Microeconomics IIIH

4. Science subjects

SY02 Biochemistry II	SO02 Organic Chemistry II
SB02 Botany II	SC02 Physical and Inorganic Chemistry II
SC12 Chemistry II	SP02 Physics II
SJ02 Genetics II	SS02 Physiology II
SG02 Geology II	SZ02 Zoology II
SG72 Geophysics II	

† To be offered in 1979 only if staff available.

### THIRD-YEAR SUBJECTS AND HALF-SUBJECTS

#### 1. Mathematical Sciences subjects

QN03 Applied Mathematics III	QF13 Mathematical Physics III
QN13 Applied Mathematics IIIA	QT03 Mathematical Statistics III
QA03 Computing Science III	QM03 Pure Mathematics III
QA13 Computing Science IIIA	QM13 Pure Mathematics IIIA

#### 2. Arts subjects

AC73 Ancient History III (Roman)	AG88 German IIIB
AA03 Anthropology IIIA	AC13 Greek III
AA13 Anthropology IIIB	AH03 History IIIA
AA23 Anthropology IIIC	AH13 History IIIB
AA33 Anthropology IIID	AQ23 Japanese III
AQ03 Chinese III	AC03 Latin III
AC33 Classical Studies III	AE93 Linguistics III
AQ43 The Development of Asia III	AL23 Logic III
AE03 English IIIA	UA53 Music III
AE13 English IIIB	AE88 Old and Middle English III
AF03 French III	AL03 Philosophy IIIA
AF88 French IIIB	AL13 Philosophy IIIB
AJ13 Geography IIIA	AP03 Politics IIIA
AJ23 Geography IIIB	AP13 Politics IIIB
AG03 German III	AY23 Psychology III

#### Arts half-subjects

AJ8H Geography IIIB	AY2H Psychology IIIB(B)
AY1H Psychology IIIB(A)	

#### 3. Economics subjects.

EC33 Commerce III (Mathematical Sciences)	EE03 Economics III (Mathematical Sciences)
---	--

#### 4. Science subjects

QN83 Applied Mathematics IIIM*	SK03 Microbiology and Immunology III
SY03 Biochemistry III	SO03 Organic Chemistry III
SY83 Biochemistry IIIM	SO83 Organic Chemistry IIIM
SB03 Botany III	SC13 Physical and Inorganic Chemistry IIIB
SB83 Botany IIIM	SC83 Physical and Inorganic Chemistry IIIM
QA83 Computing Science IIIM*	SP03 Physics III
SJ03 Genetics III	SP83 Physics IIIM
SG03 Geology III	SS03 Physiology III
SG83 Geology IIIM	SS33 Physiology IIIA (Physiology)
SG73 Geophysics III	SS43 Physiology IIIB (Pharmacology)
SG23 Geology and Economic Geology IIIA	SS83 Physiology IIIM
SG33 Geology and Economic Geology IIIB	QM83 Pure Mathematics IIIM*
MA13 Histology and Cell Biology III	SZ03 Zoology III
MA43 Histology and Cell Biology IIIM	SZ83 Zoology IIIM

\* See schedule II paragraph 3 for the circumstances under which these subjects may be counted towards the degree of Bachelor of Science in the Faculty of Mathematical Sciences.

## SCHEDULE II: THE ORDINARY DEGREE

### 1. Subjects

Throughout this schedule the word "subject" denotes a subject listed in schedule I.

### 2. Equivalence of first-year half-subjects to first-year subjects

(a) Two Mathematical Sciences first-year half-subjects are equivalent to one Mathematical Sciences first-year subject for the purpose of this schedule.

(b) Any other combination of two first-year half-subjects is equivalent to a first-year subject, but cannot be counted as a Mathematical Sciences subject.

### 3. General requirements.

To qualify for the Ordinary degree a candidate shall present nine subjects or their equivalent, including at least two third-year subjects. With exceptions indicated in (a) and (d) below at least half of the subjects presented shall be Mathematical Sciences subjects. The allowable combinations of third-year subjects are:

- (a) Two Mathematical Sciences subjects (provided that in addition at least  $2\frac{1}{2}$  other Mathematical Sciences subjects are presented).
- (b) One Mathematical Sciences subject (provided that in addition at least  $3\frac{1}{2}$  other Mathematical Sciences subjects are presented).
- (c) One Mathematical Sciences subject and one of QN83 Applied Mathematics IIIM, QA83 Computing Science IIIM, and QM83 Pure Mathematics IIIM (provided that in addition at least 3 other Mathematical Sciences subjects are presented).
- (d) Two of QN83 Applied Mathematics IIIM, QA83 Computing Science IIIM and QM83 Pure Mathematics IIIM (provided that in addition at least  $3\frac{1}{2}$  Mathematical Sciences subjects are presented).

In (a), (b), (c) and (d) above, with the permission of the Faculty, QM11 Mathematics IM may be counted as a Mathematical Sciences subject in place of QM01 Mathematics I for the purpose of this Schedule.

In the first year of enrolment in the Faculty of Mathematical Sciences a candidate must enrol in at least one of QM01 Mathematics I or QA7H Computing IH or QT7H Statistics IH. Except with the permission of the Faculty, a candidate may not enrol in more than three subjects taught by departments outside the Faculty before obtaining at least a Division I pass in QM01 Mathematics I or QM11 Mathematics IM.

### 4. Distribution of subjects by years

The distribution of subjects by years shall be *either*

- 4 first-year, 3 second-year, and 2 third-year subjects or their equivalent; *or*  
5 first-year, 2 second-year, and 2 third-year subjects or their equivalent.

Permission of the Faculty is required for any other combination.

### 5. Approval of subjects

Courses of study must be approved by the Dean or an Assistant to the Dean at enrolment each year.

### 6. Unacceptable combinations of subjects

(a) No candidate will be permitted to count for the degree any subject or half-subject together with any other subject or half-subject which, in the opinion of the Faculty, contains a substantial amount of the same material; and no subject, or half-subject, may be counted twice towards the degree.\*

(b) No candidate may present the same half-subject, section of a subject, unit of a subject or option, in more than one subject for the degree.

(c) A candidate shall not present more than two of AH01 History IA, AH31 History IB and AH41 History IC.

(d) A candidate shall not present more than two of AA03 Anthropology IIIA, AA13 Anthropology IIIB, AA23 Anthropology IIIC and AA33 Anthropology IIID.

(e) No candidate may enrol in SB6H Botany IH unless he is enrolled in or has passed SZ71 Biology I.

\* A table of unacceptable combinations of subjects and half-subjects is given towards the end of this Volume (*see* Table of Contents).

### 7. Examinations

(a) Final examinations in any subject or unit shall be held in the examination period defined by the Council after the completion of the course of instruction in that subject or unit.

(c) Other examinations may be held at any time fixed by the examiners concerned, provided that such examinations are not held in the vacation and that attendance at such examinations is not compulsory.

### 8. Special circumstances

(a) When, in the opinion of the Faculty, special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of clauses 1-7 above.

(b) An examination which is to be taken into account for the purpose of regulation 5(c) may be held if the Faculty so approve. Such examination shall be held during the examination periods defined by the Council.

### 9. Pass lists

The names of the candidates who pass in any subject shall be published in an official list and be arranged in alphabetical order in the classifications: Pass with Distinction, Pass with Credit and Pass.

NOTE (not forming part of the schedules):

*Work required to complete an Adelaide degree.*

To qualify for the degree:

(i) students who have completed most of the requirements for the degree of Bachelor of Science at another institution will be required as a minimum to complete a full third-year's work in order to qualify for the Adelaide degree; and

(ii) with special permission of the Faculty, a student who has completed most of the subjects for the degree of Bachelor of Science in Adelaide including one third-year subject may be permitted to complete the requirements for the degree at another institution.

All applications must be made in writing to the Academic Registrar.

## SCHEDULE III: THE HONOURS DEGREE

1. A candidate may, subject to approval by the Head/Chairman of the department concerned, proceed to the Honours degree in one of the following subjects:

QN99 Applied Mathematics	QM99 Pure Mathematics
QA99 Computing Science	QT99 Statistics
QF99 Mathematical Physics	

2. A candidate may, subject to the approval of the Faculty in each case, proceed to the Honours degree in a subject taught in a department in another faculty. Candidates must consult the Chairman of the department concerned and apply, in writing, to the Academic Registrar for admission to the Honours course.

3. A candidate for the Honours degree in any subject shall not begin Honours work in that subject until he has qualified for the Ordinary degree of Bachelor of Arts or Bachelor of Science or such other degree as may be acceptable to the Faculty. A candidate who has been granted permission to spread the work of the Honours year over two years under regulation 9(b) must complete his qualifications for the Ordinary degree before beginning the work of the second year of his Honours course.

4. When, in the opinion of the Faculty, special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary the provisions of clauses 1, 2 and 3 above.

OF THE DEGREE OF  
**BACHELOR OF SCIENCE**  
IN THE FACULTY OF MATHEMATICAL SCIENCES  
**S Y L L A B U S E S**

*Text-books:*

Students are expected to procure the latest edition of all text-books prescribed.

*Examinations:*

For each subject students may obtain from the department concerned details of the examination in that subject including the relative weights given to the components (e.g. such of the following as are relevant: assessments, term or mid-year tests, essays or other written or practical work, final written examinations, *viva voce* examinations).

**COMPUTING SCIENCE.**

For students wishing to major in Computing Science the recommended course is:

First year: QA7H Computing IH, QT7H Statistics IH, QM01 Mathematics I, plus two subjects.

Second year: QA02 Computing Science II, plus two subjects.

Third year: QA03 Computing Science III, plus one subject.

**Course in Computer Programming.**

The Department of Computing Science normally conducts a credit course in Fortran programming for students of Architectural Design and Planning II. In 1979 this course will be given by a member of the Faculty of Architecture and Planning.

**QA7H Computing IH.**

A first-year half-subject, consisting of two lectures and one tutorial a week throughout the year. A background in algebra, such as may be obtained from the Matriculation Mathematics IS syllabus, or equivalent, will be assumed. Practical programming exercises will be a requirement of the course.

The subject is designed to convey an understanding of the elements of Computing Science as well as to teach computer programming.

Syllabus: Algorithmic processes and languages (Pascal and Fortran in 1979). Computer organisation and coding. Data structures and their manipulation.

*Text-book:*

Jensen, K., and Wirth, N., *Pascal user manual and report* (Springer).

## SECOND-YEAR SUBJECTS IN COMPUTING SCIENCE.

Two alternative full second-year subjects are offered; the first, QA02 Computing Science II, is designed only for students who have passed QA7H Computing IH in 1976 or thereafter, and the second, QA12 Computing Science IIC, is intended for all other students irrespective of previous programming experience or knowledge of Fortran. Students who passed QA7H Computing IH prior to 1976 should enrol in QA12 Computing Science IIC. Students with a knowledge of the programming language Pascal should consult the Department before enrolling.

Both QA02 Computing Science II and QA12 Computing Science IIC lead to QA03 Computing Science III and all units thereof. QA7H Computing IH, taken in 1976 or thereafter, and QA12 Computing Science IIC may NOT both be counted towards a degree.

### QA02 Computing Science II.

Pre-requisite subject. QM01 Mathematics I or QM11 Mathematics IM at Division I or higher standard.

This subject is intended for those students with a background equivalent to QA7H Computing IH taken in 1976 or thereafter.

The course comprises four lectures and one tutorial class a week, together with compulsory practical exercises.

The syllabus includes the following topics: numerical methods, advanced Fortran programming, introduction to computer systems, assembly languages, Pascal programming and data structures.

Lecture times are: Monday 9.10, Tuesday 10.10, Thursday 10.10, Friday 12.10.

#### Text-books:

Jensen, K., and Wirth, N., *Pascal user manual and report* (Springer).  
Kreyszig, E., *Advanced engineering mathematics*, 3rd edition (Wiley).

#### Reference books:

Dahlquist, G., and Björck, A., *Numerical methods* (Prentice-Hall).  
Dahl, O. J., and others, *Structured programming* (Academic Press).  
Schneider, G. M., and others, *An introduction to programming and problem solving with Pascal* (Wiley).  
Hamacher, V. C., and others, *Computer organization* (McGraw Hill).  
Grishman, R., *Assembly language programming* (Algorithmics Press).  
Wiley, G. R., *Fortran extended*, 2nd edition (Techsearch).

### QA12 Computing Science IIC.

Pre-requisite subject: QM01 Mathematics I or QM11 Mathematics IM at Division I or higher standard.

This subject is intended for all students EXCEPT those with some experience of programming in Pascal such as may have been obtained in QA7H Computing IH taken in 1976 or thereafter.

The course comprises four lectures and one tutorial class a week, together with compulsory practical exercises.

Students enrolled for this subject who have had no previous programming experience are strongly advised to attend the preliminary workshop in Pascal programming to be conducted in orientation week commencing on the Wednesday. The workshop is not intended for students with elementary Fortran programming experience.

The syllabus is almost identical with that for QA02 Computing Science II, but an introduction to computer programming in Pascal is substituted for the topic, advanced Fortran programming.

Lecture times are: Monday 9.10, Tuesday 10.10, Thursday 10.10, Friday 12.10.

(Text and reference books: as for QA02 Computing Science II, but excluding the last one.)



### THIRD-YEAR SUBJECTS IN COMPUTING SCIENCE.

The Department will offer the following third-year units in 1979 as staff and enrolments allow. Each unit, with the exception of A309 (Cobol Project), consists of about 27 lectures as well as tutorials, written exercises and, in most units, practical programming exercises.

There will be one tutorial fortnightly for some units and practical work at times to be arranged. There is strictly limited provision for after hours tutorials and practical work for part-time students.

Students taking the units A302 Numerical Analysis I or A306 Simulation I will be expected to have at their disposal a pocket calculator (usable at tutorials and possibly at examinations) with at least the following features:

- (i) The functions  $\sin x$ ,  $\cos x$ ,  $\tan x$ ,  $\arcsin x$ ,  $\arccos x$ ,  $\arctan x$ ,  $e^x$ ,  $\ln x$ ,  $\sqrt{x}$ .
- (ii) One memory location.

The lecture times for the units are shown in parentheses.

#### A301 COMPUTER ARCHITECTURE (Second term: Mon 3.15, Tues 2.15, Thurs 2.15).

Material included: Memory systems, memory interleaving, content addressable memory, virtual memory, memory protection, hierarchical memory systems, cache store, push down store, interrupt systems, paging, segmentation, micro-programming, multiprogramming, mini-computers, pipe line computers, array computers, study of particular computing systems.

#### A302 NUMERICAL ANALYSIS I (First term: Mon 4.15, Wed 2.15, Thurs 4.15).

Topics will include computer arithmetic, numerical solution of non-linear equations, numerical solution of systems of linear equations and the computation of eigenvalues and eigenvectors. The course is intended to be an analysis course rather than a methods course.

Equipment: Pocket calculator (see above).

Reference books:

Dahlquist, G., and Björck, A., *Numerical methods* (Prentice Hall).

Isaacson, E., and Keller, H. B., *Analysis of numerical methods* (Wiley).

#### A303 OPERATING SYSTEMS I (Second term: Tues 4.15, Wed 4.15, Fri 4.15).

A detailed study and comparison of the NOS/BE operating system on the Cyber 173 computer and the DOS-11 operating system on the PDP-11 computer. Topics will include processors, monitor programs, interrupt systems, inter-process communication, peripheral equipment control and job scheduling. The principles will be illustrated by exercises involving the programming and running of virtual machine programs for the two computers. The course will conclude with an analysis of the essential features of operating systems, and an introduction to the more abstract study of their design.

Reference books:

Eckhouse, R. H., *Minicomputer systems: organization and programming* (PDP-11) (Prentice-Hall).

#### A304 PROGRAMMING LANGUAGES I (Second term: Mon 4.15, Wed 2.15, Thurs 4.15).

Scope rules, block structure and recursion in block structured languages. Organisation of the runtime stack. Description of a simple stack machine. Backus-Naur notation, elementary treatment of phrase structure grammars, syntax graphs. Top down parsing, description of a simple recursive descent compiler. Internal forms of programs, compiler portability, symbol table organisation. The course involves a substantial amount of practical programming in Pascal.

Reference books:

Gries, D., *Compiler construction for digital computers* (Wiley).

Wirth, N., *Algorithms + data structures = programs* (Prentice-Hall).

A305 PROGRAMMING LANGUAGES II (Third term: Mon 4.15, Wed 2.15,  
Thurs 4.15).

Predictive analysis including goal-seeking mechanisms, backtrack, and syntax-directed processes. The programming language Snobol-4, and pattern matching in particular. Elementary computational linguistics—context free phrase structure grammar, derivation, structural description, parsing. Direct reduction parsing. precedence techniques.

Reference books:

- Gries, D., *Compiler construction for digital computers* (Wiley).  
Griswold, R. E., and others, *The Snobol-4 programming language*  
(Prentice-Hall).

A306 SIMULATION (First term: Tues 4.15, Wed 4.15, Fri 4.15).

The course will be an introductory treatment of discrete event digital simulation covering model formulation, statistical concepts, generation of stochastic variates, output analysis and experimental design.

Equipment: Pocket calculator (see above).

Reference books:

- Fishman, G. S., *Concepts and methods in discrete event digital simulation*  
(Wiley).  
Naylor, T. H., *Computer simulation experiments with models of economic systems* (Wiley).  
Cohen, C., and Robinson, B., *Simulation modeling and programming with SPURT/76* (Vogelback Computing Centre, Northwestern University).

A307 GRAPHS (Third term: Tues 4.15, Wed 4.15, Fri 4.15).

Mainly an algorithmic approach to graphs. Representation of graphs by matrices and lists; algorithms for some of: finding components, weighted paths, spanning trees, cycles. Improving enumerative algorithms.

Reference books:

- Christofides, N., *Graph theory, an algorithmic approach* (Academic Press).

A308 COBOL AND DATA BASE MANAGEMENT (First term: Mon 3.15, Tues 2.15,  
Thurs 2.15).

This course embodies a Cobol programming language course prior to discussion of the CODASYL data base management system which uses Cobol as the host language. The relational type of data base system will also be considered.

Reference books:

- Martin, J., *Computer data—base organization* (Prentice-Hall).  
McCracken, D. D., and Garbassi, U., *A guide to Cobol programming*,  
2nd edition (Wiley).  
*Cobol version 4 reference manual* (Control Data Corporation).  
McCracken, D. D., *A simplified guide to structured Cobol programming*  
(Wiley).

A309 COBOL PROJECT (Third term: Mon 3.15, Tues 2.15, Thurs 2.15).

This unit assumes a knowledge of Cobol such as may have been obtained in the unit A308 Cobol and Data Base Management.

The Project is a major programming exercise (about a quarter of a term's work) following on from the unit A308 Cobol and Data Base Management. Lectures and tutorials will be arranged as necessary from among the times shown in parentheses.

**Subject combinations and pre-requisites.**

A pass at Division I level or higher in QA02 Computing Science II or QA12 Computing Science IIC is the pre-requisite for QA03 Computing Science

III, QA13 Computing Science IIIA, QA83 Computing Science IIIM, and all third-year units.

Students intending to take Honours Computing Science are strongly advised to include the units A301, A302, A303, A304, A305, A306 in their course. Although these units are not formal pre-requisites for Honours work, they form an important background to it.

The subjects offered are:

#### QA03 Computing Science III.

This subject consists of any six of the third-year units A301, A302, A303, A304, A305, A306, A307, A308, A309 offered by the Department of Computing Science.

#### QA13 Computing Science IIIA.

The course consists of six third-year units offered by Departments in the Faculty of Mathematical Sciences and selected with the approval of the Chairmen of all Departments concerned. The units selected must satisfy the following requirements:

- (i) at least four units must be selected from units offered by the Department of Computing Science;
- (ii) at least one unit must be selected from units offered by other Departments in the Faculty of Mathematical Sciences.

#### QA83 Computing Science IIIM.

The course consists of six third-year units selected with the approval of the Heads/Chairmen of all Departments concerned. The units selected must satisfy the following requirements:

- (i) at least four units must be selected from units offered by the Department of Computing Science;
- (ii) at least one unit must be selected from units offered by Departments in another Faculty.

(For the purpose of this subject, a double unit in another Faculty is regarded as two single units.)

---

### HONOURS DEGREE OF B.A. OR B.Sc.

#### QA99 Computing Science for the Honours degree of B.A. or B.Sc.

The normal pre-requisites are passes at a standard satisfactory to the Chairman of the Department in the following: QA03 Computing Science III or QA13 Computing Science IIIA or QA83 Computing Science IIIM, and one other third-year subject offered by the Departments of Pure Mathematics, Applied Mathematics or Statistics. Students with a different background of third-year courses may be accepted at the discretion of the Chairman of the Department of Computing Science.

The course will be determined from year to year and will consist partly of lectures given in the Department of Computing Science, and partly of lectures given in other departments of the Faculty of Mathematical Sciences. It will normally include topics selected from the following: operating systems, advanced numerical analysis, information theory, operations research, advanced programming languages, theory of languages, computer architecture.

Students will be required to undertake a major computing project, under the guidance of a supervisor.

Intending students should consult the Chairman of the Department of Computing Science not later than the end of the preceding year, and be prepared to commence work on a suitable project in the first week of February.

ECONOMICS AND COMMERCE  
(FOR THE DEGREE OF BACHELOR OF SCIENCE)  
IN THE FACULTY OF MATHEMATICAL SCIENCES

**Introductory Notes.**

The first-year and second-year Economics subjects and half-subjects available to Mathematical Sciences students are listed in Schedule I of the degree of Bachelor of Science in the Faculty of Mathematical Sciences. For syllabuses please see under the degree of Bachelor of Economics in the Faculty of Economics. Two third-year Economics subjects for Mathematical Sciences are available, namely:

EE03 Economics III (Mathematical Sciences)      EC33 Commerce III (Mathematical Sciences).  
and details of these are given below.

For students wishing to include EE03 Economics III (Mathematical Sciences) in a Mathematical Sciences degree, the recommended choice of subjects is:

First Year: Four subjects including  
EE1G Macroeconomics IH      *and at least one of*  
EE2G Microeconomics IH      QA7H Computing IH and  
QM01 Mathematics I      QT7H Statistics IH

Second Year:  
EE3G Macroeconomics IIIH      and 2 Mathematical Sciences subjects  
EE4G Microeconomics IIIH

Third Year:  
EE03 Economics III (Mathematical Sciences), and a Mathematical Sciences subject

For students wishing to include EC33 Commerce III (Mathematical Sciences) in a Mathematical Sciences degree, the recommended choice of subjects is:

First Year: Four subjects including  
EC01 Accounting I      QM01 Mathematics I  
EE2G Microeconomics IH      QT7H Statistics IH  
(Inclusion of EE1G Macroeconomics IH and/or QA7H Computing IH is also desirable.)

Second Year:  
EC02 Accounting II, and 2 Mathematical Sciences subjects

Third Year:  
EC33 Commerce III (Mathematical Sciences), and a Mathematical Sciences subject

The third year Economics half-subjects available within EE03 Economics III (Mathematical Sciences) and EC33 Commerce III (Mathematical Sciences) are each equivalent to two third-year Mathematical Sciences units. These half-subjects are also available for inclusion in some mixed third-year (IIIM) subjects offered by Mathematical Sciences Departments.

Mathematical Sciences students who have taken appropriate options in EE03 Economics III (Mathematical Sciences) may proceed to Honours in Economics subject to the permission of the Faculty of Mathematical Sciences and the Department of Economics. Students interested in this possibility should consult the Chairman of the Department of Economics before enrolling in EE03 Economics III (Mathematical Sciences).

**EE03 Economics III (Mathematical Sciences).**

This subject is available only to Mathematical Sciences students who have passed EE3G Macroeconomics IIIH and EE4G Microeconomics IIIH.

The course consists of the equivalent of *six* units selected from the following list of options, in which EE13 Economic Development III and EE33 Economics IIIA are equivalent to *four* units and all other options are equivalent to *two* units:

EE13 Economic Development III	(4)	EE7H Managerial Economics	
EE33 Economics IIIA	(4)	IIIH	(2)
EE8G Economic History IIIH	(2)	EE8H Econometrics IIIH	(2)
EE2H Public Finance IIIH	(2)	EE9H Mathematical Economics	
EE3H Economics of Labour IIIH	(2)	IIIH	(2)
EE4H Agricultural Economics		EE8F Economic Theory IIIH	(2)
IIIH	(2)		

For syllabuses and pre-requisites for these options please see under the degree of Bachelor of Economics in the Faculty of Economics. Students must have passed the pre-requisite subjects or half-subjects relevant to the options included.

The options selected must include:

*either* EE33 Economics IIIA *or* EE13 Economic Development III

**EC33 Commerce III (Mathematical Sciences).**

This subject is available only to Mathematical Sciences students who have passed EC02 Management Accounting II.

This course consists of a selection of the equivalent of *six* units from the following list, in which EC03 Accounting III and EC23 Industrial Sociology III are each equivalent to *four* units and all other options are equivalent to *two* units:

EC03 Accounting III	(4)	EC23 Industrial Sociology III	(4)
EC4H Business Finance IIIH	(2)	EC5H Marketing IIIH	(2)
LL2H Commercial Law IH	(2)		

For syllabuses and pre-requisites for these options, please see under the degree of Bachelor of Economics in the Faculty of Economics, noting that either QT7H Statistics IIIH *or* QT02 Mathematical Statistics II is acceptable as a pre-requisite in lieu of EE22 Economic Statistics II *or* EE32 Economic Statistics IIA.

Students must have passed the pre-requisite subjects or half-subjects relevant to the options included.

At least one of the options EC03 Accounting III, and EC4H Business Finance IIIH must be included.

With the permission of the Chairman of the Department of Commerce, at most one two-unit option may be replaced by two third-year units offered by Mathematical Sciences Departments. In such cases the units and options selected for the course must be approved by the Chairmen of all Departments concerned.

## MATHEMATICAL PHYSICS.

The pre-requisites for QF13 Mathematical Physics III and QF03 Theoretical Physics are passes at Division I or higher standard in two second-year subjects, including QM02 Pure Mathematics II or QN22 Applied Mathematics IIA or QN12 Applied Mathematics IIB.

The Department offers the following units, most of which consist of two or three lectures a week, and a tutorial, for one term:

F301 MATHEMATICAL METHODS: First term.

Vector and Tensor Analysis. Theory and applications of distributions.

F302 ADVANCED DYNAMICS: First term.

Newtonian mechanics. Lagrange's and Hamilton's equations of motion.

F303 QUANTUM MECHANICS I: Second term.

This unit is essential for students wishing to study molecular, atomic or nuclear physics at an advanced level. The subject is developed from first principles, with emphasis on the use of Hilbert space, and some elementary applications are included.

F304 THEORY OF RELATIVITY: Second term.

Lorentz transformations. Minkowski space, kinematics and dynamics of point particles, electromagnetism, charged particle motions.

The Physics Unit P309 is identical (see footnote to third-year time-table).

F305 QUANTUM MECHANICS II: Third term.

This unit is strongly recommended to students wishing to proceed to honours in Mathematical Physics. It includes more advanced applications, and is a continuation of F303, a knowledge of which is assumed.

F306 CONTINUUM MECHANICS: Third term.

Macroscopic conservation laws, thermodynamics and irreversible processes. Magnetohydrodynamics.

F307 STATISTICAL MECHANICS: Third term.

Equilibrium distributions; microcanonical, canonical, grand-canonical. Non-interacting systems, Boltzman, Fermi-Dirac and Bose-Einstein statistics. Connection with thermodynamics.

The subjects offered are:

### QF03 Theoretical Physics III.

This is a group C science subject and may be taken only with another group C subject listed in the Syllabus of a Department of the Faculty of Science. It consists of at least six units which will normally include at least four of the units F301-F307. The remaining units should be chosen, with the approval of the Chairman of the Department, from units offered by Departments of the Faculty of Mathematical Sciences. The unit M323 Complex Functions of QM03 Pure Mathematics III should normally be included.

### QF13 Mathematical Physics III.

This subject may be taken only with another third-year subject of the Faculty of Mathematical Sciences, listed under Schedule I, 3. It consists of at least six units, which will normally include at least five of the units F301-F307. The unit M321 Applicable Analysis in Pure Mathematics should be included by students not taking QM03 Pure Mathematics III.

HONOURS DEGREE.

QF99 Mathematical Physics for the Honours degree of B.Sc.

Students who have reached a satisfactory standard in at least four of the third-year units F301-7, and other third-year Science or Mathematical Sciences units, may be permitted to proceed to the Honours course.

The course will contain lectures on most of the following subjects: general theory of relativity, relativistic quantum mechanics, field theory, statistical mechanics, quantal many body theory, electricity and magnetism, advanced plasma dynamics, theoretical nuclear physics, particle physics, irreversible statistical mechanics, together with a selection of lectures drawn from the honours programmes of the Departments of Physics and Mathematics. In addition students will be required to submit a thesis containing a review of, or original contributions to, some advanced topic in mathematical physics, to be approved in advance by the Chairman of the Department. A reading knowledge will be required of at least one foreign language.

## MATHEMATICS.

### INTRODUCTORY NOTES.

1. Attention is drawn to the pre-requisite subjects for admission to the various courses and units as prescribed in the syllabuses below.

2. The Departments of Pure and Applied Mathematics offer the following courses:

First Year: \*QM01 Mathematics I, QM11 Mathematics IM, QM7H Mathematics IH (half-subject).

Second Year: \*QM02 Pure Mathematics II, \*QN22 Applied Mathematics IIA, \*QN12 Applied Mathematics IIB.

Third Year: \*QM03 Pure Mathematics III, \*QM13 Pure Mathematics IIIA, QM83 Pure Mathematics IIIM, \*QN03 Applied Mathematics III, \*QN13 Applied Mathematics IIIA, QN83 Applied Mathematics IIIM, Mathematics III (Engineering) (Part 9 of Engineering II and III).

Fourth Year: QM99 Honours Pure Mathematics, QN99 Honours Applied Mathematics.

Subjects marked \* are Mathematical Sciences subjects and may count towards the requirements of Section 3 of Schedule II for the Ordinary degree of B.Sc. in the Faculty of Mathematical Sciences. The fourth-year courses are available only in the Faculty of Mathematical Sciences.

3. The courses QN22 Applied Mathematics IIA and QN12 Applied Mathematics IIB are similar in scope. QN12 Applied Mathematics IIB is designed to meet the mathematical requirements of Engineering students, but is also suitable for non-Engineering students.

A pass at Division I or higher standard in *either* QM01 Mathematics I or QM11 Mathematics IM is a pre-requisite for QN22 Applied Mathematics IIA or QN12 Applied Mathematics IIB, but QM01 Mathematics I provides the better background and preparation.

A pass at Division I or higher standard in *either* QN22 Applied Mathematics IIA or QN12 Applied Mathematics IIB is a sufficient pre-requisite for all third-year Applied Mathematics units, but QN22 Applied Mathematics IIA is a better preparation for the probability units.

4. Students who have passed either of the mixed second-year subjects QN32 Applied-Pure Mathematics IIC or QN42 Applied-Pure Mathematics IID, which were given for the last time in 1977, should consult the Chairmen of the Applied and Pure Mathematics Departments if they wish to proceed to any third year mathematics subjects or units.

5. Subject to the approval of the Heads/Chairmen of all Departments concerned, two third-year units in Pure or Applied Mathematics can be combined with units from a Department in the Faculty of Science to make up a third-year Science subject.

6. For unacceptable combinations of subjects offered by the Pure and Applied Mathematics Departments please see the list of unacceptable combinations of subjects towards the end of this volume.



7. For students wishing to major in Applied Mathematics the recommended choice of subjects is:

First Year: QM01 Mathematics I, QA7H Computing IH, QT7H Statistics IH + 2 subjects;

Second Year: QN22 Applied Mathematics IIA, QM02 Pure Mathematics II + 1 subject;

Third Year: QN03 Applied Mathematics III + 1 subject.

The alternative five first-year, two second-year, two third-year allows QA7H Computing IH, for example, to be taken in second year if not taken in first year.

8. For students wishing to major in Pure Mathematics, the recommended choice of subjects is:

First Year: QM01 Mathematics I, QA7H Computing IH, QT7H Statistics IH + 2 subjects;

Second Year: QM02 Pure Mathematics II + 2 subjects, at least one of which should be a Mathematical Sciences subject;

Third Year: QM03 Pure Mathematics III + a Mathematical Sciences subject.

9. For students with special interest in mathematical logic, philosophy courses (with the logic options) are particularly suitable for combining with pure mathematics.

10. A student who is likely to become a teacher of mathematics is strongly advised to study some computing science and statistics in addition to mathematics.

## FIRST-YEAR SUBJECTS.

### QM01 Mathematics I.

A knowledge of Matriculation Mathematics I and II will be assumed.

The course comprises four lectures and one two-hour tutorial class a week.

A pass in it at Division I or higher standard is sufficient for entrance to any second-year subject offered by the Departments of Pure and Applied Mathematics.

The syllabus comprises: functions of one and two variables, differentiation and integration, Taylor series; differential equations; the vector space  $R^n$ , linear equations and transformations, determinants, matrices, eigenvalues, quadratic forms, and elementary number theory.

Text-books:

Anton, H., *Elementary linear algebra*, 2nd edition (Wiley).

Leithold, L., *The calculus with analytic geometry*, 3rd edition (Harper International Edition).

Reference books:

- Johnson, R. E., and Kiokemeister, F. L., *Calculus with analytic geometry*, 5th edition (Allyn and Bacon).  
Maxfield, J. E., and Maxfield, M. W., *Discovering number theory* (Saunders).  
Kaplan, W., and Lewis, D. J., *Calculus and linear algebra*, combined edition (Wiley).  
Lipschutz, S., *Linear algebra* (Schaum's Outline Series).

QM11 Mathematics IM.

This course is intended for students who have studied Matriculation Mathematics IS, and a knowledge of this subject will be assumed. (Matriculation Mathematics I and II, or Matriculation Mathematics I if taken before 1971, would also provide a suitable background.)

A pass in QM11 Mathematics IM at Division I level or higher, is sufficient for entrance to: QN22 Applied Mathematics IIA or QN12 Applied Mathematics IIB.

Exceptionally, a student obtaining a pass at Distinction level in QM11 Mathematics IM may, with the permission of the Chairman of the Department of Pure Mathematics, proceed to QM02 Pure Mathematics II.

The course comprises four lectures and one two-hour tutorial class a week.

The syllabus comprises differential and integral calculus of functions of one or two real variables; differential equations; Taylor series; vector, linear equations, matrices and determinants; the vector space  $R^n$ ; linear transformations, eigenvalues; systems of linear inequalities; introduction to number theory.

Text-books:

- Anton, H., *Elementary linear algebra*, 2nd edition (Wiley).  
Leithold, L., *The calculus with analytic geometry*, 3rd edition (Harper International Edition).

Reference books:

- Ayres, F., *Matrices* (Schaum's Outline Series).  
Johnson, R. E., and Kiokemeister, F. L., *Calculus with analytic geometry*, 5th edition (Allyn and Bacon).  
Purcell, E. J., *Calculus with analytic geometry* (Appleton-Century-Crofts).  
Maxfield, J. E., and Maxfield, M. W., *Discovering number theory* (Saunders).

QM7H Mathematics IH.

This course is intended for students who do not wish to proceed to further courses in mathematics. It will assume a knowledge of Matriculation Mathematics IS. (Matriculation Mathematics I and II, or Matriculation Mathematics I if taken before 1971, would also provide a suitable background.) The course comprises two lectures and a one-hour tutorial class a week.

The syllabus comprises differential and integral calculus, differential equations, vectors, linear equations, matrices and determinants.

Reference books:

- Anton, H., *Elementary linear algebra*, 2nd edition (Wiley).  
Ayres, F., *Matrices* (Schaum's Outline Series).  
Johnson, R. E., and Kiokemeister, F. L., *Calculus with analytic geometry*, 5th edition (Allyn and Bacon).  
Leithold, L., *The calculus with analytic geometry*, 3rd edition (Harper and Row).  
Purcell, E. J., *Calculus with analytic geometry* (Appleton-Century-Crofts).

SECOND-YEAR SUBJECTS.

QM02 Pure Mathematics II.

Pre-requisite subject: QM01 Mathematics I at Division I or higher standard.

Exceptionally, a student, who obtains a pass at Distinction level in QM11 Mathematics IM, may, subject to the approval of the Chairman of the Department of Pure Mathematics, enrol in QM02 Pure Mathematics II.

The course comprises four lectures and one tutorial class a week.

The syllabus comprises six sections:

- M1 ANALYSIS (real and complex sequences and series, power series). First term.  
Reference book:  
Spivak, M., *Calculus* (Benjamin).
- M2 ALGEBRA (permutations, groups, polynomials). First term.  
Reference books:  
Davidson, N., and Gulik, F., *Abstract algebra* (Houghton Mifflin).  
Fraleigh, J. B., *A first course in abstract algebra* (Addison-Wesley).  
Shapiro, L. W., *Introduction to abstract algebra* (McGraw-Hill).
- M3 MULTIVARIATE MATHEMATICS (linear algebra, functions of several variables, multiple integrals). Second term.  
Reference book:  
Bartle, R. G., and Ionescu Tulcea, C., *Honours calculus* (Scott, Foresman).
- M4 GEOMETRY (a deductive approach to Euclidean geometry). Second term.  
Reference books:  
Coxeter, H. S. M., *Introduction to geometry* (Wiley).  
Pedoe, D., *A course of geometry* (C.U.P.).  
Maxwell, E. A., *Geometry for advanced pupils* (O.U.P.).  
Greenberg, M. J., *Euclidean and non-Euclidean geometries, development and history* (Freeman).
- M5 COMPLEX FUNCTIONS (complex functions, including contour integration and conformal mapping, together with applications). Third term.  
Text-book:  
Marsden, J. E., *Basic complex analysis* (Freeman); OR  
Churchill, R. V., and others, *Complex variables and applications*, 3rd edition (McGraw-Hill).  
Marsden is recommended for students who are likely to do third-year Pure Mathematics.
- M6 COMBINATORICS (combinations, recursive relations, generating functions, discrete problem solving). Third term.  
Text-book:  
Anderson, I., *A first course in combinatorial mathematics* (Oxford, Clarendon Press).  
Reference books:  
Liu, C., *Introduction to combinatorial mathematics* (McGraw-Hill).  
Ryser, H. J., *Combinatorial mathematics* (Mathematical Association of America).

Some of the above sections are especially suitable for secondary mathematics teachers who may wish to enrol as visiting students.

QN22 Applied Mathematics IIA.

Pre-requisite subject: QM01 Mathematics I or QM11 Mathematics IM at Division I or higher standard. QM01 Mathematics I provides a better background and preparation than QM11 Mathematics IM.

Students taking this course are advised to obtain some knowledge of computer programming beforehand, e.g. via the course QA7H Computing IH. Special arrangements will be made in orientation week to assist students who do not possess such prior computing knowledge.

The course comprises four lectures (M12, Tu12, W12, Th12) and one tutorial class a week.

The syllabus comprises a selection of topics from: Fourier series and Laplace transforms, ordinary and partial differential equations, vectors and cartesian tensors, linear programming, applied probability, mechanics, numerical analysis, complex analysis.

Text-books:

- Kreyszig, E., *Advanced engineering mathematics*, 3rd edition (Wiley).  
Spiegel, M. R., *Theoretical mechanics* (Schaum's Outline Series).  
Trustrum, K., *Linear programming* (Routledge).

**QN12 Applied Mathematics IIB.**

Pre-requisite subject: QM01 Mathematics I or QM11 Mathematics IM at Division I or higher standard. QM01 Mathematics I provides a better background and preparation than QM11 Mathematics IM.

The course comprises four lectures (M9, Tu9, W9, Th9) and one tutorial class a week.

This course is designed to meet the needs of engineering students, but is also available to non-engineering students, and provides a sufficient preparation for third-year Applied Mathematics courses.

The syllabus comprises a selection of topics from: Fourier series and Laplace transforms, ordinary and partial differential equations, vectors and cartesian tensors, linear programming, probability and statistics, numerical analysis, complex analysis. The course will also include an introduction to computing, given in orientation week.

Text-books:

- Kreyszig, E., *Advanced engineering mathematics*, 3rd edition (Wiley).  
Trustrum, K., *Linear programming* (Routledge).

**THIRD-YEAR SUBJECTS IN PURE MATHEMATICS.**

The Department of Pure Mathematics offers the following units. The third term units M324, M332 and M333 consist of six lectures and one tutorial a fortnight for the term, while the remaining units consist of five lectures and one tutorial a fortnight for one term.

The pre-requisite subjects for individual units are stated below. Note that in each case a pass at Division I level or higher is required in one of the pre-requisite subjects.

QM02 Pure Mathematics II is a sufficient pre-requisite for any of the units below.

Any second year Mathematical Sciences subject is a sufficient pre-requisite for M341 (Sets and Logic).

In addition the unit M332 (Rings and Modules) presupposes a knowledge of M331 (Groups).

Note that the two units M303 (Analysis II) and M313 (Complex Functions) given in previous years have been replaced by the single unit M323 (Complex Analysis), for which QM02 Pure Mathematics II is a pre-requisite. Much of the material previously covered in the unit M313 (Complex Functions) is now contained in section M5 (Complex Functions) of QM02 Pure Mathematics II.

Students who have passed any of the mixed subjects QA42 Computing-Pure Mathematics IIC, QA52 Computing-Pure Mathematics IID, QN32 Applied-Pure Mathematics IIC or QN42 Applied-Pure Mathematics IID (now discontinued), and who wish to proceed to some third year Pure Mathematics are advised to consult the Chairman of the Department.

Units M341 (Sets and Logic), M333 (Geometry), M321 (Applicable Analysis) and M334 (Number Theory) are particularly recommended for suitably qualified secondary mathematics teachers who wish to enrol as visiting students. Attention is also drawn to the note on the use of sections of QM02 Pure Mathematics II for this purpose.

M322 ANALYSIS (First term: M10, Tu10, Th10).

Metrics and norms, continuity, convergence, and topological concepts. Completeness and compactness, uniform convergence. Connectedness.

Reference books:

- Apostol, T. M., *Mathematical Analysis* (Addison-Wesley).  
 Kasriel, R. H., *Undergraduate topology* (W. B. Saunders).  
 Newman, M. H. A., *Topology of plane sets of points* (C.U.P.).  
 Pitts, C. G. C., *Introduction to metric spaces* (Oliver and Boyd) Univ. Math. Texts.  
 Simmons, G. F., *Introduction to topology and modern analysis* (McGraw-Hill).

M334 NUMBER THEORY (First term: Tu12, Th12, F3).

This unit assumes an elementary knowledge of computer programming.

Congruences, arithmetical functions, finite fields, quadratic fields, irrational numbers, applications.

Reference books:

- Adams, W. W., and Goldstein, L. J., *Introduction to number theory* (Prentice-Hall).  
 Hardy, G. H., and Wright, E. M., *Introduction to the theory of numbers* (C.U.P.).  
 Shockley, J. E., *Introduction to number theory* (Holt, Rinehart and Winston).  
 Stark, H. M., *Introduction to number theory* (Markham).

M341 SETS AND LOGIC (First term: M12, W12, F12).

Propositional calculus. First order logic, models, consistency. Zermelo-Fraenkel set theory.

Text-book:

- Crossley, J. N., *What is mathematical logic?* (O.U.P.).

Reference books:

- Bittinger, M. L., *Logic and proof* (Addison-Wesley).  
 Kilmister, C. W., *Language, logic and mathematics* (English Univ. Press).  
 Smith, K. J., *Introduction to symbolic logic* (Brooks and Cole).  
 Robbin, J. W., *Mathematical logic* (Benjamin).  
 Mendelson, E., *Introduction to mathematical logic* (Van Nostrand).

M321 APPLICABLE ANALYSIS (Second term: Tu12, Th12, F3).

Inner products, Hilbert space, operators, spectral theorem for compact self-adjoint operators. Orthogonal functions, recurrence relations. Fourier series.

Reference books:

- Davis, H. F., *Fourier series and orthogonal functions* (Allyn and Bacon).  
 Krall, A. M., *Linear methods of applied analysis* (Addison-Wesley).  
 Soulé, J. L., *Linear operators in Hilbert space* (Gordon and Breach).  
 Wilf, H. S., *Mathematics for the physical sciences* (Wiley).

M323 COMPLEX ANALYSIS (Second term: M10, Tu10, Th10).

This unit assumes a knowledge of the QM02 Pure Mathematics II sections M1 (Analysis) and M5 (Complex Functions).

The basic theory of holomorphic functions including conformal mapping, Cauchy's integral theorem and the residue theorem, together with selected applications.

Text-book:

- Ahlfors, L. V., *Complex analysis* (McGraw-Hill).

or

- Marsden, J. E., *Basic complex analysis* (Freeman).

Reference books:

- Ash, R. B., *Complex variables* (Academic Press).  
 Carrier, G. F., and others, *Functions of a complex variable* (McGraw-Hill).  
 Rudin, W., *Real and complex analysis* (McGraw-Hill). (This is particularly recommended to potential Honours Pure Mathematics IV students.)

M331 GROUPS (Second term: M12, W12, F12).

A systematic treatment including homomorphisms, Sylow theory, direct products, free groups, finitely generated abelian groups.

Text-book:

Shapiro, L. W., *Introduction to abstract algebra* (McGraw-Hill).

Reference books:

Fraleigh, J. B., *A course in abstract algebra* (Addison-Wesley).

MacDonald, I. P., *The theory of groups* (O.U.P.).

M324 INTEGRATION (Third term: M10, Tu10, Th10).

Countable and uncountable sets. Lebesgue measure. The Lebesgue integral of a real valued function of  $n$  variables and its applications.

Reference books:

Apostol, T. M., *Mathematical analysis*, 2nd edition (Addison-Wesley).

Rudin, W., *Principles of mathematical analysis*, 2nd edition (McGraw-Hill).

Rudin, W., *Real and complex analysis*, 2nd edition (McGraw-Hill). (This is particularly recommended to prospective Honours Pure Mathematics IV students.)

Royden, H. L., *Real analysis*, 2nd edition (Macmillan).

M332 RINGS AND MODULES (Third term: M12, W12, F12).

Rings, integral domains and fields. Modules over a principal ideal domain.

Text-book:

Hartley, B., and Hawkes, T. O., *Rings, modules and linear algebra* (Chapman and Hall).

Reference books:

Shapiro, L. W., *Introduction to abstract algebra* (McGraw-Hill).

Fraleigh, J. B., *A first course in abstract algebra* (Addison-Wesley).

M333 GEOMETRY (Third term: Tu12, Th12, F3).

This unit differs from the unit M307 (Geometry) given in previous years, the content of which is now substantially covered in QM02 Pure Mathematics II section M4 (Geometry).

An introduction to projective geometry via axioms and coordinates: incidence theorems, collineations, projectivities and the conic. One of the topics: affine and Euclidean geometry, non-Euclidean geometry, finite geometry.

Text-book:

Horadam, A. F., *A guide to undergraduate projective geometry* (Pergamon).

Reference books:

Adler, C. F., *Modern geometry* (McGraw-Hill).

Fishback, W. T., *Projective and Euclidean geometry*, 2nd edition (Wiley).

M343 HISTORY OF MATHEMATICS.

This unit will not be given in 1979.

The subjects offered are:

**QM03 Pure Mathematics III.**

Pre-requisite: a pass in QM02 Pure Mathematics II at Division I or higher standard.

The subject is designed to provide a balanced introduction to the main aspects of modern pure mathematics.

The course consists of six third year Pure Mathematics units selected to satisfy the following requirements:

- (i) the units M331 (Groups) and M322 (Analysis) must be included;
- (ii) exactly two units must be selected in each term.

However, at the discretion of the Chairman of the Department, a student may in exceptional circumstances be permitted to substitute another unit given in the department for one of the units normally required for Pure Mathematics III. Intending honours students are encouraged to take additional units. They are strongly advised to take M324 (Integration) and M332 (Rings and Modules), a knowledge of which will be assumed in compulsory analysis and algebra courses in QM99 Honours Pure Mathematics IV.

#### QM13 Pure Mathematics IIIA.

Pre-requisite: a pass in QM02 Pure Mathematics II or QN32 Applied-Pure Mathematics IIC or QN42 Applied-Pure Mathematics IID or QA42 Computing-Pure Mathematics IIC or QA52 Computing-Pure Mathematics IID at Division I or higher standard.

The course consists of six third year Mathematical Sciences units selected with the approval of the Chairman of all Departments concerned.

The units selected by students proceeding from QM02 Pure Mathematics II must satisfy the following requirements:

- (i) at least four Pure Mathematics units must be selected;
- (ii) the units M322 (Analysis) and M331 (Groups), must be included;
- (iii) at least one unit must be selected from units offered by other Mathematical Sciences Departments;
- (iv) not more than two Pure Mathematics units may be selected in any one term.

Students who have passed any of the mixed subjects QA42 Computing-Pure Mathematics IIC, QA52 Computing-Pure Mathematics IID, QN32 Applied-Pure Mathematics IIC or QN42 Applied-Pure Mathematics IID (now discontinued) and who wish to take Pure Mathematics IIIA should consult the Chairman of the Department.

#### QM83 Pure Mathematics IIIM.

Pre-requisite: a pass in QM02 Pure Mathematics II at Division I or higher standard.

The course consists of six third year units selected with the approval of the Chairmen of all Departments concerned. The units selected must satisfy the following requirements:

- (i) at least four Pure Mathematics units must be selected;
- (ii) the units M322 (Analysis) and M331 (Groups), must be included;
- (iii) at least one unit must be selected from units offered by Departments outside the Faculty of Mathematical Sciences;
- (iv) not more than two Pure Mathematics units may be selected in any one term.

(For the purpose of this subject, a double unit in the Faculty of Science is regarded as two single units.)

#### THIRD-YEAR SUBJECTS IN APPLIED MATHEMATICS.

The Department of Applied Mathematics offers the following units, each of which consists of three lectures a week and one tutorial a fortnight for one term. A pass at Division I or higher standard in QN22 Applied Mathematics IIA or QN12 Applied Mathematics IIB is the pre-requisite for all third-year Applied Mathematics units, but QN22 Applied Mathematics IIA is the better preparation for the third-year probability units N302 and N309. In addition as specified below, N309 (Queues) assumes a knowledge of applied probability such as given in Unit N302.

Students who have passed any of the mixed subjects QA22 Computing-Applied IIC, QA32 Computing-Applied IID, QN32 Applied-Pure IIC or QN42 Applied-Pure IID (now discontinued) who wish to proceed to some third-year Applied Mathematics are advised to consult the Chairman of the Department.

N301 ELASTICITY (First term: Tu9, Th9, F10).

An introduction to tensor analysis and the theory of elasticity, fundamental boundary value problems in elasticity.

Reference books:

- Sokolnikoff, I. S., *Mathematical theory of elasticity* (McGraw-Hill).  
Little, R. W., *Elasticity* (Prentice-Hall).

N302 APPLIED PROBABILITY (First term: M2, W10, F2).

Markov Chains: classification of states, solidarity properties, criteria for transience and recurrence. Random walks. Absorption probabilities. Birth and death processes. Markov Chains with rewards.

Reference book:

- Karlin, S., *A first course in stochastic processes* (Academic Press).

N303 CALCULUS OF VARIATIONS (Third term: M9, W9, F9).

Euler Lagrange equation, constrained extrema and Lagrange multipliers. Extension to several variables, variable end points. Applications in mechanics. Direct methods. Introduction to control theory.

Reference book:

- Elsgol, L. E., *Calculus of variations* (Pergamon).

N304 HYDRODYNAMICS (Second term: Tu9, Th9, F10).

Classical hydrodynamics of an inviscid fluid. Bernoulli theorem. Irrotational flows. Introduction to viscous flows. Vector (but not tensor) methods will be used. Some use may be made of complex variable analysis, which will be taught as part of the unit as required.

Reference books:

- Chorlton, F., *Textbook of fluid dynamics* (Van Nostrand).  
Batchelor, G. K., *An introduction to fluid dynamics* (C.U.P.).

N305 MATHEMATICAL PROGRAMMING (Third term: M2, W10, F2).

A selection of topics from: advanced linear programming, network theory, integer programming and applications.

Reference books:

- Garfinkel, R. S., and Nemhauser, G. L., *Integer programming* (Wiley).  
Potts, R. B., and Oliver, R. M., *Flows in transportation networks* (Academic Press).  
Taha, H. A., *Operations research* (Collier Macmillan).

N306 DIFFERENTIAL EQUATIONS (First term: M9, W9, F9).

A selection of topics from: Existence and uniqueness. Critical points and stability theory. Analysis of linear systems. Sturm-Liouville theory. Eigenfunction expansions. Integral equations. Partial differential equations. Asymptotic expansions.

Reference books:

- Rabenstein, A. L., *Introduction to ordinary differential equations* (Academic Press).  
Burkhill, J. C., *The theory of ordinary differential equations* (Oliver and Boyd).  
Sanchez, D. A., *Ordinary differential equations and stability theory* (Freeman).  
Stephenson, G., *An introduction to partial differential equations for science students* (Longmans).



N308 OPTIMISATION (Second term: M9, W9, F9).

Single and multi-variable optimisation, search and gradient methods, Kuhn-Tucker theory for constrained optimisation: algorithms and applications.

Reference books:

- Adby, R. R., and Dempster, M. A. H., *Introduction to optimization methods* (Chapman and Hall).  
Kowalik, J., and Osborne, M., *Methods for unconstrained optimization problems* (American Elsevier).

N309 QUEUES (Second term: M2, W10, F2).

A knowledge of applied probability such as given in Unit N302, is assumed.

Definition and examples of queues. Birth and death processes. Kolmogorov differential equations. Analyticity condition techniques. Method of phases. Supplementary variable and imbedded chain approaches. Little's formula. Lindley's theorem. Kieffev and Wolfowitz's theorem. Elementary renewal theorem. Applications to telephony.

Reference book:

- Cooper, R. B., *Introduction to queueing theory* (Macmillan).

N310 MATHEMATICAL BIOLOGY (Third term: Tu9, Th9, F10).

No prior knowledge of biology is assumed.

A survey of applications of mathematics to various biological science problem areas, for example: epidemics, genetics, applications of branching processes, ecology, evolution, enzyme kinetics, diffusion, nerve impulse conduction, tissue and muscle mechanics, blood flow, motility.

Reference books:

- Rubinow, S. I., *Introduction to mathematical biology* (Wiley).  
Simon, W., *Mathematical techniques for physiology and medicine* (Academic).  
Pielou, E. C., *An introduction to mathematical ecology* (Wiley).  
Rashevsky, N., *Mathematical biophysics. Physico-mathematical foundations of biology*, 2 vols. (Dover).

The subjects offered are:

**QN03 Applied Mathematics III.**

The course consists of:

- two of the three units N301, N302, N306;  
two of the three units N304, N308, N309; and  
two of the three units N303, N305, N310.

Students who may wish to proceed to QN99 Honours Applied Mathematics IV will be encouraged to take additional units and are advised to see the Chairman of the Department before enrolling.

**QN13 Applied Mathematics IIIA.**

The course consists of six third-year units offered by Departments in the Faculty of Mathematical Sciences and selected with the approval of the Chairmen of all Departments concerned. The units selected must satisfy the following requirements:

- (i) at least four units must be selected from units offered by the Department of Applied Mathematics;
- (ii) at least one unit must be selected from units offered by other Departments in the Faculty of Mathematical Sciences.
- (iii) not more than two Applied Mathematics units may be selected in any one term.

### QN83 Applied Mathematics IIIM.

The course consists of six third-year units selected with the approval of the Heads/Chairmen of all Departments concerned. The units selected must satisfy the following requirements:

- (i) at least four units must be selected from units offered by the Department of Applied Mathematics;
- (ii) at least one unit must be selected from units offered by Departments outside the Faculty of Mathematical Sciences;
- (iii) not more than two Applied Mathematics units may be selected in any one term.

For the purpose of this subject, a double unit in the Faculty of Science is regarded as two single units. Attention is drawn to Unit M313 (Complex Functions), given by the Department of Pure Mathematics.

### MATHEMATICS FOR THE HONOURS DEGREE OF B.A. OR B.SC.

N.B. Students who are considering taking course QM99 or QN99 are advised to consult with the Chairmen of the Departments as early as possible.

#### QM99 Pure Mathematics for the Honours degree of B.A. or B.Sc. (Honours Pure Mathematics IV.)

Students are required to consult with the Chairman of the Department of Pure Mathematics, preferably no later than the end of the year preceding their enrolment, in order to ensure that they have obtained the necessary pre-requisite knowledge at a satisfactory standard, to plan their course of study and discuss their choice of project. All students are required to obtain the approval of the Chairman of the Department of Pure Mathematics before enrolling for Honours Pure Mathematics IV.

The normal pre-requisites are:

- (i) QM03 Pure Mathematics III, including Analysis II for honours in 1979, at a satisfactory standard;
- (ii) a knowledge of the material of Units M332 (Rings and Modules) and M324 (Integration); and
- (iii) a third-year subject offered by another Department in the Faculty of Mathematical Sciences.

Students with a different background of third-year courses may be accepted at the discretion of the Chairman of the Department of Pure Mathematics.

Students are strongly advised to acquire a reading knowledge of a modern foreign language, preferably German, Russian or French.

The lecture course will be determined from year to year. Students will be required to make a selection from units offered by the Departments of Pure Mathematics, by other departments of the Faculty of Mathematical Sciences, and by the School of Mathematical Sciences at The Flinders University of S.A., including some compulsory units in Algebra and Analysis; units offered by other Departments may also be available.

Each student will be assigned a supervisor who will advise on the choice of lecture programme and give guidance in the writing of a project on some topic in mathematics. Work on this project should begin in the Department in the first week of February and should be completed by the end of the third term's lecture programme.

#### Recommended Programme for Prospective Teachers.

With the co-operation of the Departments of Applied Mathematics, Statistics and Computing Science, the Department of Pure Mathematics offers an optional Recommended Programme for Prospective Teachers within QM99 Honours Pure Mathematics IV. This Programme consists of a recommended selection of units, some of which have been specially designed for the purposes of the Programme. Students taking the whole of this Programme may be permitted to replace the project normally required by two minor projects on topics appropriate to the Programme. The Programme is recommended in particular to potential secondary mathematics teachers.

Some units within the Recommended Programme for Prospective Teachers will be available to suitably qualified secondary mathematics teachers who wish to attend as Visiting Students.

#### QN99 Applied Mathematics for the Honours degree of B.A. or B.Sc. (Honours Applied Mathematics IV.)

Students who are considering taking this subject are advised to see the Chairman of the Department as soon as possible, preferably before enrolling for their third-year courses.

All students are required to obtain the approval of the Chairman of the Department of Applied Mathematics before enrolling for Honours Applied Mathematics IV.

The normal pre-requisites are passes at a standard satisfactory to the Chairman of the Department in the following:

- (i) QN03 Applied Mathematics III or QN13 Applied Mathematics IIIA or QN83 Applied Mathematics IIIM;
- (ii) a third-year subject offered by the Department of Pure Mathematics, Statistics, Computing Science or Mathematical Physics;
- (iii) and such additional third-year units as may be required.

Students with a different background of third-year courses may be accepted at the discretion of the Chairman of the Department of Applied Mathematics.

Students are strongly advised to acquire a reading knowledge of a modern foreign language, preferably German, Russian or French.

The lecture course will be determined from year to year. Students will be required to make a selection from units offered by the Departments of Applied Mathematics, Pure Mathematics, Statistics, Computing Science, Mathematical Physics and by the Schools of Mathematical and Earth Sciences at The Flinders University of S.A. Students may normally take any appropriate third-year Applied Mathematics units which have not already been taken.

Each student will be assigned a supervisor who will advise him on and approve his choice of lecture programme and guide him in the writing of a project on some topic in Applied Mathematics. Possible topics should be discussed with the staff before the end of the preceding year. Work on the chosen project should begin in the Department in the first week of February and should be completed by the end of the third term's lecture programme.

#### Special Course for Prospective Teachers.

Special units are available for students taking QN99 Honours Applied Mathematics IV as a preparation for teaching mathematics in, for example, a secondary school. A comprehensive course for any such student will be determined according to his background of second- and third-year subjects, and the normal honours project may be replaced by two minor projects relevant to mathematics teaching. Such students are strongly advised to see the Chairman of the Department before enrolling for this course.

#### POSTGRADUATE STUDIES IN MATHEMATICS AND EDUCATION.

Students who hold a degree (or Honours degree) in Mathematics and the Diploma in Education and who have at least one year's experience of teaching approved by the Chairman of the Department of Education may undertake studies in Mathematics and Education as part of the Advanced Diploma in Education or Master of Education courses in the Faculty of Arts.

## STATISTICS.

Students who intend to take advanced courses in Statistics are advised to include the following first- and second-year subjects in their course. *First Year:* QM01 Mathematics I, QT7H Statistics IH. *Second Year:* QM02 Pure Mathematics II and QT02 Mathematical Statistics II.

Before enrolling in third-year unit courses, all students *must* discuss their programmes with the Chairman of the Department of Statistics.

A student who wishes, or who thinks he may wish, to proceed to Honours Statistics is advised to discuss his course programme with the Chairman of the Department of Statistics as early as possible.

### QT7H Statistics IH.

No formal pre-requisites, but a knowledge of *either* Matriculation Mathematics IS or Matriculation Mathematics I and II.

This first-year half-subject comprises two lectures and one hour tutorial a week. The emphasis in this introductory course is on logical aspects of statistics. Topics covered include description of data, relative frequency and probability, probability calculus, distributions, random sampling, estimation, hypothesis testing, confidence intervals, t-tests, simple linear regression, analysis of variance, Chi-square tests of fit and independence, non-parametric methods.

Text: No specific text-book is set, but lecture notes will be available from the Department of Statistics.

#### Reference books:

- Acton, F. S., *Analysis of straight line data* (Wiley).  
Cramer, H., *The elements of probability theory* (Wiley).  
Huntsberger, D. V., and Billingsley, P., *Elements of statistical inference*, 4th edition (Allyn and Bacon).  
Snedecor, G. W., and Cochran, W. G., *Statistical methods*, 6th edition (Iowa State College Press).

### QT02 Mathematical Statistics II.

Pre-requisite subject: QM01 Mathematics I at Division I or higher standard or QM11 Mathematics IM at Credit standard or higher (exceptionally on approval of Head of Department, QM11 Mathematics IM at Division I standard). QT7H Statistics IH is strongly recommended for students contemplating taking QT02 Mathematical Statistics II.

The course comprises four lectures and two one-hour tutorials a week. Students who have not taken QT7H Statistics IH should familiarise themselves with the contents of this course.

Programming of statistical calculations forms an important part of QT02 Mathematical Statistics II. Students enrolled for this subject must take the preliminary course in Fortran programming on the University computer, given by the Mathematics Departments throughout orientation week, i.e. the week prior to the start of the first term lectures. Exemptions may be given to students who have demonstrated beforehand a proficiency in Fortran programming on this computer to the satisfaction of the Chairman of Department.

Syllabus: Probability and probability distributions as mathematical models of statistical data, applications of the normal, binomial, Poisson, Chi-square, t and F distributions, simple and multiple regression, analysis of variance, experimental design, quality control, introduction to some aspects of statistical inference, programming of statistical computations.

#### Text-books:

- Lindgren, B. W., *Statistical theory*, 3rd edition (Macmillan).  
Lindley, D. V., and Miller, J. C. P., *The Cambridge elementary statistical tables* (C.U.P.).

#### Reference books:

- Cramer, H., *The elements of probability theory* (Wiley).  
Fisher, R. A., and Yates, F., *Statistical tables for biological, agricultural and medical research*, 6th edition, revised and enlarged (Oliver and Boyd).

### QT03 Mathematical Statistics III.

Pre-requisite subjects for all units: QT02 Mathematical Statistics II at Division I standard or higher and *any* one of QM02 Pure Mathematics II, QA42 Computing—Pure Mathematics IIC or QN32 Applied Mathematics—Pure Mathematics IIC at Division II standard or higher.

The course comprises five lectures and two tutorial classes per week, together with a component of computing as specified below.

#### Units.

- First Term: T301 Probability and Distribution Theory.  
T304 Linear Models I.  
Second Term: T302 Statistical Inference I.  
T305 Linear Models II.  
Third Term: T303 Statistical Inference II.  
T306 Special Topics.

In general any unit offered in second or third term presupposes a knowledge of all units given in preceding terms, however Statistical Inference I could be taken without Linear Models I, and Special Topics makes little use of Linear Models I and II.

#### Outline of Syllabuses.

T301 PROBABILITY AND DISTRIBUTION THEORY. (Three lectures and one tutorial class per week. First term.)

Calculus of distributions. Moments and cumulants. Moment generating functions. Exact distributions of interest in statistics. Definition and Properties of the multinomial distribution. Weak law of large numbers. Central Limit Theorem. Approximation of distributions. Order Statistics. An introduction to applied probability, especially the elementary stochastic processes.

T302 STATISTICAL INFERENCE I. (Two lectures and one tutorial per week. Second term.)

The likelihood function. Sufficiency and the sufficiency principle. Score and information functions. Construction of point estimators. Consistency. Efficiency. Cramer-Rao bound. Blackwell-Rao Theorem and completeness. Maximum likelihood estimators, with large sample properties. Tests of significance. Significance intervals. Hypothesis tests. Power functions. "Exact" tests for contingency tables. Likelihood ratio and chi-square tests.

T303 STATISTICAL INFERENCE II. (Three lectures and one tutorial per week. Third term.)

Likelihood ratio theory—*continued*. Construction and analysis of Generalised Linear Models and non-linear models, with applications. Interval estimation. Robust and distribution free techniques. Nonparametric inference. Comparative theories of inference.

T304 LINEAR MODELS I. (Two lectures and one tutorial per week. First term.)

Arithmetical arrays, lattices of subspaces, orthogonal projections, least squares, analysis of orthogonal experimental designs by the sweep method, computer programming of the analysis with examples, minimum variance consistent estimators.

T305 LINEAR MODELS II. (Three lectures and one tutorial per week. Second term.)

Normal theory and maximum likelihood. Sufficiency. Total and partial regression coefficients. Orthogonalised variables and reduced normal equations, non-linear regression, redundant specification, double classification with non-proportional class frequencies. Analysis of covariance, elementary multivariate analysis, discriminant functions. Variance components, experimental designs.

T306 SPECIAL TOPICS. (Two lectures and one tutorial per week. Third term.)

Bayesian inference and decision theory. Finite population sampling. An introduction to the analysis of time series.

COMPUTING.

The programming of statistical computations form an integral part of the course, and exercises requiring computer programming are periodically set throughout the year. The final assessment in the subject, and for individual units in the case of students taking statistics units as part of a IIIA or IIIM subject, will adduce evidence from the computing component of the course.

Reference books:

- Cochran, W., *Sampling techniques* (Wiley).  
Cox, D. R., and Hinkley, D. V., *Theoretical statistics* (Chapman-Hall).  
Cramer, H., *Mathematical methods of statistics* (Princeton U.P.).  
Draper, N. R., and Smith, H., *Applied regression analysis* (Wiley).  
Daniel, C., and Wood, F. S., *Fitting equations to data* (Wiley).  
Fisher, R. A., *The design of experiments* (Oliver and Boyd).  
Fisher, R. A., *Statistical methods for research workers*, 13th edition (Oliver and Boyd).  
Fisher, R. A., and Yates, F., *Statistical tables for agricultural biological and medical research* (Oliver and Boyd).  
Hogg, R. V., and Craig, A. T., *Introduction to mathematical statistics* (Macmillan).  
Mood, A. M., and others, *Introduction to the theory of statistics* (McGraw-Hill).  
Plackett, R. L., *An introduction to the theory of statistics* (Oliver and Boyd).  
Rao, C. R., *Linear statistical inference and its applications* (Wiley).  
Silvey, S. D., *Statistical inference* (Penguin).  
Williams, E. J., *Regression analysis* (Wiley).

HONOURS DEGREE.

QT99 Statistics for the Honours degree of B.A. or B.Sc.  
(Honours Statistics IV.)

Pre-requisite subjects: QM03 Pure Mathematics III, QT03 Mathematical Statistics III and other prescribed courses at a standard satisfactory to the Chairman of the Department. QM83 Pure Mathematics IIIM may be substituted for QM03 Pure Mathematics III with the approval of the Chairman of the Department of Statistics.

Students are strongly advised to acquire a reading knowledge of a modern foreign language, preferably French, German or Russian.

The course will be determined from year to year, and will comprise topics selected from the following: statistical inference, estimation theory, special topics in regression and the analysis of variance, experimental design, non-parametric methods, time series, multivariate analysis, measure theory, probability and stochastic processes, statistical programming, plus a selection of other topics from Honours Mathematics IV and other subjects.

The course also involves a class project.

Students are required to prepare a seminar under the supervision of a member of the Department and present it during orientation week. Work begins in the Department on the first Monday in February.

OF THE  
DIPLOMA IN COMPUTING SCIENCE  
REGULATIONS

1. There shall be a postgraduate Diploma in Computing Science.

†2. Except as provided for in regulation 3 a candidate for admission to the course for the diploma shall have qualified for admission to a degree of the University or to a degree of another university accepted for the purpose by the University and have obtained the approval of the Department of Computing Science.

\*3. Subject to the approval of the Council the Faculty may, in special cases and subject to such conditions (if any) as it may see fit to impose in each case, accept as a candidate for the diploma a person who does not hold a degree of a university but has given evidence satisfactory to the Faculty of his fitness to undertake work for the diploma.

4. To qualify for the diploma a candidate shall satisfactorily complete a course of full-time study extending over at least one year or of part-time study extending over at least two years.

††5. The course of study to be undertaken, and the examinations to be passed, shall be prescribed in schedules approved by the Council. Such schedules shall take effect as from the date of approval by the Council or such other date as the Council shall determine and shall be published in the next University Calendar which is issued after that approval has been given.

\*6. A candidate who desires that the examinations which he has passed in the University or elsewhere should be counted for the Diploma in Computing Science, may on written application be granted such exemption from the requirements of these regulations as the Council shall determine.

\*7. There shall be three classifications of pass at an annual examination in any subject for the diploma: Pass with Distinction, Pass with Credit, and Pass. The names of the candidates in each classification shall be arranged in alphabetical order.

8. (a) A candidate who fails to pass in a subject and desires to take the subject again shall again attend lectures and satisfactorily do such written and practical work as the professor or lecturer concerned may prescribe, unless specifically exempted therefrom after written application to the Academic Registrar for such exemption.

\* Amended 21 December, 1972.

\*\* Amended 28 February, 1974.

† Amended 28 February, 1974, 23 January, 1975, and 23 December, 1976.

†† Amended 15 January, 1976.

(b) A candidate who has twice failed to pass the examination in any subject or division of a subject may not enrol for that subject again except by special permission to be obtained in writing from the Academic Registrar and then only under such conditions as may be prescribed.

(c) For the purpose of this regulation a candidate who is refused permission to sit for examination, or who fails, without a reason accepted by the Professor of Computing Science as adequate, to attend all or part of an annual examination (or supplementary examination if granted) after having enrolled for at least two terms in that year, shall be deemed to have failed to pass the examination.

9. A candidate who complies with the foregoing conditions and satisfies the examiners shall be awarded the Diploma in Computing Science.

Regulations allowed 28 January, 1965.



OF THE  
DIPLOMA IN COMPUTING SCIENCE

SCHEDULES

(Made by the Council under regulation 5.)

NOTE: Syllabuses of subjects for the Diploma in Computing Science are published below, immediately after these schedules. For syllabuses of subjects taught for other degrees and diplomas see the table of subjects at the end of the volume.

SCHEDULE I: COURSES OF STUDY

1. A candidate for the diploma shall regularly attend lectures and tutorials, do such written work as may be prescribed, and pass examinations in the following subjects:

QA04 Diploma Computing I  
QA14 Diploma Computing II

QA24 Diploma Computing III

2. A candidate shall also satisfactorily undertake and complete a course of practical work:

QA34 Diploma Project

OF THE  
**DIPLOMA IN COMPUTING SCIENCE**  
**SYLLABUSES**

*Text-books:*

Students are expected to procure the latest edition of all text-books prescribed.

*Examinations:*

For each subject students may obtain from the department concerned details of the examination in that subject including the relative weights given to the components (e.g. such of the following as are relevant: assessments, term or mid-year tests, essays or other written or practical work, final written examinations, *viva voce* examinations).

**DIPLOMA IN COMPUTING SCIENCE.**

The Department offers a postgraduate Diploma in Computing Science which may be taken in one year of full-time study or two or more years of part-time study. The aim of the course is to assist graduates from other disciplines to gain a sound knowledge of Computing Science. The course is not designed to cater for graduates in Computing Science, or even those with significant knowledge of the contents of the third-year subject Computing Science III.

The course comprises a computing project and three subjects (each Diploma subject is equivalent to half a third-year subject) consisting of units. The units forming the subjects will be selected in consultation with the Department, according to the background, interests and progress of each student. Units will be selected from topics concerned with advanced programming, computer systems, data management, numerical analysis, operating systems, and simulation.

Graduates wishing to enrol must consult the Chairman of the Department of Computing Science for advice and details of the units selected for their course. The course must be approved by the Chairman of the Department. Graduates are requested to commence their enquiries in early October of the year before they enrol and they must be ready to start work on their project in the first week of March. Full-time students should join the Department to start their course on the second Monday in February.

Assumed knowledge: (i) *Computer programming*: Graduates will be required to have substantial experience of computer programming, such as may be obtained in QA7H Computing IH. When it is considered necessary students will be asked to undertake an audio visual course in programming in February.

(ii) Two Mathematical Sciences subjects or their equivalent at second- or third-year level. In addition, certain units offered for the Diploma assume a knowledge of certain units at the third-year level: this mainly applies to units drawn from QA99 Honours Computing Science.

(iii) Graduates with a lesser mathematical or computer programming background are invited to apply to the Department and may be able to enrol in the Diploma by making special arrangements.

Diploma subjects and project:

- QA04 Diploma Computing I.**
- QA14 Diploma Computing II.**
- QA24 Diploma Computing III.**
- QA34 Diploma Project.**

OF THE DEGREE OF  
MASTER OF SCIENCE  
IN THE FACULTY OF MATHEMATICAL SCIENCES  
REGULATIONS

1. The following persons may become candidates for the degree of Master of Science in the Faculty of Mathematical Sciences: (a) Bachelors of Arts, (b) Bachelors of Science, (c) other graduates whose academic qualifications are accepted by the Faculty of Mathematical Sciences as sufficient.

Provided that, subject to the approval of the Council, the Faculty may, in special cases and subject to such conditions (if any) as it may see fit to impose in each case, accept as a candidate for the degree a person who does not hold a degree of a university, but has given evidence satisfactory to the Faculty of his fitness to undertake work for the degree.

Unless the candidate has obtained the Honours degree of Bachelor of Science in the Faculty of Mathematical Sciences he shall, before submitting his thesis as provided for in regulation 4, pass such qualifying examination as the Faculty may in the circumstances deem proper.

2. Subject to conditions to be determined in each case a graduate of a university recognised by the University of Adelaide, whose degree is accepted by the Faculty of Mathematical Sciences as equivalent to one of the qualifications required in regulation 1, may be allowed by the Council to proceed to the degree in compliance with these regulations. Every such candidate must spend at least three consecutive academic terms or twelve calendar months at the University of Adelaide or at an institution approved for the purpose by the University of Adelaide.

\*3. A candidate who holds the Honours degree or its equivalent in a university recognised by the University of Adelaide may proceed to the degree of Master of Science in the Faculty of Mathematical Sciences at the expiration of one year from the date of his admission to the Honours degree of Bachelor; no other candidate shall proceed to the degree before the expiration of two years from the beginning of his candidature.

4. To qualify for the degree a candidate shall submit a thesis upon an approved subject and shall adduce sufficient evidence that the thesis is his own work. The thesis shall give the results of original research or of an investigation on which the candidate has been engaged. A candidate may also submit other contributions to mathematical sciences in support of his candidature.

\* Amended 28 February, 1974.

5. Every candidate shall give at least three terms' notice of his intended candidature, and shall indicate therewith in general terms the subject of the research work or investigation on which he proposes to submit a thesis. The Faculty of Mathematical Sciences, if it approve the subject of his research, may appoint a supervisor to guide the candidate in his work. The candidate shall submit his thesis not earlier than three terms and, except by special permission of the Faculty, not later than nine terms after approval by the Faculty of the subject of his research.

†6. A candidate's progress shall be reviewed annually by the Faculty, under the provisions of clause 4c of Chapter XXV of the Statutes.

7. The Faculty shall appoint a Board of Examiners to report upon the thesis and any supporting papers that the candidate may submit. The Board of Examiners may require any candidate to pass an examination in the branch of science to which his original research or investigation is cognate.

8. A candidate for the degree of Doctor of Philosophy whose work is considered by the Faculty, after report by the examiners appointed to adjudicate upon it, not to be of sufficient merit to qualify for the degree of Doctor but of sufficient merit for the degree of Master may be admitted to the degree of Master provided that he is qualified to become a candidate for the degree.

9. On completion of his work a candidate shall lodge with the Academic Registrar three copies of his thesis prepared in accordance with directions given to candidates from time to time.\*

10. A candidate who complies with the foregoing conditions and satisfies the Board of Examiners shall on the recommendation of the Faculty of Mathematical Sciences be admitted to the degree of Master of Science in the Faculty of Mathematical Sciences.

Regulations allowed 21 December, 1972.

† Allowed 23 January, 1975; amended 15 January, 1976.

\* Published in "Notes and Instructions to candidates for Higher Degrees":  
see Table of Contents.

OF THE DEGREE OF  
DOCTOR OF SCIENCE  
IN THE FACULTY OF MATHEMATICAL SCIENCES  
REGULATIONS

1. (a) Subject to these regulations a person who has been admitted in the University of Adelaide to an Honours degree of Bachelor of Science or a degree of Master of Science, Arts or Economics, or to the degree of Doctor of Philosophy in a field of study approved by the Faculty of Mathematical Sciences, may proceed to the degree of Doctor of Science, in the Faculty of Mathematical Sciences.

(b) On the recommendation of the Faculty of Mathematical Sciences the Council may accept as a candidate for the degree a person who has been admitted to a degree in the University of Adelaide other than one named in section (a) of this regulation, or who is a graduate of another university or institution of higher education recognised by the University of Adelaide and has a substantial association with the University; provided that in each case the graduate concerned has, in the opinion of the Faculty of Mathematical Sciences, had an adequate training in the mathematical sciences.

(c) No person shall be accepted as a candidate for the degree of Doctor of Science in the Faculty of Mathematical Sciences before the expiration of five years from the date of his original graduation.

2. (a) A person who desires to become a candidate for the degree shall give notice of his intended candidature in writing to the Academic Registrar and with such notice shall furnish particulars of his achievements in the mathematical sciences and of the work which he proposes to submit for the degree.

(b) The Faculty of Mathematical Sciences shall appoint a committee to examine the information submitted and to advise the Faculty on whether the Faculty should—(i) allow the applicant to proceed, and approve the subject or subjects of the work to be submitted; or (ii) advise the applicant not to submit his work; and the Faculty's decision shall be conveyed to the applicant.

(c) If it accepts the candidature and approves the subject or subjects of the work to be submitted the Faculty shall nominate examiners of whom one at least shall be an external examiner.

3. (a) To qualify for the degree the candidate shall furnish satisfactory evidence that he has made an original contribution of distinguished merit adding to the knowledge or understanding of any subject with which the Faculty is directly concerned.

(b) The degree shall be awarded primarily on a consideration of such of his published works as the candidate may submit for examination.

(c) The candidate in submitting his published works shall state generally in a preface and specifically in notes the main sources from which his information is derived and the extent to which he has availed himself of the work of others, especially where joint publications are concerned. He may also signify in general terms the portions of his work which he claims as original.

(d) The candidate is required to indicate what part, if any, of the work he has submitted for a degree in this or any other university.

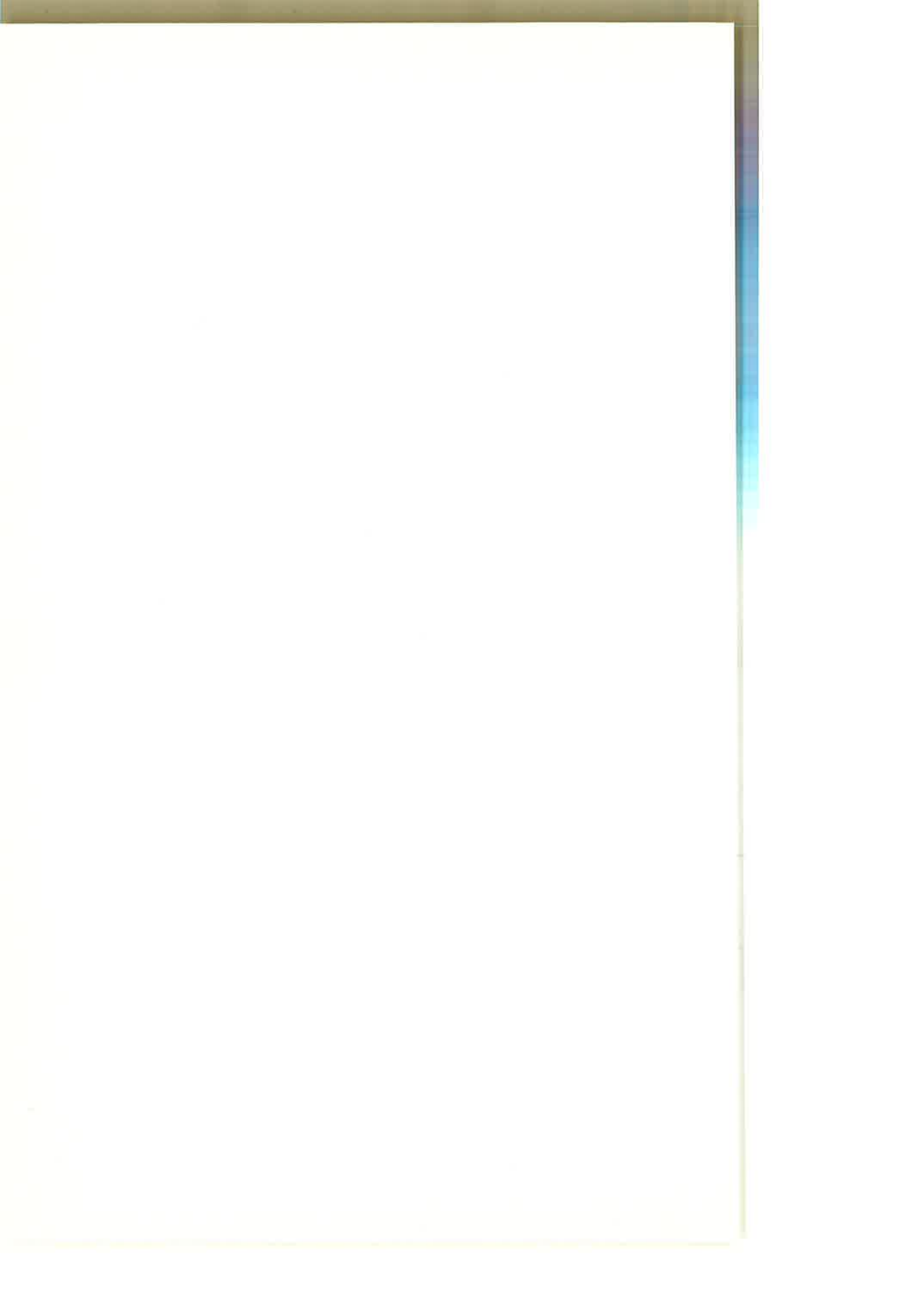
4. The candidate shall lodge with the Academic Registrar three copies of the work prepared in accordance with the directions given in sub-paragraph (b) of clause 2B of Chapter XXV of the Statutes. If the work is accepted for the degree the Academic Registrar will transmit two of the copies to the University Library.

5. A candidate who complies with the foregoing conditions and satisfies the examiners may, on the recommendation of the Faculty of Mathematical Sciences, be admitted to the degree of Doctor of Science in the Faculty of Mathematical Sciences.

\*6. Notwithstanding anything contained in the preceding regulations, the Faculty may recommend the award of the degree to any person who is not a member of the staff of the University. Any such recommendation must be accompanied by evidence that the person for whom the award is proposed has made an original and substantial contribution of distinguished merit to the knowledge or understanding of a subject with which the Faculty is directly concerned, of a standard not less than required by regulation 3.

Regulations allowed 28 February, 1974.

\* Allowed 15 January, 1976.



# FACULTY OF MEDICINE

## REGULATIONS, SCHEDULES AND SYLLABUSES OF DEGREES AND DIPLOMAS

### Bachelor of Medicine and Bachelor of Surgery (M.B., B.S.)

Regulations	-	-	-	-	-	-	-	-	-	894
Schedules	-	-	-	-	-	-	-	-	-	897
Rules for admission of medical students to the teaching hospitals, health centres and the I.M.V.S.	-	-	-	-	-	-	-	-	-	900
Syllabuses	-	-	-	-	-	-	-	-	-	901

### Bachelor of Medical Science (B.Med.Sc.)

Regulations	-	-	-	-	-	-	-	-	-	916
Schedules	-	-	-	-	-	-	-	-	-	917
Syllabuses	-	-	-	-	-	-	-	-	-	918

### Diploma in Psychotherapy (Dip.P.T.)

Regulations	-	-	-	-	-	-	-	-	-	919
Schedules	-	-	-	-	-	-	-	-	-	920
Syllabuses	-	-	-	-	-	-	-	-	-	921

### Diploma in Clinical Science (Dip.Clin.Sc.)

Regulations	-	-	-	-	-	-	-	-	-	923
-------------	---	---	---	---	---	---	---	---	---	-----

### Master of Clinical Science (M.Clin.Sc.)

Regulations	-	-	-	-	-	-	-	-	-	924
-------------	---	---	---	---	---	---	---	---	---	-----

### Doctor of Philosophy (Ph.D.)

Regulations and Schedules: under "Board of Research  
Studies"—*see* Table of Contents.

### Doctor of Medicine (M.D.)

Regulations	-	-	-	-	-	-	-	-	-	925
-------------	---	---	---	---	---	---	---	---	---	-----



OF THE DEGREES OF  
BACHELOR OF MEDICINE AND BACHELOR  
OF SURGERY

## REGULATIONS

## I. LENGTH OF COURSE

1. The course of study for the degrees of Bachelor of Medicine and Bachelor of Surgery shall extend over six years.

## II. CURRICULUM

†2. To qualify for the degrees a candidate must attend regularly such tutorials and seminar work, satisfactorily perform such laboratory, practical, clinical and written work, and pass such examinations as the Council may from time to time prescribe.

\*\*3. Schedules defining the courses of study and practice to be undertaken, and the examinations to be passed, shall be submitted by the Faculty of Medicine to the Council and on approval by the Council shall be effective from the date of such approval or from such other date as the Council shall determine; and they shall be published in the next edition of the University Calendar issued after the Council has approved them.

## III. EXAMINATIONS

4. Subject to the provisions of regulation 9(d) hereof, a candidate shall pass in the whole of one examination before entering upon the courses of study and practice leading to the next examination.

5. A candidate shall enter for each examination on the form and by the date prescribed by the Council, but shall not present himself for the examinations unless he has completed to the satisfaction of the professors and lecturers concerned, prior to the beginning of the examination, the courses of study and practice prescribed for it.

6. The examiners in any subject may take into consideration written or practical work required of candidates during the course of study and practice and the results of terminal or other examinations in the subject.

7. A candidate who fails to pass in an examination shall, before presenting himself for the examination again, attend again such part or parts of the course of study and practice leading to that examination as the Faculty may direct.

† Amended 24 December, 1969.

\*\* Amended 15 January, 1976.

Notes: (1) The reference to study and practice in regulations 3 to 7 above includes all that practical work and clinical instruction prescribed in schedule I.

(2) The Faculty of Medicine regards lectures as a valuable teaching method. Consequently candidates are advised to attend regularly such courses of lectures as may be provided.

\*8. (a) Except in the case of the Fourth-Year and the Final (Sixth-Year) Examination, the names of candidates who pass in the whole of an examination prescribed in the Schedules shall be arranged in alphabetical order.

(b) The names of candidates who, having passed the whole of the Second-Year, Third-Year or Fifth-Year Examinations, or the whole or part of the First-Year Examination, are adjudged by the Board of Examiners as having reached the standard of Distinction or Credit in any of the component subjects for that examination shall in each of these subjects be arranged in order of merit within the relative classification.

(c) Except in the case of the First-Year Examination, a candidate who passes in an examination in any subject from part of which he has been granted exemption shall not be classified at that examination.

(d) At the Fourth-Year Examination and the Final (Sixth-Year) Examination, there shall be three classifications of pass as follows: Pass with Distinction, Pass with Credit, Pass. The names of candidates who pass with Distinction or Credit shall be arranged in order of merit within the classification and the names of other candidates shall be arranged in alphabetical order.

(e) A candidate whose results in the Third-Year, Fourth-Year, Fifth-Year and Final (Sixth-Year) Examinations in the medical course have been adjudged by the Faculty of Medicine to have been of distinguished merit may, by the decision of the Faculty on the recommendation of the Board of Examiners in the final year of the course, be awarded the degrees of Bachelor of Medicine and Bachelor of Surgery (with Honours).

#### IV. SUPPLEMENTARY EXAMINATIONS

9. (a) The Board of Examiners may grant a candidate who has been prevented by illness or other sufficient cause from sitting for the whole or part of an examination permission to sit for a special or supplementary examination; the extent of such special or supplementary examination to be determined by the Board in each case.

(b) The Board of Examiners may grant a candidate who has failed in part only of an examination permission to sit for a supplementary examination in the subject or subjects in which he has failed.

\*°(c) On passing in a special or supplementary examination granted under this regulation a candidate shall be deemed to have completed the whole of the examination; but if he fails in such special or supplementary examination he shall take again, and pass in, the whole of the examination before proceeding with the courses of study and practice leading to the next examination; provided that for the First-Year Examination the Board of Examiners may require a candidate to repeat only those subjects in which he has failed.

\* Amended 17 December, 1970, 21 December, 1972, and 23 January, 1975.

\*\* Amended 16 December, 1971, and 23 January, 1975.

(d) A candidate granted permission to sit for a supplementary or special examination may enter provisionally upon the courses of study and practice leading to the next examination pending publication of the result of his supplementary examination.

#### V. STATUS FOR WORK DONE ELSEWHERE

\*10. A candidate who has passed subjects in other faculties or universities or elsewhere, may on written application to the Academic Registrar be granted such exemption from these regulations and from schedules made under them as the Council on the recommendation of the Faculty may determine.

#### VI. STATUS UNDER EARLIER REGULATIONS

11. All regulations hitherto in force concerning the degrees of Bachelor of Medicine and Bachelor of Surgery are hereby repealed: provided that this repeal shall not affect

- (a) anything done or suffered under any regulation hereby repealed; or
- (b) any right or status acquired, duty imposed, or liability incurred by or under any regulation hereby repealed.

Note: Before being admitted to the course of study a candidate shall have matriculated in the University and have been accepted by the Council as a student to be so admitted.

Regulations allowed 28 January, 1965.  
\* Amended 16 December, 1971.

OF THE DEGREES OF  
BACHELOR OF MEDICINE AND  
BACHELOR OF SURGERY

SCHEDULES

(Made by the Council under regulation 3.)

NOTES: 1. The Hospital Clinical Year begins on the fifth Monday in the year. 2. Syllabuses of subjects for the degrees of M.B., B.S. are published below, immediately after these schedules. For syllabuses of subjects taught for other degrees and diplomas see the table of subjects at the end of the volume.

SCHEDULE I: COURSES OF STUDY AND PRACTICE

1. Lectures, Practical Work, etc.

During the first year the student shall attend courses of lectures and practical work in (a) Behavioural Science, (b) Biology, (c) Chemistry, (d) Genetics, and (e) Physics.

During the second year the student shall attend courses of instruction in:

- (a) Anatomy—including Gross Anatomy, Histology and Embryology (and dissect during the whole academic year);
- (b) Biochemistry;
- (c) Human Physiology;
- (d) Medicine in the Community.

During the first two terms of the third year the student shall attend courses of instruction, including clinical demonstrations where required, in:

- (a) Anatomy including Neuroanatomy;
- (b) Physiology, and Pharmacology;
- (c) Pathology;
- (d) Microbiology;
- (e) Medicine in the Community.

During the third term of the third year and during the fourth year the student shall attend courses of topic instruction in Medicine, Surgery, Psychiatry, Microbiology, Pathology, Human Physiology, Pharmacology, Clinical Biochemistry, Applied Anatomy, Community Medicine and Public Health, as directed.

During the fifth year the student shall attend courses of instruction in:

- (a) Obstetrics and Gynaecology;
- (b) Medicine and Surgery;
- (c) Psychiatry;
- (d) Medical Paediatrics;
- (e) Surgical Paediatrics;

and continue to attend demonstrations in Clinical Pathology; and attend Class Examinations as directed by the Faculty of Medicine.

During the sixth year a candidate shall attend as directed for instruction in:

- (a) Medicine;
- (b) Surgery;
- (c) Medical specialities;
- (d) Surgical specialities;
- (e) Obstetrics and Gynaecology;
- (f) Paediatrics;
- (g) Community Medicine;
- (h) Psychiatry;
- (i) Applied Pathology and Forensic Medicine; and

undertake either a period of elective study approved by the Faculty of Medicine or if so directed by the Board of Examiners for the Fifth-Year Examination, undertake a revision course in one or more of Obstetrics and Gynaecology, Paediatrics, Psychiatry, Applied Pathology and Forensic Medicine, Medicine and Surgery.

## 2. Clinical Instruction

Clinical instruction will begin in the third term of the third year and extend to the end of the sixth year.

During this period the student shall:

- (a) attend the medical and surgical practice of the Royal Adelaide Hospital and/or the Queen Elizabeth Hospital for such period as may be directed, in the wards and in the outpatients department; and receive tutorial instruction in medicine and surgery as directed;
- (b) during the fifth year attend for 12 weeks, or such period as may be directed, the obstetrical and gynaecological practice of the Royal Adelaide Hospital or the Queen Elizabeth Hospital or the Queen Victoria Hospital in the wards and in the outpatients department; and reside for 6 weeks or such period as may be directed in the Queen Victoria Maternity Hospital or the Queen Elizabeth Hospital (maternity section) for clinical work in obstetrics;
- (c) hold for a total of at least 12 weeks during the fifth year, the office of medical clerk or surgical dresser at the Adelaide Children's Hospital; and during the sixth year attend the paediatric practice of that hospital for a further period of 4 weeks;
- (d) reside during the sixth year for at least 8 weeks in the Royal Adelaide Hospital and/or the Queen Elizabeth Hospital for clinical instruction in medicine and surgery;
- (e) reside during the sixth year for a period of 4 weeks in such hospital as may be directed for clinical instruction in obstetrics and gynaecology;
- (f) receive instruction during the sixth year in community medicine as directed, and attend, for such period as may be directed, the medical practices of general practitioners located in urban and regional areas;
- (g) attend a course of clinical instruction in psychiatry during the fifth and sixth years;
- (h) receive tutorial instruction as directed.

## 3. Approval of Enrolment

Students who did not enrol in the immediately preceding year and those who have been granted, or are seeking exemption from the requirements of these schedules under regulation 10, must have their course of study approved by the Dean (or his nominee) at the time of enrolment in the year concerned.

The Faculty may require a student who has interrupted his studies for a period during which the provisions of these schedules have varied to resume his studies at such point in the course and/or to undertake such special programme of study as the Dean recommends.

## SCHEDULE II: EXAMINATIONS

The examinations prescribed in accordance with regulation 3 shall be as follows and a candidate shall satisfy the examiners in each subject and half-subject and each other required component:

### 1. The First-Year Examination

(to be held in or about November of the first year)

MH71 Behavioural Science	SJ8H Genetics IH(M)
SZ71 Biology I	SP7H Physics IH(M)
SC71 Chemistry IM	

A candidate who fails at the First-Year Examination will be required to repeat the course of instruction and present himself for re-examination only in the subjects or half-subjects in which he failed to satisfy the examiners.

The supplementary examinations (for candidates permitted under regulation 9 to present themselves therefor) will be held in or about the following February.

### 2. The Second-Year Examination

(to be held in or about November of the second year)

MA02 Anatomy	SS12 Human Physiology
SY72 Biochemistry	MU02 Medicine in the Community II

### 3. The Third-Year Examination

(to be held in or about August of the third year)

MA03 Anatomy	SS13 Human Physiology and Pharmacology
MP03 Biology of Disease	MU03 Medicine in the Community III

The supplementary examinations (for candidates permitted under regulation 9 to present themselves therefor) will be held in or about the following November.

### 4. The Fourth-Year Examination

(to be held in two parts, part I in or about the first week of May and part II in or about November of the fourth year.)

MX74 Fourth-Year Examination:

An integrated examination covering Pathology, Microbiology and Immunology, Applied Physiology and Pharmacology, Medicine and Surgery, Special Subjects (Otorhinolaryngology, Ophthalmology and Dermatology), and Psychiatry and Community Medicine relevant to Topic Teaching.

Any other examination held during the fourth year will not be taken into account when assessing the results for MX74 Fourth-Year Examination.

Topics for part I will usually be: Community Medicine and History Taking, Diseases with Infection, Alimentary, Cardiovascular, Respiratory and Renal Systems, and Haematology.

Topics for part II will usually be: Revision of part I, Anaesthetics and Intensive Care, Endocrinology, Neurology, Medical and Surgical Diseases of Bones and Joints, Otorhinolaryngology, Ophthalmology, and Dermatology.

There will be three sections to part I and four sections to part II: Objective Written Test; Problem Solving Test; Practical Test; Clinical Vivas—including Special Subjects (part II only).

As the work for the Fourth-Year Examination does not provide for the division into specified subjects, supplementary or special examinations may be granted only under regulation 9(a).

### 5. The Fifth-Year Examination

(to be held in or about November of the fifth year).

MO75 Obstetrics and Gynaecology	MC75 Paediatrics
---------------------------------	------------------

A candidate's performance in Medicine, Surgery and Psychiatry will be taken into account in determining the results of the examinations.

A candidate who is granted a supplementary examination will normally be required to undertake a prescribed course of revision in lieu of undertaking a sixth-year elective. The supplementary examination will be taken immediately following that course.

**6. The Final (Sixth-Year) Examination**

MX76 Final (Sixth-Year) Examination:

- (a) A multi-disciplinary examination in Medicine, Surgery, Obstetrics and Gynaecology, Psychiatry, Applied Pathology and Forensic Medicine, Community Medicine and Paediatrics (to be held in or about October and November of the sixth year).
- (b) Assessments of performance in the required clinical work.
- (c) *Viva voce* examinations as required (to be held in or about October and November of the sixth year).

Assessments of performance in the required clinical work that are considered satisfactory by the examiners must be received before a candidate's results of the Final (Sixth-Year) Examination may be published.

Supplementary examinations shall be taken in or about the following May.

Candidates granted supplementary examinations in any part of the Final (Sixth-Year) Examination will carry out such additional work as the Head/Chairman of the department may require.

NOTE (not forming part of the schedules): Details of hospital residence charges may be found under "Fees and Charges": see Table of Contents.

RULES FOR THE ADMISSION OF MEDICAL STUDENTS  
TO THE PRACTICE OF THE TEACHING HOSPITALS, HEALTH CENTRES  
AND THE INSTITUTE OF MEDICAL AND VETERINARY SCIENCE

1. Medical students admitted to the practice of a Teaching Hospital or Health Centre shall be under the control of the Medical Superintendent\* in relation to matters of common discipline; the University will otherwise be responsible for matters related to education.

2. No student shall publish the report of any case without the permission of the Hospital Board or Health Centre Management Committee and the Senior Medical Officer under whose care the patient is or has been.

3. Except in the performance of his clinical duties, no student may disclose any information whatsoever concerning a patient without the permission of both the patient and the Senior Medical Officer in charge.

4. No student may communicate directly or indirectly to the Press, radio or television any matter concerning the clinical practice of the Institution to which he is attached.

5. No student may introduce visitors into any Hospital or Health Centre to the practice of which he has been admitted, without the permission of the Medical Superintendent\* or his deputy.

6. Students shall pay such fees as are laid down from time to time by the University in conjunction with the Teaching Hospitals or Health Centres. Fees are payable directly to the University; no student will be admitted to a Teaching Hospital or Health Centre until such fees are paid.

7. Students shall discharge the duties assigned to them, and pay for or replace any article damaged or lost or destroyed by them through negligence or misconduct.

8. During any period of residence the student will comply with the directions of the Medical Superintendent\* of the Hospital or Health Centre in respect of discipline and general conduct.

9. Subject to rule 10 any student infringing any of these rules or the rules of the Hospital or Health Centre, or otherwise misconducting himself may be suspended or dismissed by the Board of the Hospital or Health Centre from the practice of the Hospital or Health Centre. If he is so dismissed he shall forfeit all payments which may have been made and all rights accruing therefrom.

10. In all instances where a student has been either suspended or dismissed from the practice of the Hospital or Health Centre his case shall be investigated by an Investigation Committee on which there shall be a representative appointed by the Hospital Board, a Senior Consultant Clinical Teacher nominated by the Chairman (or his deputy) of the appropriate Staff Committee of the Hospital or Health Centre concerned, a representative appointed by the University, and the Dean of the Faculty of Medicine (or his deputy). The Committee should also normally include a representative of the Adelaide Medical Students' Society (e.g. a student member of the Faculty of Medicine). The Investigating Committee shall make its recommendation to the Board of the Hospital or Health Centre Management Committee concerned and to the Council of the University for confirmation or otherwise.

11. These rules apply equally to medical students who use the facilities of the I.M.V.S. where the Director of the Institute has the authority given in these Rules to the Medical Superintendent of a Teaching Hospital, and where the Council of the Institute replaces the Board of the hospital.

\* The Medical Director of the Queen Victoria Hospital and Health Centres.

OF THE DEGREES OF  
**BACHELOR OF MEDICINE AND  
BACHELOR OF SURGERY**  
SYLLABUSES

*Text-books:*

Students are expected to procure the latest edition of all text-books prescribed.

*Examinations:*

For each subject students may obtain from the department concerned details of the examination in that subject including the relative weights given to the components (e.g. such of the following as are relevant: assessments, term or mid-year tests, essays or other written or practical work, final written examinations, *viva voce* examinations).

FIRST-YEAR EXAMINATION (M.B., B.S.)

AND

FIRST ANNUAL EXAMINATION (B.D.S.).

**MH71 Behavioural Science.**

The course consists of three lectures, one tutorial, and one three-hour practical class, a week.

The course deals with scientific approaches to the understanding of human behaviour in health and disease. With this objective, contributions from developmental psychology, psychophysiology, social psychology, sociology, and anthropology are studied.

*Text-books:*

Lindgren, H. C., and Byrne, D., *Psychology: an introduction to a behavioral science*, 4th edition (Wiley).

Mussen, P. H., and others, *The psychological development of the child*, 2nd edition (Prentice-Hall).

Mann, L., *Social psychology* (Wiley).

*Reference books:*

Mussen, P. H., and others, *Child development and personality*, 4th edition (Harper).

Contemporary psychology: readings from *Scientific American* (Freeman).

Coopersmith, S., *Frontiers of psychological research: readings from Scientific American* (Freeman).

Proshansky, H. M., and Seidenberg, B. (eds.), *Basic studies in social psychology* (Holt, Rinehart and Winston).

Broom, L., and Selznick, P., *Sociology*, 5th edition (Harper).

Engel, G. L., *Psychological development in health and disease* (Saunders).

Millon, T. (ed.), *Medical behavioural science* (Saunders).

Zimbardo, P., and others, *Influencing attitudes and changing behavior*, 2nd edition (Addison-Wesley).

**SZ71 Biology I.**

A course consisting of two lectures, one tutorial and approximately four hours of practical work each week throughout the year. Both day and evening classes will be held.

In Biology I there are two streams which have somewhat different emphasis. One stream is available to medical and dental students and the other to students in faculties other than Medicine and Dentistry. The course for Medicine and Dentistry includes: elementary biochemistry, cell structure and physiology, an introduction to bacteria fungi and autotrophs, structure and physiology of vertebrate and invertebrate animals, the mechanisms of evolution and the principles of ecology.

*Text-book:*

Curtis, H., *Biology*, 2nd edition (Worth).



## SC71 Chemistry IM.

There will be three lectures, a one-hour tutorial class and a three-hour practical class each week throughout the year.

This chemistry course is designed to meet the specific needs of students enrolled in the Faculties of Medicine and Dentistry. Principles are illustrated with biological and medical examples.

## A. STRUCTURE AND BONDING.

Crystals and the solid state: the principle of X-ray crystallography; crystal systems; crystal chemistry. Chemical bonding concepts: developed to a level for understanding of structures and reactions elsewhere in the course. Qualitative discussion of spectrophotometry and spectral techniques used to establish molecular structure. Molecular architecture: the structure of biological molecules, metal chelates and haem-type complexes.

## B. ENERGETICS AND CHEMICAL EQUILIBRIA.

Equilibria in aqueous solutions: concepts of free energy, enthalpy and entropy; buffers; metal-complex formation. Electrochemical phenomena: electrode potentials; glass electrode; specific ion electrodes. Interfacial phenomena: interfaces and adsorption; monolayers; electrical double-layers; membranes; osmotic phenomena; Donnan equilibrium; hydrophilic colloids.

## C. RATE PROCESSES.

The concepts of reaction rates, rate laws, mechanisms; effect of temperature on reaction rates; diffusion as a rate-determining process.

## D. ORGANIC CHEMISTRY.

The lecture course in Organic Chemistry will be devoted to a discussion of the occurrence, preparation and properties, both physical and chemical, of the major families of organic compounds, viz. paraffins; olefins, acetylenes; alcohols; alkyl halides; aldehydes; ketones; acids; aromatic hydrocarbons; phenols; amines; heterocyclic compounds; amino acids and proteins; carbohydrates.

Representative examples will be included of compounds of medicinal and biological importance, e.g., anaesthetics, analgesics, anti-inflammatory drugs, anti-septics, bacteriostats, antibiotics, vitamins, nucleotides, steroids, etc.

At appropriate places in the course the following topics will be presented:

Isomerism: geometrical, optical, recognition and separation of isomers. Spectroscopic methods: applications of ultra-violet, infra-red, n.m.r., and mass spectrometry in the identification of organic compounds. Fluorescence: examples of fluorescent compounds, fluorescence spectroscopy. Carcinogenesis. Polymers: preparation and properties of synthetic organic polymers, proteins, cellulose, starch. Chromatography: some examples of applications of gas, thin film, column chromatography. Biological processes: simple examples of transformations, *in vivo*, of organic molecules. Fats and waxes, lipids.

## Text-books:

- Lippincott, W. T., and others, *Chemistry: a study of matter*, 3rd edition (Wiley International Student Edition).  
 Chang, R., *Physical chemistry with applications to biological systems* (Collier-Macmillan).  
 Brown, W. H., *Introduction to organic chemistry*, 2nd edition (Wadsworth International Student Edition) (Wise Grant Press).

## Reference books:

- Mahan, B. H., *University chemistry*, 3rd edition (Addison-Wesley).  
 Morris, J. G., *A biologist's physical chemistry*, 2nd edition (Edward Arnold).

## SJ8H Genetics IH(M).

There will be one lecture and a tutorial/practical class each week throughout the year.

This course outlines the principles of human genetics as an introduction to individual variation which is part of the background to the practice of medicine and dentistry. Practical sessions and exercises will give students the opportunity

to analyse data of normal and pathological human variation so as to encourage a critical approach to genetical and medical problems.

Scientific method. Mendelian genetics in human families. Application of statistical tests to genetic data. Cytogenetics. Biochemical and population genetics including an introduction to metabolic errors, haemoglobin variants, blood groups and tissue compatibility. Inbreeding. Genetic studies of twins. Mutation and radiation hazards. Selection and genetic polymorphism in man. Genetics of quantitative variables. Role of genetic factors in the production of congenital anomalies and some adult diseases. Genetic counselling.

**Text-books:**

Thompson, J. S., and Thompson, M. W., *Genetics in medicine*, 2nd edition (Saunders).

Swinscow, T. D. V., *Statistics at square one*, 2nd edition (British Medical Association).

**SP7H Physics IH(M).**

The course consists of about 39 one-hour lectures (about two a week throughout the year), 12 one-hour tutorials and one three-hour laboratory session a fortnight. An essay and problem assignments are set. The course aims to bridge the gap between matriculation Physics and medical subjects. It does so by teaching specially selected material and by the use of applications to physiology and biology.

Lecture Topics include:

Errors of measurement.

Review of the main principles of mechanics, electromagnetism and thermodynamics.

Properties of matter—fluids and solids, surface tension, diffusion and osmosis. DC and AC circuit analysis.

Feedback and control.

Principles of instrument design, performance and resolution.

Optics.

Sound.

Nuclear and radiation physics.

Students who have not taken Matriculation Physics are advised to consult the Lecturer giving the SP7H Physics IH(M) course as early as possible before the start of first term.

Text-book:

Cromer, A. H., *Physics for the life sciences*, 2nd edition (McGraw Hill).

**SECOND-YEAR EXAMINATION.**

In the second year a co-ordinated course in human biology comprises MA02 Anatomy, SY72 Biochemistry and SS12 Human Physiology. Also included in the second-year course is MU02 Medicine in the Community. Students are required to enrol for all these subjects at the beginning of second year.

**MA02 Anatomy.**

This course includes the following:

**INTRODUCTORY ANATOMY:**

One lecture per week during first term. The course covers the general anatomy of the musculoskeletal, nervous and vascular systems.

## GROSS ANATOMY:

40 lectures and 54 hours of tutorial-demonstrations and practical work on the lower limb and trunk extend over three terms. Functional and clinical aspects of anatomy are emphasised. Students dissect part of the body; prosected specimens are provided also.

## Equipment:

A human half-skeleton, dissecting instruments, laboratory coats.

## Text-book:

Thompson, J. S., *Core textbook of anatomy* (Lippincott).

## Atlas (optional):

Clemente, C. D., *Anatomy. A regional atlas of the human body* (Urban and Schwartzenberg).

## HISTOLOGY AND CYTOLOGY:

About 40 hours each of lectures and practical classes on general cytology and the microscopic structure of the tissues, organs and systems of the body. The course relates structural features to function.

## Equipment:

An approved microscope. [Information is available from the Department.]

## Text-book:

Junqueira, L. C., and others, *Basic histology*, 2nd edition (Lange).

## Atlas (optional):

Reith, E. J., and Ross, M. H., *Atlas of descriptive histology*, 3rd edition (Harper); OR

Fiore, M. S. H. di, *Atlas of human histology* (Lea and Febiger).

## EMBRYOLOGY:

The 27 lectures cover both pre- and post-natal stages of normal human growth and development, and extend into related topics such as control of development, experimental embryology, congenital anomalies and teratogenesis.

## Text-book:

Moore, K. L., *The developing human* (Saunders).

**SY72 Biochemistry.**

Lectures and a series of Medical Laboratory Units which combine audio-visual tutorial work, reading and practical exercises. The course is designed to cover basic biochemistry but its clinical relevance is given.

Work in biochemistry will be completed in the second year of the medical course.

The course will include aspects of protein structure and function, metabolism of carbohydrates, lipids and amino acids; porphyrin metabolism, hormone action and metabolic control; biological membranes; vision; nucleic acid and protein synthesis; mutation, control of gene expression, eukaryote chromosomes, immunoglobulins, molecular basis of antibiotic action, nature of antibiotic resistance; nature of viral diseases, biochemistry of cancer.

The Medical Laboratory Units reinforce and extend the lectures.

## Text-books:

Stryer, L., *Biochemistry* (Freeman).

Montgomery, R., and others, *Biochemistry: A case oriented approach*, 2nd edition (Mosby).

Reference books:

- Harper, H. A., *Review of physiological chemistry*, 14th edition (Lange).  
White, A., and others, *Principles of biochemistry*, 5th edition (McGraw-Hill).

**SS12 Human Physiology.**

Throughout each week of the three terms in second year students attend three one-hour lectures, a one-hour tutorial and a three-hour practical session. The course is concerned with aspects of both general and systematic physiology.

Introductory reading:

- Horrobin, D. F., *An introduction to human physiology* (Medical and Technical Publishing Co. Ltd.).

Text-book:

- Guyton, A. C., *Textbook of medical physiology*, 5th edition (Saunders).

**MU02 Medicine in the Community II.**

The first term consists of a course concerning "Relationships in Community Health". In this programme, conducted by the Foundation for Multidisciplinary Education in Community Health, students from Second Year medicine join with students from social work, nursing, physiotherapy and occupational therapy and together look at the relationship between them and their patients or clients (an introduction to counselling), the relationships they will have with other professionals (introducing concepts of teamwork and differences in roles), and the relationships they will have with people in general (considering the health education aspect of being a health care person).

The students work in small groups of 8 or 9. Short talks and field visits act as triggers for discussion within the groups—each of which will produce a brief report of the term's work. These discussions are supported by printed material especially prepared for this programme.

In terms 2 and 3 of the second year students are introduced to basic concepts in epidemiology and to styles of social and economic analysis of medicine in the community. The epidemiology lectures and tutorials aim to familiarise students with statistical methods of studying patterns and processes of disease within populations and to undertake a detailed examination of the epidemiology of a number of diseases. Practical sessions introduce computer methods for dealing with community health data.

The course in social analysis begins with an exploration of the way in which knowledge about society is acquired and evidence is evaluated. The social diversity of understandings of health and medicine is explored and some of the implications of that diversity, for both practitioners and lay people, are explored. Economists' techniques for analysing the costs and benefits of various arrangements of health care are also discussed.

Assessment is continuous in tutorial, project work and 24-hour essay assignments.

Text-books:

- Barker, D. J. P., and Rose, G., *Epidemiology in medical practice* (Churchill Livingstone).  
Freidson, E., *Professional dominance* (Aldine).  
Fuchs, V., *Who shall live?* (Basic Books).  
Klecka, W. R., and others, *SPSS Primer* (McGraw-Hill).  
Plus: Reading list in Sixth Year course.

## THIRD-YEAR EXAMINATION.

In the third year a co-ordinated course in advanced human biology comprises MA03 Anatomy and SS13 Human Physiology. Also included in the third-year course are MP03 Biology of Disease comprising Microbiology and General Pathology and MU03 Medicine in the Community III. Students are required to enrol for all these subjects at the beginning of third year.

## MA03 Anatomy.

## GROSS ANATOMY AND EMBRYOLOGY:

36 lectures and 54 hours of tutorial-demonstrations and practical work on the head and neck and upper limb extend over the first two terms. Functional and clinical aspects are emphasised. Students dissect these regions; prosected specimens and models are provided for some structures.

## NEUROBIOLOGY:

This course is closely co-ordinated with the course in neurophysiology given in the first term. About 25 lectures and 36 hours of demonstrations and practical work (including brain dissection and study of prepared sections) relate structure to function in the nervous system. (Clinical demonstrations are included.)

## Text-books:

- Grant, J. C. B., *Method of anatomy*, 9th edition, ed. by J. V. Basmajian (Williams and Wilkins).  
Noback, C. R., and Demarest, R. J., *The human nervous system: basic principles of neurobiology*, 2nd edition, 1975 (McGraw-Hill).  
Tobin, C. E., *Shearer's manual of human dissection*, 5th edition (McGraw-Hill).

## MP03 Biology of Disease.

An introductory course in Microbiology and General Pathology. Details are given below under Fourth-Year Examination.

## SS13 Human Physiology and Pharmacology.

The course is comprised of three one-hour lectures and one three-hour practical session in each week of the first two terms of third year. In first term the course is devoted to integrative aspects of systematic physiology and in second term with the fundamentals of medical pharmacology.

## Introductory reading:

- Rand, M. J., and others, *An introduction to the physiology and pharmacology of the autonomic nervous system* (Australasian Pharmaceutic Publishing Co.).

## Text-books:

- Guyton, A. C., *Textbook of medical physiology*, 5th edition (Saunders).  
Goodman, L. S., and Gilman, A., *The pharmacological basis of therapeutics*, 5th edition (Macmillan).

## Reference book:

- Goldstein, A., and others, *Principles of drug action*, 2nd edition (Harper International).

## MU03 Medicine in the Community III.

In terms 1 and 2 of the third year courses are conducted in the process and practice of preventing illness in relation to human sexuality, growth and development, environment and occupation and growing old. Field visits to community resources, including general practice are arranged.

Assessment is continuous in tutorial, project work and 24-hour essay assignments.

## Text-books:

See above under MU02 Medicine in the Community II.

## FOURTH-YEAR EXAMINATION.

### MX74 Fourth-Year Examination.

#### Applied Physiology and Pharmacology.

The course extends through four consecutive terms beginning with the third term in the third year of medical studies, and is integrated with topic teaching. The subject-matter will be the application of important principles of physiology and pharmacology to medicine and surgery.

##### Text-books:

- Guyton, A. C., *Textbook of medical physiology*, 5th edition (Saunders).  
Laurence, D. R., *Clinical pharmacology*, 4th edition (Churchill).

##### Reference books:

- Avery, G. S., *Drug treatment* (Adis Press).  
Goodman, L. S., and Gilman, A., *The pharmacological basis of therapeutics*, 5th edition (Macmillan).

#### Clinical Anatomy.

Occasional lectures are integrated with topic teaching. The subject matter is the application of important principles of anatomy to medicine, surgery and radiology.

#### Medicine and Surgery.

A course of tutorials, lectures and clinical instruction on the medical and surgical aspects of diseases. The course is part of the topic teaching programme which provides integrated multidisciplinary teaching in community medicine, public health, history taking, diseases of the alimentary tract, cardiovascular system, respiratory system, infection, endocrine disorders, metabolic abnormalities, urinary tract diseases, diseases of bones and joints, diseases of the blood, neurological disorders, diseases of the eyes, skin, ears, nose and throat, and anaesthesia and resuscitation. The psychological aspects of disease will be discussed where relevant.

The course, commencing in the third term of the third year and continuing throughout the fourth year, is designed to give students a balanced introduction to clinical science and to integrate the medical sciences with clinical medicine. For recommended text-books see under MX76 Final (Sixth-Year) Examination.

#### Community Medicine.

Preventive and epidemiological aspects of disease are presented and discussed where appropriate throughout the year. Lectures, tutorials and clinical teaching are provided on the preventive, primary and community care aspects of topics under consideration. For text-books see under MX76 Final (Sixth-Year) Examination.

#### Microbiology.

Bacteria of medical importance: their isolation, morphology, physiology and classification. The principles of sterilisation and disinfection, the use of antibiotics and chemotherapeutic agents. The role of micro-organisms in human disease, considered as a study of host-parasite relationships; epidemiology and its relation to hospital cross-infections. An outline of human virus infections. The collection of specimens for bacteriological and viral diagnosis.

The principles of immunology as applied to the diagnosis, prophylaxis and therapy of bacterial and virus diseases, transplantation, diseases due to allergy or hypersensitivity and autoimmune disease.

In the first and second terms of the third year, introductory lectures and a practical course using basic laboratory techniques are given. In the following four terms there are seminars on selected clinical topics related to Topic Teaching concerning infectious diseases and immunological problems, including visits to the Children's Hospital and the Northfield Wards of the Royal Adelaide Hospital. Students are expected to take an active part in these clinical presentations.

At all stages the course is related, whenever possible, to clinical material.

Text-books:

- Cruickshank, R. (ed.), *Medical microbiology* (Livingstone).  
 Humphrey, J. H., and White, R. G., *Immunology for students of medicine*, 3rd edition (Blackwell).  
 Garrod, L. P., and O'Grady, F. (eds.), *Antibiotic and chemotherapy*, 4th edition (Livingstone).

### Pathology.

The course in Pathology extends over the third and fourth years. In the first and second terms of the third year of the medical course the general principles of pathology are presented as part of the course in MP03 Biology of Disease. The nature and causes of disease are first considered, and then follows a full consideration of the inflammatory reaction, including tissue regeneration and repair. Other topics are coagulation and its disorders, thrombosis, embolism and infarction, retrograde cellular changes and degenerations, the biological effects of radiant energy, the fundamentals of the neoplastic process, malformations, chromosomal abnormalities, haemorrhage, shock and oedema.

Commencing in the third term of the third year of the medical course applied (systematic) pathology is studied, as part of an integrated multi-disciplinary programme of instruction on selected topics: The naked-eye and microscopic changes in diseased organs and tissues are considered, and the morbid physiology of disease is also discussed. The course comprises lectures, weekly tutorials, mortuary demonstrations of selected material, clinico-pathological demonstrations, and attendance at necropsies in the mortuary of the Royal Adelaide Hospital.

Necropsies are held daily when material is available, and students are advised to attend as many as possible.

Text-book:

*For general pathology:*

Walter, J. B., and Israel, M. S., *General pathology*, 4th edition (Churchill).

*For special pathology:*

Robbins, S. L., and Angell, M., *Basic pathology*, 2nd edition (Saunders).

Reference book:

La Via, M. F., and Hill, R. B., *Principles of pathobiology* (O.U.P.).

### Psychiatry.

The course in Psychiatry which commences with the course in Behavioural Science in the first year is designed to help the student acquire the knowledge and skills necessary for the evaluation of psychological and sociological factors and the integration of these with biological factors in all forms of illness.

In the third and fourth years a short course of lectures is given covering the following topics: stress and coping, anxiety, depression, memory and pain. The principles of clinical interviewing are taught and psychosocial aspects of disease are presented and discussed where appropriate throughout the course.

For text-books see under MX76 Final (Sixth Year) Examination.

## FIFTH-YEAR EXAMINATION.

### MO75 Obstetrics and Gynaecology.

A course of lectures in obstetrics and gynaecology is given during the fifth year. Students are rostered to the Queen Elizabeth Hospital or the Queen Victoria Hospital and the Royal Adelaide Hospital for one clinical term. During this time both obstetrics and gynaecological clinical attachments are performed and students are resident for six weeks.

Tutorials in practical obstetrics, endocrinology and gynaecological pathology are given during term.

Seminars are conducted in which social, psychological and psychosomatic aspects of human reproduction and sexuality are discussed.

#### Text-books:

- Beischer, N. A., and Mackay, E. V., *Obstetrics and the newborn* (Saunders).  
Jeffcoate, T. N. A., *Principles of gynaecology*, 4th edition (Butterworth).  
Llewellyn-Jones, D., *Fundamentals of obstetrics and gynaecology*, vol. I: Obstetrics, vol. 2: Gynaecology (Faber).  
Townsend, L., *Obstetrics for students*, 2nd edition (Melbourne U.P.).  
Townsend, L., *Gynaecology for students*, 2nd edition (Melbourne U.P.).  
Peel, J., and Potts, M., *Textbook of contraceptive practice* (C.U.P.).  
Dennerstein, L., and others, *Gynaecology, sex and psyche* (Melbourne U.P.).

#### Reference books:

- Reid, D. E., and others, *Principles and management of human reproduction* (Saunders).  
Novak, E. R., and others, *Novak's textbook of gynaecology*, 8th edition (Williams and Wilkins).  
Macdonald, R. R., *Scientific basis of obstetrics and gynaecology* (Churchill).  
Speroff, L., and others, *Clinical gynecologic endocrinology and infertility* (Williams and Wilkins).

### MC75 Paediatrics.

#### MEDICAL DISEASES OF CHILDREN:

Lectures, tutorials, and clinical instruction in the general problems of paediatrics, including the newborn.

#### General introductory text-book:

- Maxwell, G. M., *Principles of paediatrics* (Queensland U.P.).

#### Reference book:

- Nelson, W. E., *Text-book of paediatrics, latest edition* (Saunders).

#### SURGICAL DISEASES OF CHILDREN:

Lecture-demonstrations on surgical diseases of children given at the Adelaide Children's Hospital.

#### Reference book:

- Royal Children's Hospital Melb., *Clinical paediatric surgery*, ed. by P. G. Jones (Ure Smith).



**Medicine.**

Fifth-year students spend six weeks in the University Departments of Medicine and Surgery at either the Royal Adelaide Hospital or the Queen Elizabeth Hospital. The course is designed to analyse the whole diagnostic and clinical approach to the patient. Students are concerned with the problems of individual patients under the direct supervision of a preceptor from the Department.

For text-books see under MX76 Final (Sixth Year) Examination.

**Surgery.**

Fifth-year students spend six weeks in the University Departments of Surgery and Medicine at either the Royal Adelaide Hospital or the Queen Elizabeth Hospital in a course designed to analyse the whole diagnostic process, including special diagnostic procedures.

For text-books see under MX76 Final (Sixth Year) Examination.

**Psychiatry.**

In the fifth year students are assigned to psychiatric units in general hospitals for clinical clerking, the detailed study of the patient and his family and an over-view of the field of general psychiatry.

For text-books see under MX76 Final (Sixth Year) Examination.

## FINAL (SIXTH-YEAR) EXAMINATION.

### MX76 Final (Sixth-Year) Examination.

#### Medicine.

The sixth year of the course is provided to allow for the study and care of patients under the supervision of the University Department of Medicine and the Clinical Teachers of the University at both hospitals. Students will spend four weeks in General Medicine in the capacity of Student Interns at the teaching hospitals. Normally a student will be required to be in residence at the hospital to enable himself to maintain continuity of patient care. There will also be a period of four weeks devoted to Medical Specialties. There will be a minimum of formal teaching. In addition the new curriculum provides an eight week elective period at the beginning of the year.

The following books are recommended throughout the three years' instruction in Medicine. Students should purchase copies of text-books. Many students also find it valuable to have a personal copy of a general reference book. A list of special reference books will be made available at the beginning of the year.

#### Text-books:

Macleod, J. G. (ed.), *Davidson's principles and practices of medicine* (Livingstone).

Macleod, J. G. (ed.), *Clinical examination* (Churchill-Livingstone).

#### General reference books:

Harrison, T. R., and others, *Principles of internal medicine* (McGraw-Hill); or

Beeston, P. B., and McDermott, W., *Text-book of medicine* (Saunders).

#### Psychiatry.

In the sixth year students will be assigned to psychiatric units both in the Psychiatric Hospital and in the Community where they will develop knowledge of assessment techniques and the management of a wide variety of disorders in general clinical psychiatry. Students are required to submit an essay on a psychiatric topic of their choice. A list of possible subjects is provided for guidance.

#### Text-book:

Kolb, L. C., *Modern clinical psychiatry* (Saunders).

#### Reference books:

Engel, G. L., *Psychological development in health and disease* (Saunders).  
Morgan, W. L., and Engel, G. L., *The clinical approach to the patient* (Saunders).

Forrest, A., *Companion to psychiatric studies*, vols. I and II (Churchill and Livingstone).

Mathis, J. L., and others, *Basic psychiatry* (Appleton-Century-Crofts).

Pilowsky, I., and Maddison, D. C., *Psychiatry and the community* (Sydney U.P.).

Erikson, E. H., *Identity and the life cycle* (International U.P.).

Shepherd, M., and others, *Clinical psychopharmacology* (English U.P.).

Rees, L. W., *A short textbook of psychiatry* (Unibooks).

Crown, S., *Essential principles of psychiatry* (Raven).

Sim, M., *Guide to psychiatry* (Livingstone).

Gregory, I., *Fundamentals of psychiatry* (Saunders).

Willis, J., *Clinical psychiatry* (Blackwell).

The following paperbacks are valuable:

- Brown, J. A. C., *Freud and the post Freudians* (Penguin).  
Crowcroft, A., *The psychotic* (Penguin).  
Késsel, W. I. N., and Walton, H. J., *Alcoholism* (Penguin).  
Lowe, G. R., *Personal relationships in psychological disorders* (Penguin).  
Stengel, E., *Suicide and attempted suicide* (Penguin).  
Storr, A., *The integrity of the personality* (Penguin).  
Storr, A., *Sexual deviation* (Penguin).  
Enelow, A. J., and Swisher, S. N., *Interviewing and patient care* (O.U.P.).

### Surgery.

In the sixth year each student is attached for four weeks to a general surgical clinic. During this period he is given duties which will involve him directly in patient-care, as the most junior member of the surgical team. Normally, he will be required to be in residence at the hospital to enable him to maintain continuity of patient-contact. There will be a minimum of formal teaching. For a further period of four weeks each student will attend for instruction in a surgical specialty.

Text-books and equipment:

- The Department of Surgery issues to all fourth, fifth and sixth-year students towards the end of each year a booklet describing the course in more detail, and giving detailed advice to students about the choice of text and reference books, and of equipment.

### Community Medicine.

A course in community practice is designed to provide students with practical learning in illness behaviour, epidemiology of disease and the organisation and evaluation of medical care in the community. This should provide the student with skills to help people in the community to cope with their most common health problems individually and collectively. Particular emphasis is given to the role of the general practitioner as a health educator and counsellor.

A four-week externship programme includes field placements in metropolitan and country general practice, visits to community care resources and evaluation of these learning experiences in tutorials and seminar settings. The course includes a one week seminar at a health centre in the city involving recent graduates from other disciplines in health care, during which issues concerning teamwork and communications in the provision of health care and education to the community are explored, and a day-long seminar in a hospital in a country town. A short training course in public health is also provided.

Student evaluation includes both group and individual study assignments and a running assessment of the clinical clerkship in general practice and vivas in public health and patient management of problems common to community practice.

Text-books:

- Barker, D. J. P., and Rose, G. A., *Epidemiology in medical practice* (Churchill Livingstone).  
Hodgkin, K., *Towards earlier diagnosis: a guide to general practice*, 3rd edition (Churchill Livingstone).  
*The Australian morbidity survey* (Med. J. Aust. Supplement, October 1976).

Reference books:

- Balint, M., *The doctor, his patient and the illness* (Pitman).  
Diesendorf, M., *The magic bullet* (SSRS—Canberra).  
Gordon, D., *Health, sickness and society* (Queensland U.P.).  
Hetzel, B. S., *Health and Australian society* (Pelican).  
Hocking, G., *Principles of community and family medicine* (Family medicine programme of the R.A.C.G.P.).  
Morrell, D. C., *The art of general practice* (Pitman).

A set of important reprints and articles on matters of community medicine interest is kept in the Department of Community Medicine.

**Obstetrics and Gynaecology.**

Each student will reside in an obstetric hospital for four weeks for a student internship. During this time he will be attached to the practice of a visiting obstetrician and gynaecologist.

**Paediatrics.**

During the sixth year each student will be attached to the practice of a paediatric unit and may be required to reside in a hospital for a period of four weeks as a student intern.

**Applied Pathology and Forensic Medicine.**

This course organised by the Department of Pathology comprises a series of combined presentations by pathologists and clinicians and is orientated towards relating clinical features to laboratory findings in selected diseases. There is also a series of lectures dealing with selected topics in forensic medicine and pathology.

**Medical Ethics.**

A short course of lectures on the ethics of the profession.

The relationship of practitioners to one another, to patients, nurses, chemists, friendly societies, the public, advertising, hospitals, the law courts, and the State.

ADDITIONAL SUBJECTS TAUGHT BY DEPARTMENTS OF THE  
FACULTY OF MEDICINE

- MA13 Histology and Cell Biology III for the degree of B.Sc.  
 MA79 Anatomy and Histology for the Honours degree of B.Sc.  
 MA72 General Anatomy for the degree of B.D.S.  
 MA82 General and Dental Histology for the degree of B.D.S.  
 MM04 General Medicine for the degree of B.D.S.  
 MS04 General Surgery for the degree of B.D.S.  
 MP73 General Pathology for the degree of B.D.S.  
 MA89 Anatomy and Histology for the Honours degree of B.Sc. in Dentistry.  
 MP89 Pathology for the Honours degree of B.Sc. in Dentistry.

MA51 and MA52; MA61 and MA62.

These subjects are provided for students enrolled at the South Australian Institute of Technology in the courses for the Diplomas in Technology in Physiotherapy and in Occupational Therapy.

**MA51 Anatomy I(O.T.).**

This course, for students of Occupational Therapy, consists of three parts:

**INTRODUCTORY ANATOMY:**

A course of two lectures a week in the first term, dealing with the general anatomy of musculoskeletal, nervous and vascular systems, and basic histology.

Preliminary reading (particularly for students with little background in biology):

Barnett, C. H., and others, *The human body* (English U.P.).

**GROSS ANATOMY:**

A flexible arrangement of approximately two lectures and two hours of demonstration-tutorial instruction a week throughout the year. The course deals with the anatomy of the whole body, but emphasises musculoskeletal and nervous structures and their functional application in activities of everyday living, and stresses particularly the upper limb.

**Equipment:**

Students will need a laboratory coat, and will find a human half-skeleton, particularly the limbs, an advantage.

**Text-book:**

Basmajian, J. V., *Primary anatomy*, 7th edition (Williams and Wilkins).

**EMBRYOLOGY:**

This part of the course is shared with Physiotherapy students. Refer to the syllabus and text-books for MA61 Anatomy I(P), Embryology section.

**MA52 Anatomy II(O.T.).**

This is a course in Neurobiology, shared with Physiotherapy students. Refer to the syllabus and text-books for MA62 Anatomy II(P), Neurobiology section.

**MA61 Anatomy I(P).**

The course, for students of Physiotherapy, consists of three parts:

**INTRODUCTORY ANATOMY:**

Two lectures per week in first term, dealing with the general anatomy of the musculoskeletal, nervous and vascular systems.

Preliminary reading (particularly for students with little background in biology):

Barnett, C. H., and others, *The human body* (English U.P.).

**GROSS ANATOMY:**

2 lectures a week on the gross anatomy of the extremities and trunk, given throughout the year. Functional aspects of anatomy are emphasised.

3 hours of practical work a week includes dissections of the extremities and trunk. Tutorial-demonstrations are held in conjunction with dissections. Prosected specimens of some regions are used as demonstration material.

**Equipment:**

A human half-skeleton, dissecting instruments, and laboratory coats.

**Text-books:**

Grant, J. C. B., *Method of anatomy*, 9th edition, ed. by J. V. Basmajian (Williams and Wilkins).

Cunningham, D. J., *Manual of practical anatomy*, vols. 1 and 2 (O.U.P.).

**Atlas (optional):**

Clemente, D., *Anatomy. A regional atlas of the human body* (Urban and Schwartzberg).

**EMBRYOLOGY:**

A course of 27 lectures on embryology (including the development of the nervous system) given in the second and third terms.

**Text-book:**

Moore, K. L., *Before we are born* (Saunders).

**MA62 Anatomy II(P).****GROSS ANATOMY:**

36 lectures on the gross anatomy of the head and neck, the vertebral column, and on special topics, given in the first two terms. Functional aspects of anatomy are emphasised.

54 hours of practical work in the form of dissections of the head and neck, the vertebral column and the central nervous system. Tutorial-demonstrations are held in conjunction with dissections. Prosected specimens of some regions are used as demonstration material.

**Equipment:**

See MA61.

**Text-books:**

Cunningham, D. J., *Manual of practical anatomy*, vol. 3 (O.U.P.).

Grant, J. C. B., *Method of anatomy*, 9th edition, ed. by J. V. Basmajian (Williams and Wilkins).

**NEUROBIOLOGY:**

A course of about 18 lectures and 9 hours of dissection, dealing with the functional anatomy of the central nervous system and emphasising topics of clinical significance.

**Text-book:**

Noback, C. R., and Demarest, R. J., *The nervous system: introduction and review* (McGraw-Hill).

OF THE HONOURS DEGREE OF  
**BACHELOR OF MEDICAL SCIENCE**  
**REGULATIONS**

\*1. There shall be an Honours degree of Bachelor of Medical Science.

\*2. To qualify for the degree a candidate shall undertake a course of advanced study extending over at least one academic year, and shall satisfy the examiners in one of the subjects prescribed in the schedules.

\*3. Before admission to a course of study for the degree a candidate shall have:

- (a) passed the Third-Year Examination for the degrees of Bachelor of Medicine and Bachelor of Surgery;
- (b) been accepted by the Chairman of the department concerned as a suitable candidate for advanced work in the subject he wishes to pursue; and
- (c) completed such pre-requisite work as the Chairman of the department concerned may prescribe.

†4. The names of the candidates who qualify for the degree shall be published in alphabetical order within the following classes and divisions in each subject:

First Class  
Second Class  
Division A  
Division B  
Third Class.

5. A candidate shall enter for examination on the form and by the date prescribed by the Council, but shall not be eligible to present himself for examination unless he has regularly attended the prescribed lectures and has done written and laboratory or other practical work, where required, to the satisfaction of the professors and lecturers concerned.

\*6. Schedules defining the courses of study which may be undertaken, and the examinations to be passed, shall be drawn up by the Faculty of Medicine and submitted to the Council. Such schedules shall become effective from the date of approval by the Council or such other date as the Council may determine, and shall be published as soon as practicable after that approval has been given.

\*7. On the recommendation of the Faculty of Medicine, the Council may accept as a candidate for the degree a person who in a medical course of another institution has passed examinations regarded as equivalent to that specified in section (a) of regulation 3.

Regulations allowed 12 December, 1963.

† Amended 21 December, 1972.

\* Allowed 15 January, 1976.

OF THE HONOURS DEGREE OF  
BACHELOR OF MEDICAL SCIENCE

SCHEDULES

(Made by the Council under regulation 6.)

SCHEDULE I: COURSE OF STUDY

1. A course of study for the degree may be undertaken in one of the following:

MA99 Anatomy and Histology	MO99 Obstetrics and Gynaecology
MH89 Behavioural Science	MC99 Paediatrics
SY89 Biochemistry	MP99 Pathology
MU99 Community Medicine	SS79 Pharmacology
SJ89 Genetics	SS69 Physiology
MM99 Medicine	MII99 Psychiatry
SK89 Microbiology	MS99 Surgery

2. The course comprises three equally important aspects undertaken concurrently:

- (a) *Course of Reading* in selected fields, and the submission of a series of essays associated therewith.
- (b) *Experimental work*, covering a wide range of techniques.
- (c) *The undertaking of a research project* which will be assigned early in the course and on which a thesis must be submitted.

3. The examination for the degree will consist of a written paper or papers, the essays submitted during the year, the thesis on the research project, an oral examination, and a practical examination if required by the examiners.



OF THE HONOURS DEGREE OF  
**BACHELOR OF MEDICAL SCIENCE**  
**S Y L L A B U S E S**

*Text-books:*

Students are expected to procure the latest edition of all text-books prescribed.

*Examinations:*

For each subject students may obtain from the department concerned details of the examination in that subject including the relative weights given to the components (e.g. such of the following as are relevant: assessments, term or mid-year tests, essays or other written or practical work, final written examinations, *viva voce* examinations).

THE HONOURS DEGREE OF BACHELOR OF MEDICAL SCIENCE.

- MA99 Anatomy and Histology for the Honours degree of B.Med.Sc.
- MH89 Behavioural Science for the Honours degree of B.Med.Sc.
- SY89 Biochemistry for the Honours degree of B.Med.Sc.
- MU99 Community Medicine for the Honours degree of B.Med.Sc.
- SJ89 Genetics for the Honours degree of B.Med.Sc.
- MM99 Medicine for the Honours degree of B.Med.Sc.
- SK89 Microbiology for the Honours degree of B.Med.Sc.
- MO99 Obstetrics and Gynaecology for the Honours degree of B.Med.Sc.
- MC99 Paediatrics for the Honours degree of B.Med.Sc.
- MP99 Pathology for the Honours degree of B.Med.Sc.
- SS79 Pharmacology for the Honours degree of B.Med.Sc.
- SS69 Physiology for the Honours degree of B.Med.Sc.
- MH99 Psychiatry for the Honours degree of B.Med.Sc.
- MS99 Surgery for the Honours degree of B.Med.Sc.

Students requiring further information concerning syllabuses and work required for the Honours degree of Bachelor of Medical Science are advised to consult the Chairman/Head of the appropriate department as early as possible.

OF THE  
DIPLOMA IN PSYCHOTHERAPY  
REGULATIONS

1. There shall be a postgraduate Diploma in Psychotherapy.
2. A candidate for admission to the course for the diploma shall have qualified for admission to the degrees of Bachelor of Medicine and Bachelor of Surgery of the University, or to a corresponding degree or degrees of another university accepted for the purpose by the University.
3. To qualify for the diploma a candidate shall:
  - (a) satisfactorily complete a course of part-time study extending over two years; and
  - (b) submit evidence that subsequently to qualifying for the award of the degree or degrees referred to in regulation 2 hereof he has undergone in a hospital, practical clinical training in psychotherapy deemed satisfactory by the Faculty, for a period of not less than two years.
4. The course of study shall be prescribed in schedules which shall be drawn up from time to time by the Faculty of Medicine and approved by the Council. Such schedules shall take effect as from the date of approval by the Council or such other date as the Council shall determine and shall be published in the next University Calendar which is issued after that approval has been given.
5. A candidate who has twice failed to pass the examination may not enrol for the diploma again except by special permission of the Faculty and then only under such conditions as the Faculty may prescribe.
6. For the purpose of this regulation a candidate who is refused permission to sit for examination, or who fails, without a reason accepted by the Dean as adequate, to attend all or part of an annual examination (or supplementary examination if granted) after having enrolled for at least two terms in that year, shall be deemed to have failed to pass the examination.
7. A candidate who complies with the foregoing conditions and satisfies the examiners shall be awarded the Diploma in Psychotherapy.

Regulations allowed 15 January, 1976.

OF THE  
DIPLOMA IN PSYCHOTHERAPY

SCHEDULES

(Prescribed by the Council under regulation 4.)

SCHEDULE I: COURSE OF STUDY

A candidate for the Diploma in Psychotherapy shall regularly attend lectures, complete such written, practical and tutorial work as may be prescribed, and pass examinations in:

- (a) MH17 Individual Psychotherapy.
- (b) MH27 Behavioural Psychotherapy.
- (c) MH37 Evaluative Techniques in Psychotherapy.
- (d) MH47 Marital and Family Therapy.
- (e) MH57 Group and Milieu Therapy.
- (f) MH67 Elective Case Study.
- (g) MH77 Critical Survey.

OF THE  
**DIPLOMA IN PSYCHOTHERAPY**  
S Y L L A B U S E S

*Text-books:*

Details of required books will be provided at the beginning of the course: students are expected to procure the latest edition of all text-books prescribed.

*Examinations:*

Details of the method of examination in specific subjects may be obtained from the Department of Psychiatry: the methods will include continuous assessment of practical work, assessments of presentation of subjects in seminars, and written work.

**DIPLOMA IN PSYCHOTHERAPY**

The course is intended for graduates in Medicine, to provide systematic experience in a variety of treatment methods in psychotherapy; to foster a critical appraisal of indications for, limitations of, and evaluation of, such treatment methods. It is expected that the students will hold a concurrent clinical appointment. The timetable is devised so as to provide for the hospital commitments of students.

The course extends over two years of part-time study. It includes lectures, demonstrations, seminars and practical work on specific subjects as listed below.

Subjects 1 and 2 below will normally be examined during the first year, and subjects 3-7 during the second year of the course.

Assessments will be on the basis of the presentation of clinical material, presentation of subjects in seminars, and essays:

The subjects of study are:

1. MH17 Individual Psychotherapy.
2. MH27 Behavioural Psychotherapy.
3. MH37 Evaluative Techniques in Psychotherapy.
4. MH47 Marital and Family Therapy.
5. MH57 Group and Milieu Therapy.
6. MH67 Elective Case Study.
7. MH77 Critical Survey.

**MH17 Individual Psychotherapy.**

The course will be taken over two terms, with one session of one and a half hours a week, as well as practical work (in individual psychotherapy with a selected patient or patients) in the student's own time. The course will include review of therapy, and provision will be made for evaluation of treatment. A written record of treatment progress will be required, and this will provide part of the assessment of the student.

Topics will include: the nature of the psychotherapeutic process; historical review of major theoretical systems of psychotherapy; criteria for selection for individual psychotherapy; limitations of individual psychotherapy; common factors in differing modes of individual psychotherapy; the place of short-term versus long-term therapy; psychotherapy in specific syndromes (e.g. psychosomatic disorders and psychotic states).

**MH27 Behavioural Psychotherapy.**

The course will be taken over one term with one session of one and a half hours a week as well as practical work exercises. The course will include demonstrations of specific techniques, and opportunities for acquisition of skills in these techniques.

Topics will include: the relationship between behaviour therapy and individual psychotherapy; the theoretical bases of behavioural approaches to treatment; specific indications for behavioural techniques; relaxation training, desensitization, and implosion methods; the place of adjunctive drug therapy.

**MH37 Evaluative Techniques in Psychotherapy.**

Lectures and seminars will be given over ten sessions, with each session of one and a half hours' duration. The sessions will be interspersed throughout the first five terms (two sessions per term) in order that the evaluative techniques may be applied to the particular psychotherapeutic method under study for that term.

Topics will include: methodological issues in establishing criteria for "change" in psychotherapy; patient/therapist variables affecting outcome; spontaneous remission of symptoms; the limitations of measurement; evaluation with specific treatment methods.

**MH47 Marital and Family Therapy.**

The course will be taken over one term with one session of one and a half hours a week, as well as practical work (family assessment with selected patients) in the students' own time. Such work will be reviewed and provision made for evaluation of such treatment.

Topics will include: models of marital and family interaction; indications for, scope of, and limitations of marital therapy, problems with the adolescent in family therapy; family therapy and child psychiatry.

**MH57 Group and Milieu Therapy.**

The course will be taken over one term, with one session of one and a half hours a week for lecture/seminar material, in addition to one session a week of two hours' duration, for direct observation and discussion of group therapy techniques.

Topics will include: theoretical bases of group therapy approaches; "closed" and "open" groups; integration of group therapy in ward administration; criteria for selection for group therapy; indications for, scope of, and limitations of group therapy; techniques of leadership and facilitation of group processes.

**MH67 Elective Case Study.**

During the final term (term 6) the student will be required to undertake a project in which one of the modes of treatment previously studied is applied selectively in his or her clinical practice. This case study will be required to be written up, with a critical appraisal of factors influencing treatment for the purpose of assessment. The student group will continue to meet with a supervisor for weekly seminars of one and a half hours' duration during this term, with reporting and monitoring of the case material and therapist/patient transaction.

**MH77 Critical Survey.**

Each student will be required to produce a written report of a critical survey of the literature on a selected topic, chosen by the student and approved by the supervisor, within the field of psychotherapy.

OF THE  
DIPLOMA IN CLINICAL SCIENCE  
REGULATIONS

Note: This course will not be offered in 1979.

1. There shall be a postgraduate Diploma in Clinical Science.
- \*2. A candidate for admission to the course for the diploma shall have qualified for admission to the degrees of Bachelor of Medicine and Bachelor of Surgery of the University or to a corresponding degree or degrees of another university accepted for the purpose by the University.
3. To qualify for the diploma a candidate shall:
  - (a) satisfactorily complete a course of part-time study extending over at least one year; and
  - (b) submit evidence that subsequently to qualifying for the award of the degree or degrees referred to in regulation 2 hereof he has undergone in a hospital, practical clinical training deemed satisfactory by the Faculty, for a period of not less than two years.
4. The course of study shall be prescribed in schedules which shall be drawn up from time to time by the Faculty of Medicine and approved by the Council. Such schedules shall take effect as from the date of approval by the Council or such other date as the Council shall determine and shall be published in the next University Calendar which is issued after that approval has been given.
5. A candidate who has twice failed to pass the examination may not enrol for the diploma again except by special permission of the Faculty and then only under such conditions as the Faculty may prescribe.
6. For the purpose of this regulation a candidate who is refused permission to sit for examination, or who fails, without a reason accepted by the Dean as adequate, to attend all or part of an annual examination (or supplementary examination if granted) after having enrolled for at least two terms in that year, shall be deemed to have failed to pass the examination.
7. A candidate who complies with the foregoing conditions and satisfies the examiners shall be awarded the Diploma in Clinical Science.

Regulations allowed 28 February, 1974.

\* Amended 23 January, 1975.

### SCHEDULES AND SYLLABUSES

For schedules and syllabuses of the Diploma in Clinical Science, *see* Calendar of the University for 1978, Volume II, pages 930-932.

OF THE DEGREE OF  
MASTER OF CLINICAL SCIENCE  
REGULATIONS

1. There shall be a degree of Master of Clinical Science.
2. The Faculty may accept as a candidate for the degree a person who has been admitted to the degrees of Bachelor of Medicine and Bachelor of Surgery of the University of Adelaide, or degrees accepted by the Faculty as equivalent, and who has either:
  - (a) qualified for the award of the Diploma in Clinical Science; *or*
  - (b) holds qualifications acceptable to the Faculty *in lieu* of the Diploma.
3. To qualify for the degree a candidate shall:
  - (a) undertake a programme of research extending over at least one year of full-time or two years of part-time study on a subject approved by the Faculty and of relevance to the practice of clinical medicine; and
  - (b) submit a satisfactory dissertation thereon.
4. The Faculty will appoint a supervisor to guide the candidate in his work.
5. The candidate shall lodge with the Academic Registrar three copies of his dissertation which shall be prepared in accordance with directions given to candidates from time to time.\*
6. On submission or re-submission of the dissertation the Faculty shall nominate examiners who may recommend that it:
  - (a) be accepted, with or without conditions; *or*
  - (b) be accepted, with or without conditions, subject to satisfactory oral examinations; *or*
  - (c) be sent back to the candidate for revision; *or*
  - (d) be rejected.
7. A candidate who fulfils the requirements of these regulations may, on the recommendation of the Faculty, be admitted to the degree of Master of Clinical Science.
8. A candidate's progress shall be reviewed by the Faculty annually. If in the opinion of the Faculty of Medicine a candidate is not making satisfactory progress the Faculty may, with the consent of the Council, withdraw its approval of his candidature and the candidate shall cease to be enrolled for the degree.

Regulations allowed 15 January, 1976.

\* Published in "Notes and Instructions to candidates for Higher Degrees":  
*see* Table of Contents.

OF THE DEGREE OF  
DOCTOR OF MEDICINE  
REGULATIONS

1. The following persons may be accepted as candidates for the degree of Doctor of Medicine:

- (a) Bachelors of Medicine of the University of Adelaide;
- (b) Graduates in medicine of another university who hold a degree which is accepted by the Council on the recommendation of the Faculty of Medicine as equivalent to the degree of Bachelor of Medicine of the University of Adelaide.

2. No person may be awarded the degree of Doctor of Medicine until three years have elapsed since he became qualified to receive the degree specified in regulation 1 of these regulations. He may proceed to the degree either by completing a period of research and presenting a satisfactory thesis thereon, or by the submission of previously published work.

3. No thesis or other work presented for the degree may include material which has been accepted for any other degree or qualification of any university or institution. The degree shall not be awarded unless the thesis or work submitted contain an account of original work by the candidate for the degree amounting to a substantial contribution to knowledge.

4. When he submits his thesis or other work, a candidate shall:

- (a) submit therewith a declaration that the thesis or work is his own composition;
- (b) indicate wherein he considers the thesis or work to advance medical knowledge or practice;
- (c) furnish a history of the progress of medical knowledge in the subjects of the thesis or work;
- (d) indicate clearly and fully, by appropriate references, the extent to which he is indebted for any portion of his work to any other person.

*Regulations governing admission to the degree by thesis*

5. A person who wishes to proceed to the degree of Doctor of Medicine by thesis shall make written application to the Academic Registrar for enrolment as a candidate. The applicant shall include a brief statement of the topic upon which he proposes, upon the completion of a period of research, to submit a thesis.



\*6. A person accepted as a candidate shall conduct or continue research in the field of study approved by the Faculty of Medicine (hereinafter referred to as the Faculty). The Faculty may, if it thinks it desirable, appoint a supervisor or supervisors of his research and may nominate a department or departments under whose aegis the candidate may be required to pursue his research. Unless the Faculty shall otherwise determine, a candidate shall not present his thesis for examination until after the expiry of six terms from the approval of his candidature.

7. The Faculty may permit a candidate to pursue his research at such place or places outside the University as it thinks fit.

8. A candidate shall give the Academic Registrar one month's notice in writing of his intention to submit his thesis and shall give particulars of any other work which he desires to submit in support of his thesis. The Faculty may permit the submission of such work if in its opinion it may conveniently be examined along with the thesis.

9. The candidate shall lodge with the Academic Registrar three copies of the work prepared in accordance with the directions given in sub-paragraph (b) of clause 2B of Chapter XXV of the Statutes. If the work is accepted for the degree the Academic Registrar shall transmit two of the copies to the University Library.\*

10. The Faculty shall nominate examiners of the thesis of whom at least one shall be an external examiner. The Faculty may require the candidate to submit himself for examination upon the subject of his thesis and matters related thereto.

11. After the examiners' reports have been considered the Faculty may recommend that the candidate:

- (a) be awarded the degree; or
- (b) be awarded the degree on the satisfactory completion of an examination on the subject of his thesis and matters related thereto; or
- (c) be not awarded the degree, but be allowed to revise and re-submit his thesis (within such period as the Faculty may allow); or
- (d) be not awarded the degree and be not allowed to re-submit his thesis.

*Regulations concerning admission to the degree by  
previously published work*

12. Any person who satisfies the requirements of regulation 1 hereof may seek the permission of the Faculty to submit, as evidence that he is a fit and proper person to receive the degree, work or papers previously published by him.

\* Amendment awaiting allowance.

13. Any person who seeks the permission of the Faculty under regulation 12 hereof shall apply in writing to the Academic Registrar giving particulars of the work which he proposes to submit together with a *curriculum vitae*. The Faculty shall refer the matter to a committee which shall enquire into it and make recommendations to the Faculty. The Faculty may refuse to grant the permission sought or it may, if it entertains serious doubts about the suitability of the work which the applicant proposes to submit, advise him of its doubts and request him to reconsider his application.

14. The candidate shall lodge with the Academic Registrar three copies of the work prepared in accordance with the directions given in clause 2B of Chapter XXV of the Statutes. If the work is accepted for the degree the Academic Registrar shall transmit two of the copies to the University Library.\*

15. The Faculty shall nominate examiners of the work of whom at least one shall be an external examiner. The Faculty may require the candidate to submit himself for examination upon the subject of his work and matters related thereto.

16. After the examiners' reports have been considered the Faculty may recommend that the candidate:

- (a) be awarded the degree; or
- (b) be awarded the degree on the satisfactory completion of an examination on the subject of his work and matters related thereto; or
- (c) be not awarded the degree.

\*\*17. Notwithstanding the provisions of the preceding regulations, the Council may, on the recommendation of the Faculty, admit to the degree any person other than a member of the staff of the University. Any such recommendation shall be accompanied by evidence that the person has made an original and substantial contribution to knowledge.

Regulations allowed 21 December, 1967.

\*\* Allowed 15 January, 1976.

\* Published in "Notes and Instructions to candidates for Higher Degrees":  
see Table of Contents.



# FACULTY OF MUSIC

## REGULATIONS, SCHEDULES AND SYLLABUSES OF DEGREES

### Bachelor of Music (B.Mus.)

Regulations	-	-	-	-	-	-	-	-	-	930
Schedules	-	-	-	-	-	-	-	-	-	933
Syllabuses	-	-	-	-	-	-	-	-	-	935

### Master of Music (M.Mus.)

Regulations	-	-	-	-	-	-	-	-	-	940
Schedules	-	-	-	-	-	-	-	-	-	942

### Doctor of Philosophy (Ph.D.)

Regulations and Schedules: under "Board of Research Studies"—*see* Table of Contents.

### Doctor of Music (D.Mus.)

Regulations	-	-	-	-	-	-	-	-	-	943
-------------	---	---	---	---	---	---	---	---	---	-----

OF THE DEGREE OF  
**BACHELOR OF MUSIC**  
REGULATIONS

1. There shall be an Ordinary degree and an Honours degree of Bachelor of Music. A candidate may obtain either degree or both.

2. The course of study for the Ordinary degree shall extend over three academic years and that for the Honours degree over four academic years.

†3. To qualify for the Ordinary degree a candidate shall complete three years of academic study and pass the examinations prescribed under schedule I.

†4. (a) To qualify for the Honours degree a candidate shall attend lectures and do such other work as may be properly required by the professors and lecturers concerned, and pass examinations in accordance with the provisions of schedule II.

(b) The names of candidates who qualify for the Honours degree shall be published in alphabetical order within the following classes and divisions in each school:

First Class

Second Class

Division A

Division B

Third Class.

(c) A candidate who, after examination, has failed to obtain Honours shall be reported to the Faculty which may recommend that he be awarded the Ordinary degree, provided that he has, in all other respects, completed the work for the Honours degree.

(d) A candidate may not enrol a second time for the final Honours course if he (i) has already qualified for Honours, or (ii) has presented himself for examination, but has failed to obtain Honours, or (iii) withdraws from the Honours course, unless the Faculty on such conditions as it may determine permits him to re-enrol.

\*5. Schedules defining the courses of study (including lectures, practical work, and examinations) to be undertaken, shall be drawn up by the Faculty of Music and submitted to the Council for approval. Such schedules shall become effective from the date of approval by the Council or such other date as the Council may determine, and shall be published as soon as practicable after that approval has been given.

† Amended 16 December, 1971.

\*\* Amended 15 January, 1976.

6. Except by permission of the Faculty of Music, a candidate shall not be admitted to the class in any subject for which he has not completed the pre-requisite work prescribed in the syllabus for that subject.

†7. The separate subjects which together comprise an academic year of study need not all be taken in one and the same year, nor need the examination in all the subjects of the academic year of study be passed at the same time; but except by special permission of the Faculty of Music a candidate shall not proceed to any part of the work of the second or a subsequent year unless he has satisfied the pre-requisite work prescribed in the syllabus of the subject concerned.

\*8. (a) The annual examination shall be held towards the end of each academic year. A candidate shall enter for examination on the form and by the date prescribed by the Council, but unless granted exemption by the Faculty of Music, he shall not be eligible to present himself for examination unless he has regularly attended the prescribed lectures and has done the written and practical work required to the satisfaction of the professors and lecturers concerned.

(b) The examination in a subject shall take the form prescribed in the syllabus. Written or practical work done by the candidates by direction of the professor or lecturer concerned, and the results of terminal or other examinations held during the year, may be taken into consideration at the final examination in any subject.

(c) The names of candidates who pass in any subject for the Ordinary degree shall be published in alphabetical order within the following classifications: Pass with Distinction, Pass with Credit, Pass.

†9. (a) A candidate who fails to pass in any subject shall, before presenting himself again for examination, again attend lectures and do written or practical work in that subject to the satisfaction of the professor or lecturer concerned unless granted exemption from doing so by the Faculty of Music.

(b) A candidate who has twice failed to pass the annual examination in any subject or division of a subject may not present himself again for instruction or examination therein unless his plan of study is approved by the Dean. If he fails a third time he may not proceed with the subject again except by special permission of the Faculty of Music and under such conditions as the Faculty may prescribe.

(c) For the purpose of sections (a) and (b) of this regulation a candidate who is refused permission to sit for examination, or who fails either to enter for or to attend an annual examination after having enrolled for at least two terms in that year, shall be deemed to have failed to pass the examination.

\* Amended 16 December, 1971, and 23 December, 1976.

† Amended 16 December, 1971.

10. (a) A candidate who, on account of illness or other sufficient cause allowed by the Faculty, is prevented from attending the whole or part of any annual examination may be permitted by the Faculty of Music to present himself for a supplementary examination.

\* (b) A candidate who presents himself at an annual examination but fails to pass, may, on the recommendation of the Board of Examiners, be permitted by the Faculty of Music to present himself for a supplementary examination.

(c) A candidate shall not be re-examined at a supplementary examination in any subject in which he passed at the preceding annual examination.

11. A candidate who has passed equivalent examinations in the University or elsewhere and desires that such examinations be counted *pro tanto* for the degree of Bachelor of Music may, on written application, be granted such exemption from the requirements of these regulations as the Council may determine.

12. (a) A candidate who by 31 March, 1970, had matriculated and completed at least one academic year of study for the degree of Bachelor of Music under the regulations in force in 1969 may complete his course under those regulations provided that he does so by 31 December, 1974.

\* (b) A candidate who, by 31 March, 1972, had matriculated and completed at least one year of academic study for the degree of Bachelor of Music under the regulations in force in 1970, may complete the Honours degree under those regulations provided that he does so by 31 December, 1975.

† (c) A candidate who by 31 March, 1973 had matriculated and completed at least one year of academic study for the degree of Bachelor of Music under the regulations in force in 1972, may complete his course under those regulations provided he completes the course for the Ordinary degree by March, 1975 or the course for the Honours degree by March, 1976.

(d) A candidate may at any time apply for status under these regulations and shall be granted such status thereunder as the Faculty of Music may in each case determine.

Regulations allowed 28 January, 1965.

† Amended 21 December, 1972.

\* Amended 16 December, 1971.

OF THE DEGREE OF  
**BACHELOR OF MUSIC**

**SCHEDULES**

(Made by the Council under regulation 5.)

NOTE: Syllabuses of subjects for the degree of B.Mus. are published below, immediately after these schedules. For syllabuses of subjects taught for other degrees and diplomas see the table of subjects at the end of the volume.

**SCHEDULE I: THE ORDINARY DEGREE**

1. Before admission to the course of study for the degree of Bachelor of Music, a candidate shall show sufficient musical aptitude and may be required to pass a special entrance examination appropriate to the course of study he wishes to pursue.

2. Courses of study must be approved by the Chairman of the Department (or his nominee) at enrolment each year.

3. A candidate for the degree will, throughout the period of his enrolment, be under the direction of a course supervisor. He will normally be required to attend and satisfactorily participate, for up to two hours a week, in tutorials and practical lessons, as determined by the supervisor in consultation with the Chairman of the Department of Music and the candidate's practical teacher. In addition he will be required to take part satisfactorily in general practical work in the Department of Music (e.g. choir, orchestra and chamber music).

4. To qualify for the Ordinary degree a candidate shall satisfy the examiners in each of the following subjects:

**First Year.**

UM21 Historical and Related Studies I

*Elective Subject:*

UM31 Theoretical Studies I

UM51 Elective Studies I; or

UM41 Practical Studies I

UA11 Drama I; or

A subject, other than a Music subject, offered by the Faculty of Arts.

**Second Year.**

UM22 Historical and Related Studies II

UM42 Practical Studies II

UM32 Theoretical Studies II

UM52 Elective Studies II

**Third Year.**

UM23 Historical and Related Studies III

UM43 Practical Studies III

UM33 Theoretical Studies III

UM53 Elective Studies III

NOTES (not forming part of the schedules):

1. *Work required to complete an Adelaide degree.*

To qualify for the degree of Bachelor of Music a student granted status under regulation 11 must, except in special cases approved by the Faculty, complete all the work of the final year of the degree course while attending the Department of Music.

2. *Candidates undertaking study for the degrees of B.Mus. and B.A. concurrently.*

Candidates may enrol for the degrees of B.Mus and B.A. concurrently if they apply for and are admitted to both the Faculty of Music and the Faculty of Arts.

The Faculties of Arts and Music recommend that such candidates should take their subjects according to the following scheme:

*First Year:* Two first-year Arts subjects (but not UA51 Music I) and two first-year Music subjects.

*Second Year:* One second-year Arts subject, two first-year Music subjects and one second-year Music subject.

*Third Year:* One second-year Arts subject, and three second-year Music subjects.

*Fourth Year:* Two third-year Arts subjects.

*Fifth Year:* The third year of the B.Mus. course.



## SCHEDULE II: THE HONOURS DEGREE

1. (a) Before entering an Honours course a candidate must obtain the approval of the Chairman of the Department of Music, who will take into account his academic record up to the time of his application. Normally such approval should be sought at the end of the second year of the course for the Ordinary degree.

(b) The work of the final Honours year must be completed in one year of full-time study, provided that the Faculty may permit a candidate to spread the work over two years, but not more, on such conditions as it may determine.

2. To qualify for the Honours degree a candidate shall complete:

(a) the work prescribed in schedule I; The Ordinary degree, provided that a topic of his elective work shall be in the subjects in which he subsequently takes Honours;

(b) one of the following Honours subjects:

UM79 Performance	UM59 Ethnomusicology
UM99 Composition	UM69 Music in Education
UM89 Musicology	

(c) UM09 Honours project (one project).

OF THE DEGREE OF  
BACHELOR OF MUSIC  
SYLLABUSES

*Text-books:*

Students are expected to procure the latest edition of all text-books prescribed.

*Examinations:*

For each subject students may obtain from the department concerned details of the examination in that subject including the relative weights given to the components (e.g. such of the following as are relevant: assessments, term or mid-year tests, essays or other written or practical work, final written examinations, *viva voce* examinations).

MUSIC.

Courses are offered in the Department of Music and in the Centre for Aboriginal Studies in Music.

All students are required to take part satisfactorily in group practical work in the Department of Music.

Detailed syllabuses and book lists will be available from the Department of Music early in 1979.

FIRST-YEAR SUBJECTS.

UM21 Historical and Related Studies I.

Lectures and tutorials on the History of Western Music together with an Introduction to Ethnomusicology (one-third of the subject).

Text-books:

- Seay, A., *Music in the medieval world* (Prentice-Hall).  
Brown, H. M., *Music in the Renaissance* (Prentice-Hall).  
Palisca, C. V., *Baroque music* (Prentice-Hall).  
Pauly, R. G., *Music in the classical period* (Prentice-Hall).  
Longyear, R. M., *Nineteenth century romanticism in music* (Prentice-Hall).  
Salzman, E., *Twentieth century music* (Prentice-Hall).

UM31 Theoretical Studies I.

Lectures and tutorials in music theory, with a course in Aural Awareness.

Text-book:

- Jacob, G., *Orchestral technique* (Oxford).

UM41 Practical Studies I.

(a) *Performance.*

Individual or class tuition in an instrument/voice AND A MASTER CLASS (STYLE AND REPERTOIRE)

OR

*Composition.*

Individual and/or group tuition.

(b) *Other Classes.*

These include orchestras, choirs, ensembles and workshops (Music in Education, Electronic Music, Composers' Seminar, CROSS-CULTURAL PRACTICAL STUDIES, etc.).

## FIRST-YEAR ELECTIVE SUBJECT.

## UM51 Elective Studies I.

Supervised studies and course work in:

Performance

OR

Composition

OR

## UA11 Drama I.

For syllabus see under the degree of B.A. in the Faculty of Arts.

OR

A subject, other than a Music subject, offered in the Faculty of Arts (see Schedule I of the degree of B.A.).

## SECOND-YEAR SUBJECTS.

## UM22 Historical and Related Studies II.

(a) *Project IIA.*

A historical project from the project list.

(b) *Project IIB.*

Any project from the project list.

## UM32 Theoretical Studies II.

Lectures and tutorials in music theory together with a course in Aural Awareness.

## UM42 Practical Studies II.

(a) *Performance.*

Individual or class tuition in an instrument/voice AND A MASTER CLASS (STYLE AND REPERTOIRE)

OR

*Composition.*

Individual and/or group tuition.

(b) *Other Classes.*

These include orchestras, choirs, ensembles and workshops (Music in Education, Electronic Music, Composers' Seminar, etc.).

## UM52 Elective Studies II.

Supervised studies and course-work in *one of the following*:

(a) Performance

(b) Composition

(c) Musicology

(d) Music in Education

(e) Ethnomusicology

In approved cases this may be taken as two half-units.

## THIRD-YEAR SUBJECTS.

## UM23 Historical and Related Studies III.

(a) *Project IIIA.*

A historical project from the project list.

(b) *Project IIIB.*

Any project from the project list.

**UM33 Theoretical Studies III.**

Lectures in music theory together with a course in Aural Awareness.

**UM43 Practical Studies III.**

(a) *Performance.*

Individual or class tuition in an instrument/voice AND A MASTER CLASS (STYLE AND REPERTOIRE).

OR

*Composition.*

Individual and/or group tuition.

(b) *Other Classes.*

These include orchestras, choirs, ensembles and workshops (Music in Education, Electronic Music, Composers' Seminar, etc.).

**UM53 Elective Studies III.**

Supervised studies and course-work in *one of the following*:

- (a) Performance
- (b) Composition
- (c) Musicology
- (d) Music in Education
- (e) Ethnomusicology

In approved cases this may be taken as two half-units.

**CENTRE FOR ABORIGINAL STUDIES IN MUSIC.**

Students may present work at the Centre within the following subjects:

- (a) UM22 Historical and Related Studies II
- (b) UM52 Elective Studies II
- (c) UM23 Historical and Related Studies III
- (d) UM53 Elective Studies III
- (e) Practical Studies in Aboriginal Singing as part of UM41, UM42 and UM43
- (f) Cross-cultural instrumental studies as part of UM41, UM42 and UM43.

Honours and postgraduate work in Ethnomusicology is also offered by the Centre in conjunction with the Department of Music.

## HONOURS DEGREE OF BACHELOR OF MUSIC.

## FINAL HONOURS SUBJECTS.

**UM99 Composition.**

A course of seminars and individual tuition in composition and analysis of music.

Candidates will be required to submit a major work, or group of works, the general nature of which has been approved in advance by the Faculty of Music, and which must be lodged with the Dean by 1 November of the year in which the candidate intends to take the examination. Assignments in advanced analysis must be completed during the year.

**UM89 Musicology.**

A reading knowledge of a language or languages necessary for the course of study will be assumed.

Candidates will be required to complete individual research assignments as directed.

**1. HISTORICAL MUSICOLOGY.**

A course of seminars and individual tuition in: paleography; selected theoretical writings; editorial practice; musicological method (analytical bibliography, source evaluation, periodisation of musical terminology).

OR

**2. SYSTEMATIC MUSICOLOGY.**

A course of seminars and individual tuition in: advanced acoustics; psycho-acoustics; music physiology; advanced music aesthetics; music philosophy; information theory.

**UM79 Performance.**

A course of individual tuition in performance.

Candidates will be required to perform two recital programmes, approved in advance by the Faculty of Music, for public performance, and to submit programme notes on the works performed.

**UM69 Music in Education.**

A course of workshops in creative music and improvisation; and a comprehensive study of more advanced teaching methods, including associated work in electronics. Part of this work will involve students taking projects into primary and secondary schools.

**UM59 Ethnomusicology.**

A course of seminars and individual tuition in the theoretical background to ethnomusicology, including field techniques, transcription, analytical procedures, performance techniques.

**UM09 Honours Project.**

A project chosen from the project programme below and examined at Honours level.

## ADDITIONAL SUBJECTS.

UA11 Drama I for the degree of B.A.

UA12 Drama II for the degree of B.A.

UA51 Music I for the degree of B.A.

UA61 Music IA for the degree of B.A.

UA52 Music II for the degree of B.A.

UA53 Music III for the degree of B.A.

UA68 Music IIIS for the degree of B.A. (Preliminary Honours).

UA69 Music for the Honours degree of B.A.

**PROJECT PROGRAMME 1979.**

Projects are studied from a broad perspective which covers, as well as specific considerations of music theory and music history, the related musicological implications of aesthetics, philosophy and sociology. At the time of printing the Project Programme has not been determined; it will be available from the Department of Music early in 1979.

OF THE DEGREE OF  
MASTER OF MUSIC  
REGULATIONS

1. The Faculty of Music may accept as a candidate for the degree of Master of Music a person who: (a) has qualified in the University of Adelaide for the degree of Bachelor of Music; or (b) has obtained, in another university or institution recognised for the purpose, a qualification which is accepted by the Faculty of Music as equivalent to the degree of Bachelor of Music in the University of Adelaide.

†2. In special cases the Council, on the recommendation of the Faculty and subject to such conditions (if any) as it may impose in each case, may accept as a candidate for the degree a person who, irrespective of whether or not he is a university graduate, has given evidence satisfactory to the Faculty of his fitness to undertake studies for the degree of Master of Music.

\*3. The course of study for the degree shall comprise two parts as follows:

*Part A:* Such preliminary study and examinations as may be prescribed in the schedules of the degree extending over not more than one year of full-time study or two years of part-time study.

*Part B:* A course of advanced study and/or research extending over not less than one year nor more than three years of full-time study. The Faculty may, in special cases, permit a candidate to complete part B over not less than two years nor more than five years of part-time study. A candidate shall not be permitted to proceed to part B until he has fulfilled the requirements of part A.

4. A candidate may be exempted from the whole or such part of part A as the Faculty may decide if he has:

- (a) qualified for the Honours degree of Bachelor of Music; *or*
- (b) qualified for the Ordinary degree of Bachelor of Music and has passed in (i) all the Ordinary degree subjects that are compulsory for the Honours degree in the field to which his subject of study relates; and (ii) an examination of Honours standard approved by the Faculty; *or*
- (c) obtained a qualification which is accepted by the Faculty as equivalent to the Honours degree of Bachelor of Music in the University of Adelaide.

A candidate who has obtained qualifications which fully or partly satisfy the requirements specified in (a), (b) or (c) above may be exempted from the whole or such part of part A as the Faculty may decide, and shall thereafter fulfil the requirements of part B, as prescribed in the schedules.

\* Amended 15 January, 1976.

† Amended 23 December, 1976.

5. If in the opinion of the Faculty of Music a candidate is not making satisfactory progress the Faculty may, with the consent of the Council, withdraw its approval of his candidature and the candidate shall cease to be enrolled for the degree.

†6. Every candidate shall pursue a programme of advanced study in music as prescribed in the schedules. The subjects and content and relative weighting of all sections of a candidate's programme, together with the method of examination of advanced work shall be approved by the Faculty, provided that the work of section 1 of schedule II shall be examined as provided in regulation 8.

†7. On completion of work for the degree a candidate shall lodge with the Academic Registrar three copies of his submission made in accordance with the requirements of section 1 of schedule II, prepared in accordance with directions given to candidates from time to time.\*

\*\*8. (a) Not less than two examiners, at least one of whom shall be an external examiner, shall be appointed by, and shall report to, the Faculty of Music.

(b) The examiners may require a candidate to undergo further examination in the field of study immediately relevant to his subject.

(c) The examiners may recommend that the work under examination:

- (i) be accepted (subject, if they so recommend, to minor amendments being made); *or*
- (ii) be not accepted but returned to the candidate for revision and re-submission; *or*
- (iii) be rejected.

9. A candidate who fulfils the requirements of these regulations and satisfies the examiners in the field to which his subject relates shall on the recommendation of the Faculty of Music be admitted to the degree.

Regulations allowed 21 December, 1967.

† Allowed 15 January, 1976.

\*\* Amended 15 January, 1976.

\* Published in "Notes and Instructions to candidates for Higher Degrees":  
*see* Table of Contents.



OF THE DEGREE OF  
MASTER OF MUSIC  
SCHEDULES

(Made by the Council under regulations 3, 4, 6 and 7.)

SCHEDULE I: PRELIMINARY STUDY AND EXAMINATIONS

Part A: Preliminary Study and Examinations

Such preliminary work and examinations as may be prescribed in each individual case. This shall normally comprise one Honours project and one Honours subject as prescribed in the schedules for the Honours degree of Bachelor of Music.

SCHEDULE II: PROGRAMMES OF STUDY

Part B: Programme of Advanced Study

A candidate shall satisfactorily complete a programme of advanced study to be approved by the Faculty after consultation with his supervisor including the following:

1. (a) a composition or compositions; *or*  
(b) two public recitals to be given at an interval of not more than forty-eight hours, and a dissertation; *or*  
(c) a thesis on a topic in Historical Musicology, Systematic Musicology, Ethnomusicology, Music in Education, Sonological Research, or in relevant interdisciplinary studies; *or*  
(d) an edition with critical commentary; *or*  
(e) a dissertation and a report on original field or practical work in any of the areas specified in (c) above.
2. Such other advanced course work or seminar work as may be prescribed or approved in each individual case.

OF THE DEGREE OF  
DOCTOR OF MUSIC  
REGULATIONS

1. (a) The Faculty of Music may accept as a candidate for the degree of Doctor of Music a person who:

- (i) has qualified in the University of Adelaide for the degree of Bachelor of Music or the degree of Master of Music; or
- (ii) has obtained another degree in the University of Adelaide and has satisfied the Faculty of his fitness to undertake studies for the degree of Doctor of Music.

(b) On the recommendation of the Faculty of Music, the Council may accept as a candidate for the degree a person who (i) has obtained in another university or institution of higher education recognised by the University of Adelaide a qualification accepted by the Faculty as equivalent to one of the qualifications specified in (a) above and (ii) has, or has had, a substantial association with the University.

(c) No person may be admitted to the degree of Doctor of Music before the expiration of five years from the date on which he obtained the qualification prescribed in (a) or (b)(i) above.

2. (a) A person who desires to become a candidate for the degree shall give notice of his intended candidature in writing to the Academic Registrar and with such notice shall furnish particulars of his musical achievements and of the work which he proposes to submit for the degree.

(b) The Faculty of Music shall appoint a committee to examine the information submitted and to advise the Faculty whether the Faculty should:

- (i) allow the applicant to proceed, and approve the subject or subjects of the work to be submitted; or
- (ii) advise the applicant not to submit his work; and the Faculty's decision shall be conveyed to the applicant.

(c) If it accept the candidature and approve the subject or subjects of the work to be submitted, the Faculty shall nominate examiners of whom two at least shall be external examiners.

3. (a) To qualify for the degree the candidate shall furnish satisfactory evidence that he has made an original and substantial contribution of distinguished merit to some branch of music.

(b) The degree shall be awarded primarily on a consideration of such of his published compositions or other scholarly works as a candidate may submit for examination, but the examiners may take into account any unpublished original composition or other work that he may submit in support of his candidature.

(c) The candidate in submitting his published works other than compositions shall, where applicable, state generally in a preface and specifically in notes the main sources from which his information is derived and the extent to which he has availed himself of the work of others, especially where joint publications are concerned. He may also signify in general terms the portions of his work which he claims as original.

(d) The candidate shall indicate what part, if any, of the compositions or other work he has submitted for a degree in this or any other University.

4. The candidate shall lodge with the Academic Registrar three copies of the work prepared in accordance with the directions given in sub-paragraph (b) of clause 2B of Chapter XXV of the Statutes. If the work is accepted for the degree the Academic Registrar will transmit two of the copies to the University Library.

5. A candidate who complies with the foregoing conditions and satisfies the examiners may, on the recommendation of the Faculty of Music, be admitted to the degree of Doctor of Music.

\*6. Notwithstanding anything contained in the preceding regulations the Faculty may recommend the award of the degree to any person who is not a member of the staff of the University. Any such recommendation must be accompanied by evidence that the person for whom the award is proposed has made an original and substantial contribution of distinguished merit to some branch of musical knowledge of a standard not less than that required by regulation 3.

Regulations allowed 17 December, 1970.

\* Allowed 15 January, 1976.

# FACULTY OF SCIENCE

## REGULATIONS, SCHEDULES AND SYLLABUSES OF DEGREES

### Bachelor of Science in the Faculty of Science (B.Sc.)

Regulations	-	-	-	-	-	-	-	-	-	946
Schedules	-	-	-	-	-	-	-	-	-	949
Syllabuses	-	-	-	-	-	-	-	-	-	953
Anatomy and Histology (for B.Sc.)	-	-	-	-	-	-	-	-	-	953
Biochemistry	-	-	-	-	-	-	-	-	-	956
Botany	-	-	-	-	-	-	-	-	-	959
Chemistry	-	-	-	-	-	-	-	-	-	964
Physical and Inorganic	-	-	-	-	-	-	-	-	-	967
Organic	-	-	-	-	-	-	-	-	-	971
Genetics	-	-	-	-	-	-	-	-	-	973
Geological Sciences	-	-	-	-	-	-	-	-	-	976
Microbiology and Immunology	-	-	-	-	-	-	-	-	-	984
Physics	-	-	-	-	-	-	-	-	-	986
Physiology and Pharmacology	-	-	-	-	-	-	-	-	-	993
Psychology (for B.Sc.)	-	-	-	-	-	-	-	-	-	996
Social Biology	-	-	-	-	-	-	-	-	-	997
Zoology	-	-	-	-	-	-	-	-	-	999

### Master of Science in the Faculty of Science (M.Sc.)

Regulations	-	-	-	-	-	-	-	-	-	1004
-------------	---	---	---	---	---	---	---	---	---	------

### Doctor of Philosophy (Ph.D.)

Regulations and Schedules: under "Board of Research Studies"—see Table of Contents.

### Doctor of Science in the Faculty of Science (D.Sc.)

Regulations	-	-	-	-	-	-	-	-	-	1006
-------------	---	---	---	---	---	---	---	---	---	------

OF THE DEGREE OF  
BACHELOR OF SCIENCE  
IN THE FACULTY OF SCIENCE  
REGULATIONS

1. There shall be an Ordinary and an Honours degree of Bachelor of Science. A candidate may obtain either degree or both.

2. The course of study for the Ordinary degree shall extend over three academic years and that for the Honours degree over four academic years.

3. (a) In these regulations and in schedules made under them by the Council the following definitions shall apply:

“Subject” means a course of study at the University normally completed in one academic year.

“Unit” means a course of study at the University on a prescribed topic normally completed in one academic term.

\*(b) The Council, after receipt of advice from the Faculty of Science, shall from time to time prescribe schedules defining (i) the subjects and units of study for the degree (ii) the range of subjects and units (including lecture courses, laboratory courses and other practical work) to be satisfactorily completed and the examinations to be passed by candidates, and (iii) the method of publishing the examination results.

(c) Such schedules shall become effective from the date of prescription by the Council or such other date as the Council may fix.

(d) The syllabuses of subjects and units shall be specified by the Head of the department concerned and submitted to the Faculty and Council for approval.

(e) Schedules made and syllabuses approved by the Council shall be published in the next edition of the University Calendar.

4. (a) Except by permission of the Faculty, a candidate shall not be admitted to the class in any subject or unit, for which he has not satisfactorily completed the pre-requisite studies as prescribed in the syllabus for that subject or unit.

(b) Exemption from any part of the course on the first occasion on which a candidate takes a subject or unit will be granted only in special cases and on grounds approved by the Faculty.

†5. (a) Examinations in any subject or unit shall be held in accordance with the provision of the relevant schedule made under these regulations.

\* Amended 21 December, 1972, and 15 January, 1976.

† Amended 23 December, 1976.

(b) A candidate shall enter for examination in a subject on a form and by a date prescribed by the Council, but shall not be eligible to present himself for examination unless he has done written and laboratory or other practical work, where required, to the satisfaction of the teaching staff concerned.

(c) In determining a candidate's final result in a subject (or unit) the assessors may take into account oral, written, practical or examination work, provided that the candidate has been given notice at the beginning of the course of the way in which the work will be taken into account and of its relative importance in the final result.

(d) A candidate will be permitted to take a supplementary examination only in circumstances approved by the Faculty, and then only if the candidate's previous work in the subject or unit has been such as to indicate that he has a reasonable chance of passing the supplementary examination.

\*6. There shall be three classifications of pass in any subject for the Ordinary degree, as follows: Pass with Distinction, Pass with Credit, Pass. The names of the candidates in each of the classifications shall be published in accordance with the provision of the relevant schedule made under the regulations. If the list of candidates who pass be published in two divisions, a pass in the higher division may be prescribed in the appropriate syllabuses as pre-requisite for admission to another subject. A candidate with a lower division pass who wishes to gain a higher division pass shall be allowed to repeat the course, subject to the provisions of regulation 7.

7. (a) A candidate who fails to pass in a subject (or unit) or who obtains a lower division pass and who desires to take the subject or unit again shall, unless exempted wholly or partially therefrom by the Head of department concerned, do written and laboratory or other work in that subject or unit to the satisfaction of the teaching staff concerned.

(b) A candidate who has twice failed to obtain a Division I pass or higher in the examination in any subject shall not enrol for the subject again except by permission of the Faculty and under such conditions as the Faculty may prescribe. For the purpose of this clause a candidate who fails to receive permission to sit for or absents himself from the examination in any subject after having attended substantially the full course of instruction in it, shall be deemed to have failed to pass the examination. A candidate who obtains a higher division pass only after being granted permission to enrol for the third time shall not take a subject for which that higher division pass is a pre-requisite, save in exceptional circumstances and with the permission of the Faculty.

8. (a) A candidate who has passed subjects in other faculties or universities or elsewhere, may on written application to the Academic Registrar be granted such exemption from these regulations and from schedules made under them as the Council on the recommendation of the Faculty may determine.

\* Amended 21 December, 1972.

°(b) A graduate in another faculty, who wishes to proceed to the degree of Bachelor of Science in the Faculty of Science and to count towards that degree subjects which he has already presented for another degree may do so, subject to the following conditions:

- (i) he shall present a range of subjects which fulfils the requirements of the relevant schedule made under regulation 3, and
- (ii) he shall present two third-year subjects not presented for any other degree.

9. (a) There shall be the following classifications for the Honours degree and the names of successful candidates in each subject shall be published in alphabetical order within each classification:

- First Class
- Second Class
  - Division A
  - Division B
- Third Class.

(b) A candidate who fails to obtain one of the foregoing classifications at his first attempt shall not be permitted to present himself again for the examination.

°10. A graduate who has obtained the Honours degree of Bachelor of Arts, or the Honours degree of Bachelor of Science in the Faculty of Mathematical Sciences, may not proceed to the Honours degree of Bachelor of Science in the Faculty of Science in the same subject.

11. Applications for approval under clauses 4(a), 4(b), 7(a), 7(b) or 8 shall be submitted in writing to the Academic Registrar.

Regulations allowed 17 December, 1970.

° Amended 21 December, 1972.

OF THE DEGREE OF  
**BACHELOR OF SCIENCE**  
IN THE FACULTY OF SCIENCE

**SCHEDULES**

(Made by the Council under regulation 3.)

NOTE: Syllabuses of subjects for the degree of B.Sc. in the Faculty of Science are published below, immediately after these schedules. For syllabuses of subjects taught for other degrees and diplomas see the table of subjects at the end of the volume.

**SCHEDULE I: THE ORDINARY DEGREE**

DEFINITIONS FOR THE PURPOSES OF THESE SCHEDULES

**A Group A subject:**

A subject in first year, equivalent to one-quarter of a year's work.

**A Group A half-subject:**

A half-subject in first year, equivalent to one-eighth of a year's work.

**A Group B subject:**

A subject in second year, equivalent to one-third of a year's work.

**A Group C subject:**

A subject in third year, equivalent to one-half of a year's work, basically consisting of six units or three double units.

**A Group D subject:**

A double subject in third year, equivalent to two group C subjects.

**A Group E subject:**

A subject which forms part of a combination approved *in lieu* of a group C subject under clause 5 of these schedules.

1. The subjects of study for the Ordinary degree shall be as follows:

GROUP A SUBJECTS AND HALF-SUBJECTS

**Subjects**

SZ71 Biology I	QM11 Mathematics IM
SC01 Chemistry I	SP01 Physics I
SG01 Geology I	AY01 Psychology I
QM01 Mathematics I	

**Half-subjects**

SP8H Astronomy IH	SJ7H Genetics and Human Variation IH
SB6H Botany IH	QM7H Mathematics IH
QA7H Computing IH	QT7H Statistics IH
SB5H Environmental Biology IH	
SG7H Environmental Geology IH	



## GROUP B SUBJECTS

QN22 Applied Mathematics IIA	SG72 Geophysics II
QN12 Applied Mathematics IIB	QT02 Mathematical Statistics II
SY02 Biochemistry II	SO02 Organic Chemistry II
SB02 Botany II	SC02 Physical and Inorganic Chemistry II
NH12 Chemical Engineering II	SP02 Physics II
SC12 Chemistry II	SS02 Physiology II
SC22 Chemistry IIE	AY02 Psychology II
QA02 Computing Science II	QM02 Pure Mathematics II
QA12 Computing Science IIC	SZ02 Zoology II
SJ02 Genetics II	
SG02 Geology II	

## GROUP C SUBJECTS

QN03 Applied Mathematics III	SK03 Microbiology and Immunology III
QN13 Applied Mathematics IIIA	SO03 Organic Chemistry III
QN83 Applied Mathematics IIIM	SO83 Organic Chemistry IIIM
SY03 Biochemistry III	SC13 Physical and Inorganic Chemistry IIIB
SY83 Biochemistry IIIM	SC83 Physical and Inorganic Chemistry IIIM
SB03 Botany III	SP03 Physics III
SB83 Botany IIIM	SP83 Physics IIIM
SC23 Chemistry III	SS03 Physiology III
QA03 Computing Science III	SS33 Physiology IIIA (Physiology)
QA13 Computing Science IIIA	SS43 Physiology IIIB (Pharmacology)
QA83 Computing Science IIIM	SS83 Physiology IIIM
SJ03 Genetics III	AY23 Psychology III
SG03 Geology III	QM03 Pure Mathematics III
SG83 Geology IIIM	QM13 Pure Mathematics IIIA
SG23 Geology and Economic Geology IIIA	QM83 Pure Mathematics IIIM
SG33 Geology and Economic Geology IIIB	QF03 Theoretical Physics III
SG73 Geophysics III	SZ03 Zoology III
MA13 Histology and Cell Biology III	SZ83 Zoology IIIM
MA43 Histology and Cell Biology IIIM	
QT03 Mathematical Statistics III	

## GROUP D SUBJECT

SC03 Physical and Inorganic Chemistry IIIA

## GROUP E SUBJECTS

SG13 Palaeontology III                      SX33 Social Biology III

2. To qualify for the Ordinary degree a candidate shall, subject to the conditions and modifications specified in clauses 3, 4 and 5 below, satisfactorily complete the following range of subjects:

- Four group A subjects or their equivalent.
- Either* three subjects from group B *or* two subjects from group B and a fifth group A subject or its equivalent.
- Either* two subjects from group C or their equivalent, provided that only one combination of subjects permitted under clause 5 is presented, *or* one subject from group D.

3. A candidate may present NX01 Engineering I or not more than the equivalent of one first-year subject available in the Faculty of Arts, *in lieu* of not more than one group A subject or its equivalent required under clauses 2(a) and 2(b), except that SP9H Physics, Man and Society IH shall not be counted towards the degree.

4. (a) No candidate will be permitted to count for the degree any subject or half-subject together with any other subject or half-subject which, in the opinion of the Faculty, contains a substantial amount of the same material; and no subject, or half-subject, may be counted twice towards the degree.\*

(b) No candidate may present the same half-subject, section of a subject, unit of a subject or option, in more than one subject for the degree.

(c) No candidate may count towards the degree a total of more than four group B and group C subjects taught by departments in the Faculty of Mathematical Sciences.

(d) No candidate may enrol in SB6H Botany IH unless he is enrolled in, or has previously passed, SZ71 Biology I.

5. A candidate may present one of the following combinations of subjects, *in lieu* of a subject from group C:

SG13 Palaeontology III and SB02 Botany II;

SG13 Palaeontology III and SJ02 Genetics II;

SG13 Palaeontology III and SZ02 Zoology II;

SX33 Social Biology III and AA02 Anthropology IIA *or* AA12 Anthropology IIB *or* AA22 Anthropology IIC;

SX33 Social Biology III and AJ12 Geography IIA (Units J702 Economic Geography and J704 Social Geography);

SX33 Social Biology III and AH02 History IIA *or* AH22 History IIB;

SX33 Social Biology III and AL02 Philosophy II;

SX33 Social Biology III and AP32 Politics IIA *or* AP42 Politics IIB;

SX33 Social Biology III and AY02 Psychology II;

SX33 Social Biology III can only be taken as a Group E subject by students whose other third-year subject is taken in one of the following departments: Anatomy, Physiology, Psychology, Genetics or Zoology.

6. (a) Final examinations in any subject or unit shall be held in the examination period defined by the Council following the completion of the course of instruction in that subject or unit.

(b) An examination counting as part of a final examination may be held in a part only of a subject if the Faculty so approve. Such examination should be held during the examination period defined by the Council.

Class and terminal examinations in a subject or unit may be held at any time fixed by the examiners concerned, provided that the examination is not held in the vacation and that attendance at the examination is not compulsory.

7. When, in the opinion of the Faculty of Science, special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of clauses 1-6 above.

8. The names of the candidates who pass in any subject shall be published in an official list and be arranged in alphabetical order in the classifications: Pass with Distinction, Pass with Credit and Pass.

NOTE (not forming part of the schedules):

*Work required to complete an Adelaide degree.*

To qualify for the degree:

(i) students coming from other universities and wishing to obtain an Adelaide degree, are required to complete the whole of the work of the final year of the course;

(ii) with special permission of the Faculty, a student who has completed most of the degree in Adelaide, including one third-year subject, may be permitted to complete the requirements for the degree at another institution.

All applications must be made in writing to the Academic Registrar.

\* A table of unacceptable combinations of subjects and half-subjects is given towards the end of this Volume (*see* Table of Contents).

## SCHEDULE II: THE HONOURS DEGREE

1. A candidate may, subject to approval by the Head/Chairman of the department concerned, proceed to the Honours degree in one of the following subjects:

MA79 Anatomy and Histology	SO99 Organic Chemistry
SY99 Biochemistry	SS89 Pharmacology
SB99 Botany	SC99 Physical and Inorganic Chemistry
SJ99 Genetics	SP99 Physics
SG99 Geology	SS99 Physiology
SG89 Geophysics	AY89 Psychology
QF99 Mathematical Physics	SZ99 Zoology
SK99 Microbiology and Immunology	

2. A candidate may, subject to the approval of the Faculty in each case, proceed to the Honours degree in a subject taught in a department in another faculty. Candidates must consult the Chairman of the department concerned and apply, in writing, to the Academic Registrar before 30 November in the preceding year for admission to the Honours course.

3. A candidate for the Honours degree in any subject shall not begin final-year Honours work in that subject until he has qualified for the Ordinary degree of Bachelor of Science in either the Faculty of Science or the Faculty of Mathematical Sciences, and has completed such pre-requisite subjects (if any) as may be prescribed in the syllabus.

4. When, in the opinion of the Faculty of Science, special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary the provisions of clauses 1, 2 and 3 above.

OF THE DEGREE OF  
**BACHELOR OF SCIENCE**  
IN THE FACULTY OF SCIENCE  
**S Y L L A B U S E S**

*Text-books:*

Students are expected to procure the latest edition of all text-books prescribed.

*Examinations:*

For each subject students may obtain from the department concerned details of the examination in that subject including the relative weights given to the components (e.g. such of the following as are relevant: assessments, term or mid-year tests, essays or other written or practical work, final written examinations, *viva voce* examinations).

**ANATOMY AND HISTOLOGY.**  
(FOR THE DEGREE OF BACHELOR OF SCIENCE)

SECOND YEAR.

For details of the General Anatomy and Histology section of SS02 Physiology II, see under Physiology.

THIRD-YEAR SUBJECTS IN HISTOLOGY AND CELL BIOLOGY.

Pre-requisite subject: SS02 Physiology II (which includes a course in Histology and Cell Biology) at Division I or higher standard; or an equivalent standard in a similar subject approved by the Chairman of the Department of Anatomy and Histology (such approval to be obtained in writing through the Academic Registrar). Generally, units H301, H302 and H304 will require an acceptable standard in a morphological science, while units H305 and H306 will require an acceptable standard in a physiological discipline; for unit H303 some knowledge of physics and mathematics will be assumed.

The Department offers 6 units dealing with the relationships between microscopic structure and function in mammalian cells and tissues, and stressing recent advances in knowledge and techniques. Each unit consists of approximately 13 hours of lectures, and 45 hours of practical work, demonstrations and tutorials.

H301 GENERAL CYTOLOGY: First half of Term III (in 1979).

Structure and function of the cell and its organelles, including the cell membrane, nucleus, endoplasmic reticulum, ribosomes, Golgi complex, lysosomes, mitochondria, centrioles and microtubules. Emphasis on the experimental basis of cytology.

Text-book:

de Robertis, E. D. P., Saez, F. A., and de Robertis, E. M. F., *Cell biology* (Saunders).

H302 NEUROCYTOLOGY: Second half of Term III (in 1979).

The structure and functional dynamics of nerve cells. Neurocytological methods. Special study of degeneration, regeneration, and the production, transportation and release of biogenic amines and neurohormones.

Reading will be suggested during the course.

**H303 METHODS IN CELL BIOLOGY: First half of Term I (in 1979).**

Theory and practice of optical and electron microscopy will be the main concern, but other methods in biomedical science will be considered, including cell fractionation, chromatography, tissue culture and immunological techniques in cytology.

**Text-book:**

Möllring, F. K., *Microscopy from the very beginning* (Carl Zeiss). Available from the Department of Anatomy.

**H304 HISTOCHEMISTRY AND CYTOCHEMISTRY: Second half of Term I (in 1979).**

The principles of qualitative and quantitative histochemistry and cytochemistry are presented and illustrated by a study of methods of tissue preparation and selected techniques for the demonstration of a range of chemical substances and enzymes.

Reading will be suggested during the course.

**H305 NEUROENDOCRINOLOGY: First half of Term II (in 1979).**

The central co-ordinating role of the neuroendocrine system in physiological function. The role of hypothalamic and extra-hypothalamic centres in endocrine regulation. To provide a basis for the specialised course in Reproductive Biology (H306).

Reading will be suggested during the course.

**Text-book:**

Donovan, B. T., *Mammalian neuroendocrinology* (McGraw-Hill).

**H306 REPRODUCTIVE BIOLOGY: Second half of Term II (in 1979).**

Biology and endocrinology of reproduction. Comparative studies of mammalian oestrous and menstrual cycles and their ovarian control. Fertilisation, implantation, placentation and parturition. Biological basis of methods of fertility control.

**Text-book:**

Austin, C. R., and Short, R. V., *Reproduction in mammals*, vols. 1-6 (C.U.P. paperback).

The subjects offered are:

**MA13 Histology and Cell Biology III.**

A Group C subject consisting of the 6 units listed above.

**MA43 Histology and Cell Biology IIIM.**

A Group C subject. At least 4 units from the above list, with 1 or 2 units, or a double unit, from another Department in the physical or biological sciences (including J333 Social Biology). The combination of units must be approved at the time of enrolment by the Heads/Chairmen of the Departments concerned.

HONOURS DEGREE.

**MA79 Anatomy and Histology for the Honours degree of B.Sc.**

Pre-requisite: MA13 Histology and Cell Biology III at a standard satisfactory to the Professor of Anatomy and Histology. Students who have taken individual units of the pre-requisite course, other disciplines of Anatomy (e.g. Embryology, Neurobiology, Gross Anatomy) or other suitable subjects will also be considered.

An intending candidate should consult the Professor of Anatomy and Histology near the end of the year preceding the Honours year, and give full attendance for an academic year to a special course of study and laboratory work and participate in experimental research work under the supervision of Staff members of the Department. A course of reading, suggested by the Department of Anatomy and Histology, should be commenced during the long vacation prior to the Honours year.

## BIOCHEMISTRY.

There are several combinations of subjects with SY02 Biochemistry II in second year which are appropriate for students intending to take Biochemistry III (SY03 or SY83) in third year. There is a place in the subject for those strongly biased towards the biological or towards the chemical subjects. For appreciation of modern biochemistry probably the most suitable subjects to take along with SY02 Biochemistry II are two of the following: SJ02 Genetics II, SO02 Organic Chemistry II, SC02 Physical and Inorganic Chemistry II, SS02 Physiology II. Other subjects are, however, not excluded.

## SY02 Biochemistry II.

Pre-requisite subject: A Division I pass in SC01 Chemistry I.

A course of three hour lectures and six hours tutorial and practical work a week.

The course will include: protein structure and function; biochemistry of enzymes; metabolism of carbohydrates, amino acids and lipids; biochemical control mechanisms in the cell; specialised functions—visual process, bone mineralisation, muscle contraction; nucleic acids and protein synthesis; biochemistry of gene action; microbiology and bacterial genetics; biochemistry in medicine and industry.

The practical work will be related to these topics.

Text-books:

Stryer, L., *Biochemistry* (Freeman).

Watson, J. D., *Molecular biology of the gene*, 3rd edition (Benjamin).

Reference book:

*Biochemistry—a problems approach*, ed. by W. B. Wood and others (Benjamin).

## THIRD-YEAR SUBJECTS IN BIOCHEMISTRY.

Pre-requisite subjects for all third-year subjects in Biochemistry: SY02 Biochemistry II at Division I pass, or higher standard.

The Department offers the following units, each consisting of not more than 16 lectures, about 50 hours practical work and tutorial sessions on data interpretation.

General text-book:

Freifelder, D., *Physical biochemistry*, 1st edition (Freeman paperback).

## Y301 BIOCHEMISTRY OF MEMBRANES AND CELL SURFACES: First term.

The course deals with the special structure-function relationships of the lipid and protein components of biological membranes, and the way these two components are inter-related in the various membranes. The functional aspects include ATP generation, transport of ions and molecules across membranes, glycoproteins in membranes, cell surfaces, contact inhibition and possible relevance to control of cell division in cancer, hormone receptors, transport of proteins across membranes, chemotaxis, nerve impulse transmission and vision.

Text-book:

Weissmann, G., and Claiborne, R. (eds.), *Cell membranes* (H.P. Publishing).

## Y302 SYNTHESIS, ORGANISATION AND FUNCTION OF DNA: First term.

A central feature of living organisms is their ability to replicate. Initially, the unit describes the mechanism of DNA replication in viruses, bacteria and higher cells. The second part of the unit examines the effects of radiation and mutation on chromosome integrity, and the third part considers the organisation of genes on chromosomes and the 'logic' in these arrangements. Concurrent tutorials are:

- (1) Sequencing of DNA, RNA,
- (2) Nucleic acid hybridisation,
- (3) Molecular cloning for gene isolation.

Text-book:

Hood, L. E., and others, *Molecular biology of eucaryotic cells*, vol. 1 (Benjamin, paperback).

Reference book:

Davidson, J. N., *The biochemistry of nucleic acids*, 7th edition (Chapman and Hall, paperback).

Y303 SYNTHESIS, ORGANISATION AND FUNCTION OF RNA: Second term.

We first ask how a gene is 'read' into RNA and then consider the ways in which the RNA transcript is processed and modified into its biologically active form. Previously unexpected re-arrangements may occur, such as cutting and re-splicing different segments of RNA to form novel messenger RNA species. Special features of the interaction of mRNA with ribosomes are considered and the unit then addresses the question of how the transcriptional events are integrated and controlled. Finally, we trace the way in which genes are activated and controlled in early embryogenesis.

Concurrent tutorial: Isolation and characterisation of mRNA.

Y304 MOLECULAR BIOLOGY OF VIRUSES: Second term.

Viruses are obligatory intracellular parasites specific for cells from bacteria, through algae, yeast, plants, insects and animals. Their classification on shape and chemical structure will be first considered, then their various mechanisms for entering and controlling the cell, their replication, assembly into new viruses and release. The ability of some viruses not to kill the cell but rather establish a latent state, in some cases to transform it into a tumour cell, in others to mutagenise the cell, will also be covered. Finally, special topics such as the antigenic shifts in influenza and the relationship of viruses to simpler genetic elements that move in and out of chromosomes, will also be discussed.

Text-book:

Lewin, B., *Gene expression*, vol. 3: *Plasmids and phages* (Wylie Interscience, paperback).

Y305 STRUCTURE AND BIOLOGICAL ACTIVITY OF PROTEINS: Third term.

This course will deal with the following relationship of the structure of proteins to their diverse biological functions; the forces determining the three-dimensional shapes of proteins; the conservation during evolution of structural features; assembly of supramolecular structures such as ribosomes and viruses; biological functions of proteins and mechanisms of enzyme actions; enzyme inhibitors and probes for active site structure determination.

Y306 REGULATION OF EUKARYOTE METABOLISM: Third term.

This course deals with the various ways which the many pathways of multicellular organisms are controlled and co-ordinated. The experimental approaches and data available (and their limitations) are discussed in relation to compartmentation, the allosteric and covalent modification of enzyme activity, substrate cycling, the molecular basis of hormone action, and the adaptive responses of organisms to environmental changes.

Text-books:

Denton, R. M., and Pogson, C. I., *Metabolic regulation* (Chapman and Hall).

Cohen, P., *Control of enzyme activity* (Chapman and Hall).

Reference book:

Newsholme, E. A., and Start, C., *Regulation in metabolism* (Wiley).

The subjects offered are:

**SY03 Biochemistry III.**

A group C subject. Units Y301, Y302, Y303, Y304, Y305, Y306.

**SY83 Biochemistry IIIM.**

A group C subject. With approval of the Heads/Chairmen of Departments concerned a combination of four together with one double-unit or two single-units from other Departments.



## HONOURS DEGREE.

**SY99 Biochemistry for the Honours degree of B.Sc.**

Pre-requisite subject: SY03 Biochemistry III or SY83 Biochemistry IIIM. In exceptional cases students having passed another group C subject, which includes as part of it one or more of the Biochemistry units, may be considered for entry into the Honours class.

Candidates are required to give their full time for an entire academic year to a special course of study and experimental work in the Department of Biochemistry. Candidates will normally be expected to start the course on the first Monday of February, but this can be altered in special circumstances by arrangement with the Professor of Biochemistry.

The work will include a course on techniques used in biochemical research; participation in a series of lecture-symposia on topics of modern biochemistry; participation in research seminars, and the performance of research work under the supervision of one or more members of the Biochemistry Department staff. Toward the end of the first term the student will report on the aim, significance and approach of his research topic. At the end of the year the candidate may present and defend an original proposition on science and submit the results of his research in the form of a thesis, which will also contain a literature review surrounding his research topic.

## ADDITIONAL SUBJECTS.

**SY72 Biochemistry for the degrees of M.B., B.S.**

**SY89 Biochemistry for the Honours degree of B.Med.Sc.**

**SY82 Biochemistry for the degree of B.D.S.**

**SY79 Biochemistry for the Honours degree of B.Sc.Dent.**

## BOTANY.

Students are directed to refer to the *Laboratory Rules*, which are published at the end of the volume.

EXAMINATIONS.—All examinations in Botany cover both theoretical and practical aspects. These cannot be taken separately.

### SB6H Botany IH.

This half-subject can be taken only concurrently with or following completion of SZ71 Biology I.

A half-subject comprising one lecture and two and a half hours practical per week which may include one discussion period a fortnight throughout the year.

SB6H Botany IH offers a more extensive first year treatment of plant science than does SZ71 Biology I alone. SZ71 Biology I deals with structure, physiology and evolution of plants and animals, elementary biochemistry, cell physiology and genetics, the mechanisms of evolution and the principles of ecology. SB6H Botany IH builds upon this basis to provide a full year equivalent coverage of plant science and includes study of a greater variety of plants and more information about physiology, ecology and relevance of plants to man. Field work may be included.

#### Text-book:

To be set by the Department.

#### Reference books:

Colinvaux, P. A., *Introduction to ecology* (Wiley).

Weier, T. E., and others, *Botany: an introduction to plant biology* (Wiley).

### SZ71 Biology I.

For SZ71 Biology I, a subject which is given jointly by the Departments of Botany and Zoology, see under Zoology.

### SB5H Environmental Biology IH.

A half-subject comprising 11-12 lectures, four 3-hour practicals, and one day field trip per term. Tutorials and case-history studies of specific environmental problems will be conducted.

The course is designed for students who have no previous knowledge of biology and who do not at this stage propose to continue with biological subjects. (In 1979, it cannot be taken with either SZ71 Biology I or SB6H Botany IH.) The course is concerned with providing students with a sound biological basis for appreciating the practical problems arising from man's influence on, and use of, the natural environment.

Introduction, historical perspective on the growing understanding of the South Australian environment. The biosphere concept. Introduction to organisms. Aspects of climate and soils. Australian vegetation, especially with reference to South Australia. National Parks as a management problem.

Aquatic habitats of Australia; their ecology and management. Eutrophication and water supply. Terrestrial habitats of Australia, the distribution and abundance of plants and animals, the invasion by exotic species. The growth and exploitation of populations. The replacement and stability of populations. Biological control.

Native vegetation in arid rangelands and conservation park contexts, and ecological research towards its management.

#### Reference books:

Colinvaux, P. A., *Introduction to ecology* (Wiley).

Costin, A. B., and Frith, H. J. (eds.), *Conservation* (Penguin).

Frith, H. J., *Wildlife conservation* (Angus and Robertson).

Krebs, C. J., *Ecology: the experimental analysis of distribution and abundance* (Harper Int. Ed.).

Specht, R. L., *The vegetation of South Australia* (Government Printer).

Leeper, G. W., *The Australian environment*, 4th edition (C.S.I.R.O., M.U.P.).

## SB02 Botany II.

Pre-requisite subjects: A pass at Division I or higher standard in SZ71 Biology I, SC01 Chemistry I is not a formal pre-requisite but it is strongly recommended and a knowledge equivalent to it will be assumed.

The course comprises three lecture periods and two practical periods a week throughout the year.

## A. EVOLUTION AND TAXONOMY OF THE ANGIOSPERMS: First term.

Natural selection and speciation, chromosome botany, recombination systems; taxonomic concepts illustrated by selected families and genera; biogeography and origin of angiosperms.

The practical portion of the course will teach the basic skills necessary to describe and identify angiosperms, and will acquaint students with the techniques used by modern systematists. In addition projects such as reports on field excursions, representative herbaria and species essays, will be given and assessed during the term. The nature of this project and its assessment may be varied, and candidates are advised to consult the Department Chairman if in doubt.

## Text-books:

Radford, A. E., and others, *Vascular plant systematics* (Harper and Row).  
Black, J. M., *Flora of South Australia*, vols. 1-4 (Government Printer, Adelaide).

## Reference books:

Eichler, Hj., *Supplement to J. M. Black's Flora of South Australia* (Government Printer, Adelaide).  
Stebbins, G. L., *Processes of organic evolution*, 3rd edition (Prentice-Hall).  
Additional references will be prescribed at one of the first lectures of the term.

## B. PLANT ECOLOGY AND PLANT ANATOMY: Second term.

Plant ecology: a lecture course during the term, dealing with principles and practice, followed by 5 days field work during the third week of the August vacation (costs approx. \$5 per day).

Plant anatomy: a practical course during the term covering the subject of vascular plant anatomy. Lectures introducing the practical work may be included.

## Text-books:

Esau, K., *Anatomy of seed plants*, 2nd edition (Wiley).  
Kormondy, E. J., *Concepts of ecology* (Prentice-Hall: paperback).

## Reference books:

Cutler, D. F., *Applied plant anatomy* (Longman).  
Kershaw, K. A., *Quantitative and dynamic ecology* (Arnold).  
Greig-Smith, P., *Quantitative plant ecology*, 2nd edition (Butterworth).  
Krebs, C. J., *Ecology: the experimental analysis of distribution and abundance* (Harper Int. Ed.).

## C. PLANT PHYSIOLOGY: Third term.

Enzymes; intermediary metabolism (respiration and photosynthesis); sources of metabolic energy; permeability of cells to water and solutes; movement of water and solutes through the plant; plant growth and development (including photoperiodism and hormone effects).

## Text-book:

Bidwell, R. G. S., *Plant physiology* (Macmillan); OR  
Salisbury, F. B., and Ross, C., *Plant physiology*, 2nd edition (Wadsworth).

### THIRD-YEAR SUBJECTS IN BOTANY.

Pre-requisite subjects: SB02 Botany II at Division I or higher standard. Students who entered SB02 Botany II having passed only SB1H General Biology IH are required to have passed SB2H Plant Biology IH; or gain special permission of the Chairman of the Department for particular units.

The Department offers the eleven single-units listed below. Numbers B304-B311 each comprises 16 lectures and 48 hours practical work for one term. The other three are each equivalent in content to this but the work is done during intensive consecutive courses each of about three weeks duration, during January-February. These three courses are available to qualified visiting students, space permitting.

Students are advised to confirm the sequence of units at the time of enrolment.

#### B301 RANGELAND ECOLOGY.

An intensive course given during three weeks in January. Students wishing to enrol for this course must inform the Chairman of Department by 24 December of the preceding year. The course will include no more than two weeks continuous field work on an arid-zone station (cost approx. \$5 a day).

A course in ecology emphasising the study of the interactions between grazing animals and vegetation in arid areas, the principles involved, and their application to management practices.

##### References:

A reprint collection is made available to students.

#### B302 MARINE PLANT BIOLOGY A.

The benthic algae and their relationships; Chlorophyta; Phaeophyta, and Rhodophyta. The environment of marine algae and intertidal ecology. One day and one week-end field trip are part of this course.

##### Text-book:

To be notified.

##### Reference books:

As set during the course.

#### B303 MARINE PLANT BIOLOGY B.

Phytoplankton and seagrasses; marine ecology of benthic algae, phytoplankton and seagrasses; biogeography and utilisation of algae. Project: Comparative morphology of a selected species of Rhodophyta.

##### Text-book:

To be notified.

##### Reference books:

As set during the course.

#### B304 PLANT NUTRITION: First term.

This course will cover the uptake and assimilation of inorganic nutrients by both aquatic and land plants. Specific topics will include the bioenergetics of ion transport into cells; transport through the plant in relation to plant structure and function; regulation of mineral content of plants; nitrogen metabolism; the problems posed by osmotic and salinity stress. Ecological aspects of plant nutrition will be considered.

##### Reference books:

As set during the course.

## B305 PLANT BIOCHEMISTRY: First term.

This course will cover some aspects of cellular biochemistry, especially with respect to the physiology of organelles (mitochondria, chloroplasts and microbodies) and their interactions. It will include carbohydrate and lipid metabolism, respiration, photosynthesis, photorespiration, membrane function, energy transduction and energetics.

## Reference books:

- Lehninger, A. L., *Biochemistry*, 2nd edition (Worth); OR  
Conn, E. E., and Stumpf, P. K., *Outlines of biochemistry*, 4th edition (Wiley).

## B306 MYCOLOGY: Second term.

Morphology and taxonomy of the fungi; industrial and applied mycology. This course is given at the Waite Agricultural Research Institute.

## Text-book:

- Alexopolous, C. J., *Introductory mycology* (Wiley).

## Reference book:

- Talbot, P. H. B., *Principles of fungal taxonomy* (Macmillan).

## B307 EVOLUTION OF SEED PLANTS: Second term.

The first half of the lecture course deals with basic concepts (e.g. continental drift, theory of uniformitarianism, floral vasculature, leaf architecture) relevant to palaeobotanists and evolutionary systematists. The second half presents current topics of research in these disciplines (e.g. origin of angiosperms, validity of palaeoecology) and may include student discussions of recent papers. The practicals will consist of 3 or 4 projects designed to teach the techniques used in this area of study.

## Reference books:

- Banks, H. P., *Evolution and plants of the past* (Macmillan).  
*Origin and early evolution of angiosperms*, ed. C. B. Beck (Columbia U.P.).

## B308 EVOLUTIONARY PROCESSES: Second term.

A unit complementing taxonomic courses but also relevant to ecology and physiology; changes in chromosomes and karyotype evolution; mutation and protein changes with analyses at the level of both species and family.

## Reference books:

- Stebbins, G. L., *Chromosome evolution in higher plants* (Arnold).  
Darlington, C. D., *Chromosome botany* (Allen and Unwin).  
Ayala, F. J. (ed.), *Molecular evolution* (Sinauer).

## B309 COMPARATIVE MORPHOLOGY AND PALAEOBOTANY: Third term.

This course involves comparative studies of living and fossil representatives of bryophytes and vascular plants. The course may include day field trips.

## Reference books:

- Foster, A. S., and Gifford, E. M., *Comparative morphology of vascular plants*, 2nd edition (Freeman).  
Watson, E. V., *The structure and life of bryophytes* (Hutchinson).  
Sporne, K. R., *The morphology of pteridophytes* (Hutchinson).  
Sporne, K. R., *The morphology of gymnosperms* (Hutchinson).  
Other books as set during the course.

**B310 PLANT WATER RELATIONS: Third term.**

Physics of the plant environment and influences upon water in the plant; the plant water transport system; water deficits and drought resistance mechanisms. The course will deal with angiosperms, with some emphasis on arid-zone and sclerophyll vegetation. A field excursion will be held during the October long weekend.

Reference books:

- Kozlowski, T. T., *Water deficits and plant growth*, vols. I and II (Academic Press).  
Meidner, H., and Sheriff, D. W., *Water and plants* (Blackie).  
Slatyer, R. O., *Plant-water relationships* (Academic Press).  
Levitt, J., *Responses of plants to environmental stresses* (Academic Press).

**B311 PHYTOPLANKTON ECOLOGY AND THE PRODUCTION OF INLAND WATERS: Third term.**

This course is complementary to Unit Z306 Freshwater Ecology, offered by the Department of Zoology.

The course will cover four main topics in phytoplankton ecology. The problem of suspension; the growth, photosynthesis and respiration of phytoplankton; models in phytoplankton ecology and the response of phytoplankton to nutrients.

Where possible students will spend a day in the field.

Reference books:

- Hutchinson, G. E., *A treatise on limnology*, vols. I, II and III (Wiley).  
Vollenweider, R. A. (ed.), *A manual of methods for measuring primary production in aquatic environments* (I.B.P. handbook no. 12) (Blackwell).  
Fogg, G. E., *Algal cultures and phytoplankton ecology* (Athlone Press).  
Golterman, H. L., *Physiological limnology. (Developments in water science 2)* (Elsevier).

The subjects offered are:

**SB03 Botany III.**

A group C subject. Six single-units from the above list selected with the approval of the Chairman of the Department.

**SB83 Botany IIIM.**

A group C subject. With approval of the Heads/Chairmen of the Departments concerned, a combination of four single-units from the above list together with two units or one double-unit from another department.

**HONOURS DEGREE.**

**SB99 Botany for the Honours degree of B.Sc.**

Pre-requisite subjects: A satisfactory standard in SB03 Botany III or SB83 Botany IIIM or special permission of the Chairman of the Department.

Candidates are expected to acquire a more detailed knowledge than is required for the Ordinary degree. A course of reading is prescribed and students are required to lead seminars and write essays. In addition, candidates are expected to study more deeply one branch of botany, to carry out research in this field and to present the results in a written report. Approximately one third of the total course is flexible and candidates choose, with approval, between additional project work and courses such as third-year science units, AG74 Science German, Fortran programming, etc.

Candidates should consult the Chairman of the Department during the final year of their Ordinary degree course. The Honours course commences at the beginning of February.

## CHEMISTRY.

## INTRODUCTORY NOTES.

1. The Department of Physical and Inorganic Chemistry and the Department of Organic Chemistry offer the following courses:

- First Year: SC01 Chemistry I; [additional subject SC71 Chemistry IM for the degrees of B.D.S. and M.B., B.S.].
- Second Year: SC02 Physical and Inorganic Chemistry II, SO02 Organic Chemistry II, SC12 Chemistry II, SC22 Chemistry IIE.
- Third Year: SC03 Physical and Inorganic Chemistry IIIA, SC13 Physical and Inorganic Chemistry IIIB, SC83 Physical and Inorganic Chemistry IIIM, SO03 Organic Chemistry III, SO83 Organic Chemistry IIIM, SC23 Chemistry III.
- Fourth Year: SC99 Honours Physical and Inorganic Chemistry, SO99 Honours Organic Chemistry.

2. Attention is drawn to the pre-requisite subjects for admission to the various courses as prescribed in the syllabuses below.

3. Students who intend to take third-year subjects in the Department of Physical and Inorganic Chemistry and/or the Department of Organic Chemistry are advised to take the following combinations of *First-Year* subjects: SC01 Chemistry I, SP01 Physics I, QM01 Mathematics I or QM11 Mathematics IM and *either* SZ71 Biology or SG01 Geology I. Other combinations are, however, acceptable.

4. In second year four courses are available. Students intending to specialise in Chemistry should take SC02 Physical and Inorganic Chemistry II and SO02 Organic Chemistry II and SY02 Biochemistry II or QM02 Pure Mathematics II or QN22 Applied Mathematics IIA or QN12 Applied Mathematics IIB or SP02 Physics II. Other combinations are, however, acceptable.

SC12 Chemistry II is a course oriented towards the biological and agricultural sciences. SC22 Chemistry IIE is a course directed towards the physical sciences and the needs of students taking courses in Chemical Engineering.

5. In third year a range of unit courses is offered by both the Departments of Physical and Inorganic and of Organic Chemistry. The subjects offered are: SC23 Chemistry III; SC03 Physical and Inorganic Chemistry IIIA, which incorporates eight units of Physical and Inorganic Chemistry, and four units from another Department; SC13 Physical and Inorganic Chemistry IIIB, SO03 Organic Chemistry III, which incorporate six units from the appropriate Department; SC83 Physical and Inorganic Chemistry IIIM, SO83 Organic Chemistry IIIM, which incorporates four units from the appropriate Department, together with two units from another Department. Students specialising in Chemistry are advised to choose a selection of subjects which will give a course of study involving twelve units selected from those available from both Departments. Other combinations with units or subjects from other Departments are permissible for those wishing to specialise in inter-disciplinary areas.

6. Entry to the Honours degree in Physical and Inorganic Chemistry (SC99), will normally involve courses in SC02 Physical and Inorganic Chemistry II, and in one of the third-year courses SC03 Physical and Inorganic Chemistry IIIA or SC13 Physical and Inorganic Chemistry IIIB or SC83 Physical and Inorganic Chemistry IIIM. Likewise entry to the Honours degree in Organic Chemistry (SO99), will normally involve courses in SO02 Organic Chemistry II, and in one of the third-year courses SO03 Organic Chemistry III or SO83 Organic Chemistry IIIM [preferably SO03 Organic Chemistry III]. In special cases and subject to approval of the appropriate Head/Chairman of Department, SC23 Chemistry III may be accepted as a pre-requisite for the Honours course in either Department.

7. Before enrolling for third-year unit courses all students *must* discuss their programmes with the Heads/Chairmen of the Departments concerned.

8. A student who wishes, or who thinks he may wish, to proceed to Honours in either Department of Chemistry is advised to discuss his course programme with the Heads/Chairmen of Departments concerned as early as possible.

### SC01 Chemistry I.

A knowledge of Matriculation Chemistry will be assumed. Students who have studied Physics and *either* Mathematics IS *or* Mathematics I and II at the Matriculation level will be greatly advantaged.

The course consists of three lectures, one three-hour practical class and one problem-solving class in each week throughout the year. Extensive notes are issued for both lecture and practical classes.

Students may be required to complete regular work assignments based on the lecture course.

The course is given in four sections:

*Structure and Bonding*: the structure of molecules, and methods of determining structure, models for chemical bonding, forces between molecules and acids and bases will be discussed.

*Physical Chemistry*: an introduction showing how chemical phenomena can be treated quantitatively and how such phenomena as the properties of the states of matter, solutions, surfaces, rates of chemical reactions, depend on molecular properties and forces between molecules.

*Inorganic Chemistry*: the chemistry of the main group and first row transition elements will be discussed with reference to halides, oxides, hydrides, aqua ions and simple organometallic compounds. The concepts of semi-conductor behaviour, crystal chemistry, dynamic equilibria, reaction mechanisms and catalysis will be introduced.

*Organic Chemistry*: an introduction to the properties, reactions (including mechanisms) and synthesis of representative organic compounds, including those of biological significance.

#### Text-book:

Brown, M. H., *Introduction to organic chemistry*, 2nd edition (Wadsworth International Students Edition).

#### Reference books:

Mahan, B. H., *University chemistry*, 3rd edition (Addison-Wesley).

Tedder, J. M., and Nechvatal, A., *Basic organic chemistry, part I* (Wiley).

Cotton, F. A., and Wilkinson, G., *Basic inorganic chemistry* (Wiley).

Students are recommended to obtain a set of molecular models; advice on suitable brands will be given in the Preliminary Lecture.

### SC12 Chemistry II.

Pre-requisite subjects: A division I pass, or higher, in SC01 Chemistry I. A pass in a full or a half Mathematics subject in first year is desirable; a student without such qualification must obtain the permission of the Head of the Department of Physical and Inorganic Chemistry before enrolling.

The course is convenient for students taking biological subjects, but also allows entry to SC23 Chemistry III, and subject to special approval of the Head of the appropriate Chemistry Department, a limited programme of units in SC13 Physical and Inorganic Chemistry IIB *or* SC83 Physical and Inorganic Chemistry IIIM *or* SO03 Organic Chemistry III *or* SO83 Organic Chemistry IIIM.

The course consists of three lectures and six hours of practical work a week throughout the three terms of the year.

The course covers the principles of organic, inorganic and physical chemistry. Lectures will deal with heterocyclic compounds, with special reference to nitrogenous and other compounds of significance to the biologist; the mechanisms of organic reactions; carbohydrates; amino acids and related compounds; transition metal chemistry; metal complexes (providing a basis for future studies in metallo-biochemistry); macromolecules; solid state; spectroscopy; thermodynamics; electro-chemistry and surface chemistry.



## Text-books:

- DePuy, C. H., and Rinehart, K. L., *Introduction to organic chemistry*, 2nd edition (Wiley International).  
Basolo, F., and Johnson, R. E., *Co-ordination chemistry* (Benjamin).  
Chang, R., *Physical chemistry with applications to biological systems* (Collier-Macmillan).  
Kice, J. L., and Marvell, E. N., *Modern principles of organic chemistry* (Collier-Macmillan).

## Reference books:

- Sykes, P., *A guidebook to mechanism in organic chemistry*, 3rd edition (Longman).  
Moore, W. J., *Physical chemistry*, 5th edition (Longman, paperback).  
Cowie, J. M. G., *Polymers; chemistry and physics of modern materials* (Intertext).

## SC22 Chemistry IIE.

Pre-requisite subjects: A Division I pass, or higher, in SC01 Chemistry I. The course assumes a knowledge of some topics covered in first-year Mathematics courses and students wishing to enrol for SC22 Chemistry IIE without having passed QM01 Mathematics I or QM11 Mathematics IM or QM7H Mathematics IH in combination with either QA7H Computing IH or QT7H Statistics IH must obtain the permission of the Head of the Department of Physical and Inorganic Chemistry.

The course is suitable for students taking Chemical Engineering, but also allows entry to SC23 Chemistry III and, subject to the special approval of the Head of the appropriate Chemistry Department, to a limited programme of units in SC13 Physical and Inorganic Chemistry IIIB or SC83 Physical and Inorganic Chemistry IIIM or SO03 Organic Chemistry III or SO83 Organic Chemistry IIIM.

The course consists of three lectures, one tutorial and six hours practical work a week throughout the three terms of the year.

The course is directed to the principles of physical, organic and inorganic chemistry with particular reference to chemical engineering. The course deals with thermodynamics, surface chemistry, electrochemistry, the solid state, topics in inorganic chemistry, physical organic chemistry and basic group transformations and synthetic methods in organic chemistry.

## Text-books:

- Denaro, A. R., *Elementary electrochemistry* (Butterworth).  
Kice, J. L., and Marvell, E. N., *Modern principles of organic chemistry* (Collier-Macmillan).

## Reference books:

- Cotton, F. A., and Wilkinson, G., *Basic inorganic chemistry* (Wiley International Edition).  
Dickerson, R. E., *Molecular thermodynamics* (Benjamin).  
Shaw, D. J., *Introduction to colloid and surface chemistry*, 2nd edition (Butterworth).  
Moore, W. J., *Physical chemistry*, 5th edition (Longman).  
Greenwood, N. N., *Ionic crystals, lattice defects and non-stoichiometry* (Butterworth).  
Bloss, F. D., *Crystallography and crystal chemistry* (Holt, Rinehart and Winston).

## SC23 Chemistry III.

Pre-requisite subjects: A Division I pass or higher in SC12 Chemistry II or SC22 Chemistry IIE or SC02 Physical and Inorganic Chemistry II and SO02 Organic Chemistry II. The course, which will consist of three lectures and about twelve hours practical work a week throughout the three terms of the year, will deal with physical, inorganic and organic chemistry.

PHYSICAL AND INORGANIC CHEMISTRY.

SC02 Physical and Inorganic Chemistry II.

Pre-requisite subjects: A Division I pass, or higher, in SC01 Chemistry I. The course assumes a knowledge of some topics covered in first-year Mathematics courses and students wishing to enrol for SC02 Physical and Inorganic Chemistry II without having passed QM01 Mathematics I, or QM11 Mathematics IM, or QM7H Mathematics IH in combination with either QA7H Computing IH or QT7H Statistics IH must obtain the permission of the Head of the Department of Physical and Inorganic Chemistry.

The course consists of three lectures, one tutorial and not less than six hours' practical work a week throughout the three terms of the year.

This course deals with structural chemistry; the chemistry of simple and complex compounds, electron deficient compounds, ligand field and molecular orbital theories; the synthesis of inorganic compounds and reaction mechanisms; thermodynamics, surface chemistry; electrochemistry; chemical spectroscopy, principles of atomic and molecular spectroscopy.

A more detailed syllabus will be available from the Department during the enrolment period.

The laboratory course is designed to illustrate and link in with the lecture course and also to introduce essential experimental techniques.

Text-books:

Cotton, F. A., and Wilkinson, G., *Advanced inorganic chemistry*, 3rd edition (Interscience).

Denaro, A. R., *Elementary electrochemistry*, 2nd edition (Butterworth).

Banwell, C. N., *Fundamentals of molecular spectroscopy*, 2nd edition (McGraw-Hill).

Huheey, J. E., *Inorganic chemistry* (Harper and Row).

Reference books:

Wells, A. F., *Structural inorganic chemistry*, 3rd edition (O.U.P.).

Castellan, G. W., *Physical chemistry*, 2nd edition (Addison Wesley).

Dickerson, R. E., *Molecular thermodynamics* (Benjamin).

Moore, W. J., *Physical chemistry*, 5th edition (Longman).

Shaw, D. J., *Introduction to colloid and surface chemistry*, 2nd edition (Butterworth).

THIRD-YEAR SUBJECTS IN PHYSICAL AND INORGANIC CHEMISTRY.

Pre-requisite subjects: A Division I pass, or higher, in SC02 Physical and Inorganic Chemistry II is the desirable pre-requisite for third-year units. However, subject to the approval of the Head of the Department of Physical and Inorganic Chemistry in each case, students may be allowed to proceed to a limited programme of third-year units in Physical and Inorganic Chemistry on the basis of Division I passes or higher, in second-year (Group B) subjects other than SC02 Physical and Inorganic Chemistry II, in particular, programmes in SC13 Physical and Inorganic Chemistry IIIB and SC83 Physical and Inorganic Chemistry IIIM may be permitted to students with Division I passes, or higher, in SC12 Chemistry II or SC22 Chemistry IIE.

The Department offers the following units, each of which consists of about 15 lectures and about 54 hours' practical work and tutorials.

A pamphlet giving further information on unit courses will be available from the Department of Physical and Inorganic Chemistry in December and during the enrolment period. Prior to enrolling all third-year students taking unit courses should discuss their course with members of staff of the Department and finally with the Head of Department.

Students enrolling in any of the units C301, C303, C305 or C308 will undertake a short course in *Molecular symmetry and group theory* which will be held at the beginning of First Term. Students should obtain the timetable of lectures and tutorials for this course from the Department at the beginning of Orientation Week. The formal course work in each of the four units will be reduced accordingly.

## Text-book:

Vincent, A., *Molecular symmetry and group theory* (Wiley).

## Reference book:

Cotton, F. A., *Chemical applications of group theory*, 2nd edition (Wiley).

## C301 QUANTUM CHEMISTRY: First term.

Wave mechanics, hydrogen, hydrogen-like atoms, more complex atoms, molecular orbitals, simple and complex molecules,  $\pi$  molecular orbitals, calculation of charge densities, bond orbitals and dipole moments; symmetry operations; group theory.

## Text-book:

Phillips, L. F., *Basic quantum chemistry* (Wiley).

## Reference books:

La Paglia, S. R., *Introductory quantum chemistry* (Harper and Row).

Atkins, P. W., *Quanta, a handbook of concepts* (O.U.P.).

## C302 STATISTICAL THERMODYNAMICS: Second term.

Use of statistical methods to calculate thermodynamic properties and equilibrium constants; Maxwell-Boltzmann, Fermi-Dirac and Bose-Einstein quantum statistics. Determination of intermolecular forces from equilibrium and transport properties.

## Text-book:

Denbigh, K. G., *The principles of chemical equilibrium* (C.U.P.).

## C303 CRYSTALLOGRAPHY: First term.

An introduction to X-ray structure determination and diffraction analytical techniques. The main sections are crystal symmetry, diffraction processes and image reconstruction, the procedures of X-ray structure determination and diffraction by real crystals. The practical work includes microscopy of crystal growing, laser diffraction, single crystal and powder X-ray photographs, symmetry in patterns and photographs, introduction to X-ray diffractometry and determination of a simple structure.

## Text-book:

Glusker, J. P., and Trueblood, K. N., *Crystal structure analysis* (O.U.P.).

## Reference books:

Stout, G. H., and Jensen, L. H., *X-ray structure determination* (Macmillan).

Azaroff, L. V., *Elements of X-ray crystallography* (McGraw-Hill).

## C304 REACTION KINETICS: Third term.

Theories of gas and liquid phase reactions; unimolecular, bimolecular, termolecular, chain, and photochemical reactions; stationary state and non-stationary state systems. The practical work illustrates the use of kinetic measurements to deduce reaction mechanisms.

## Text-books:

Nicholas, J., *Chemical kinetics. A modern survey of gas reactions* (Harper and Row); OR

Laidler, K. J., *Reaction kinetics*, vol. 1 (Pergamon); OR

Laidler, K. J., *Chemical kinetics*, 2nd edition (McGraw-Hill); OR

Pratt, G. L., *Gas kinetics* (Wiley).

## Reference books:

Benson, S. W., *Foundations of chemical kinetics* (McGraw-Hill).

Frost, A. A., and Pearson, R. G., *Kinetics and mechanism*, 2nd edition (Wiley).

Benson, S. W., *Thermochemical kinetics* (Wiley).

## C305 MOLECULAR SPECTRA: Second term.

Theory and selected applications of emission, absorption and resonance spectroscopies including the use of polarised radiation.

## Text-books:

Chang, R., *Basic principles of spectroscopy* (McGraw-Hill); OR

Banwell, C. N., *Fundamentals of molecular spectroscopy*, 2nd edition (McGraw-Hill).

Reference book:

Walker, S., and Straw, H., *Spectroscopy*, vols. 1 and 2 (Chapman and Hall).

C306 ORGANOMETALLIC CHEMISTRY: First term.

Complexes containing organic ligands (e.g. CO, unsaturated hydrocarbons, etc.) attached to transition metals occupy an important position in present-day chemistry. The course discusses many interesting features of their chemistry including bonding theory, principles of synthesis, physico-chemical studies and reactions of the major types of complex, including those of catalytic and industrial importance. Some topics of wider applicability, such as stereochemical nonrigidity, polyatom-cluster chemistry and metal-directed reactions of organic molecules, will also be covered.

Reference books:

Cotton, F. A., and Wilkinson, G., *Advanced inorganic chemistry*, 3rd edition (Interscience).

Coates, G. E., and others, *Organometallic compounds*, vol. 2, 3rd edition (Methuen).

Heck, R. F., *Organotransition metal chemistry* (Academic Press).

Huheey, J. E., *Inorganic chemistry* (Harper and Row).

C307 MACROMOLECULAR CHEMISTRY: First term.

A physical chemical discussion of the structure and solution properties of natural and synthetic macromolecules.

Text-book:

Cowie, J. M. G., *Polymers; chemistry and physics of modern materials* (Intertext).

Reference book:

Billmeyer, F. W., *Textbook of polymer science* (Wiley International Edition).

C308 METAL COMPLEXES: Second term.

Bonding in complexes, crystal field and charge transfer spectra. Formation of complexes in solution: species, equilibria, and energy changes.

Text-book:

Cotton, F. A., and Wilkinson, G., *Advanced inorganic chemistry*, 3rd edition (Interscience).

Reference book:

Sutton, D., *Electronic spectra of transition metal complexes* (McGraw-Hill).

C309 INORGANIC REACTION MECHANISMS: Third term.

Typical reactions at metal and non-metal centres including bio-inorganic and excited state processes. Solvent and ligand exchange, substitution, isomerisation, oxidation-reduction.

Text-book:

Tobe, M. L., *Inorganic reaction mechanisms* (Nelson, paperback).

Reference books:

Basolo, F., and Pearson, R. S., *Mechanisms of inorganic reactions*, 2nd edition (Wiley).

Taube, H., *Electron transfer reactions of complex ions in solution* (Academic Press).

Edwards, J. O., *Inorganic reaction mechanisms* (Benjamin).

C310 ELECTROLYTE SOLUTIONS: Third term.

Equilibrium and transport properties of electrolyte solutions. Interpretation in terms of simple models.

Text-book:

Bockris, J.O'M., and Reddy, A. K. N., *Modern electrochemistry*, vol. 1 (Plenum).

## Reference books:

Robinson, R. A., and Stokes, R. H., *Electrolyte solutions*, 2nd edition (Butterworth).

Gurney, R. W., *Ionic processes in solution* (McGraw-Hill).

Three different subjects in third-year Physical and Inorganic Chemistry are offered depending on whether eight, six or four units from the above list are taken along with units from other Departments. All students intending to take courses in third-year Physical and Inorganic Chemistry *must* obtain notes issued by the Department on suggested combinations of units and *must* make an appointment to discuss their course with the Head of Department or members of Staff prior to enrolment during the enrolment period and/or immediately after the results of the November examinations are made known.

The subjects offered are:

## SC03 Physical and Inorganic Chemistry IIIA.

A Group D subject. Eight units from the above list selected with the approval of the Head of Department together with four units or two double-units in either Organic Chemistry; or Biochemistry; or Pure or Applied Mathematics III; or other third-year subjects chosen after consultation with the Heads/Chairmen of the Departments concerned.

*Note:* The pre-requisites for the subjects in other Departments must be observed.

## SC13 Physical and Inorganic Chemistry IIIB.

A Group C subject. Six units from the above list selected with the approval of the Head of Department.

## SC83 Physical and Inorganic Chemistry IIIM.

A Group C subject. Four units from the above list with two units or one double-unit from one other Department selected with the approval of the Heads/Chairmen of the Departments concerned.

## HONOURS DEGREE.

## SC99 Physical and Inorganic Chemistry for the Honours degree of B.Sc.

Pre-requisite subjects: Any third-year subject in the Department of Physical and Inorganic Chemistry together with subjects in any of the Departments of Organic Chemistry, Biochemistry, Mathematics, Mathematical Physics, Geology or Physics, or such other third-year subjects as may be approved by the Head of the Department of Physical and Inorganic Chemistry. Subject to the approval of the Head of the Department of Physical and Inorganic Chemistry in each case, a student may proceed to Honours in Physical and Inorganic Chemistry if he has taken a first degree programme which has not included a Physical and Inorganic Chemistry III subject.

Four Honours unit courses in advanced Physical and Inorganic Chemistry will be provided. Students will be required to take either these four units, or three of the Honours units with one third year unit in Physical and Inorganic Chemistry, or three of the Honours units with one appropriate unit of equivalent weight from another Department. The lecture programme of each student will be determined by consultation with his research supervisor and the Head of Department. Each student will be assigned a research problem which he will investigate under the personal guidance of a member of staff of the Department of Physical and Inorganic Chemistry. The performance of each student will be assessed on the basis of written and oral examinations and the student's written report of his research investigation.

Books: Those for the Ordinary degree, and in addition other reference books which will be recommended by supervisors and lecturers.

## ORGANIC CHEMISTRY.

### SO02 Organic Chemistry II.

Pre-requisite subject: A Division I pass, or higher, in SC01 Chemistry I.

The course consists of three lectures and six hours practical work a week throughout the three terms of the year.

The lectures provide an introduction to the physical and theoretical aspects of organic chemistry, and a discussion of the synthesis, properties, biological significance and reactions of compounds belonging to the major families of aliphatic, aromatic and heterocyclic compounds.

**Text-books:**

Morrison, R. T., and Boyd, R. N., *Organic chemistry*, 3rd edition or Student edition (Allyn and Bacon).

Morrison, R. T., and Boyd, R. N., *Study guide for organic chemistry* (Allyn and Bacon).

Students should also purchase a suitable set of Molecular Models.

### THIRD-YEAR SUBJECTS IN ORGANIC CHEMISTRY.

Pre-requisite subjects for all third-year subjects in Organic Chemistry: SO02 Organic Chemistry II at Division I pass, or higher standard. Subject to the approval of the Chairman of the Organic Chemistry Department in each case students may be allowed to proceed to a limited programme of third-year units in Organic Chemistry on the basis of Division I passes or higher in second-year subjects other than SO02 Organic Chemistry II.

The Department offers the following units each of which consists of about 15 lectures and about 54 hours' practical work and tutorials.

**O301 SPECTROSCOPY: First term.**

Theory and applications in organic chemistry of infra-red, ultra-violet, nuclear magnetic resonance, electron paramagnetic resonance, and mass spectrometry.

**O302 PERICYCLIC REACTIONS AND FREE RADICAL CHEMISTRY: First term.**

Theoretical aspects and synthetic applications of pericyclic reactions; photochemistry; structure and reactions of organic free radicals.

**O303 PHYSICAL ORGANIC CHEMISTRY: Second term.**

Thermodynamics and kinetics of organic systems; conformational analysis and stereochemistry; aromaticity; medium effects; structure-activity relationships.

**O304 MECHANISM AND SYNTHESIS I: Second term.**

General synthetic methods with particular emphasis on the mechanism and applications of reactions involving carbanions, carbonium ions, nitrenes, carbenes and arynes.

**O305 MECHANISM AND SYNTHESIS II: Third term.**

General synthetic methods with emphasis on functional group manipulations, selective reactions, and protecting groups; the design of syntheses.

**O306 HETEROCYCLIC CHEMISTRY AND NATURAL PRODUCTS: Third term.**

The chemistry of heterocyclic compounds with emphasis on those of biological significance; the chemistry of representative natural products; bio-organic chemistry.

**O307 ORGANIC CHEMICALS IN THE ENVIRONMENT: Third term.**

Petrochemicals, air pollution, photochemical smog; production properties, reactions and degradation of pesticides; food additives, plastics and plasticisers; detection and assay of organic chemicals in the environment.

The subjects offered are:

### SO03 Organic Chemistry III.

A group C subject. Six units from the above list selected with the approval of the Chairman of Department.

**SO83 Organic Chemistry IIIM.**

A group C subject. Four units from the above list together with two units or one double-unit from one other Department selected with the approval of the Heads/Chairmen of the Departments concerned.

NOTE: All students intending to take courses in third-year organic chemistry *must* obtain notes issued by the Department concerning suggested combinations of units and *must* make an appointment prior to enrolment with the Chairman of Department or member of staff to discuss their course either during the enrolment period or immediately after the results of the November examinations are made known.

Text-books:

*All Units*

Morrison, R. T., and Boyd, R. N., *Organic chemistry*, 3rd edition or Student edition (Allyn and Bacon).

Fleming, I., and Williams, D. H., *Spectroscopic methods in organic chemistry* (McGraw-Hill).

*Units 2, 3, 4 and 5*

Sykes, P., *A guidebook to mechanism in organic chemistry*, 4th edition (Longmans).

Carruthers, W., *Some modern methods of organic synthesis* (C.U.P.).

Students should also obtain a set of Framework Molecular Models.

A list of reference books is available from the Departmental Office.

**HONOURS DEGREE.****SO99 Organic Chemistry for the Honours degree of B.Sc.**

Pre-requisite subjects: A third-year subject in the Department of Organic Chemistry [preferably SO03 Organic Chemistry III]. In exceptional cases students who have passed another group C subject which contains Organic Chemistry Units may be permitted to enter the Honours class.

Candidates are required to devote their full time for an entire academic year to a special course of study and experimental work in the Organic Chemistry Department. The course will normally commence in the first week of February.

The work will include a course of lectures and tutorials on advanced organic chemistry, attendance at a series of seminars and research colloquia, and the investigation of a research problem under the personal guidance and supervision of one or more members of the staff of the Organic Chemistry Department. Candidates will be required to take written examinations and to present a thesis embodying the results of their research work.

Intending Honours candidates should consult the Professor of Organic Chemistry during the preceding year.

**ADDITIONAL SUBJECT.****SC71 Chemistry IM for the degrees of B.D.S., and M.B., B.S.**

## GENETICS.

### SJ7H Genetics and Human Variation IH.

A first-year half-subject designed to introduce the principles of human genetics as a means of understanding the diversity and underlying unity of mankind.

There will be one lecture and a tutorial/practical class each week throughout the year.

The nature, causes and maintenance of human variation. Family patterns for rare differences. Human chromosomes. Sex determination and differentiation. Human populations and their genetical structure. Elements of demography. Assortative mating. Consanguinity. Common genetical differences—blood groups, transplantation antigens, colour-blindness, etc. Selection in primitive and civilized communities. Effects of migration and racial mixture. Gene action and inborn errors of metabolism. Polygenic variation (body shape and size, fingerprints, intelligence, etc.). Twin comparisons. Mutation and radiation hazards. Human evolution.

Text-book:

Bodmer, W. F., and Cavalli-Sforza, L. L., *Genetics, evolution and man* (Freeman).

Reference book:

Thompson, J. S., and Thompson, M. W., *Genetics in medicine*, 2nd edition (Saunders).

### SJ02 Genetics II.

The following subjects are recommended as most suitable for taking along with SJ02 Genetics II in second year: SY02 Biochemistry II, SB02 Botany II, SC02 Chemistry II, QT02 Mathematical Statistics II, SO02 Organic Chemistry II, SS02 Physiology II, AY02 Psychology II, QM02 Pure Mathematics II, SZ02 Zoology II.

Pre-requisites: *either*

(A) A Division I pass, or higher in SJ7H Genetics and Human Variation IH; *or*

(B) A Division I pass in SZ71 Biology I and a pass in a mathematical subject or half-subject from Group A; *or*

(C) In special circumstances a knowledge of biology and mathematics deemed satisfactory by the Chairman of the Department or his nominee.

Three lectures and five hours of practical/tutorial work a week for three terms.

Mendelian inheritance. Probability and inductive inference in genetics. Linkage. Mitosis and meiosis. The chromosome theory of heredity. Structural changes in chromosomes. Recombination systems in micro-organisms. The genetic material. Gene mutation. Gene structure and function. Protein synthesis. Gene regulation. The genetic code. Cytoplasmic inheritance. Differentiation. Sex determination and differentiation. Polyploidy. Breeding systems in plants. Population growth and the elements of demography. Population genetics and natural selection. Polygenic variation (e.g. height, yield, intelligence) and its particulate basis. Heritability and the response to selection. Inbreeding and outbreeding. Speciation. Genetics and Man—pedigree analysis, chromosomal variants, inborn errors of metabolism, twin comparisons, common genetical differences, genetic counselling.

Text-books:

\*Bailey, N. T. J., *Statistical methods in biology* (English U.P.).

Strickberger, M. W., *Genetics*, 2nd edition (Macmillan).

\*Nuttall, I., and Stewart, J., *Genetics; analysis of population* (Open Univ. Press).

\*John, B., and Lewis, K. R., *The meiotic mechanism* (O.U.P.).

\* Available as paperbacks.



**SJ03 Genetics III.**

Pre-requisite subject: SJ02 Genetics II at Division I or higher standard.

The Department offers the following course consisting of 3 lectures, 3 tutorials or seminars and 3-6 hours of practical work per week throughout the year.

**HUMAN GENETICS.**

*Estimation and scoring for genetic parameters:* computer methods; gene frequency; linkage; heterogeneity.

*Quantitative characters:* random mating populations; assortative mating; threshold characters; the use of twin data.

*Biochemical genetics:* gel electrophoresis and human variation; protein polymorphisms and gene/protein relationships; inborn errors and genetic disease.

*Somatic cell genetics:* the use of cell cultures and somatic cell hybrids in studies of chromosome mapping, genetic complementation, the genetic control of malignancy, cellular differentiation and gene regulation in higher organisms.

*Immunogenetics:* histocompatibility differences in Man and other species; linkage relationships and disease associations; structure and function of the immunoglobulins and the genes controlling them.

**EVOLUTION.**

The synthesis of Darwinism and Mendelism. Genetic demography and the measurement of biological fitness. Natural selection: individual or group advantage; balanced polymorphisms and the evolution of super genes; transient polymorphisms; mimicry; fluctuations in numbers. Isolation and adaptation. Speciation. Population structure. Molecular evolution; protein and nucleic acid sequences and phylogeny. Roles of selection, mutation, and drift in evolution. Human populations and the effects of genetic counselling, therapeutic abortion, relaxation of selection and changing mating patterns on their genetic composition.

**RECOMBINATION, MUTATION AND GENETIC SYSTEMS.**

*Recombination:* the molecular basis for recombination in eukaryotes and prokaryotes.

*Mutation:* the molecular basis for mutation; assay systems for environmental mutagens.

*Genetic systems:* a selection of three topics will be made from the following:

- (a) bacterial plasmids and insertion sequences,
- (b) chloroplast genetics,
- (c) mitochondrial genetics,
- (d) incompatibility systems in fungi,
- (e) host and obligate parasite systems.

**Text-books:**

- \*Catcheside, D. G., *The genetics of recombination* (Arnold).
- Cavalli-Sforza, L. L., and Bodmer, W. F., *The genetics of human populations* (Freeman).
- Fincham, J. R. S., and Day, P. R., *Fungal genetics*, 3rd edition (Blackwell).
- \*Fisher, R. A., *The genetical theory of natural selection*, 2nd edition (Dover).
- Ford, E. B., *Ecological genetics*, 4th edition (Chapman and Hall).
- \*Harris, H., *The principles of human biochemical genetics*, 2nd edition (North Holland).

**Reference books:**

- Auerbach, C., *Mutation research* (Chapman and Hall).
- \*Ayala, F. J. (ed.), *Molecular evolution* (Sinauer).
- Drake, J. W., *The molecular basis of mutation* (Holden-Day).
- Hayes, W., *The genetics of bacteria and their viruses*, 2nd edition (Blackwell).
- Ringertz, N. R., and Savage, R. E., *Cell hybrids* (Academic).
- Sager, R., *Cytoplasmic genes and organelles* (Academic).
- Snell, G. D., and others, *Histocompatibility* (Academic).

\* Available as paperbacks.

HONOURS DEGREE.

**SJ99 Genetics for the Honours degree of B.Sc.**

Pre-requisite subject: A pass in SJ03 Genetics III at a standard satisfactory to the Chairman of the Department of Genetics.

Candidates are required to give their full attendance for one academic year to a special course of study in the Department of Genetics. Each candidate will have a prescribed reading list and a research investigation to be carried out under the supervision of a member of staff. The course will include participation in seminars and discussions on advanced topics and the writing of essays and literature reviews. Candidates will be required to take a written examination and to present a thesis embodying the results of their research work.

Intending Honours candidates should consult the Chairman of the Department during the previous year so that they can be advised on suitable reading for the Long Vacation.

ADDITIONAL SUBJECTS.

**SJ8H Genetics IH(M) for the degrees of B.D.S., and M.B., B.S.**

**SJ89 Genetics for the Honours degree of B.Med.Sc.**

The pre-requisites are passes in SJ02 Genetics II and in the Third-Year Examination in Medicine. Intending candidates should consult the Chairman of the Department of Genetics as early as possible.

**SJ79 Genetics for the Honours degree of B.Ag.Sc.**

**SJ69 Genetics for the Honours degree of B.Sc.Dent.**

## GEOLOGICAL SCIENCES.

One first-year subject and one half-subject are available. SG01 Geology I provides a balanced introduction to the geological sciences through lectures and practical work and is the normal pre-requisite for entry to SG02 Geology II. It also serves students in the Faculties of Engineering and Agricultural Science. SG7H Environmental Geology IH is a course of lectures and tutorials designed for students who wish to develop an understanding of the geological controls of the environment and of earth resources, but who do not require the fuller scientific basis provided by SG01 Geology I. This half-subject should combine well, for example, with the half-subject in Environmental Biology. It will not serve as a pre-requisite for SG02 Geology II, and it cannot be combined with SG01 Geology I.

A further half-subject SG3H Geology IH(E) is offered for Civil Engineering students and is described in the syllabuses of the Faculty of Engineering.

## SG01 Geology I.

There are no formal pre-requisites for SG01 Geology I but a knowledge of Matriculation Chemistry and Physics will be helpful. The course consists of three lectures, three hours practical work and one tutorial a week throughout the year. Occasional field excursions form an important part of the course.

The course deals with the following main fields:

*Earth materials:* crystal structure and mineralogy, igneous and metamorphic rocks and associated ore deposits; rock weathering and soil development.

*Earth structure and dynamics:* including global seismicity, gravity, radioactivity and magnetism; sea floor spreading, continental drift and plate tectonics; structural geology and landscape.

*Earth history:* sediments and sedimentation; the history of life; methods of dating and correlating rock strata.

*Earth resources:* energy resources including fossil fuels, geothermal and nuclear energy, direct and indirect solar energy; occurrence and origin of mineral resources including minerals for construction, agriculture, manufacturing and chemical industries; mineral exploration and problems of mineral exploitation; atmosphere, oceans and water resources in relation to pollution.

The practical work includes the study of crystals, minerals, rocks and fossils; interpretation of elementary geological maps; geophysical exercises. The practical course thus illustrates and develops the lecture course with reference to Australian examples.

## Text-books:

Press, F., and Siever, R., *Earth* (Freeman).

\*Press, F., and Siever, R., *Planet earth* (Readings from Scientific American) (Freeman).

\*Ernst, W. G., *Earth materials* (Prentice-Hall).

\*Bennison, G. M., *An introduction to geological structures and maps*, 3rd edition (Edward Arnold).

\* Available as paperbacks.

## SG7H Environmental Geology IH.

There are no formal pre-requisites for SG7H Environmental Geology IH though some scientific background is desirable. The course consists of two lectures and one tutorial a week throughout the first term, and thereafter one lecture and two tutorials.

The course examines the basic problems of energy, water and mineral resources and of the environment in terms of the constraints provided by our knowledge of the geological sciences.

Following a general introduction to geology the following topics are considered:

*Atmosphere and Oceans in Relation to Pollution; Water Resources.*

*Soil Resources:* weathering, trace elements, erosion and deposition; flooding phenomena.

*Energy Resources:* fossil and nuclear fuels. Solar, geothermal and hydroenergy—waste disposal.

*Mineral Resources:* their nature and limits; conflicts between mineral exploitation and conservation.

*Geological Hazards:* seismicity, slope stability and mass movements, volcanicity.

Text-books:

Alderman, A. R., *Southern aspect* (S.A. Museum).

Bloom, A. L., *The surface of the earth* (Prentice-Hall).

Skinner, B. J., *Earth resources*, 2nd edition (Prentice-Hall).

### SG02 Geology II.

Pre-requisite subjects: Division I pass or higher in SG01 Geology I. SC01 Chemistry I is not a formal pre-requisite but is strongly recommended and a knowledge equivalent to it will be assumed.

**LECTURES.**—This course consists of three lectures a week throughout the year as follows:—

*Crystallography:* The symmetry of crystals and lattices. X-Ray powder diffraction.

*Mineralogy:* The theory of optical mineralogy. Crystal chemistry of minerals.

*Petrology:* The characteristics and mode of occurrence of igneous, metamorphic and sedimentary rocks; a study of the accepted classifications of rocks. Elementary thermodynamics of natural systems.

*Structural Geology:* The geometry and interpretation of geological structures.

*Stratigraphy and Sedimentation:* Principles, with application to the study of Australian stratigraphy.

*Palaeontology:* The major groups of skeletonised invertebrates.

**LABORATORY WORK.**—Not less than six hours a week.

*Crystallography:* Symmetry of crystals.

*Mineralogy:* Optical mineralogy; study of minerals in the hand specimen.

*Petrology:* Identification and classification of rocks; study of typical rocks both in hand specimen and under the microscope.

*Structural Geology:* Interpretation of geological maps; solving of structural problems by graphical methods. Introduction to photogeological interpretation.

*Palaeontology:* Introduction to morphology and taxonomy; interpretation of fossil assemblages.

**FIELD WORK.**—A minimum of ten days will be spent in the field during the year. Excursions to localities of special interest form part of the course.

**APPARATUS.**—Students need to provide themselves with field equipment of approved pattern.

## Text-books:

- °Dana, J. D., *Manual of mineralogy*, 18th edition, revised by C. S. Hurlbut (Wiley).
- °Verhoogen, J., and others, *The earth* (Holt, Rinehart and Winston).
- °Williams, Howel, and others, *Petrography* (Freeman).
- Dunbar, C. O., and Rodgers, J., *Principles of stratigraphy* (Wiley).
- °Heinrich, E. W., *Microscopic identification of minerals* (McGraw-Hill).
- °Blatt, H., and others, *Origin of sedimentary rocks* (Prentice-Hall).
- °Hobbs, B., and others, *An outline of structural geology* (Wiley).
- Wood, E. A., *Crystals and light*, 2nd edition (Dover).

° These are also Geology III texts.

## SG72 Geophysics II.

Pre-requisite subject: Division I pass or higher in SP01 Physics I (a pass in full or half Mathematic subject in first year is desirable; a student without such a qualification must obtain permission from the Professor of Geophysics or his nominee before enrolling).

The course consists of 3 lectures and 6 hours practical work a week throughout 3 terms of the year.

The course is concerned with the study of the solid state as it relates to the earth. It will be taught by members of the Departments of Chemical Engineering, Economic Geology, Geology, and Physics.

The course is divided into 2 parts.

A. 32 lectures and associated laboratory work. The mechanical and rheological profile of real and idealised materials including an account of crystal structure with special reference to silicate minerals, and the relation of crystal structure to the mechanical properties of solids.

## Text-book:

Wyatt, O. H., and Dew-Hughes, D., *Metals, ceramics and polymers* (C.U.P.).

B. 40 lectures and associated laboratory work. Aspects of global geophysics, exploration geophysics and rock mechanics, including the behaviour of rocks and enclosed fluids at normal and elevated temperatures and pressures.

A more detailed syllabus will be available from the Departments of Economic Geology and Physics during the enrolment period.

## Reference books:

- Garland, G. D., *Introduction to geophysics* (Saunders).
- Jacobs, and others, *Physics and geology*, 2nd edition (McGraw-Hill).
- Jaeger, J. C., and Cook, N. C., *Fundamentals of rock mechanics* (Methuen).
- Parasnis, D. S., *Principles of applied geophysics* (Chapman and Hall).
- Stacey, F. D., and Banerjee, S. K., *The physical principles of rock magnetism* (Elsevier).

## THIRD-YEAR SUBJECTS IN GEOLOGICAL SCIENCES.

Pre-requisites vary according to the units or subjects taken and are given below.

The Department of Geology and Mineralogy and the Department of Economic Geology offer the following units, each of which consists of about 16 lectures together with about 48 hours' practical work:

G301 STRATIGRAPHY A: Second term.

Principles of stratigraphy and historical geology. Field studies and a project in subsurface stratigraphy will form part of the course.

All students should obtain the chart: van Eysinga, F. W. B., *Geological time table*, 3rd edition (Elsevier).

G302 SEDIMENTOLOGY: Second term.

Analysis of modern sedimentary environments. Interpretation of ancient environments and basin analysis. Fieldwork will form part of course.

G303 STRUCTURAL GEOLOGY A: Third term.

The nature and interpretation of geological structures. Field studies will form a part of the course.

Text-books:

- Hobbs, B. E., Means, W. D., and Williams, P. F., *An outline of structural geology* (Wiley).  
Phillips, F. C., *The use of the stereographic projection in structural geology* (Arnold).

G304 IGNEOUS AND METAMORPHIC PETROLOGY A: First term.

The characteristics and origin of the principal associations of igneous and metamorphic rocks. Field studies will form a part of the course.

Text-books:

- Hyndman, D. W., *Petrology of igneous and metamorphic rocks* (McGraw-Hill).  
Heinrich, E. W., *Microscopic identification of minerals* (McGraw-Hill);  
OR  
Deer, W. A., and others, *An introduction to the rock forming minerals* (Longmans).  
Williams, H., and others, *Petrography* (Freeman).

G305 IGNEOUS AND METAMORPHIC PETROLOGY B: Third term.

The application of theoretical and experimental petrology to natural rock systems. Assumes a knowledge of G304. Field studies will form a part of the course.

Text-books:

- Hyndman, D. W., *Petrology of igneous and metamorphic rocks* (McGraw-Hill).  
Heinrich, E. W., *Microscopic identification of minerals* (McGraw-Hill); OR  
Deer, W. A., and others, *An introduction to the rock forming minerals* (Longmans).

G306 MINERAL DEPOSITS A: First term.

Metallic and non-metallic mineral deposits formed at the earth's surface: placer and residual deposits, evaporites, laterites, coal, the evolution of kerogen and accumulation of hydrocarbons. Precipitation products of the ocean floor. Strati-form deposits of iron, manganese, copper and uranium. Conditions of surface transport and precipitation.

Text-books:

- Lamey, C. A., *Metallic and industrial mineral deposits* (McGraw-Hill).  
Smirnov, V. I., *Geology of mineral deposits* (M.I.R. Moscow).

G307 MINERAL DEPOSITS B: Second term.

Mineral deposits requiring hypogene thermal gradients. Kuroko type deposits and their volcanogenic equivalents of the sea floor and orogenic domains (Cu, Pb, Zn, Ag, Au, Hg, Sb). Mississippi Valley type deposits (Pb, Zn, Ba, F). Deposits associated with acid igneous rocks (porphyry coppers, pegmatites, Sn, W, Li, Be), alkaline rocks and carbonatites (Nb, Ta, P) and mafic and ultramafic rocks (Ni, Cr, Pt, Fe, diamonds). Genetic evidence from stable isotopes, trace elements, fluid inclusions and experimental petrology. Field studies will form part of this unit.

Text-books:

- Stanton, R. L., *Ore petrology* (McGraw-Hill).  
Smirnov, V. I., *Geology of mineral deposits* (M.I.R. Moscow).

## G308 STRUCTURAL MINERALOGY: Second term.

X-ray structure determination and the relation of atomic structure to physical and chemical properties of minerals.

## Text-books:

- Evans, R. C., *An introduction to crystal chemistry*, 2nd edition (C.U.P.).  
Bragg, W. L., and Claringbull, G. F., *Crystal structures of minerals* (Bell).  
Sands, D. E., *Introduction to crystallography* (Benjamin).

## G309 GEOCHEMISTRY AND ISOTOPE GEOLOGY: First term.

Study of geochemical differentiation processes. Isotope geology.

## Text-books:

- Krauskopf, K. B., *Introduction to geochemistry* (McGraw-Hill).  
Faul, H., *Ages of rocks, planets and stars* (McGraw-Hill).

## G310 GENERAL PALAEOONTOLOGY AND BIOSTRATIGRAPHY: First term.

A survey of the fossil record and its biohistorical and geohistorical meaning.

## Text-books:

- Beerbower, J. R., *Search for the past*, 2nd edition (Prentice-Hall).  
Raup, D. M., and Stanley, S. M., *Principles of paleontology* (Freeman).

## G311 PALAEOONTOLOGY A: Second term.

Skeletonised protists and lower invertebrates; evolution, taxonomy and distribution.

## G312 PALAEOONTOLOGY B: Third term.

Higher invertebrates and vertebrates; evolution, taxonomy and distribution.

## Text-book:

- Colbert, E. H., *Evolution of the vertebrates*, 2nd edition (Wiley).

## G313 GEOPHYSICS A: Second term.

This course covers the design, conduct and interpretation of geophysical surveys used for petroleum and mineral exploration and in applied geology. Field studies will form part of this Unit.

## Text-books:

- Slotnick, M. M., *Lessons in seismic computing*, vol. 2 (Theory) (S.E.G.).  
Telford, W. M., and others, *Applied geophysics* (C.U.P.).

## G314 GEOPHYSICS B: First term.

The basis for the interpretation of gravity, magnetic and seismic surveys will be covered in this course.

## Text-book:

- Telford, W. M., and others, *Applied geophysics* (C.U.P.).

## G315 MINING GEOLOGY: Third term.

The role of size, shape and location of mineralised bodies in the decision making process of mine development and exploitation. The economics of exploitation. Mining geology.

## Text-books:

- Cummins, A. B., and Given, I. A., *Mining engineering handbook*, vol. I and II (Soc. Mining Eng. and Amer. Inst. Mining Eng. N.Y.).  
Flawn, P. T., *Mineral resources: geology—engineering economics—politics and law* (Wiley).  
Peters, W. C., *Exploration, mining and geology* (Wiley).

**G316 STRUCTURAL GEOLOGY B: Third term.**

An advanced course in the study of natural rock deformation including chemical and physical aspects of the development of microstructures and textures.

Text-book:

Hobbs, B. E., Means, W. D., and Williams, P. F., *An outline of structural geology* (Wiley).

**G317 STRATIGRAPHY B: Third term.**

Analysis of selected stratigraphic problems, assuming a knowledge of G301. Practicals will deal mostly with marine carbonates and chemical sediments. There will be a field project.

**G318 TECTONICS: Third term.**

Principles of tectonic analysis. Study of tectonic evolution of the earth's crust with special reference to Australasia.

The subjects offered are:

**SG03 Geology III.**

(A Group C subject.) Units G301, G302, G303, G304, G310 and G318. Greater flexibility in the choice of units is afforded by SG83 Geology IIIM and other IIIM subjects.

**SG23 Geology and Economic Geology IIIA.**

(A Group C subject.) Units G306, G307, G309, G311, G312 and G317.

**SG33 Geology and Economic Geology IIIB.**

(A Group C subject.) Units G305, G306, G307, G309, G308 or G313, G315 or G316 or G317.

**SG73 Geophysics III.**

(A Group C subject.) Units G313 and G314 together with four units, approved by the Professor of Geophysics or his nominee, from the Departments of Mathematics and Physics.

**SG13 Palaeontology III.**

(A Group E subject.) Units G311 and G312. SG13 Palaeontology III may be taken together with SJ02 Genetics II or SB02 Botany II or SZ02 Zoology II, in lieu of a Group C subject.

**SG83 Geology IIIM.**

(A Group C subject.) With approval of the Heads/Chairmen of Departments concerned, a combination of four units chosen from the above complete list (two terms' work) together with two units or one double unit (one term's work) in another department. Pre-requisites will depend on the units approved.



**Subject Combinations and Pre-requisites.**

Students majoring in the Geological Sciences will normally take SG03 Geology III and *either* SG23 Geology and Economic Geology IIIA *or* SG33 Geology and Economic Geology IIIB *or* SG73 Geophysics III *or* SG13 Palaeontology III, but any one of the above subjects can be taken in combination with other subjects offered by the Departments of Geology and Mineralogy and Economic Geology *or* with subjects offered by other departments providing the following pre-requisites are satisfied:

Pre-requisite subjects for SG03 Geology III and for SG33 Geology and Economic Geology IIIB: SG02 Geology II at Division I pass or higher standard. There are no formal pre-requisites but QM01 Mathematics I, SC01 Chemistry I and SP01 Physics I are highly desirable.

Pre-requisite subjects for SG73 Geophysics III: SP01 Physics I and QN12 Applied Mathematics IIB at Division I level or higher standard. Other second-year subjects from the Faculty of Mathematical Sciences may be accepted. A working knowledge of computing techniques is expected. The course assumes a knowledge of some of the topics covered in SG01 Geology I and students without a pass at Division I level or higher in this subject must obtain the permission of the Professor of Geophysics before enrolling. SG72 Geophysics II is not a pre-requisite but provides useful additional background to the course.

Pre-requisite subjects for SG23 Geology and Economic Geology IIIA and for SG13 Palaeontology III: SG02 Geology II and SZ71 Biology I or SZ01 Zoology I at Division I or higher standard and unit G310 above (General palaeontology and biostratigraphy). SC01 Chemistry I is also highly desirable.

The pre-requisites for individual units will usually be the same as those for the subjects in which they occur but in special circumstances exemption from certain pre-requisites may be granted on application to the Chairman of the Department of Geology or his nominee.

**HONOURS DEGREE.****SG99 Geology for the Honours degree of B.Sc.**

Pre-requisite subjects: Passes satisfactory to the Professors concerned in any third-year subject, other than Geophysics, offered by the Departments of Economic Geology and Geology and Mineralogy together with a second subject in Geological Sciences or a subject offered by the Departments of Pure Mathematics, Applied Mathematics, Statistics, Physics, Physical and Inorganic Chemistry or Organic Chemistry.

In general it is expected that students proceeding to Honours in Geology will have passed SG03 Geology III at a level acceptable to the Professors concerned.

Candidates will be required to attend several courses from a number which will be given in specialised fields of geology and economic geology including geophysics, geochemistry and palaeontology. In addition, candidates will undertake supervised individual projects involving one or more of these fields. Special courses of reading and laboratory studies will be laid down and each candidate will be required to give all the time not required for lectures or in the field to work in the laboratory. Candidates may be required to satisfy the examiners that they have a reading knowledge of French, German or Russian. They will also be required to contribute to a series of seminars.

Candidates must apply, before the end of the year preceding that in which they wish to enrol, to the Professor concerned for approval of their proposed courses of study.

**SG89 Geophysics for the Honours degree of B.Sc.**

Pre-requisite subjects: Passes satisfactory to the Professor of Geophysics in SG73 Geophysics III and one of the other third-year subjects offered by the Departments of Economic Geology and Geology and Mineralogy, or a third-year subject offered by the Departments of Applied Mathematics or Physics. Students with a different background of third-year courses may be accepted at the discretion of the Professor of Geophysics.

Candidates will be required to attend several courses from a number which will be given in specialised fields of geology, economic geology, mathematics and physics. Honours students may, after consultation with the Head/Chairman of the appropriate department, also be required to take some third-year units in the Departments of Geology, Applied Mathematics or Physics, which they did not take in third year. In addition, candidates will undertake supervised individual projects: possible topics should be discussed with the Professor of Geophysics before the end of the preceding year. Special courses of reading and laboratory studies will be laid down and each candidate will be required to give all the time not required for lectures or in the field to work in the laboratory. Candidates may be required to satisfy the examiners that they have a reading knowledge of French, German or Russian. They will also be required to contribute to a series of seminars.

Candidates must apply, before the end of the year preceding that in which they wish to enrol, to the Professor of Geophysics for approval of their proposed courses of study.

**ADDITIONAL SUBJECT.**

**SG3H Geology IH(E) for the degree of B.E. (Civil).**

## MICROBIOLOGY AND IMMUNOLOGY.

## THIRD-YEAR SUBJECT IN MICROBIOLOGY AND IMMUNOLOGY.

## SK03 Microbiology and Immunology III.

A group C subject.

Pre-requisites: A Division I pass or higher standard in any two subjects from Group B. Students intending to take Microbiology are advised to take SY02 Biochemistry II. Students who have not taken SY02 Biochemistry II as a Group B subject should consult a member of the staff of the Department prior to enrolment.

The Department offers the following course, consisting of approximately 81 lectures, 81 hours of tutorials and seminars and 210 hours of practical work throughout the year.

GENERAL MICROBIOLOGY: 37 lectures.

The course illustrates that while bacteria share with other forms of life many common features of structure, development and function, they also differ in some fundamental ways. An introduction to the bacteria will be given, followed by a more detailed consideration of the distinctive characteristics of their growth and ecology; sexual and asexual multiplication and genetic recombination. Bacterial viruses will be discussed in some detail.

IMMUNOLOGY: 44 lectures.

The aim of the course is to acquaint the student with the basic principles and concepts of immunological mechanisms whereby mature vertebrates resist invasion by bacteria, viruses and foreign tissue cells.

The structure and diversity of antibodies and antigens will be considered, together with a discussion of the methods available for the detection of antibodies in relation to the specificity of antigen-antibody reactions. This will be followed by an examination of the kinetics of the immune response, with particular reference to the cells involved in antibody formation, immune tolerance, hypersensitivity reactions and immunity to transplanted foreign tissues. Finally, the genetic control of susceptibility to infection will be discussed on the basis of present knowledge of the immunological mechanisms involved in the removal of parasites from mammalian hosts.

The general importance of the mechanisms of natural and acquired immunity to fundamental biology will be considered. The roles that phagocytic cells and humoral factors, including antibody and complement, play in the recognition and removal of foreign and effete materials in invertebrates and vertebrates will be discussed. Emphasis will be placed on the evolutionary sequence and increasing complexity of the systems involved in recognition of unwanted materials. Consideration will be given to the role of the thymus in the development of immunological competence in foetal and newborn animals. Finally, various theories of antibody production will be considered in the light of present knowledge of the detailed structure of antibody molecules, including allotype specificities, the relationship of antibody structure to function and the genetic control of protein synthesis.

## Text-books:

- Davis, B. D., and others, *Microbiology*, 2nd edition (Harper and Row).  
Hobart, M. J., and McConnell, I., *The immune system* (Blackwell).  
Stanier, R. Y., and others, *General microbiology*, 4th edition (Macmillan).

## Reference books:

- Hayes, W., *The genetics of bacteria and their viruses*, 2nd edition (Blackwell).  
Humphrey, J. H., and White, R. G., *Immunology for students of medicine*, 3rd edition (Blackwell).  
Kabat, E. A., *Structural concepts in immunology and immunochemistry* (Holt, Rinehart and Winston).  
Herbert, W. J., and Wilkinson, P. C., *A dictionary of immunology*, 2nd edition (Blackwell).  
Fudenberg, H. H., and others, *Basic immunogenetics*, 2nd edition (O.U.P.).

HONOURS DEGREE.

**SK99 Microbiology or Immunology for the Honours degree of B.Sc.**

Pre-requisite subject: Students intending to take the Honours course in Microbiology or Immunology are recommended to take the course SK03 Microbiology and Immunology III. Students taking other suitable science disciplines will, however, be considered.

An intending candidate should consult a member of the staff of the Microbiology and Immunology department some time during the year preceding the Honours year.

Candidates are required to give their full attendance for an entire academic year to a special course of study and laboratory work, and to participate in experimental work of a research character under the direction and supervision of staff members of the Department. A course in reading, which should be commenced during the long vacation prior to the Honours year, will be provided by the Department of Microbiology and Immunology.

ADDITIONAL SUBJECTS.

**MP03 Biology of Disease.**

(For M.B., B.S. Third-Year Examination.)

**Microbiology.**

(For M.B., B.S. Fourth-Year Examination—MX74.)

**SK79 Microbiology for the Honours degree of B.Sc.Dent.**

**SK89 Microbiology for the Honours degree of B.Med.Sc.**

## PHYSICS.

## INTRODUCTORY NOTES.

The Department of Physics offers the following courses:

First Year: SP01 Physics I, SP8H Astronomy IH (a half-subject), SP7H Physics IH(M) (for the degrees of B.D.S. and M.B., B.S.), and SP9H Physics, Man and Society IH (a half-subject for the degree of B.A., B.Ec. and B.Sc. in Maths. Science).

Second Year: SP02 Physics II.

Third Year: SP03 Physics III and SP83 Physics IIIM.

Fourth Year: SP99 Honours Physics.

An adequate mathematical preparation is needed for the study of physics. Students intending to continue with physics at second- and third-year levels are advised to take QM01 Mathematics I (or QMII Mathematics IM) with SP01 Physics I in their first-year, and either QN12 Applied Mathematics IIB or QN22 Applied Mathematics IIA (or another second-year mathematics subject offered by the Departments of Pure and Applied Mathematics) with SP02 Physics II in their second-year. Attention is drawn to the pre-requisite subjects for admission to some courses as prescribed in the syllabuses below.

In the third year 15 unit courses are offered by the Department of Physics covering a wide range of topics. Students taking SP03 Physics III choose six of these units. Four further Physics units will be taken by a student who in addition enrolls in SP83 Physics IIIM. In general students may offer from ten to two Physics units depending on whether they are enrolled in SP03 Physics III and SP83 Physics IIIM, SP03 Physics III plus two additional units as part of an "M" type subject in another department, SP03 Physics III alone, SP83 Physics IIIM, or just two physics units as part of an "M" type subject.

In the Honours year, a further range of unit courses is offered, some of which are related to the research interests of the Department. Honours students will also take some of the third-year units which they did not take in third year.

All physics students should refer to the Laboratory rules, which are printed in this volume of the Calendar. For all laboratory classes students must provide stiff-covered practical notebooks.

## SP8H Astronomy IH.

There is no formal pre-requisite for SP8H Astronomy IH. The course comprises three lectures and one tutorial a fortnight throughout the year, plus four three-hour laboratory or observational sessions a term. Evening observations form a major part of the practical work in the first term.

The course will include the following topics:

Historical introduction. Examples of ancient and modern astronomical instruments.

The Solar System, planet Earth, Earth-Moon System, distance scales within the Solar System, the Sun, planets, planetary motion, space probes, eclipses, meteors, asteroids and comets.

Stars, stellar distances, types of stars, variable stars, star clusters, the Milky Way, stellar evolution.

Galaxies, galactic distance scale, radioastronomy, space astronomy, cosmology.

Text-books:

Abell, G. O., *Exploration of the universe*, 3rd edition (Holt, Rinehart and Winston); OR

Jastrow, R., and Thompson, M. H., *Astronomy: fundamentals and frontiers*, 3rd edition (Wiley); OR

Wyatt, S. P., *Principles of astronomy*, 2nd edition (Allyn and Bacon).

### SP01 Physics I.

There are no formal pre-requisites for SP01 Physics I, but a knowledge of Matriculation Physics and Matriculation Mathematics I and II (or Matriculation Mathematics IS) will be assumed.

The course comprises three lectures, one tutorial and three hours of practical work a week.

The course is given in three sections:

#### 1. MECHANICS AND THE STRUCTURE OF MATTER: First term.

Classical mechanics, gravitation, atomic structure, thermodynamics and the bulk properties of matter.

#### 2. OSCILLATIONS AND ELECTROMAGNETISM: Second term.

Forced and natural oscillations, electrostatics, electromagnetic effects, alternating currents, particles and fields.

#### 3. WAVES, RADIATION AND RELATIVITY: Third term.

Elastic waves, electromagnetic waves, dispersion, interference, diffraction, the velocity of light, special relativity and introductory quantum physics.

##### Text-books:

- Resnick, R., and Halliday, D., *Physics*, combined edition (Wiley-Toppan).  
Resnick, R., *Basic concepts in relativity and early quantum theory* (Wiley).

##### Reference books:

- Weidner, R. T., and Sells, R. L., *Elementary physics: classical and modern* (Allyn and Bacon).  
Gamow, G., *Matter, earth and sky*, 2nd edition (Prentice-Hall).  
Feynman, R. P., and others, *The Feynman lectures on physics*, vol. 1 (Addison-Wesley).  
Shortley, G. H., and Williams, D., *Elements of physics*, 5th edition (Prentice-Hall).  
Taylor, E. F., *Introductory mechanics* (Wiley).  
French, A. P., *Vibrations and waves* (Norton).  
Crawford, F. S., *Berkeley physics course*, vol. 3, *Waves* (McGraw-Hill).  
Tabor, D., *Gases, liquids and solids* (Penguin).

### SP02 Physics II.

Pre-requisite subjects: SP01 Physics I at Division I or higher standard and QM01 Mathematics I or QM11 Mathematics IM.

The course comprises three lectures, one tutorial and six hours practical work a week.

The lecture topics are:

#### A. ELECTROMAGNETISM: First term.

Circuit theory: analysis of D.C. and A.C. circuits with applications. The electromagnetic field.

#### B. OPTICS: First term.

Lens aberrations, interference, polarisation, refractive index, crystal optics.

- C. PHYSICS OF SOLIDS, LIQUIDS AND GASES: Second term.  
Kinetic theory, properties of matter, hydrodynamics, thermodynamics.
- D. SPECIAL RELATIVITY: Second term.  
Nature of space-time, four-vectors; energy and momentum conservation.
- E. QUANTUM MECHANICS: Third term.  
The postulates of quantum mechanics. States and measurement.  
Schrodinger equation and applications. The one-electron atom.
- F. ATOMIC, NUCLEAR AND SOLID STATE PHYSICS: Third term.  
Atomic and nuclear physics: properties and interaction of radiation, atoms and nuclei. Electrons in solids: free electron and band model of solids.

## Text-books:

- Duffin, W. J., *Electricity and magnetism* (McGraw-Hill).  
Eisberg, R., and Resnick, R., *Quantum physics* (Wiley).  
Tabor, D., *Gases, liquids and solids* (Penguin).  
Brophy, J. J., *Basic electronics for scientists* (McGraw-Hill).  
Taylor, E. F., and Wheeler, J. A., *Spacetime physics* (Freeman).  
Hecht, E., and Zajac, A., *Optics* (Addison-Wesley).

## Reference books:

- MacFadyen, K. A., *Physics laboratory handbook for students* (London U.P.).  
Mermin, N. D., *Space and time in special relativity* (McGraw-Hill).  
Feynman, R. P., and others, *The Feynman lectures on physics* (Addison-Wesley).  
French, A. P., *Special relativity* (Norton).  
Kittel, C., *Introduction to solid state physics* (Wiley).  
Pippard, A. B., *Elements of classical thermodynamics* (Cambridge U.P.).  
Gasiorowicz, S., *Quantum physics* (Wiley).  
Jenkins, F. A., and White, H. E., *Fundamentals of optics*, 4th edition (McGraw-Hill).  
Smith, F. G., and Thomson, J. H., *Optics* (Wiley).

## THIRD-YEAR SUBJECTS IN PHYSICS.

Pre-requisite subjects: SP02 Physics II at Division I or higher standard and either QN12 Applied Mathematics IIB or QN22 Applied Mathematics IIA or another second-year mathematics subject offered by the Departments of Pure and Applied Mathematics.

The Department offers the following units, each of which consists of about 16 lectures and 36 hours of laboratory work.

A pamphlet giving information on timetables of unit courses will be available from the Department during the enrolment period.

## P301 ELECTROMAGNETISM: Second term.

Electrostatics, scalar potential, special relativity and the electric and magnetic fields of moving charges, steady currents and fields, vector potential, electromagnetic induction, Maxwell's equations in free space, propagation of electromagnetic waves, the Poynting vector, fields in material media.

## Text and Reference books:

- Lorrain, P., and Corson, D., *Electromagnetic fields and waves*, 2nd edition (Freeman).  
Cook, D. M., *The theory of the electromagnetic field* (Prentice-Hall).  
Feynman, R. P., *Lectures on physics*, vol. II (Addison-Wesley).  
Purcell, E. M., *Electricity and magnetism*, Berkeley physics course, vol. 2 (McGraw-Hill).  
Robinson, F. N. H., *Electromagnetism* (O.U.P.).  
Robinson, F. N. H., *Macroscopic electromagnetism* (Pergamon).  
French, A. P., *Special relativity* (Norton).

P302 ELECTROMAGNETIC WAVES: Third term.

Propagation of electromagnetic waves on transmission lines and in wave guides; resonant cavities, radiation density. Propagation, scattering and absorption of electromagnetic waves in weakly ionised gases; ionospheric propagation, effect of magnetic field. Reflection and transmission of electromagnetic waves at a dielectric interface; Fresnel equations, evanescent waves, surface waves. Radiation by accelerated charges.

Text-book:

Ramo, S., and others, *Fields and waves in communication electronics* (Wiley).

P303 QUANTUM MECHANICS: First term.

The need for wave mechanics. The relationship between classical and quantum mechanics. The postulates of quantum mechanics. Operators and the wave equation. Boundary conditions and one-dimensional barrier problems. Alpha particle decay. The simple harmonic oscillator. Ehrenfest's Theorem. Angular momentum. The hydrogen atom and the Zeeman Effect.

Reference books:

Matthews, P. T., *Introduction to quantum mechanics* (McGraw-Hill).

Gasiorowicz, S., *Quantum physics* (Wiley).

Eisberg, R. M., *Fundamentals of modern physics* (Wiley).

P304 OPTICS: Third term.

Kirchhoff-Helmholtz diffraction integral, Fresnel and Fraunhofer diffraction, gratings, Fourier methods, Abbe's theory, coherence, spatial filtering, holography and other related topics in modern optics.

Text-book:

Hecht, E., and Zajac, A., *Optics* (Addison-Wesley).

Reference books:

Fowles, G. R., *Introduction to modern optics* (Holt, Rinehart and Winston).

Smith, F. G., and Thomson, J. H., *Optics* (Wiley).

P305 STATISTICAL MECHANICS: First term.

The fundamentals of statistical mechanics, statistical thermodynamics and applications of macroscopic thermodynamics, the microcanonical, canonical and grand canonical ensembles, the partition function and some simple applications, introduction to the quantum statistics of ideal gases. The formulation and solving of problems is an essential part of the course.

Text-book:

Reif, F., *Fundamentals of statistical and thermal physics* (McGraw-Hill).

P306 ATOMIC PHYSICS: First term.

This course aims to provide an introduction to the fundamentals of atomic physics including a discussion of some processes which are basic to Astrophysics.

Text-book:

Eisberg, R. M., *Fundamentals of modern physics* (Wiley).

Reference books:

Leighton, R. B., *Principles of modern physics* (McGraw-Hill).

Herzberg, G., *Atomic spectra and atomic structure* (Dover).

Kuhn, H. G., *Atomic spectra* (Longmans).

Series, G. W., *Spectrum of atomic hydrogen* (O.U.P.).



## P307 NUCLEAR PHYSICS: Second term.

The course aims to give a fairly broad coverage of the experimental and basic theoretical aspects of nuclear physics. It consists of three main sections: (i) basic ideas about nuclei and nuclear reactions, (ii) interaction of charged particles and radiation with matter, and (iii) nuclear forces and models. A knowledge of the Quantum Mechanics course would be an advantage.

## Reference book:

Enge, H. A., *Introduction to nuclear physics* (Addison-Wesley, student edition).

## P308 SOLID STATE PHYSICS: Second term.

Crystal structure, reciprocal lattice, Crystal binding, Lattice vibrations, Dielectric properties, Free electron gas, Electrons in periodic lattice, Energy bands, Semi-conductors.

## Text-book:

Kittel, C., *Introduction to solid state physics*, 4th edition (Wiley).

(It is advisable for students taking this unit to take unit P303.)

## P309 RELATIVITY: Second term.

This course is common with the Mathematical Physics unit F304.

## P310 ASTROPHYSICS: Third term.

This course aims to provide an introduction to the basic ideas of astrophysics and stellar astronomy, including discussions of stellar evolution, stellar composition and radiation, the interstellar medium and galactic structure.

## Text-book:

Swihart, T. L., *Astrophysics and stellar astronomy* (Wiley).

## Reference books:

Bok, B., and Bok, P., *The milky way*.

Harwit, M., *Astrophysical concepts* (Wiley).

Hoyle, F., *Astronomy and cosmology, a modern course* (Freeman).

## P311 ATMOSPHERIC PHYSICS: Third term.

An introduction to physical and dynamical meteorology. Cloud physics; solar and terrestrial radiation and heat balance; the wind—equations of motion, etc., approximations and applications; turbulence, diffusion of pollutants; general circulation; climatic change.

## Reference books:

McIntosh, D. H., and Thom, A. S., *Essentials of meteorology* (Wykeham).

Neiburger, M., and others, *Understanding our atmospheric environment* (Freeman).

Goody, R. M., and Walker, J. C. G., *Atmospheres* (Prentice-Hall).

## Recommended reading:

Hess, S. L., *Introduction to theoretical meteorology* (Holt).

Haltiner, G. J., and Martin, F. L., *Dynamical and physical meteorology* (McGraw-Hill).

Holton, J. R., *An introduction to dynamic meteorology* (Academic Press).

## P312 PLANETARY INTERIORS: First term.

Elastic wave propagation; the outer layers of the earth; crustal reflection and refraction techniques (explosion seismology); evidence of large scale crustal movements. Detection of elastic waves and location of earthquakes. Travel time curves and structure of the deep interior of the earth; density and composition. The moon and the other planets.

## Reference books:

Howell, B. F., *Introduction to geophysics* (McGraw-Hill).

Bullen, K. E., *An introduction to the theory of seismology* (C.U.P.).

Stacey, F. D., *Physics of the earth* (Wiley).

Garland, G. D., *Introduction to geophysics* (Saunders).

P313 HISTORY AND PHILOSOPHY OF PHYSICS: Third term.

The topics to be discussed will be selected from: statistical physics and the history of the theory of heat; history and philosophy of special relativity; philosophy and interpretation of quantum mechanics; history of mechanics; history of theories of light.

Reference books:

A reading list will be provided.

P314 ENVIRONMENTAL PHYSICS: First term.

The earth as a planet, the sun, the earth's atmosphere and oceans, evolution of the atmosphere, biological processes and atmospheric composition, global effects of industrial activity, remote monitoring, energy resources.

Reference books:

Kuiper, G. P. (ed.), *The earth as a planet* (Chicago U.P.).

Glasstone, S., *Sourcebook on the space sciences* (Van Nostrand).

Singer, S. F. (ed.), *Global effects of environmental pollution* (Reidel).

*Man's impact on the global environment: Assessment and recommendations for action*, report of the Study of Critical Environmental Problems (M.I.T. Pr.).

*The Biosphere* (Scientific American, September 1970).

P315 BIOPHYSICS: Second term.

Biological structure and function. Microscopy and X-ray diffraction. Atoms, molecules and bonding. Crystals, liquids and monolayers. Proteins and nucleic acids. Large molecules in solution. Topics chosen from: membranes, transport phenomena, muscle, ionising radiation. It is emphasised that familiarity with first-year mathematics will be assumed.

Reference books:

Snell, F. M., and others, *Biophysical principles of structure and function* (Addison-Wesley).

Setlow, R. B., and Pollard, E. C., *Molecular biophysics* (Addison-Wesley).

Clowes, R. C., *The structure of life* (Pelican).

LABORATORY WORK IN THIRD YEAR:

The work includes formal courses in Laboratory Techniques (first term only), Electronics and Vacuum Physics. In addition research type projects are carried out under a supervisor who is usually attached to one of the research groups. Students undertake laboratory work in proportion to the number of lecture units to be counted.

The subjects offered are:

SP03 Physics III.

A group C subject. Six units, including P301 and P303, but not more than two from units P310-P315. The Mathematical Physics unit F301 Mathematical Methods may be taken in place of one of the units P302, P304-P315 above. A minimum of nine hours' laboratory work each week is required.

SP83 Physics IIIM.

A group C subject. Four units from the list above with two units from one other Department selected with the approval of the Heads/Chairmen of the Departments concerned. With the approval of both Heads/Chairmen of Departments, a unit in Mathematical Physics may be taken in place of one of the units listed above. Two terms of laboratory work with a minimum of nine hours a week are required.

QF03 Theoretical Physics III.

This is a third-year Science subject, offered by the Mathematical Physics Department and may be taken with either SP03 Physics III or SP83 Physics IIIM. For syllabus see under Faculty of Mathematical Sciences.

## HONOURS DEGREE.

## SP99 Physics for the Honours degree of B.Sc.

The Honours course will normally include courses of lectures on quantum mechanics, electromagnetism, statistical mechanics, nuclear physics, solid state physics, Fourier methods, atmospheric physics, astrophysics, and atomic and molecular physics, but not all topics will necessarily be offered every year. Honours students will be required to take at least four Honours courses from a list of options, and they will also be required to take some third-year units which they did not take in third year. Full details may be obtained on application to the Chairman of the Department. Students also carry out a research project, on which they submit a report.

Normal pre-requisites for Honours Physics are a pass in SP03 Physics III at a standard satisfactory to the Chairman of the Department of Physics, together with a pass in SP83 Physics IIIM, or QF03 Theoretical Physics III, or QN03 Applied Mathematics III, or *any* other group C subject.

## ADDITIONAL SUBJECTS.

SP7H Physics IH(M) for the degrees of B.D.S., M.B., B.S., and B.Ag.Sc.

SP9H Physics, Man and Society IH for the degree of B.A.

## PHYSIOLOGY.

Physiology is a subject that can be taken in combination with a variety of physical, biological and mathematical subjects.

### SS02 Physiology II.

Pre-requisite subjects: A pass at Division I or higher standard in SZ71 Biology I (or SZ01 Zoology I) and a pass in SC01 Chemistry I. The course consists of three lectures and six hours practical work a week throughout the three terms of the year.

#### GENERAL ANATOMY AND HISTOLOGY:

The course comprises approximately 35 lectures and 81 hours practical work in general anatomy, histology of tissues and organs, and cytology, with emphasis on the relationship of structure to function.

Slides and microscopes will be provided.

#### PHYSIOLOGY:

The course comprises approximately 46 lectures and 81 hours practical work dealing with the function of the principal mammalian tissues, organs and systems, together with hormonal and neural integration of the organism.

#### Text-books:

##### For Histology:

Junqueira, L. C., and others, *Basic histology*, 2nd edition (Lange).

Atlas (optional): Reith, E. J., and Ross, M. H., *Atlas of descriptive histology*, 3rd edition (Harper).

##### For Physiology:

Vander, A. J., and others, *Human physiology*, 2nd edition (McGraw-Hill).

### THIRD-YEAR SUBJECTS IN PHYSIOLOGY AND PHARMACOLOGY.

Pre-requisite subject: SS02 Physiology II at Division I pass or higher standard. Students taking units in third year must nominate their units at the time of enrolment and have them approved by the Chairman of the Department of Human Physiology and Pharmacology.

The Department offers six double units, each of which comprises three lectures a week and nine hours' practical work a week for one term:

#### S301 PRINCIPLES OF PHARMACOLOGY AND TOXICOLOGY: Term 1.

Principles of drug action. Factors which modify the intensity and duration of drug action. Drug toxicity and development. Environmental toxicology.

#### S302 CELLULAR NEUROPHYSIOLOGY: Term 1.

Membrane electrical properties and membrane potentials. Ionic fluxes, action potentials, synaptic mechanisms.

#### S303 SYSTEMATIC PHARMACOLOGY: Term 2.

A survey of the actions of drugs on the autonomic nervous system, followed by actions of drugs on the cardiovascular, renal and respiratory systems.

**S304 SYSTEMATIC NEUROPHYSIOLOGY: Term 2.**

Somaesthetics, special senses, and the motor system. Sleep, consciousness, the limbic system, memory.

**S305 CARDIOVASCULAR AND RENAL PHYSIOLOGY: Term 3.**

Physiology and biophysics of the circulation. Kidney and body fluids.

**S306 NEUROPHARMACOLOGY: Term 3.**

A double unit in neuropharmacology. A survey of the actions of drugs on the central nervous system, with particular reference to behaviour, drug dependence and drug abuse.

The subjects offered are:

**SS03 Physiology III.**

A group C subject. Any three of the above double units, other than the particular combinations listed under SS33 Physiology IIIA (Physiology) and SS43 Physiology IIIB (Pharmacology).

**SS33 Physiology IIIA (Physiology).**

A group C subject. Double units S302, S304, S305.

**SS43 Physiology IIIB (Pharmacology).**

A group C subject. Double Units S301, S303 and S306.

**SS83 Physiology IIIM.**

A group C subject. With the approval of Heads/Chairmen of Departments concerned, a combination of two double units from the above list, together with two units or one double unit (one term's work) in another department.

Text-books:

*Double units:* S301, S303, S306.

Goodman, L. S., and Gilman, A., *The pharmacological basis of therapeutics*, 5th edition (Macmillan).

*Double unit:* S302.

Junge, D., *Nerve and muscle excitation* (Sinauer).

*Double unit:* S304.

Noback, C. R., and Demarest, R. J., *The human nervous system*, 2nd edition (McGraw-Hill).

Eyzaguirre, C., *Physiology of the nervous system*, 2nd edition (Year Book Medical Publishers).

*Double unit:* S305.

Guyton, A. C., *Textbook of medical physiology*, 5th edition (Saunders).

PHARMACOLOGY OR PHYSIOLOGY FOR THE HONOURS DEGREE  
OF B.Sc.

## SS89 Pharmacology for the Honours degree of B.Sc.

Pre-requisite subjects: SS03 Physiology III, SS43 Physiology IIIB, or SS83 Physiology IIIM.

The course extends over three terms.

Candidates are required to give their full attendance for an entire academic year to a special course of study and laboratory work in the pharmacology laboratory, and to participate in experimental work of a research character under the direction and supervision of the Chairman of the Department. A course in reading, which should be commenced during the long vacation prior to the Honours year, will be published in the Department of Human Physiology and Pharmacology.

## SS99 Physiology for the Honours degree of B.Sc.

Pre-requisite subjects: SS03 Physiology III, SS33 Physiology IIIA or SS83 Physiology IIIM.

The course extends over three terms.

Candidates are required to give their full attendance for an entire academic year to a special course of study and laboratory work in the physiology laboratory, and to participate in experimental work of a research character under the direction and supervision of the Chairman of the Department of Human Physiology and Pharmacology. A course in reading, which should be commenced during the long vacation prior to the Honours year, will be published in the Department of Human Physiology and Pharmacology.

## ADDITIONAL SUBJECTS.

SS12 Human Physiology for the degrees of M.B., B.S. (Second Year).

SS13 Human Physiology and Pharmacology for the degrees of M.B., B.S.  
(Third Year).

Applied Physiology and Pharmacology.

(For M.B., B.S. Fourth-Year Examination—MX74.)

SS69 Physiology for the Honours degree of B.Med.Sc.

SS79 Pharmacology for the Honours degree of B.Med.Sc.

SS22 Human Physiology for the degree of B.D.S.

SS23 Human Physiology and Pharmacology for the degree of B.D.S.  
(Third Year).

SS39 Physiology for the Honours degree of B.Sc.Dent.

SS49 Pharmacology for the Honours degree of B.Sc.Dent.

**PSYCHOLOGY.**

(FOR THE DEGREE OF BACHELOR OF SCIENCE)

In 1978, the following Psychology courses will be offered in the Faculty of Science:

AY01 Psychology I; AY02 Psychology II; AY23 Psychology III.

The pre-requisite for AY02 Psychology II will be a Division I or higher level pass in AY01 Psychology I, and the pre-requisite for AY23 Psychology III will be AY02 Psychology II.

Third year Psychology is organised on an optional unit system and consists of three groups. A group is normally made up by pairing two related units. The unit Y774 Psychological Statistics is compulsory but it may be paired with any other unit to form one of the three necessary groups. Units normally consist of 12 lectures (one a week), 6 tutorials (one a fortnight), and associated laboratory and practical work.

Units are combined to form the subject AY23 Psychology III or the half-subjects AY1H Psychology IIIH(A) and AY2H Psychology IIIH(B). AY1H Psychology IIIH(A) and AY2H Psychology IIIH(B) are not available to Science students. However the Faculty of Science may, in some cases, approve Science students taking AY23 Psychology III over 2 years. A pair of units from a single group may also form part of any other scheduled third-year subject which is offered by another department (such as a Science IIIM subject) provided that this is jointly approved by the Chairmen of the two departments.

Full details of syllabuses for these subjects may be found under the degree of B.A. in the Faculty of Arts.

**HONOURS DEGREE OF B.Sc.****AY89 Psychology for the Honours degree of B.Sc.**

Pre-requisite subjects: AY01 Psychology I, AY02 Psychology II and AY23 Psychology III, including a pass in the unit Y774 Psychological Statistics.

Candidates are required to give their full attendance for an entire academic year to a special course of study in the psychological laboratory. The course will include lectures and discussions on advanced topics. It will also involve the writing of a substantial essay and the presentation of a dissertation embodying the results of, and a survey of the literature relevant to, a research investigation carried out under the supervision of a member of the staff of the Department.

## SOCIAL BIOLOGY.

(DOUBLE-UNIT OR GROUP E SUBJECT  
FOR THE DEGREE OF BACHELOR OF SCIENCE)

### UNIT J333 SOCIAL BIOLOGY and SX33 Social Biology.

The formal pre-requisites are SJ7H Genetics and Human Variation IH or SJ02 Genetics II and a knowledge of statistics which may be obtained through QT7H Statistics IH or AY02 Psychology II or SJ02 Genetics II or an acceptable mathematical subject. But as the course is intended to investigate various genetical, physiological and medical models of human attributes and behaviour, and in many cases compare them with socially derived models, a background in areas of both the social and biological sciences will clearly be valuable. Students who have taken second-year subjects in these areas will find the course particularly useful.

J333 Social Biology is equivalent to one-third of a third-year subject and can be presented as a double-unit as part of SS83 Physiology IIIM, SZ83 Zoology IIIM or, with permission of the appropriate chairman, as part of any other IIIM subject. It may be presented as part of only one subject. The course is identical to the half-subject SJ3H Social Biology IIIM available to Arts students but Science students will complete appropriately less tutorial and assignment work.

SX33 Social Biology III, identical to the double-unit J333 may be presented as a Group E subject by science students, in which case it is to be taken in conjunction with an approved second-year Arts subject. SX33 Social Biology III may not be taken if J333 Social Biology is being presented as a component of a third-year Science subject.

There will be one lecture and one tutorial each week throughout the year for both J333 and SX33. The course is identical to, and is taken with the half-subject SJ3H Social Biology IIIM available to Arts students. There is an appropriately lower amount of tutorial and assignment work for Science students.

The course will investigate and compare the past, present and possible future biological and social evolution of man, paying particular attention to the genetic and social variability present in the human species which is the basic raw material of this evolution. The genesis of certain social problems will be discussed and the relevance or otherwise of biology to their understanding and possible alleviation will be examined. The particular social problems to be examined include race and race differences, social stratification, the heritability of intelligence and scholastic ability, social and antisocial behaviours, aspects of eugenics and genetic engineering, and the biosocial consequences of man's changing environment.

#### Preliminary reading:

- Pringle, J. W. S. (eds.), *Biology and the human sciences* (O.U.P.).
- Fuller, W. (ed.), *The social impact of modern biology* (Routledge and Kegan Paul).
- Berger, P. L., *Invitation to sociology* (Pelican).

#### Text-books:

- Dobzhansky, Th., *Mankind evolving* (Yale U.P.).
- Bodmer, W. F., and Cavalli-Sforza, L. L., *Genetics, evolution and man* (Freeman).
- Reynolds, V., *The biology of human action* (Freeman).

#### Reference books:

##### (a) Mainly biological:

- Dyer, K. F., *The biology of racial integration* (Scientechica).
- Hinde, R. A., *Biological bases of human social behaviour* (McGrav-Hill).
- Lerner, I. M., and Libby, W. J., *Heredity, evolution and society*, 2nd edition (Freeman).
- Wilson, E. O., *Sociobiology* (Harvard U.P.).
- Young, J. Z., *An introduction to the study of man* (O.U.P.).



## (b) Mainly social:

Aronson, E., *The social animal*, 2nd edition (Freeman).

Swartz, M. J., and Jordan, D. K., *Anthropology: perspective on humanity* (Wiley).

Van Den Berghe, *Man in society: a biosocial view* (Elsevier).

---

**HONOURS DEGREE.**

Subject to the adequacy of existing resources, there will be opportunity for students to undertake studies leading to an Honours degree in which Social Biology will form a component part. Students will normally be in one of the departments which allow Social Biology as a component of one of their subjects and they must satisfy the pre-requisites for the Honours degree of that department. Intending students should consult the Senior Lecturer in Social Biology and the Chairman of the Department concerned.

## ZOOLOGY.

### Examinations.

Assessments in Zoology will take various forms. Both lecture and practical work will be assessed.

### Practical Zoology.

Practical work (laboratory and/or fieldwork) forms an integral part of most courses offered in Zoology. A record of all laboratory work must be kept.

### SZ02 Zoology II.

**Pre-requisite subjects:** A pass at Division I standard or higher in SZ71 Biology I. Students are strongly advised to take SC01 Chemistry I and a first-year subject in mathematics\* or its equivalent in addition to SZ71 Biology I to form a suitable basis for further studies.

The course consists of three lectures and six hours practical work a week throughout the year. Just over half of the course is concerned with diversity and structure in the invertebrates and vertebrates. The remainder is concerned with: ecology, evolution, physiology, biostatistics and ethology. The course is designed both for those students intending not to proceed further in Zoology, and those who wish to proceed to third-year Zoology.

#### Text-books:

Students should have a copy of each of the following texts from which the syllabus is compiled.

Marshall, A. J., and Williams, W. D. (eds.), *Textbook of zoology: invertebrates* (Macmillan).

Sokal, R. R., and Rohlf, F. J., *Introduction to biostatistics* (Freeman).

Wood, W. D., *Principles of animal physiology* (Arnold).

Young, J. Z., *The life of vertebrates* (O.U.P.).

#### Reference books:

Students are advised to consult the following books as additional reference.

Barnes, R. D., *Invertebrate zoology*, 3rd edition (Saunders).

Boughey, A. S., *The ecology of populations*, 2nd edition (Macmillan).

Bullough, W. S., *Practical invertebrate anatomy* (Macmillan).

Dobzhansky, T. G., *Genetics of the evolutionary process* (C.U.P.).

Imms, A. D., *Outlines of entomology*, 5th edition (Methuen).

McNeill, A. R., *The chordates* (Cambridge U.P.).

Manning, A., *An introduction to animal behaviour* (Arnold).

Mayr, E., *Animal species and evolution* (Harvard U.P.).

Norris, K. R., and Upton, M. S., *The collection and preservation of insects* (Australian Entomological Society. Misc. Publ. 3).

Whittaker, R. H., *Communities and ecosystems*, 2nd edition (Macmillan).

\* The Department recommends that students take the combination QM7H Mathematics IH with QF7H Statistics IH unless they wish to continue in mathematics or statistics and zoology when they should examine the relevant pre-requisites.

## THIRD-YEAR SUBJECTS IN ZOOLOGY.

Pre-requisites subject for all third-year subjects in Zoology: SZ02 Zoology II at Division I pass or higher standard.

The Department offers the following double-units:

## Z301 POPULATION BIOLOGY: Second term.

Recommended subjects QM7H Mathematics 1H plus QT7H Statistics 1H.

Three lectures, one three-hour practical session and one six-hour practical session each week.

A major portion of the course will concern the ecology of populations and some aspects of communities. Topics will include the concept of "population", characteristics of populations and their measurement, the kinds of factors which influence the distribution and abundance of animals, the use of models and the significance of variability in ecological systems. Another major portion will deal with the evolution of populations. Topics will include population genetics, selection, adaptation and speciation. Finally the often neglected, but very important, interface between ecology and evolution at the level of the population will be explored. Selected areas of current research will be discussed in detail as examples. The practical work and many of the examples in lectures will concern marine systems. Field work will form part of the practical course but will be restricted because of the season. Additional, voluntary fieldwork may be offered at weekends.

Text-books:

Krebs, C. J., *Ecology: the experimental analysis of distribution and abundance*, 2nd edition (Harper and Row).

Dobzhansky, T., *Genetics of the Evolutionary process* (Columbia U.P.).

Other references will be mentioned during the course; some will be available for loan.

## Z302 COMPARATIVE BIOCHEMISTRY AND POLLUTION: First term.

The initial part of the course will be on evolution at a molecular level and this theme will be emphasised in the two text-books. Topics to be covered will include protein polymorphism, sequence homology, and biochemical taxonomy. Animals living in different habitats will be compared at the level of allosteric effects and substrate affinities of homologous proteins and at the level of qualitative differences in metabolic pathways.

In its later part the course will feature an analysis of various aspects of pollution and related topics at various levels from the molecular to the social. Topics will include air pollution, water pollution, smoking, radiation, heavy metals, herbicides, pesticides and food additives.

Laboratory work will include electrophoretic studies on populations from polluted and non-polluted habitats.

Text-books.

Manwell, C., and Baker, C. M. A., *Molecular biology and the origin of species* (Sidgwick and Jackson).

Hochachka, P., and Somero, G., *Strategies of biochemical adaptation* (Saunders).

Reference books:

Warren, C. E., *Biology and water pollution control* (Saunders).

Rudd, R. L., *Pesticides and the living landscape* (Wisconsin U.P.; Faber and Faber).

Parke, D. V., *The biochemistry of foreign compounds* (Pergamon).

Rothman, H., *Murderous providence: a study of pollution in industrial societies* (Bobbs-Merrill).

Z303 ENVIRONMENTAL PHYSIOLOGY: Third term.

Twenty-four lectures, seminars and practicals during the third term. The practical work consists of formal three-hour practicals throughout the term. As well students are divided into small groups and given a special project to develop throughout the term. Assessment is based on a formal examination at the end of the term and on practical work.

The course is concerned with how vertebrates are adapted to the environment in which they live. Topics will include reproduction, nutrition, osmotic regulation and temperature regulation.

Text-books:

- Gordon, M. S., *Animal physiology: principles and adaptations*, 3rd edition (Macmillan).  
Schmidt-Nielsen, K., *How animals work* (Cambridge).

Reference book:

- Tyndale-Biscoe, H., *Life of marsupials* (Arnold).

Z304 PARASITES AND PARASITISM: Second term.

Recommended subject SC01 Chemistry I.

Protozoa and invertebrates as parasites with emphasis on those of medical or economic significance. The course will include an analysis of the nature of parasitism together with a number of topics selected from current research e.g. growth and neuro-endocrinology of parasites; physiology of infection; metabolism of parasites; parasites as experimental animals; impact of parasitism on human affairs.

There is no recommended text-book, but students will be lent a selection of papers.

Reference books:

- Read, C. P., *Animal parasitism* (Prentice Hall).  
Rogers, W. P., *The nature of parasitism* (Academic Press).  
Wallace, H. R., *Nematode ecology and plant disease* (Arnold).

Z305 SYSTEMATICS AND BIOGEOGRAPHY: Third term.

Twenty-four lectures or tutorials and twenty-four practicals during third term. A proportion of the practicals will also be conducted informally, with each student investigating his or her own project in field and laboratory. Students will be assessed from their practical work and by means of essays and a theory examination. Topics discussed will include the following: biological nomenclature; procedural taxonomy; aspects of systematics; characters and directions of evolutionary change; growth and opportunities for diversification; diverse approaches to systematics; approaches to phylogeny; distribution and taxonomy; Wallace's Regions; marine biogeography; biological significance of continental drift; inter-continental distributions in the Southern Hemisphere; the theory of island biogeography; implications of island biogeography for conservation; biogeography of Australia and New Guinea; concepts of sub-regions; mechanisms of dispersal; barriers to dispersal; impact of glacial periods; South Australian faunal components.

Text-books:

- Mayr, E., *Principles of systematic zoology* (McGraw-Hill).  
Jeffrey, C., *Biological nomenclature*, 2nd edition (Arnold).

Reference books:

- Cain, A. J. (ed.), *Function and taxonomic importance* (Systematics Association. London).  
Darlington, P. J., *Zoogeography: the geographical distribution of animals* (Wiley).  
Darlington, P. J., *The biogeography of the southern end of the world* (Harvard U.P.).  
Good, R. D., *The geography of the flowering plants*, 3rd edition (Longmans).

- Hennig, W., *Phylogenetic systematics* (Illinois U.P.).  
 International Congress of Zoology, 15th, London, 1958, *International code of zoological nomenclature*, ed. N. R. Stoll and others (Internat. Trust for Zool. Nomenclature).  
 Mayr, E., *Animal species and evolution* (Harvard, U.P.).  
 Mayr, E., and others, *Methods and principles of systematic zoology* (McGraw-Hill).  
 Williams, W. D. (ed.), *Biogeography and ecology in Tasmania* (Junk).

## Z306 FRESHWATER ECOLOGY: First term.

An introduction to the ecological characteristics of inland waters (lakes and streams), with some emphasis on Australian environments. The course includes both theoretical and applied aspects. Assessment involves practical work, an assignment, and a theory examination. A weekend field camp is proposed during term.

Students should note that this course is complementary to Unit B311 Phytoplankton ecology offered by the Department of Botany.

## Recommended text-books:

- Bayly, I. A. E., and Williams, W. D., *Inland waters and their ecology* (Longman).  
 Williams, W. D., *Australian freshwater life: the invertebrates of Australian inland waters* (Sun Books).

## Additional general reading:

- Hutchinson, G. E., *A treatise on limnology*, vols. 1-3 (Wiley).  
 Hynes, H. B. N., *The ecology of running waters* (Liverpool U.P.).  
 Wetzel, R. G., *Limnology* (Saunders).

The subjects offered are:

**SZ03 Zoology III.**

A group C subject. Any three double-units from the above list taken with the approval of the Chairman of the Department.

**SZ83 Zoology IIIM.**

A group C subject. With the approval of the Heads/Chairmen of the Departments concerned, a combination of two double-units from the above list (two terms' work), together with two units or one double-unit (one term's work) in another department. B333 Social Biology will be acceptable. (For syllabus see above under "Social Biology".)

Students who wish to enrol for SZ83 Zoology IIIM and then to take an Honours degree in Zoology should consult the Chairman of the Department before they enrol for SZ83 Zoology IIIM.

**SZ71 Biology I.**

A course consisting of two lectures, one tutorial and approximately four hours of practical work each week throughout the year. Both day and evening classes will be held.

In SZ71 Biology I there are two streams which have somewhat different emphasis. One stream is available to medical and dental students and the other to students in faculties other than Medicine and Dentistry. The course for all faculties other than Medicine and Dentistry includes: elementary biochemistry, cell structure and physiology, genetics, structure physiology and evolution of plants and animals, the mechanisms of evolution and the principles of ecology.

## Text-book:

- Curtis, H., *Biology*, 2nd edition (Worth).

HONOURS DEGREE.

**SZ99 Zoology for the Honours degree of B.Sc.**

Students enrolled in SZ03 Zoology III or SZ83 Zoology IIIM who wish to take an Honours degree in Zoology should consult the Chairman of the Department some time during the third term. As a rule, for entry into Honours Zoology, students must have attained credit standing or better in third-year Zoology and at least a pass in their other third-year subject.

Candidates are expected to attain a higher standard in general zoology than that required for the Ordinary degree. Candidates are expected to study more deeply one branch of Zoology, to carry out research as an exercise in scientific method, and other assignments as prescribed.

Students are expected to begin work during the long vacation, and to work full-time at their courses throughout the year.

OF THE DEGREE OF  
MASTER OF SCIENCE  
IN THE FACULTY OF SCIENCE  
REGULATIONS

†1. The following persons may become candidates for the degree of Master of Science in the Faculty of Science (a) Bachelors of Science, (b) Bachelors of Agricultural Science, and (c) other graduates whose academic qualifications are accepted by the Faculty of Science as sufficient:

Provided that, subject to the approval of the Council, the Faculty may, in special cases and subject to such conditions (if any) as it may see fit to impose in each case, accept as a candidate for the degree a person who does not hold a degree of a university, but has given evidence satisfactory to the Faculty of his fitness to undertake work for the degree.

\*1A. Unless the candidate has obtained the Honours Degree of Bachelor of Science or of Agricultural Science he shall, before submitting his thesis as provided for in regulation 4, pass such qualifying examination as the Faculty may in the circumstances deem proper. Except under special circumstances acceptable to the Faculty, the qualifying examination should be taken within one year from the beginning of the candidature for a full-time candidate or within two years from the beginning of the candidature for a part-time candidate.

2. Subject to conditions to be determined in each case a graduate of a university recognised by the University of Adelaide, whose degree is accepted by the Faculty of Science as equivalent to one of the qualifications required in regulation 1, may be allowed by the Council to proceed to the degree in compliance with these regulations. Every such candidate must spend at least three consecutive academic terms or twelve calendar months at the University of Adelaide or at an institution approved for the purpose by the University of Adelaide.

\*3. A candidate who holds the Honours degree of Bachelor of Science or Bachelor of Agricultural Science or its equivalent in a University recognised by the University of Adelaide may proceed to the degree of Master of Science in the Faculty of Science at the expiration of one year from the date of his admission to the Honours degree of Bachelor; no other candidate shall proceed to the degree before the expiration of two years from the date of the beginning of his candidature.

\* Allowed 14 December, 1944; amended 15 January, 1959, 12 December, 1963, 28 February, 1974, and amendment awaiting allowance.

† Amended 4 April, 1963, and 28 February, 1974.

\*\* Amended 28 February, 1974.

\*4. To qualify for the degree a candidate shall submit a thesis upon an approved subject and shall adduce sufficient evidence that the thesis is his own work. The thesis shall give the results of original research or of an investigation on which the candidate has been engaged. A candidate may also submit other contributions to science in support of his candidature.

\*5. A person seeking enrolment as a candidate for the degree shall apply to the Academic Registrar and shall submit as part of his application, a statement of his academic standing, accompanied, in the case of a person who is not a graduate of the University of Adelaide, by acceptable proof of such standing and an outline of the research work or investigation on which he intends to submit a thesis. The Faculty of Science, if it approve the subject of his research, may appoint a supervisor to guide the candidate in his work. The candidate shall submit his thesis not earlier than three terms and, except by special permission of the Faculty, not later than nine terms after approval by the Faculty of the subject of his research.

‡6. The Faculty shall appoint a Board of Examiners to report upon the thesis and any supporting papers that the candidate may submit. The Board of Examiners may require any candidate to pass an examination in the branch of science to which his original research or investigation is cognate.

‡7. A candidate for the degree of Doctor of Philosophy or Doctor of Science whose work is considered by the Faculty, after report by the examiners appointed to adjudicate upon it, not to be of sufficient merit to qualify for the degree of Doctor but of sufficient merit for the degree of Master may be admitted to the degree of Master provided that he is qualified to become a candidate for the degree.

‡‡8. On completion of his work a candidate shall lodge with the Academic Registrar three copies of his thesis prepared in accordance with directions given to candidates from time to time.\*

§§9. A candidate's progress shall be reviewed annually by the Faculty under the provisions of clause 4c of Chapter XXV of the Statutes.

‡‡10. A candidate who complies with the foregoing conditions and satisfies the Board of Examiners shall on the recommendation of the Faculty of Science be admitted to the degree of Master of Science in the Faculty of Science.

Regulations allowed 7 December, 1939.

‡ Allowed 14 December, 1944.

† Amended 8 December, 1949.

‡‡ Allowed 16 March, 1961.

\* Amended 12 December, 1963.

‡‡ Allowed 28 February, 1974.

§§ Allowed 23 January, 1975; amended 15 January, 1976.

\* Published in "Notes and Instructions to candidates for Higher Degrees":  
see Table of Contents.



OF THE DEGREE OF  
DOCTOR OF SCIENCE  
IN THE FACULTY OF SCIENCE  
REGULATIONS

\*1. (a) Subject to these regulations a person who has been admitted in the University of Adelaide to an Honours degree of Bachelor or a degree of Master in Science, Agricultural Science, Applied Science or Engineering, or to the degree of Doctor of Philosophy in a field of study approved by the Faculty of Science, may proceed to the degree of Doctor of Science in the Faculty of Science.

(b) On the recommendation of the Faculty of Science the Council may accept as a candidate for the degree a person who has been admitted to a degree in the University of Adelaide other than one named in section (a) of this regulation, or who is a graduate of another university or institution of higher education recognised by the University of Adelaide and has a substantial association with the University; provided that in each case the graduate concerned has, in the opinion of the Faculty of Science, had an adequate scientific training.

†(c) On the recommendation of the Faculty of Science the Council may, in special cases, accept as a candidate for the degree a person who does not hold a degree of a university or institution of higher education, provided that in each case the candidate concerned has a substantial association with the University and has, in the opinion of the Faculty of Science, adequate scientific credentials.

†(d) Except where a person has been accepted as a candidate under regulation 1(c), no person shall be accepted as a candidate for the degree of Doctor of Science in the Faculty of Science before the expiration of five years from the date of his original graduation.

2. (a) A person who desires to become a candidate for the degree shall give notice of his intended candidature in writing to the Academic Registrar and with such notice shall furnish particulars of his scientific achievements and of the work which he proposes to submit for the degree.

(b) The Faculty of Science shall appoint a committee to examine the information submitted and to advise the Faculty on whether the Faculty should—(i) allow the applicant to proceed, and approve the subject or subjects of the work to be submitted; or (ii) advise the applicant not to submit his work; and the Faculty's decision shall be conveyed to the applicant.

(c) If it accept the candidature and approve the subject or subjects of the work to be submitted the Faculty shall nominate examiners of whom one at least shall be an external examiner.

\* Amended 28 February, 1974.

† Allowed 23 January, 1975.

3. (a) To qualify for the degree the candidate shall furnish satisfactory evidence that he has made an original contribution of distinguished merit adding to the knowledge or understanding of any subject with which the Faculty is directly concerned.

(b) The degree shall be awarded primarily on a consideration of such of his published works as the candidate may submit for examination.

(c) The candidate in submitting his published works shall state generally in a preface and specifically in notes the main sources from which his information is derived and the extent to which he has availed himself of the work of others, especially where joint publications are concerned. He may also signify in general terms the portions of his work which he claims as original.

(d) The candidate is required to indicate what part, if any, of the work he has submitted for a degree in this or any other university.

4. The candidate shall lodge with the Academic Registrar three copies of the work prepared in accordance with the directions given in sub-paragraph (b) of clause 2B of Chapter XXV of the Statutes. If the work is accepted for the degree the Academic Registrar will transmit two of the copies to the University Library.

\*5. A candidate who complies with the foregoing conditions and satisfies the examiners may, on the recommendation of the Faculty of Science, be admitted to the degree of Doctor of Science in the Faculty of Science.

\*\*6. Notwithstanding anything contained in the preceding regulations, the Faculty may recommend the award of the degree to any person who is not a member of the staff of the University. Any such recommendation must be accompanied by evidence that the person for whom the award is proposed has made an original and substantial contribution of distinguished merit to the knowledge or understanding of a subject with which the Faculty is directly concerned, of a standard not less than that required by regulation 3.

Regulations allowed 4 November, 1965.

\* Amended 28 February, 1974.

\*\* Allowed 15 January, 1976.



# BOARD OF ENVIRONMENTAL STUDIES

## REGULATIONS, SCHEDULES AND SYLLABUSES OF THE DEGREE

### Master of Environmental Studies (M.Env.St.)

Regulations	-	-	-	-	-	-	-	-	-	1010
Schedules	-	-	-	-	-	-	-	-	-	1013
Syllabuses	-	-	-	-	-	-	-	-	-	1015

OF THE DEGREE OF  
MASTER OF ENVIRONMENTAL STUDIES  
REGULATIONS

1. There shall be a degree of Master of Environmental Studies and a Board of Environmental Studies.

THE BOARD

2. The Board shall consist of:

- (a) the Chancellor, the Vice-Chancellor, the Chairman of the Education Committee, the Director of Environmental Studies, the South Australian Director of Environment and Conservation, *ex officio*;
- (b) one member of the academic staff nominated annually by each faculty of the University;
- (c) three members elected annually from amongst themselves by the candidates currently enrolled as candidates for the degree;
- (d) up to ten members, the majority of whom shall be teachers of the course, appointed annually by the Council on the recommendation of the Board;
- (e) two members appointed by the Council.

3. (a) The Board shall be responsible for the acceptance as candidates for the degree of applicants for admission to the course of study for the degree.

(b) Subject to availability of accommodation and facilities (and in the case of a candidate for some other higher degree to the concurrence of the Faculty concerned also) the Board may admit to any of the courses of study other persons who are qualified for admission to the course or courses and whose work or studies are relevant to environmental studies.

4. The Board shall annually elect one of its members to be Chairman.

5. The Chairman of the Board shall:

- (a) at his own discretion, or on the request of the Chancellor or the Vice-Chancellor, or on the written request of two other members of the Board, convene meetings of the Board;
- (b) preside at meetings of the Board;
- (c) subject to the control of the Board, exercise a general control over its administrative business; and
- (d) perform such other duties as the Council may from time to time prescribe.

6. Whenever the Chairman is absent from a meeting, the Board shall elect another member to preside during the Chairman's absence.

#### THE DEGREE

7. (a) An applicant for admission to the course of study for the degree must be a graduate of the University of Adelaide or hold qualifications from another university or institution acceptable for the purpose by the University of Adelaide.

†(b). Subject to the approval of the Council, the Board may in special cases and subject to such conditions (if any) as it may see fit to impose in each case, accept as a candidate for the degree a person who does not hold a degree of a university but has given evidence satisfactory to the Board of his fitness to undertake the work for the degree.

(c) Admission to the course of study for the degree shall be subject to approval by the Board of Environmental Studies.

(d) The Board, if it sees fit to do so, may require the applicant to complete such additional preliminary work as it may prescribe before being accepted as a candidate for the degree.

(e) Applications for admission shall be addressed to the Academic Registrar.

8. To qualify for the degree a candidate shall:

- (a) satisfy examiners in courses of study as prescribed in the schedules; and
- (b) as prescribed in the schedules, carry out research work and present a satisfactory dissertation on a subject approved by the Board of Environmental Studies.

\*9. Schedules defining the courses of study for the degree shall be drawn up from time to time by the Board of Environmental Studies and approved by the Council.

10. The maximum number of candidates which may be enrolled in any course for the degree shall be determined from time to time by the Council on the recommendation of the Board of Environmental Studies; and nothing in these regulations shall be held to bind the Council to provide any or all the courses in any year if for any reason the Council decides to suspend it or them.

11. If in the opinion of the Board of Environmental Studies a candidate for the degree is not making satisfactory progress the Board may with the consent of the Council withdraw its approval of his candidature and the candidate shall thereupon cease to be enrolled for the degree.

\* Amended 15 January, 1976.

† Amended 2 February, 1978.

12. On completion of his work the candidate shall lodge with the Academic Registrar three copies of his dissertation prepared in accordance with directions given to candidates from time to time.

13. The Board of Environmental Studies shall appoint the examiners required under regulation 8, both for the courses of study and for the dissertation.

14. A candidate who fulfils the requirements of those regulations and satisfies the examiners appointed under regulation 13 may on the recommendation of the Board of Environmental Studies be admitted to the degree.

15. These regulations shall come into force at a date to be determined by the Council.\*

Regulations allowed 21 December, 1972.

\* The Council determined 1 July, 1975 as the date when the regulations came into force.

OF THE DEGREE OF  
MASTER OF ENVIRONMENTAL STUDIES

SCHEDULES

(Made by the Council under regulation 9.)

NOTE: Syllabuses of subjects for the degree of M.Env.St. are published below, immediately after these schedules. For syllabuses of subjects taught for other degrees and diplomas see the table of subjects at the end of the volume.

SCHEDULE I: COURSES OF STUDY

1. Unless exempted therefrom by the Board of Environmental Studies every candidate for the degree shall in the first year complete the following courses of study:

(a) **General Environmental Studies.**

A course entitled *General Environmental Studies* which unless the Board decides otherwise shall comprise *four* compulsory subject units and at least *two* optional subject units. The number of optional subject units offered in any one year will depend on the availability of staff.

*Compulsory subject units:*

- VX05 Environmental Biology
- VX15 Environmental Geoscience
- VX25 Theory and Practice of Environmental Management
- VX35 Quantitative and Qualitative Methods

*Optional subject units:*

- VX45 Applied Geomorphology in Environmental Management
- VX55 Conservation and National Parks
- EE43 Economics of Natural Resource Use
- VX16 Ecology of Inland Waters
- VX65 Environmental Chemistry
- VX75 Environmental Physics
- VX85 Environmental Psychology
- VX95 Exploitation and Management of Seafloor Resources, and Coastal Zone Management
- VX26 Genetic and Biosocial Effects of Environmental Pollution
- VX56 Medicine in the Community
- VX96 Photogrammetric and Remote Sensing Methods of Data Acquisition— Interpretation in Environmental Planning.\*
- VX76 The Role of the Engineer in Environmental Management
- VX86 Urban and Regional Planning

(b) **Advanced Studies.**

Advanced studies in the area of his academic and professional competence and related to the research project of the second year.

\* This subject unit will be held at the School of Surveying, S.A. Institute of Technology, The Levels Campus.



(c) Other Courses.

Such other course or courses, if any, as the Board may prescribe.

2. To complete a course of study a candidate, unless exempted therefrom by the Board, shall:

- (a) regularly attend the prescribed lectures, tutorials and seminars; and
- (b) undertake such practical work and case studies, do such written work, and pass such examinations, as the Board may prescribe.

3. On the recommendation of the Chairman of the department concerned the Board may exempt a candidate from the need to satisfy any pre-requisites prescribed in the syllabus of any subject for which he wishes to enrol.

4. A candidate who desires that work which he had completed in the University or elsewhere should be counted towards the requirements of these schedules may, on written application to the Academic Registrar, be granted such exemption from the requirements as the Council, on the advice of the Board of Environmental Studies, shall determine.

5. Courses of study must be approved by the Chairman of the Board (or his nominee) at enrolment each year.

## SCHEDULE II: RESEARCH WORK

1. The second year of the course and, with the permission of the Board, part of the first year shall be devoted to research on a topic approved by the Board.

2. The research project will normally require the co-operative effort of several students; however, each student must present a separate dissertation of a standard acceptable to examiners appointed by the Board. The dissertation must not only deal with those aspects of the project studied by the student, but must also indicate an appreciation of the work of other students undertaking the project.

3. (a) In special circumstances, and with the permission of the Board in each case, a student may complete the work of the second year over not more than two years of part-time study.

(b) With the permission of the Board in each case two or more candidates may submit a joint dissertation on a subject approved by the Board. In that case each candidate must also present himself for an individual oral examination. In the light of their assessment of each candidate's contribution and quality of work the examiners may recommend for each candidate: *a.* that the degree be awarded; *b.* that the degree be not awarded; or *c.* that the candidate be required to submit additional individual work or to contribute to a revision of the joint dissertation. The dissertation must normally be acceptable before the degree can be awarded to any of its contributors, but in special circumstances the examiners may recommend that the Board suspend that requirement to allow the degree to be awarded to one or more contributors to a dissertation which is not in all respects acceptable.

4. In special circumstances the Board may grant an extension of time beyond the maximum period applicable to a full-time or to a part-time candidate for submission of his thesis.

OF THE DEGREE OF

# MASTER OF ENVIRONMENTAL STUDIES

## SYLLABUSES

*Text-books:*

Students are expected to procure the latest edition of all text-books prescribed.

*Examinations:*

For each subject students may obtain from the department concerned details of the examination in that subject including the relative weights given to the components (e.g. such of the following as are relevant: assessments, term or mid-year tests, essays or other written or practical work, final written examinations, *viva voce* examinations).

### MASTER OF ENVIRONMENTAL STUDIES.

The degree is awarded for work within the University, including case studies, compulsory and optional subject units and thesis work. More detailed information will be available to students when they enrol for the course.

The first year of the course is entitled "General Environmental Studies" and covers the following subject units:

#### COMPULSORY CORE-SUBJECT UNITS.

##### VX05 Environmental Biology.

This subject unit will involve, on average, three contact hours a week *including* practical work. There will also be three one-day field excursions at weekends.

This subject unit will give a basic introduction to the biology of ecosystems with particular emphasis on man's use and development of natural resources. Human biology as related to environmental problems will be briefly covered.

##### VX15 Environmental Geoscience.

This subject unit will involve, on average, three contact hours a week *including* practical work. There will also be one-day field excursions at weekends.

This subject unit will examine the physical and chemical environment and will include the following topics: energy and water resources; air pollution; trace nutrients; geology in the ecosystem; instability of the earth's crust; floods and urbanisation; applied geomorphology in environmental management; coastal zone conservation, and the pros and cons of erosion.

##### VX25 Theory and Practice of Environmental Management.

This subject unit will involve the following contact hours:

*Legal aspects.* At least sixty contact hours including seminars

*Economic aspects.* At least two contact hours a week throughout two terms, including seminars/tutorials and practical work.

*Political and social theory of environmental management.* Approximately nine contact hours at the end of the section on legal and economic aspects of environmental management.

The legal aspects will include problems pertaining to the enactment, administration and enforcement of laws relating to national parks; nature and wildlife reserves; land organisation; pollution; water resources; regional and urban development; ownership of international resources; relationship between economic theory and practice; nature of environmental decision-making processes.

**VX35 Quantitative and Qualitative Methods.**

This subject unit will involve three contact hours a week throughout the year, *including* lectures, workshops and practical work.

This subject unit will include the following topics: an evaluation of the use of quantitative methods and statistics; examination of the role of qualitative techniques in environmental studies; computing, systems analysis and modelling.

The integration and interaction of all these compulsory subject units, with regard to environmental studies, will be emphasised by a detailed examination of selected case studies including, for example, Monarto, the ideal city; recreational facilities for urban regions; husbandry in semi-arid and arid lands; forest management schemes; occupational health problems pertaining to the environment; water and energy resources in Australia; ownership of international resources and the exploitation of seafloor minerals.

**OPTIONAL SUBJECT UNITS.**

Subject to the availability of staff, students will be able to take at least two of the following optional subject units which will usually be in the area of their special undergraduate education. In addition, students may, with special permission, take one or two additional optional subject units in the second year of the course, which will usually be related to their work for their research project. Each optional subject unit will involve at least two contact hours a week *including* seminars and practical work:

**VX45 Applied Geomorphology in Environmental Management.**

**VX55 Conservation and National Parks.**

**EE43 Economics of Natural Resource Use.**

**VX16 Ecology of Inland Waters.**

**VX65 Environmental Chemistry.**

**VX75 Environmental Physics.**

**VX85 Environmental Psychology.**

**VX95 Exploitation and Management of Seafloor Resources and Coastal Zone Management.**

**VX26 Genetic and Biosocial Effects of Environmental Pollution.**

**VX36 History and Philosophy of Urban and Regional Planning.**

**VX56 Medicine in the Community.**

**VX96 Photogrammetric and Remote Sensing Methods of Data Acquisition-Interpretation in Environmental Planning.**

**VX76 The Role of the Engineer in Environmental Management.**

**VX86 Urban and Regional Planning.**

---

In addition, a general Seminar programme will be held during the first two terms of the first year. The main aim is to invite speakers, who are recognised authorities in their field of research, to discuss and to evaluate with students various environmental management and decision-making problems.

---

**Text-books:**

Lists of recommended text-books for all subjects may be obtained on application to the Director of Environmental Studies.

# BOARD OF RESEARCH STUDIES

## REGULATIONS AND SCHEDULES OF THE DEGREE

### Doctor of Philosophy (Ph.D.)

Regulations	-	-	-	-	-	-	-	-	-	-	1018
Schedules	-	-	-	-	-	-	-	-	-	-	1022

OF THE DEGREE OF  
DOCTOR OF PHILOSOPHY  
REGULATIONS

I. GENERAL

1. There shall be a degree of Doctor of Philosophy and a Board of Research Studies.

\*2. (a)(i) The Board shall comprise three members of the Faculty of Science, two members of the Faculty of Agricultural Science, two members of the Faculty of Engineering, two members of the Faculty of Arts, two members of the Faculty of Medicine, one member of the Faculty of Architecture and Town Planning, one member of the Faculty of Dentistry, one member of the Faculty of Economics, one member of the Faculty of Law, one member of the Faculty of Music, one member of the Faculty of Mathematical Sciences and three persons enrolled as full-time students for the degree of Ph.D. elected from among themselves in accordance with election procedures drawn up and approved by the Board of Research Studies.

(ii) The members of the Board shall be elected by the appropriate faculties for a term of three years with the exception of the post-graduate student members whose maximum period of membership shall be two years.

(iii) The Board shall annually elect from among its members a Chairman and a Deputy Chairman.

(b) The Board shall carry out those functions laid upon it by these regulations.

†3. Schedules specifying the academic standing required for candidature, and the nature and extent of the work to be completed, shall be drawn up from time to time by the Board and submitted to the Council. Such schedules shall become effective from the first day of January following their approval by the Council or from such other date as the Council may determine and shall be published in the University Calendar.

II. ENROLMENTS

†4. (a) A person seeking enrolment as a candidate for the degree shall apply to the Academic Registrar in such form as the Board shall prescribe and shall submit as part of his application a statement of his academic standing, accompanied in the case of a person who is a graduate of a university or institution other than the University of Adelaide by proof thereof acceptable to the Board, and an outline of the course of study and research which he proposes to pursue.

\* Amended 21 December, 1972, and 15 January, 1976.

† Amended 15 January, 1976.

(b) A person seeking credit in the University of Adelaide for a course of study and research leading to the degree of Doctor of Philosophy in another tertiary institution shall further submit an outline of the work he has already completed, together with a supporting statement from his supervisor or some other responsible person of that institution.

\*5. (a) A person shall not be enrolled as a candidate for the degree unless the Board is satisfied:

- (i) that his proposed course of study and research can be adequately supervised;
- (ii) that he is personally qualified to undertake the particular course of study and research which he proposes; and
- (iii) that in the case of a person granted credit under regulation 4(b) at least one year of full-time study and research, or its equivalent, will still be necessary to complete the work for the degree.

(b) The Chairman of the appropriate department and the appropriate faculty shall have the power to make recommendations to the Board on the matters set out in section (a) of this regulation.

(c) The appropriate faculty or the Board may require a candidate who is not a graduate of the University to pass at a time which it specifies such examination of Honours standard, whether special or annual, as it may deem necessary or desirable. The candidate must be notified of this requirement not later than six months after his acceptance.

\*6. (a) When it approves an enrolment the Board shall specify the month from which the candidature shall date, which shall normally be the one in which the candidate begins his course of study and research for the degree. In the case of a candidate enrolled under regulation 4(b), the month to be specified shall normally be the one in which the candidate commenced work in the other institution.

(b) When a candidate is required under regulation 5(c) to undergo an examination the Board shall determine, after he has passed the examination, the month from which his candidature will date.

### III. WORK FOR THE DEGREE

7. (a) A candidate shall pursue, to the satisfaction of the Board, and in accordance with any special conditions that may be specified in his case, an approved course of study and research in the University under a supervisor or supervisors appointed by the appropriate Faculty and approved by the Board. At least one supervisor shall be internal to the University.

(b) At the end of each year of candidature a supervisor shall submit to the Board a written report on the work of each candidate in his charge. He shall report to the Board at any time if in his opinion a candidate is not making satisfactory progress in his work or is otherwise not fulfilling the conditions laid down for him, or appears unlikely to reach the standard of the degree.

\* Amended 15 January, 1976.

8. A candidate for the degree shall devote his whole time to the pursuit of his approved course of study and research; provided that full-time members of the academic staff of the University and full-time members of the academic staff of the South Australian Institute of Technology who are engaged in teaching courses prescribed for a degree of the University may be permitted to proceed to the degree on such conditions as the Board may prescribe.

°9. (a) Subject to the provisions of this regulation, a candidate for the degree shall pursue his approved course of study and research within the University for a period of not less than two years and not more than four years from the date of his enrolment provided that, in the case of a candidate enrolled under regulation 4(b), the Board shall prescribe equivalent minimum and maximum periods, having regard to the conditions under which the work was carried out in the other institution.

(b) In special circumstances the Board may accept as an internal half-time candidate for the degree a person who, in its opinion, is a fully qualified person, is free to pursue his research programme within the University and is able to devote at least half of his time to his research. In such a case the Board shall prescribe for the duration of his programme minimum and maximum periods which in its opinion, having regard to the proportion of his time which he is able to devote to the programme in the appropriate departments, are respectively equivalent to the periods ordinarily required.

(c) The Board may permit a candidate to pursue at another university or institution part of his approved course under such conditions as it thinks fit. Normally, candidates will be required to work for at least two years within the University, but in the case of a candidate enrolled under regulation 4(b), and in other exceptional circumstances the Board may approve a reduced period on such conditions as it may determine in each case.

(d) A candidate's supervisor, who shall report to the Board, may permit a candidate to spend three months in any one year of his candidature away from the University on work connected with his research. A period of such absence in excess of three months must be approved in advance by the Board.

(e) Because of the specific responsibility of the South Australian Institute of Technology in the conduct of certain University courses, notwithstanding the provisions of regulations 5(a) and 7(a) and sub-clause (a) of this regulation, the Board may, on the recommendation of the Faculty of Engineering or the Faculty of Science, permit a candidate to carry out his work in a department of the South Australian Institute of Technology; provided that:

- (i) the candidate is a full-time member of the academic staff of the Institute;
- (ii) the candidate is able to devote at least half of his time to his research; and
- (iii) the Board is satisfied that facilities for the proposed course of study are available only in the Institute.

\* Amended 16 December, 1971, and 15 January, 1976.

†10. (a) A candidate shall submit for approval by the appropriate faculty the proposed title of the thesis required under section (b) of this regulation approximately three months before he expects to submit the thesis. On submission of the proposed title the appropriate faculty may also require a candidate to submit a summary of the thesis.

(b) At the end of his approved course of study and research a candidate shall present to the Academic Registrar, in such form as the Board prescribes,\* not fewer than three copies of a thesis embodying the results of his study and research. He may submit also, in support of the thesis, other relevant material provided that no material presented for any other degree within this or any other university shall be so submitted.

(c) Only in exceptional circumstances and by special permission of the Board on the recommendation of the relevant faculty may an extension of time beyond the maximum period applicable to the particular candidate be allowed for submission of the thesis.

(d) On submission of the thesis or an acceptable summary thereof the appropriate faculty shall nominate two external examiners and may nominate one or more internal examiners. The examiners may recommend that the candidate be examined orally or otherwise on the subject of his thesis and the general field of knowledge within which it falls. Such an examination will be conducted by examiners nominated by the appropriate faculty.

11. To qualify for the degree the thesis shall contain a significant contribution to knowledge within the scope of its subject.

12. The Faculty shall consider the reports of the examiners and report, with recommendations, to the Board. The Board, after considering these reports, may recommend that the candidate:

- (a) be awarded the degree subject to such minor amendments of the thesis as the examiners may have suggested;
- (b) be not awarded the degree, but be allowed to revise and resubmit his thesis within such period as the Board may allow;
- (c) be not awarded the degree and be not allowed to resubmit his thesis; or
- (d) be awarded an appropriate degree of Master subject to the concurrence of the appropriate faculty.

13. Two copies of a thesis and other material on which the degree is awarded shall be deposited in the Library.

Regulations allowed 21 December, 1967.

† Amended 15 January, 1976.

\* Published in "Notes and Instructions to candidates for Higher Degrees":  
*see* Table of Contents.



OF THE DEGREE OF  
DOCTOR OF PHILOSOPHY  
SCHEDULES

I: ACADEMIC STANDING

1. The academic standing required for acceptance (subject to section (a) of regulation 5) as a candidate for the degree is normally an Honours degree of Bachelor (with first or second class Honours) or a degree of Master of the University of Adelaide.

2. The Board may accept as a candidate for the degree a graduate who does not qualify under clause 1 but (a) has completed to the satisfaction of the Board at least one year of full-time postgraduate study and research and (b) passes a qualifying examination prescribed by the appropriate faculty and approved by the Board.

3. Provided that it is satisfied in each case, on the recommendation of the Head of the department and the faculty concerned, that the course of study undertaken and the academic standard reached are equivalent to those required of a candidate who is a graduate of the University of Adelaide, the Board may accept as a candidate for the degree a person who holds a degree of another university or a qualification acceptable to the University from an institution of tertiary education recognised for the purpose by the University.

4. The Board may also accept as a candidate for the degree, a person who is seeking enrolment under regulation 4(b), provided it is satisfied (a) that the person is of such academic standing as would be required of other candidates for the degree and (b) that his progress so far has been satisfactory.

5. A person who proposes to proceed to the degree by undertaking a course of study and research in education shall also hold the Diploma in Education of the University or a qualification accepted by the University as equivalent, and shall have at least three years' experience in teaching or in some other educational work approved by the University before enrolling for the degree.

The attention of intending candidates is specially drawn to regulation 5.

NOTES AND INSTRUCTIONS  
TO CANDIDATES  
FOR  
HIGHER DEGREES

NOTES AND INSTRUCTIONS TO CANDIDATES  
FOR HIGHER DEGREES

I. GENERAL

1. The degrees of Master and of Doctor (except the degree of Doctor of Philosophy) are administered by the Faculty concerned. However, the degree of Doctor of Philosophy is common to all Faculties, and accordingly responsibility for the administration of that degree is vested in a Board of Research Studies.

The attention of all candidates is drawn to the regulations and schedules of the degree to which they are proceeding, and to clause 2B of Chapter XXV of the Statutes.

2. A candidate's field of study must be approved by the appropriate faculty and, in the case of the degree of Doctor of Philosophy, by the Board of Research Studies. It may not be changed without similar approval.

3. A candidate for the degree of Master<sup>o</sup> in the Faculties of Agricultural Science, Architecture, Arts, Dentistry, Economics (degree of M.Ec. only), Engineering (under regulation 3 of the degree of M.E.), Mathematical Sciences, Medicine and Science and a candidate for the degree of Doctor of Philosophy pursues a course of research under the direction of a supervisor, who will report formally each year on the candidate's work and progress. In the case of a candidate for a master's degree, such report will be to the appropriate faculty; of a candidate for the Doctor of Philosophy degree, to the Board of Research Studies. The supervisor will also report whenever in his opinion the student is not making satisfactory progress in his work, is otherwise not fulfilling the conditions laid down for him, or appears unlikely to be able to submit a thesis, embodying the results of his research, of the required standard.

4. The supervisor will maintain fairly close contact with the student, who should regard it as his duty to keep his supervisor fully informed of the progress of his research, and to consult him about proposed future work and about the general planning of his thesis. If not consulted fairly frequently, the supervisor will satisfy himself that the research student is working satisfactorily.

5. The function of the supervisor is not to plan at all directly the work that the research student should do, rather to provide a trained mind upon which the student may test his ideas and so be led to develop his own critical faculties. The thesis itself should represent largely the student's own work, assisted only by the general aid obtained by discussion with the supervisor as to the most satisfactory method of developing and presenting his material. For a candidate whose mother tongue is not English some help with the syntax may be given with the approval of the supervisor. The thesis must conform with the specifications given below.

6. If more than one supervisor is appointed, the candidate shall consult all such supervisors on all matters of general concern to his work and thesis.

II. SPECIFICATIONS FOR THESES

I. *Preparation.*

(a) The responsibility for the layout of the thesis and selection of the title rests with the candidate after discussion with his supervisor, and the completed thesis should be shown to the supervisor before submission. In order to save delay in the appointment of examiners a candidate is advised to give three months' notice in writing to the Academic Registrar of intention to submit a thesis, and to give its proposed title. He should also forward to the Academic Registrar three copies of a summary of the thesis when the thesis is ready for binding.

(b) The thesis of a candidate for the degree of Doctor of Philosophy should be written and submitted before the candidate leaves the University. In exceptional circumstances the Board of Research Studies may give permission for the thesis to be completed elsewhere.

<sup>o</sup> A person enrolled as a part-time or external candidate for a Master's Degree who contemplates transferring to enrolment for the degree of Ph.D. should be aware of the regulation requiring that a minimum of half time working on his research programme within the University is mandatory, and that a candidate for the Ph.D. degree cannot back-date the passing of any qualifying examination that may have been necessary.

(c) *Aids to thesis and report writing*: A list of useful guides and style manuals, may be obtained on request from the Information Services Librarian of the Barr Smith Library.

## 2. *Typing.*

(a) A thesis should normally be typed on size A4 paper on one side of the paper only with double spacing. The top type-written copy should be prepared on bond paper. Quotations and footnotes may be typed in single spacing.

Work previously published, if submitted, may be in printed form.

Other forms of presentation may be allowed, if the Librarian approves. In such cases bond paper should be used. If copies are produced by xerography the original typewritten copy should still be one of the copies submitted. If copies are produced from wax stencils or litho-offset plates great care should be taken to ensure a clear black image with no smudging. Those copying processes which use chemically coated paper are unsuitable for the reproduction of theses.

(b) Margins should not be less than 35 mm on the left-hand side and 15 mm on the other three sides to allow for binding and trimming of an acceptable standard.

(c) The thesis should incorporate in the following order (i) a title page giving the title of the thesis in full, the names and degrees of the candidate, the name of the department of the University associated with the work and the date when submitted for the degree; (ii) a table of contents; (iii) a summary in not more than 500 words; (iv) a signed statement to the effect that the thesis contains no material which has been accepted for the award of any other degree or diploma in any university and that, to the best of the candidate's knowledge and belief, the thesis contains no material previously published or written by another person, except when due reference is made in the text of the thesis; (v) an acknowledgment of any help given or work carried out by another person or organisation; (vi) the main text; (vii) appendices, if any; (viii) bibliography.

Additional pages or other material not suitable for binding should be placed last and treated as indicated below.

## 3. *Diagrams and Figures.*

The following are general suggestions for normal practice, but they may be varied in special cases with the approval of the Librarian:

(a) Diagrams and figures, etc., should preferably be drawn or photographed on size A4 paper and bound in the appropriate place in the text. If it is necessary to mount photographs the mounting should be on paper somewhat heavier than that of the other pages, and great care should be taken to avoid wrinkling the paper or distorting the shape of the volume.

(b) Figures should form a right-hand page, with the top of the figure at the top or the inside edge of the page. The legend should be placed at the bottom or the right-hand edge of the page or, if necessary, on the page facing the figure.

(c) Tables should be inserted in the appropriate place in the text, except that lengthy or bulky tables should appear as an appendix.

(d) Folded diagrams, maps, tables, etc., should read as right-hand pages when open.

## 4. *Binding.*

(a) The thesis must be sewn and bound with dark cloth on stiff covers. (A spring-type or screw-type binder is unacceptable. Stapling and plastic or "perfect" binding without sewing are also unacceptable.)

(b) During binding the edges should be trimmed.

(c) On the spine of the thesis should be given, in gold lettering of suitable size, normally reading from the top to the bottom, the title of the thesis, shortened if necessary, followed by the candidate's surname. Where the width of the spine allows, the lettering may be placed horizontally, with the title of the thesis near the top of the spine and the candidate's surname near the middle.

(d) When published papers are submitted as evidence they should normally be bound near the back of the thesis as an appendix. In the case of published papers of unusual size it may be desirable to bind them in a separate volume. If they have been bound by the publisher it is desirable to keep them in a special case made and lettered to simulate a bound volume of a thesis.

Supplementary material such as folded maps and other large folded sheets may be placed in a pocket inside the back cover of the bound thesis.

Supplementary material such as reels of magnetic tape or microfilm which cannot readily be kept in a pocket should be placed in a special case made and lettered to simulate a bound volume of the thesis.

A supplementary case or additional volume of a thesis should be distinguished by a volume number but should otherwise be uniform with the first part of the thesis in respect to colour, lettering and, as far as possible, size.

##### 5. *Availability.*

(a) Three bound copies of the thesis, including the top typewritten copy (or approved alternative), and two additional loose copies of the summary should be lodged with the Academic Registrar. If the thesis is accepted for the award of the degree the Academic Registrar will distribute two copies, including the top copy, to the University Library, and one copy to the Head/Chairman of the appropriate University department.

(b) Subject to the author's consent, one copy of the thesis deposited in the Library will be available for loan.

(c) Subject to the author's consent, the thesis will be available for photocopying.

(d) The author will be asked after the award of the degree to give his consent to (b) and (c) in writing. Such notice of consent will be inserted by the Academic Registrar in the copies deposited in the Library.

(e) If the author's consent is not given to section (b) the thesis will in any case become available for loan two years after the award of the degree.

## RULES

Rules for the University Library	- - - - -	1028
Laboratory Rules and Rules Applicable to Students on University Premises	- - - - -	1033
Rules for Students using the Economics Statistics Laboratory	- - - - -	1034
Rules for Students using the Napier Birks Room	-	1034
Rules of the Computing Annexes	- - - - -	1035
Rules for the Conduct of Examinations	- - -	1036

## RULES FOR THE UNIVERSITY LIBRARY

## I. OPENING AND CLOSING OF THE LIBRARY

1. Except on Saturdays, Sundays, public holidays and such other occasions as the Council may direct that it be closed, the Library shall be open from 9 a.m. to 5 p.m. During the academic year it shall also be open from 2 p.m. to 5 p.m. on Saturdays, from 1.30 p.m. to 5.30 p.m. on Sundays, and to 10 p.m. on such days as the Library Committee may direct; and during certain periods of the academic year it shall be open from 10 a.m. to 6 p.m. on Saturdays, from 1.30 p.m. to 5.30 p.m. on Sundays and public holidays, and to 11 p.m. on such days as the Library Committee may direct.

## II. PERSONS ENTITLED TO USE THE LIBRARY

2. The following persons are entitled to read in the Library:

Members and past members of the Council.

Graduates of the University or of universities recognised by the University.

Members, full-time or part-time, of the academic staff of the University, and members of any Faculty or Board of Studies of the University.

Officers of the administrative staff.

Heads and Deputy Heads of affiliated colleges.

Professional officers, laboratory managers and senior laboratory technicians.

Students enrolled for courses of study in the University.

3. Members of the ancillary staff of the University whose status is not listed in rule 2 may be permitted to read in the Library.

4. Other persons who wish to study in the Library may, after application to the Librarian, be permitted by the Library Committee to do so for specified periods.

5. Every person entitled to use the Library may be required to produce to the Librarian or officer in charge of the Library for the time being or any authorised person proof of his identity and status. No person shall refuse or neglect to produce such proof.

## III. CONDUCT OF READERS

6. No person shall remove any book, periodical or other item from the Library, except in accordance with the provisions of section IV of these rules.

7. (a) No person shall interfere with the comfort of another person in the Library, or cause damage in the Library, or disfigure any book, periodical or other item.

(b) No person shall take any bag or case into the Library.

(c) No person shall reserve a reading place during his absence from the Library.

(d) No person shall smoke in the Library except in the rooms prescribed by the Committee.

(e) Any person who shall commit any breach of rules 5, 6 or 9 hereof or of paragraphs (a), (b), (c) or (d) of this rule 7:

(i) may be excluded or removed from the Library by the Librarian or officer in charge for the time being; and

(ii) shall make good any damage caused by such breach; and

(iii) may be deprived of the use of the Library for such time as the Council may determine.

(f) The Librarian may report any breach of rules 5, 6 or 9 hereof or of paragraphs (a), (b), (c) or (d) of this rule 7 to the Board of Discipline, and the Board of Discipline may take such action as it thinks fit.

IV. BORROWING OF BOOKS

8. The following users are entitled to borrow books, periodicals and other items approved for borrowing:

Members and past members of the Council.

Professors, readers, senior lecturers, lecturers, senior research fellows, research fellows, post-doctoral fellows, senior tutors, senior demonstrators, tutors, demonstrators, and other persons of equivalent status holding full-time or part-time teaching or research appointments in the University.

The Registrar, Academic Registrar and Bursar.

Heads and Deputy Heads of affiliated colleges.

Professional officers, laboratory managers and senior laboratory technicians.

Such bodies, institutions and other persons as the Chairman of the Library Committee and the Librarian may from time to time approve.

9. Every borrower may be required to produce proof of his identity or status at the loan desk. No person shall refuse or neglect to produce such proof.

10. Persons whose status is listed in rule 8 may have on loan at any time up to forty items, but with allowance for more at the Librarian's discretion. Loans of books from the open collection in the Research Services Wing shall be for a period of four weeks in the first instance, with the option of a ten-week loan on request, or a fifty-two week loan at the Librarian's discretion. A loan may be renewed for a further period at the Librarian's discretion if in the meantime there has been no other application for the item.

11. Short-term visitors to departments may borrow books and periodicals. They may have on loan at any time up to twenty items, but with allowance for more at the Librarian's discretion. Loans of books shall be limited to a period of four weeks in the first instance. A loan may be renewed for a further period of four weeks at the Librarian's discretion if in the meantime there has been no other application for the item.

12. Members of the ancillary staff of the University whose status is not listed in rule 8 and who make written application to the Librarian, and the spouses of persons whose status is listed in rule 8, may borrow books except books from the reserve collection or other books marked for limited loan. They may not borrow periodicals. They may have on loan at any time up to eight items, but with allowance for more at the Librarian's discretion. Loans shall be limited to a period of fourteen days in the first instance. A loan may be renewed once only for a further period of fourteen days at the Librarian's discretion if in the meantime there has been no other application for the item.

13. (a) Research scholars and students enrolled as candidates for higher degrees may borrow books but not periodicals except periodicals in accordance with rule 15. They may have on loan at any time up to twenty items, but with allowance for more at the Librarian's discretion. Loans of books shall be limited to a period of four weeks in the first instance. A loan may be renewed once only for a further period of four weeks at the discretion of the Librarian if in the meantime there has been no other application for the item.

(b) Enrolled undergraduates, and students proceeding to the Diploma in Education, may borrow books but not periodicals except in accordance with rule 15 in the case of certain categories of undergraduate.

(c) Graduates of the University or of other universities approved by the University, and such other persons as the Chairman of the Library Committee and the Librarian may from time to time approve, may borrow books but not periodicals from the Barr Smith Library and the Law Library and the Medical Library, on paying an annual fee of \$10.

(d) Graduates of the University or of other universities approved by the University, and such other persons as the Chairman of the Library Committee and the Librarian may from time to time approve, may, if they are members of the profession of medicine, dentistry or physiotherapy or of a related profession, borrow books from the Barr Smith Library, the Law Library and the Medical Library, and periodicals both bound and, at present, unbound from the Medical Library only on paying an annual fee of \$20.



(e) Borrowing under this rule 13 shall be subject to the following conditions except by special arrangement:

- (i) A borrower, other than one mentioned in 13(a), may have on loan at any time up to eight volumes, but with allowance for more at the Librarian's discretion.
- (ii) Loans of books to a borrower, other than one mentioned in 13(a), shall be for no longer than fourteen days in the first instance. A loan may be renewed once only for a further period of fourteen days at the Librarian's discretion if in the meantime there has been no other application for the item. A volume which has been on loan for fourteen days must be returned within four days of the date of a notice recalling it. A borrower who fails to return a recalled item within this four-day period shall be awarded two demerit points for each day by which the four-day period is exceeded.

14. The following provisions shall apply to all borrowers:

- (a) Items placed on reserve and available for restricted loan within the Library may also be made available for overnight loan in the period beginning one hour before and ending fifteen minutes before the Library is closed, and must be returned to the Library by the specified time. A borrower who fails to return any such item by the specified time, if late return prevents another reader from using it when he has a right to it, or if it is recalled, shall be awarded two demerit points for each hour (to a total of ten hours in any day) by which the time specified for return of the item is exceeded.
- (b) Any item which is borrowed from the open shelves for overnight loan must be returned to the Library by the specified time. A borrower who fails to return any such item by the specified time shall be awarded one demerit point for each hour (to a total of ten hours in any day) by which the time specified for return of the item is exceeded.
- (c) Any item which is borrowed from the open shelves for a period of three days must be returned by the specified time. A loan may be renewed once only for a further period of three days at the discretion of the Librarian if in the meantime there has been no other application for the item. A borrower who fails to return any such item by the specified time shall be awarded five demerit points for each day by which the loan period is exceeded, the day of return being counted as one day.
- (d) No item is recognised as having been returned to the Library until it is received at one of the official book-return points. It is the responsibility of the borrower to ensure that any item which he borrows from the Library is returned to an official book-return point.

15. Members of the teaching and research staff whose status is not listed in rule 8, and postgraduate students enrolled as candidates for higher degrees, may borrow bound and unbound periodicals from the Barr Smith Library on production of their library passes but only if such passes are suitably endorsed or coded. Students who are enrolled in the fourth or a later year of a course for a degree, or in a course for a postgraduate diploma other than the Diploma in Education, may borrow from the Barr Smith Library bound volumes of periodicals related to their courses on production of their library passes but only if such passes are suitably endorsed or coded. Special provisions may apply to the Medical Library and the libraries within the Faculties of Agricultural Science, Law and Music.

16. No periodical shall be borrowed until it has been in the Library seven days. Every bound or unbound periodical then borrowed for departmental circulation or for personal use must be returned within seven days. The loan of a bound periodical may be renewed for a further period of seven days at the discretion of the Librarian if in the meantime there has been no other application for it.

17. No book shall be borrowed until it has been in the Library seven days. Otherwise, any book except those specially reserved may be borrowed. Specially reserved books may be borrowed only by permission of the Library Committee.

18. Any publication which, although classified as a periodical, is acknowledged by the Librarian to be monographic in character, may be borrowed on the conditions which would have applied if it had been classified as a book.

19. Except as provided in rule 14(a) books and periodicals may be borrowed until thirty minutes before closing time on weekdays and until fifteen minutes before closing time on Saturdays and Sundays.

20. For each item borrowed a voucher must be filled in and deposited with the Librarian. No item approved for borrowing may, in any circumstances, be taken out of the Library until a borrowing voucher has been given for it.

21. The Librarian may recall an item at any time, and thereupon it must be returned within four days of the date of the notice. A borrower who fails to return any such item within this four-day period shall be awarded two demerit points for each day by which the four-day period is exceeded.

22. All items on loan from the Library shall be returned on a date to be fixed each year by the Chairman of the Library Committee and the Librarian for the annual check.

23. (a) For every four demerit points awarded to him a borrower shall be liable to the suspension for one day of his right to borrow from the open collection of the Library.

(b) The suspension of a borrower's right to borrow from the open collection shall take effect from the date on which the Librarian issues a notification to him that the demerit points awarded to him during the current calendar year have reached a total of sixty.

(c) If possible, the Librarian shall warn a borrower when the demerit points awarded to him during the current calendar year reach a total of forty.

24. A borrower of an item shall be held responsible for any loss, injury or mutilation of it or disfigurement of it by writing or other marks, which occurs while the item is on loan to him, and shall be required to pay the full cost of replacing or repairing such an item and may also, at the discretion of the Council, be deprived of the use of the Library.

25. Appeals by borrowers against suspension of their borrowing rights, and complaints by the Librarian against library users who seriously or persistently infringe library rules, shall be referred to a Library Tribunal of six members comprising the Chairman of the Library Committee, two student members (an undergraduate and a postgraduate student who is not a member of the academic staff), two members of the academic staff and one member of the library staff. The Library Tribunal, acting within such powers as the Council may delegate to it, shall decide or recommend to the Council on the appeals and complaints that are referred to it.

26. No items lodged in departments of the University by permission of the Library Committee may be borrowed for use outside the departments except through the Barr Smith Library.

27. The number of items issued on interlibrary loan to another institution shall be limited to twenty at a time, but with allowance for more at the Librarian's discretion.

28. The Council may vary any of the foregoing rules at any time either in specific cases or generally.

29. Until the introduction of a computerised circulation system the Library Committee may vary the provisions of the foregoing rules so far as they relate to demerit points. Any such variation of these rules shall be displayed in a prominent place in the Library and shall become binding from the time it is so displayed.

## V. RULES FOR THE MUSIC LIBRARY

30. Teachers in the Elder Conservatorium are entitled to borrow books or music from the Music Library. Students may borrow music on the written recommendation of a teacher, but must not have in their possession more than two copies at the same time.

31. Subject to the approval of the Council the rules relating to the suspension of borrowing privileges may be varied in the case of the Music Library.

32. In all other respects the foregoing rules of the University Library shall apply to the Music Library.

## VI. RULES FOR THE MEDICAL AND LAW LIBRARIES

33. Members of the Australian Physiotherapy Association (S.A. Branch) shall be entitled to use the Medical Library in accordance with the terms of the agreement between the Branch and the University. The agreement may be seen in the Medical Library.

34. Subject to the approval of the Council the rules relating to the suspension of borrowing privileges may be varied in the case of the Medical and Law Libraries.

35. In all other respects the foregoing rules of the University Library shall apply to the Medical and Law Libraries.

## ADDENDUM

N.B.: In addition to the foregoing rules, attention is drawn to the restrictions on photocopying of books and periodicals imposed by the Copyright Act (1968). Measures are currently being taken by the Library:

- (a) to draw the attention of readers to the relevant sections of the Copyright Act, and
- (b) to exert appropriate control of the library's photocopying machines to prevent infringement of the law.

Such regulations as may be needed to comply with the requirements of the Copyright Act will be introduced from time to time by the Council on the advice of the Library Committee which may approve the withdrawal of certain library privileges from anyone found in breach of these regulations.

LABORATORY RULES AND  
RULES APPLICABLE TO STUDENTS ON UNIVERSITY PREMISES

A. GENERAL

1. The attention of all students is drawn to the by-laws made under the University of Adelaide Act, 1935-1964, and The University of Adelaide Act, 1971-1978, which are published in the University Calendar (Volume I) and are exhibited on notice boards throughout the University.

2. The Head of a department may exclude any student from any class in that department for any cause he shall deem sufficient; and he shall report every such exclusion, and the grounds for it, to the Council through the Chairman of the Board of Discipline. The Council may reverse, vary or confirm the exclusion upon such terms as it shall think fit. The fees paid by any student so excluded shall not be refunded to him unless the Council shall otherwise determine.

3. The possession of fireworks, home-made explosives or explosive material of any kind on the University grounds or in any University building is forbidden.

B. LABORATORIES

1. For students taking regular courses involving laboratory work in the University an appropriate laboratory will be open daily during term time (Saturdays and holidays excepted) at such hours as shall be considered necessary by the Head of the department concerned. Persons engaged in advanced work or original research may work at such additional times as the Head of the department may arrange.

2. The facilities of a laboratory will also be made available for original research carried on by students or graduates not proceeding to a degree in the University at such times and under such conditions as the Head of the department may determine; the fee for use of a laboratory and its facilities, and the charges for materials, to be determined in each case.

3. Whenever necessary and possible, each student will have a definite working place and locker or drawer assigned to him, which he may not change without permission. To avoid congestion, students should not move about the laboratories unnecessarily.

4. Paper and refuse of any kind must be placed in the receptacles provided for the purpose. No solid material of any kind shall be thrown into sinks.

5. Students are responsible for the cleanliness of their apparatus and work places or benches, which must be left clean and tidy after each practical session.

6. All preparations and equipment made from materials supplied by the University shall remain the property of the University.

7. Large or expensive pieces of apparatus will be supplied for use by students only on condition that any damage or breakage is to be made good by the student causing the damage or breakage, on such basis as the Head of the department may determine.

8. No experiments of a dangerous nature may be performed without the express sanction of the Head of the department concerned.

9. Any accident must be reported at once to the person currently in charge of the laboratory.

10. The Head of a department may impose a fine not exceeding \$10 for any breach of discipline, misconduct, misuse of apparatus or reagents, or waste of gas, water or electricity. He shall report in writing to the Registrar the amount of such fine, and the reason for it; and the fine shall be paid to the Registrar within seven days of the time of its imposition.

Rules approved by the Council, April, 1958.

RULES FOR STUDENTS USING THE  
ECONOMICS STATISTICS LABORATORY1. *Conduct of users*

The Laboratory is to be used only by Economics or Commerce students doing calculations, audio-visual carrel or computer augmented courses. Users must refrain from conduct which will prevent the effective use of the Laboratory by others.

2. *Times of use*

During the academic year the room will be open between 9 a.m. and 10 p.m. on Mondays to Fridays, and from 9 a.m. to 12 noon on Saturdays. At all other times the room will be open during such hours as the Dean of the Faculty of Economics may determine. The computer facility will be available between 9 a.m. and 5 p.m., Monday to Friday; evening hours will be arranged and will be notified in the Laboratory each term.

3. *Use of electronic calculators, carrels and computer*

The calculators may be used at any time that the room is open except for the calculators in the Teaching Room, which may only be used if a class is not in progress. Carrels may be used only by students doing courses that involve audio-visual carrel instruction. The computer may only be used by authorised users and at all times its use is subject to the control of the Laboratory Supervisor.

Under no circumstances may any equipment be removed from the Laboratory.

4. *General*

Any student not observing the above rules shall be subject to disciplinary action.

## RULES FOR STUDENTS USING THE NAPIER BIRKS ROOM

1. *Conduct of users*

The room is to be used for purposes of study only. Users must refrain from conduct which will prevent the effective use of the room by others.

2. *Persons entitled to use the room*

The room is available for use by students enrolled for second-year or subsequent subjects in the Departments of Economics and Commerce.

3. *Times of use*

The room shall be open at such times as may be determined by the Dean of the Faculty of Economics in consultation with the Faculty.

4. *Use of books, periodicals, statistical material*

All such material must be returned to the desk of the Librarian after use.  
*In no circumstances* may such material be removed from the room.

5. *Use of electronic calculators*

Electronic calculators may only be used for short calculations. All other calculations should be done in the Statistics Laboratory.

6. *General*

Any student not observing the above rules shall be subject to disciplinary action.

RULES OF THE COMPUTING ANNEXES

1. These rules shall apply to any area housing equipment connected to the central computer, or used for collection and dissemination of computer material, which areas are hereby defined as Computing Annexes, and to such other areas as may be declared by the Council to be Computing Annexes.

In these rules the term 'supervisor' means the person appointed in consultation with the Director of the Computing Centre by the Chairmen of Departments controlling the Annexe, or by the Director of the Computing Centre. A supervisor may appoint a deputy.

2. These rules are subservient to any statutes, regulations or rules relating to discipline within the University generally.

3. A Computing Annexe will be available for use by such persons as may be approved by the supervisor, who shall keep adequate records of such approvals.

4. The supervisor shall open the Annexe during normal working hours, and during such extended periods as may in his judgement be desirable and can be adequately supported.

5. Users of Annexes shall not conduct themselves in a way which will interfere with other users, either directly, by interference with equipment, or otherwise. In particular, users must—

- (a) obey directions by the supervisor designed to maintain safe, clean and tidy working conditions;
- (b) not remove materials supplied or produced, except insofar as they may be supplied or produced for the benefit of the individual user;
- (c) not operate any item of equipment specified by the supervisor unless authorised to do so by the supervisor;
- (d) immediately report any machine failure to the supervisor;
- (e) conform to rules made by the supervisor regarding logging, documenting or otherwise controlling the use made of the equipment; and
- (f) not cause unauthorised work to be carried out by or through the equipment.

6. A supervisor may exclude any person from the Annexe, for a period not exceeding 24 hours, if that person fails to observe the rules of the Annexe. Written notice of such exclusion shall, within 24 hours, be given to the Director of the Computing Centre.

## RULES FOR THE CONDUCT OF EXAMINATIONS

1. No candidate will be allowed to enter the examination room during any examination more than half-an-hour after the time fixed for the beginning of the written or practical work in that examination.

2. No candidate will be allowed to leave the examination room during any examination before half-an-hour has elapsed from the time fixed for the beginning of the written or practical work in that examination nor during the last quarter of an hour.

3. Any candidate who shall leave the examination room shall be allowed to return to it during that examination only at the absolute discretion of the Officer-in-Charge. A candidate who wishes to leave the room temporarily *must therefore obtain the consent of a Supervisor before doing so.*

4. The attention of candidates is drawn to the following statute:

"A candidate must not during any examination whatever:

- (a) have in his or her possession any book or notes or any other means whereby he or she may improperly obtain assistance in his or her work; or
- (b) directly or indirectly give assistance to any other candidate; or
- (c) permit any other candidate to copy from or otherwise use his or her papers; or
- (d) directly or indirectly accept assistance from any other candidate; or
- (e) use any papers of any other candidate; or
- (f) by any other improper means whatever obtain or endeavour to obtain, directly or indirectly, assistance in his work, or give or endeavour to give, directly or indirectly, assistance to any other candidate; or
- (g) be guilty of any breach of good order or propriety.

Any candidate who shall be guilty of a breach of any of the provisions of this regulation shall lose that examination; and, if detected at the time, shall be summarily dismissed from the examination room; and shall be liable to such further punishment, whether by exclusion from future examination or otherwise, as the Council may determine."

5. When the five-minute warning before the end is given, *all candidates must remain seated* until their books have been collected. No candidate may leave his or her seat until all answers have been collected and the announcement is made that candidates may leave the room.

## INSTRUCTIONS TO CANDIDATES

1. Read carefully the directions printed on the front of the examination answer book and any directions that may be printed at the head of the examination paper.

2. Communicating with Examiners prior to the publication of the examination results is forbidden. Candidates who feel that they have a genuine claim for enquiry should state their cases in writing to the Academic Registrar.

## TIME-TABLES FOR 1979

NOTE: Morning lectures in all subjects will commence at ten minutes past the hour shown in the time-tables (including those shown as 12 noon).

Afternoon and evening lectures will commence at the time shown in the time-tables.

All lectures are of fifty minutes duration.

FACULTY OF AGRICULTURAL SCIENCE:										
B.Ag.Sc.	-	-	-	-	-	-	-	-	-	1038
FACULTY OF ARCHITECTURE AND PLANNING:										
B.Arch.	-	-	-	-	-	-	-	-	-	1061
FACULTY OF ARTS:										
B.A.	-	-	-	-	-	-	-	-	-	1040
Dip.App.Psych.	-	-	-	-	-	-	-	-	-	1045
Dip.Ed.	-	-	-	-	-	-	-	-	-	1046
Adv.Dip.Ed. (and M.Ed. Course Work)	-	-	-	-	-	-	-	-	-	1046
Late Afternoon and Evening Lectures	-	-	-	-	-	-	-	-	-	1062
FACULTY OF DENTISTRY:										
B.D.S.	-	-	-	-	-	-	-	-	-	1047
FACULTY OF ECONOMICS:										
B.Ec.	-	-	-	-	-	-	-	-	-	1048
M.B.M. Course Work	-	-	-	-	-	-	-	-	-	1049
Late Afternoon and Evening Lectures	-	-	-	-	-	-	-	-	-	1062
FACULTY OF ENGINEERING:										
B.E.	-	-	-	-	-	-	-	-	-	1050
FACULTY OF LAW:										
LL.B.	-	-	-	-	-	-	-	-	-	1061
FACULTY OF MATHEMATICAL SCIENCES:										
B.Sc.	-	-	-	-	-	-	-	-	-	1055
FACULTY OF MEDICINE:										
M.B., B.S.	-	-	-	-	-	-	-	-	-	1047
FACULTY OF MUSIC:										
B.Mus.	-	-	-	-	-	-	-	-	-	1061
FACULTY OF SCIENCE:										
B.Sc.	-	-	-	-	-	-	-	-	-	1055



**FACULTY OF AGRICULTURAL SCIENCE**  
**TIME-TABLE OF SUBJECTS FOR THE DEGREE OF**  
**BACHELOR OF AGRICULTURAL SCIENCE**

1979

Syllabus No.	Subject	Monday	Tuesday	Wednesday	Thursday	Friday
	<b>FIRST- AND SECOND-YEAR SUBJECTS</b>					
	See under the Faculties of Economics Mathematical Sciences and Science respectively.					
	<b>THIRD-YEAR SUBJECTS*</b>					
WB03	Agricultural Biochemistry I—					
	Lectures .. .. .	2	9	—	—	—
	Practicals .. .. .	—	12-6	—	—	—
WP03	Agricultural Microbiology—					
	Lectures .. .. .	—	—	4	—	—
	Practicals .. .. .	—	—	—	4-6	—
WX03	Agriculture III—					
	Lectures .. .. .	—	—	9	2	—
	Practicals .. .. .	—	—	10-1	—	—
WN03	Animal Physiology & Production I—					
	Lectures .. .. .	—	11	3	—	—
	Practicals .. .. .	—	—	—	—	9-12
WY73	Biometry—					
	Lectures .. .. .	3	—	2	—	—
	Tutorials .. .. .	4 or 5	—	—	—	—
WF03	Crop Physiology—					
	Lectures .. .. .	9	10	—	—	—
	Practicals .. .. .	—	—	—	10-1	—
WE03	Entomology-Pathology—					
	Lectures .. .. .	—	—	—	3	12
	Practicals .. .. .	10-1	—	—	—	—
EE43	Economics of Natural Resource Use—					
	Lectures .. .. .	—	12	—	9	—
	Tutorial .. .. .	—	2	—	—	—
EE63	Farm Prices and Policy—					
	Lectures .. .. .	—	3, 4	—	—	—
	Tutorial .. .. .	—	≠	—	—	—
QT02	Mathematical Statistics II— (See B.Sc. in Faculty of Mathematical Sciences)					
WB13	Soil Science I—					
	Lectures .. .. .	4	—	—	—	2
	Practicals .. .. .	—	—	—	—	3-6
	<b>FOURTH-YEAR SUBJECTS*</b>					
WB04	Agricultural Biochemistry II—					
	Lectures .. .. .	9	—	9	—	10
	Practicals .. .. .	2-6	—	2-6	—	—
WX04	Agriculture IV—					
	Lectures/Seminars .. .. .	—	—	10-1	—	—
WA74	Agronomy—					
	Lectures .. .. .	9	—	9	—	10
	Practicals .. .. .	2-6**	—	2-6	—	—

**NOTE:** Lectures in all subjects taken at the Waite Agricultural Research Institute will commence at ten minutes past the hour shown in the time-tables.

\*Any student who is apparently unable to pursue a combination of subjects due to a clash in the hours set aside in this time-table for work in that subject should consult an Assistant to the Dean before making a final decision.

\*\* Project time.

**FACULTY OF AGRICULTURAL SCIENCE—Continued**  
**TIME-TABLE OF SUBJECTS FOR THE DEGREE OF**  
**BACHELOR OF AGRICULTURAL SCIENCE**  
**1979**

Syllabus No.	Subject	Monday	Tuesday	Wednesday	Thursday	Friday
WN04	Animal Physiology & Production II— Lectures .. .. . Practicals .. .. .	11 —	— —	— —	12 2-6	12 2-6
EE03	Economics III (Ag. Sc.)— (See B.Ec. in Faculty of Economics)					
WE04	Entomology II— Lectures .. .. . Practicals .. .. .	10 —	— 9-6	— —	— —	9, 11 —
SJ03	Genetics III— Lectures .. .. . Practicals .. .. . Tutorial .. .. .	— — —	10, 12 2-5 9	— — —	9, 10 2-5 —	— — —
WF04	Horticultural Science— Lectures .. .. . Practicals .. .. .	11 —	— —	— —	10, 12 —	12 2-6
QT03	Mathematical Statistics III— (See B.Sc. in Faculty of Mathematical Sciences)					
WA84	Plant Breeding— Lectures .. .. . Practicals .. .. .	10 2-6	— —	— 2-6**	— —	9, 11 —
WP04	Plant Pathology II— Lectures .. .. . Practicals .. .. .	12 —	— 2-6	— —	9, 11 2-6	— —
WS04	Soil Science II— Lectures .. .. . Practicals .. .. .	10 —	— 9-1	— —	— 2-6	9, 11 —

**NOTE:** Lectures in all subjects taken at the Waite Agricultural Research Institute will commence at ten minutes past the hour shown in the time-tables.

\*Any student who is apparently unable to pursue a combination of subjects due to a clash in the hours set aside in this time-table for work in that subject should consult an Assistant to the Dean before making a final decision.

\*\* Project time.

**FACULTY OF ARTS**  
**TIME-TABLE OF SUBJECTS FOR THE DEGREE OF**  
**BACHELOR OF ARTS**

1979

Syllabus No.	Subject	Monday	Tuesday	Wednesday	Thursday	Friday
<b>GROUP A</b>						
<b>FIRST-YEAR SUBJECTS AND HALF-SUBJECTS</b>						
AA01	Anthropology I .. .. .	—	—	2.15(A), 4.15(B)	—	2.15(A), 4.15(B)
AC31	Classical Studies I .. .. .	—	9	—	9	—
UA11	Drama I .. .. .	—	3.15 <sup>f</sup>	—	—	—
AJ71	Economic Geography I .. .. .	—	—	5.15	—	5.15
AE01	English I .. .. .	—	12(A) 5.15(B)	—	12(A) 5.15(B)	—
AF01	French I .. .. .	10	10(A) 11(B)	10	—	10
AF11	French IA .. .. .	2.15	2.15	2.15	2.15	2.15
AJ01	Geography I .. .. .	—	11	—	11	—
AG01	German I .. .. .	—	10 11 <sup>g</sup> (A) 2.15 <sup>g</sup> (B)	11 <sup>g</sup> (C) 3.15	3.15	—
AG11	German IA .. .. .	9	10	9	10	9
AG74	Science German .. .. .	—	9	—	9	—
AC11	Greek I .. .. .	≠	—	≠	≠	≠
AC71	Greek IA .. .. .	9	—	9	9	9
AH01	History IA .. .. .	—	2.15	—	2.15	—
AH31	History IB .. .. .	11 <sup>d</sup>	—	11 <sup>d</sup>	—	11 <sup>d</sup>
AH41	History IC .. .. .	—	4.15	—	4.15	—
AJ2H	Human Geography IH (First half of year)	—	11	—	11	—
AQ21	Japanese I .. .. .	12	12	12	12	12
AQ31	Japanese IA .. .. .	11	11	11	11	11
AC01	Latin I .. .. .	≠	—	≠	≠	≠
AC41	Latin IA .. .. .	11	—	11	11	11
AL2H	Logic IH .. .. .	—	11(A), 5.15(B)	—	—	—
UA51	Music I } .. .. .	4.15-6.15	—	4.15	—	—
UA61	Music IA }					
AL1H	Philosophy IH(A) .. .. .	—	—	—	11(A), 5.15(B)	—
AL3H	Philosophy IH(B) .. .. .	3.15 <sup>e</sup> (A) 5.15 <sup>e</sup> (B)	11 <sup>e</sup> (A) 5.15 <sup>e</sup> (B)	—	—	—
AJ1H	Physical Geography IH (Second half of year)	—	11	—	11	—
SP9H	Physics, Man and Society IH ..	11, 4.15 <sup>g</sup>	—	—	—	—
AP11	Politics 1A }	—	—	—	—	—
AP21	Politics 1B }					
	P701 Intro. to Politics and Pol. Economy .. .. .					
	P703 Political Sociology .. .. .					
	P711 History of Political Thought					
	P712 Liberal Democracy in Aust.					
AY01	Psychology I .. .. .	10(A), 5.15(B)	—	10(A), 5.15(B)	—	10(A), 5.15(B)
EE71	Social Economics I .. .. .	—	12	—	12	—

**NOTE:** Morning lectures in all subjects will commence at ten minutes past the hour shown in the time-tables (including those shown as 12 noon).

Afternoon and evening lectures will commence at the time shown in the time-tables.

For time-tables of subjects taught by other faculties see the appropriate Faculty Time-table.

**FACULTY OF ARTS—Continued**  
**TIME-TABLE OF SUBJECTS FOR THE DEGREE OF**  
**BACHELOR OF ARTS**  
**1979**

Syllabus No.	Subject	Monday	Tuesday	Wednesday	Thursday	Friday
<b>GROUP B</b>						
<b>SECOND-YEAR SUBJECTS AND HALF-SUBJECTS</b>						
AE82	American Literature II .. ..	5.15	—	5.15	—	—
AC72	Ancient History II (Roman) ..	2.15	—	2.15	—	—
AA02	Anthropology IIA .. ..	—	—	12	—	12
AA12	Anthropology IIB .. ..	—	—	4.15	—	4.15
AA22	Anthropology IIC .. ..	—	—	2.15	—	2.15
AQ12	Asian Development II .. ..	11	—	11	—	—
AQ42	Asian Civilisations: Past and Present II .. ..	11	—	11	—	—
AE72	Australian Literary Studies II ..	—	9	—	9	—
AQ02	Chinese II .. ..	9	9	9	9	9
AC32	Classical Studies II—					
	C701 Greek Art and Arch. (1) ..	—	12 <sup>a</sup>	—	12 <sup>a</sup>	—
	C702 Roman Poetry .. ..	9 <sup>a</sup>	—	—	—	9 <sup>a</sup>
	C711 Greek Art and Arch. (2) ..	—	12 <sup>b</sup>	—	12 <sup>b</sup>	—
	C704 Pastoral, Satire and the Novel	9 <sup>b</sup>	—	—	—	9 <sup>b</sup>
	C712 Greek Art and Archaeology (Special Topics) .. ..	—	12 <sup>c</sup>	—	12 <sup>c</sup>	—
	C710 Narrative and Didactic Poetry	9 <sup>c</sup>	—	—	—	9 <sup>c</sup>
	C706 Comparative Literature ..	12 <sup>c</sup>	—	12 <sup>c</sup>	—	—
AE02	English II .. ..	—	5.15	—	5.15	—
AF02	French II .. ..	—	11	—	11	3.15
AF12	French IIA .. ..	—	10, 11	11, 12	12	—
AF72	French IIB .. ..	≠	≠	≠	≠	≠
AJ12	Geography IIA } .. ..	—	10	10	10	10
AJ22	Geography IIB }					
AJ7H	Geography IIIH }					
	(not all these times will be needed)					
AG02	German II (Times include options. Students normally attend 4 classes)	12	11	12	12	—
			5.15, 6.15		2.15(A), 5.15, 6.15(B)	
AG12	German IIA (see note for German II)	12	11	12	12, 3.15	—
AG87	German IIB .. ..	3.15	10	—	4.15	—
AC12	Greek II .. ..	≠	≠	≠	≠	≠
AC77	Greek IIS .. ..	9	—	9	9	9
AC82	Greek IIA .. ..	≠	≠	≠	≠	≠
AC92	Greek Art and Archaeology II ..	—	12	—	12	—
AH02	History IIA } .. ..	—	3.15	—	3.15	—
AH22	History IIB }					
	H701 Early Modern England c. 1500-1700 .. ..					
	H702 Modern China and Japan					
	H703 France 1850-1918 .. ..	—	10	—	10	—

**NOTE:** Morning lectures in all subjects will commence at ten minutes past the hour shown in the time-tables (including those shown as 12 noon).

Afternoon and evening lectures will commence at the time shown in the time-tables.

For time-tables of subjects taught by other faculties see the appropriate Faculty Time-table.

**FACULTY OF ARTS—Continued**  
**TIME-TABLE OF SUBJECTS FOR THE DEGREE OF**  
**BACHELOR OF ARTS**

1979

Syllabus No.	Subject	Monday	Tuesday	Wednesday	Thursday	Friday
	<b>SECOND-YEAR SUBJECTS (Contd.)</b>					
	H704 Culture and Crisis: England and Europe 1870-1970 ..	—	4.15	—	4.15	—
	H707 Bismarck to Hitler ..	—	2.15	—	2.15	—
	H708 Medieval Europe ..	—	11	—	11	—
	H709 Australia: Outpost of Empire	12	—	12	—	—
	H710 Pacific History ..	—	10	—	10	—
	H712 Social and Political Ideas since 17th Century ..	—	5.15	—	5.15	—
	H713 Nationalism and Revolution in Mod. S.E. Asia ..	4.15 <sup>a</sup>	4.15 <sup>a</sup>	—	4.15 <sup>a</sup>	—
AQ22	Japanese II .. .. .	2.15	2.15	2.15	2.15	2.15
AC02	Latin II .. .. .	≠	≠	≠	≠	≠
AC42	Latin IIA .. .. .	≠	≠	≠	≠	≠
AC57	Latin IIS .. .. .	11	—	11	11	11
AE92	Linguistics II .. .. .	—	4.15	—	4.15	—
AL22	Logic II (see Philosophy II) ..	—	—	—	—	—
UA52	Music II .. .. .	4.15-6.15	—	4.15-6.15	—	—
AE87	Old and Middle English II ..	10	—	10	—	10
AL02	Philosophy II—					
	L201 Logic .. .. .	—	—	4.15 <sup>a</sup>	—	4.15 <sup>a</sup>
	L204 Ethics .. .. .	—	—	6.15 <sup>a</sup>	—	5.15 <sup>a</sup>
	L213 Theories of Human Nature	10 <sup>a</sup>	—	—	—	10 <sup>a</sup>
	L209 Science, Progress and Truth	—	—	11 <sup>a</sup>	—	11 <sup>a</sup>
	L205 Modal Logic .. .. .	—	—	4.15 <sup>b</sup>	—	4.15 <sup>b</sup>
	L217 Problems in Causation ..	—	—	6.15 <sup>b</sup>	—	5.15 <sup>b</sup>
	L211 Marxism .. .. .	10 <sup>b</sup>	—	—	—	10 <sup>b</sup>
	L230 Aesthetics .. .. .	—	—	11 <sup>b</sup>	—	11 <sup>b</sup>
	L208 Advanced Logic .. .. .	—	—	4.15 <sup>c</sup>	—	4.15 <sup>c</sup>
	L206 Metaphysics or Philosophy of Mind .. .. .	—	—	6.15 <sup>c</sup>	—	5.15 <sup>c</sup>
	L203 Philosophy of Religion ..	—	—	11 <sup>c</sup>	—	11 <sup>c</sup>
	L221 Relativism, Witchcraft, Truth and Logic .. ..	10 <sup>c</sup>	—	—	—	10 <sup>c</sup>
AP32	Politics IIA					
AP42	Politics IIB					
	P703 Political Sociology ..	—	4.15	—	4.15	—
	P704 Third World Pol. Econ. ..	10	—	10	—	—
	P706 Marxism-Leninism ..	—	12	—	12	—
	P708 Sociology of Power ..	—	10	—	10	—
	P709 International Politics ..	5.15	—	5.15	—	—
	P710 Contemporary Social Theory	—	5.15	—	5.15	—
	P711 History of Political Thought	5.15	—	5.15	—	—
	P712 Liberal Democracy in Aust.	—	5.15	—	5.15	—
AY02	Psychology II .. .. .	3.15	—	3.15	—	2.15

**NOTE:** Morning lectures in all subjects will commence at ten minutes past the hour shown in the time-tables (including those shown as 12 noon).  
Afternoon and evening lectures will commence at the time shown in the time-tables.  
For time-tables of subjects taught by other faculties see the appropriate Faculty Time-table.

**FACULTY OF ARTS—Continued**  
**TIME-TABLE OF SUBJECTS FOR THE DEGREE OF**  
**BACHELOR OF ARTS**  
**1979**

Syllabus No.	Subject	Monday	Tuesday	Wednesday	Thursday	Friday
	<b>GROUP C</b>					
	<b>THIRD-YEAR SUBJECTS AND HALF-SUBJECTS</b>					
AC73	Ancient History III (Roman) ..	2.15	—	2.15	—	—
AA13	Anthropology IIIB .. .. .	—	—	4.15	—	4.15
AA23	Anthropology IIIC .. .. .	—	—	11	—	11
AA33	Anthropology IIID .. .. .	—	—	10	—	10
AQ03	Chinese III .. .. .	10	10	10	10	10
AC33	Classical Studies III					
	C701 Greek Art and Arch. (1) ..	—	12 <sup>a</sup>	—	12 <sup>a</sup>	—
	C702 Roman Poetry .. .. .	9 <sup>a</sup>	—	—	—	9 <sup>a</sup>
	C708 Ancient Philosophy .. ..	12 <sup>a</sup>	—	12 <sup>a</sup>	—	—
	C711 Greek Art and Arch. (2) ..	—	12 <sup>b</sup>	—	12 <sup>b</sup>	—
	C704 Pastoral, Satire and the Novel	9 <sup>b</sup>	—	—	—	9 <sup>b</sup>
	C707 Greek and Roman Historio- graphy .. .. .	12 <sup>b</sup>	—	12 <sup>b</sup>	—	—
	C712 Greek Art and Archaeology (Special Topics) .. .. .	—	12 <sup>c</sup>	—	12 <sup>c</sup>	—
	C710 Narrative and Didactic Poetry	9 <sup>c</sup>	—	—	—	9 <sup>c</sup>
	C709 Later Roman Empire ..	12 <sup>c</sup>	—	12 <sup>c</sup>	—	—
	C706 Comparative Literature ..	12 <sup>c</sup>	—	12 <sup>c</sup>	—	—
AQ43	The Development of Asia III ..	11	—	11	—	—
EE73	Economic Development Studies III					
EE03	Economics III (Arts) } (see syllabuses (B.A.) for component parts and see under Faculty of Economics for time-tables)					
AE03	English IIIA .. .. .	11	—	11	—	11
AE13	English IIIB .. .. .	—	5.15	—	5.15	—
AF03	French III .. .. .	—	9	—	9	10
AF88	French IIIB .. .. .	≠	≠	≠	≠	≠
AJ13	Geography IIIA } .. .. .	4.15	4.15	4.15	4.15	4.15
AJ23	Geography IIIB } .. .. .					
AJ84	Geography IIIC } .. .. .					
	(not all these times will be needed)					
AG03	German III (see note for German II)	12	11	12	12, 3.15	—
AG88	German IIIB .. .. .	—	10	10-12	—	—
	Honours Seminar .. .. .	—	3.15	—	—	—
AC13	Greek III .. .. .	≠	≠	≠	≠	≠
AC78	Greek IIIS .. .. .	≠	≠	≠	≠	≠
AH03	History IIIA } (see History II)					
AH13	History IIIB } .. .. .					
AQ23	Japanese III .. .. .	2.15	2.15	2.15	2.15	2.15
AC03	Latin III .. .. .	≠	—	≠	—	≠
AC67	Latin IIIS .. .. .	≠	≠	≠	≠	≠
AE93	Linguistics III .. .. .	≠	≠	≠	≠	≠
AL23	Logic III (see Philosophy II) ..					
UA51	Music III .. .. .	≠	≠	≠	≠	≠
UA68	Music IIIS .. .. .	≠	≠	≠	≠	≠

**NOTE:** Morning lectures in all subjects will commence at ten minutes past the hour shown in the time-tables (including those shown as 12 noon).

Afternoon and evening lectures will commence at the time shown in the time-tables.

For time-tables of subjects taught by other faculties see the appropriate Faculty Time-table.

**FACULTY OF ARTS—Continued**  
**TIME-TABLE OF SUBJECTS FOR THE**  
**BACHELOR OF ARTS**

1979

Syllabus No.	Subject	Monday	Tuesday	Wednesday	Thursday	Friday
<b>THIRD-YEAR SUBJECTS (Contd.)</b>						
AE88	Old and Middle English III ..	≠	≠	≠	≠	≠
AL03	Philosophy IIIA } ..					
AL13	Philosophy IIIB } ..					
	C708 Ancient Philosophy ..	12 <sup>a</sup>	—	12 <sup>a</sup>	—	—
	(see also options under Philosophy II)					
AP03	Politics IIIA } ..					
AP13	Politics IIIB } ..					
	P704 Third World Political Econ.	10	—	10	—	—
	P706 Marxism-Leninism ..	—	12	—	12	—
	P708 Sociology of Power ..	—	10	—	10	—
	P709 International Politics ..	5.15	—	5.15	—	—
	P710 Contemporary Social Theory	—	5.15	—	5.15	—
	P713 Modern Political Thought	—	11	—	11	—
AY23	Psychology III .. ..	5.15	4.15	5.15	3.15	5.15
SJ3H	Social Biology IIIH .. ..	≠	≠	≠	≠	≠

**NOTE:** Morning lectures in all subjects will commence at ten minutes past the hour shown in the time-tables (including those shown as 12 noon).

Afternoon and evening lectures will commence at the time shown in the time-table.

For time-tables of subjects taught by other faculties see the appropriate Faculty Time-table.

Times for tutorials and/or practical work will be arranged at the commencement of lectures.

Alternatives are indicated by A, B, C, etc.

≠ Time to be arranged.

a — First term only.

b — Second term only.

c — Third term only.

d — First and second terms only.

e — Second and third terms only.

f — Three additional hours to be arranged.

g — Tutorial.

**FACULTY OF ARTS—Continued**  
**TIME-TABLE OF SUBJECTS FOR THE**  
**DIPLOMA IN APPLIED PSYCHOLOGY**

**1979**

Syllabus No.	Subject	Monday	Tuesday	Wednesday	Thursday	Friday
	The times stated may be modified for particular weeks, with the agreement of enrolled students, should circumstances warrant.					
AY05	Counselling and Psychotherapy ..	—	—	—	3-5 <sup>a</sup>	—
AY15	Psychological Assessment and Measurement .. .. .	—	6-8 <sup>b</sup>	—	—	—
AY25	Behaviour Analysis and Modification	—	—	—	6-8 <sup>a</sup>	—
AY35	Applied Social Psychology .. ..	—	—	—	—	3-5 <sup>b</sup>
AY54	Statistics and Methodology .. ..	—	3-5 <sup>b</sup>	—	—	—
	Practical Work .. .. .	—	6-8 <sup>d</sup>	—	3-5 <sup>c</sup>	—
		—	—	—	6-8 <sup>c</sup>	—

- a* — Terms 2 and 3 only.
- b* — Terms 1 and 2 only.
- c* — Term 1 only.
- d* — Term 3 only.



**FACULTY OF ARTS—Continued**  
**TIME-TABLE OF SUBJECTS FOR THE**  
**DIPLOMA IN EDUCATION**  
**ADVANCED DIPLOMA IN EDUCATION, AND**  
**MASTER OF EDUCATION (COURSE WORK)**

1979

Syllabus No.	Subject	Monday	Tuesday	Wednesday	Thursday	Friday
AD24	Sociology of Education I— Lectures . . . . .	—	—	—	5.15	—
	Tutorials . . . . .	—	—	—	≠	—
AD34	Educational Psychology I— Lectures . . . . .	—	5.15	—	—	—
	Tutorials . . . . .	—	≠	—	—	—
AD15	History of Education IIA					
AD16	History of Education IIB					
	E402 History of Education in France . . . . .	≠ <sup>b</sup>	≠ <sup>b</sup>	≠ <sup>b</sup>	≠ <sup>b</sup>	≠ <sup>b</sup>
	E403 Family, Class and Schooling	5.15 <sup>b</sup>	—	—	—	—
	E404 English Secondary Education	≠ <sup>a</sup>	≠ <sup>a</sup>	≠ <sup>a</sup>	≠ <sup>a</sup>	≠ <sup>a</sup>
	E405 Education, Ideas and Society in Renaissance England . .	5.15 <sup>a</sup>	—	—	—	—
AD26	Sociology of Education IIB . . . .	—	—	5.15	—	—
AD30	Educational Psychology II . . . .	—	—	—	5.15	—
AD40	Comparative Education . . . . .	≠	≠	≠	≠	≠
AD50	History and Sociology of Science . .	—	5.15	—	—	—
AD6H	Advanced Curriculum Studies in Mathematics . . . . .	≠	≠	≠	≠	≠
AD60	Advanced Curriculum Studies in English . . . . .	≠	≠	≠	≠	≠
AD65	Advanced Curriculum Studies in History and Social Science . . . .	—	5.15	—	—	—
AD80	Special Topic (English Curriculum)	≠	≠	≠	≠	≠
AD90	Philosophy of Education II . . . .	5.15	—	—	—	—
AD95	Philosophy of Education III . . . .	≠	≠	≠	≠	≠

**NOTE:** The above times apply to part-time students only. Times for subjects offered to full-time students will be arranged in 1979.

Subject to availability of staff, each course is offered in the evening in alternate years.

AD00 Theory of Education II and AD25 Sociology of Education IIA will not be offered to part-time students in 1979 except by special arrangement, and with the permission of the Chairman of the Department of Education.

<sup>a</sup> — First half of year only.

<sup>b</sup> — Second half of year only.

**FACULTIES OF DENTISTRY AND MEDICINE**  
**TIME-TABLE OF SUBJECTS FOR THE DEGREES OF**  
**BACHELOR OF DENTAL SURGERY**  
**BACHELOR OF MEDICINE AND**  
**BACHELOR OF SURGERY**

1979

Syllabus No.	Subject	Monday	Tuesday	Wednesday	Thursday	Friday
<b>FIRST-YEAR SUBJECTS</b>						
SC71	Chemistry IM—					
	Lectures .. .. .	10	—	10	—	10
	Tutorial .. .. .	—	—	11, 12	—	—
	Practical (3 hours) .. .. .	—	2.10-5	—	2.10-5	2.10-5
SP7H	Physics IH(M)—					
	Lectures .. .. .	—	10	—	—	12
	Tutorial (1 hour) .. .. .	12	12	—	—	—
	Practical (3 hours fortnightly)	—	2.10-5(A)	2.10-5(B)	—	2.10-5(C)
SJ8H	Genetics IH(M)—					
	Lectures(1 hour) .. .. .	9	—	—	12	—
	Practical/Tutorial 1½ hours) ..	—	—	—	9(A) 10.40(B) 2.10(C) 3.40(D)	2.10(E) 3.40(F)
SZ71	Biology I—					
	Lectures .. .. .	—	—	9	—	9
	Tutorial .. .. .	≠	≠	≠	≠	≠
	Practical (4 hours) <sup>a</sup> .. .. .	—	—	—	—	—
MH71	Behavioural Science—					
	Lectures .. .. .	11	11	—	—	11
	Tutorial .. .. .	—	≠	≠	≠	—
	Practical .. .. .	2-5	—	—	—	—

**SECOND- AND LATER-YEAR SUBJECTS**

Dentistry: Dental School Office.

Medicine:

Pre-clinical subjects—Departments of Anatomy, Biochemistry and Human Physiology.

Clinical and Para-clinical subjects—Medical School Office.

**NOTE:** Morning lectures in all subjects will commence at ten minutes past the hour shown in the time-tables (including those shown as 12 noon).

Afternoon and evening lectures will commence at the time shown in the time-tables.

Alternatives are indicated by A to H.

<sup>a</sup> — The laboratories are open during the following hours:

9 a.m.-6 p.m. Monday and Friday.

9 a.m.-10 p.m. Tuesday, Wednesday and Thursday.

≠ 1 hour to be arranged.

**FACULTY OF ECONOMICS**  
**TIME-TABLE OF SUBJECTS FOR THE DEGREE OF**  
**BACHELOR OF ECONOMICS**  
**1979**

Syllabus No.	Subject	Monday	Tuesday	Wednesday	Thursday	Friday
<b>FIRST-YEAR SUBJECTS AND HALF-SUBJECTS</b>						
EE4F	Economic History IH .. ..	—	—	—	6.15	—
EE5F	*Economic Institutions and Policy IH	—	9	—	—	—
EC01	Accounting I .. ..	—	12(A)	9(B)	12(A)	9(B)
EE1G	Macroeconomics IH .. ..	—	10(A)	12(B)	—	5.15(C)
EE2F	Mathematical Economics IH ..	—	2.15	—	2.15	—
EE1F	Mathematics for Economists IH	5.15	—	5.15	—	—
EE2G	Microeconomics IH .. ..	—	—	5.15(A)	10(B)	11(C)
LL2H	Commercial Law IH .. ..	—	6.15	—	—	—
<b>SECOND-YEAR SUBJECTS AND HALF-SUBJECTS</b>						
LL3H	*Commercial Law IIIH .. ..	—	—	—	—	5.15
EE6F	Economic History IIIH (A) .. ..	—	—	—	10	—
EE7F	Economic History IIIH (B) .. ..	—	10	—	—	—
EE22	Economic Statistics II .. ..	—	5.15	—	5.15	—
EE32	Economic Statistics IIA .. ..	—	5.15	—	5.15	—
LL1H	Income Tax IIIH .. ..	—	—	9	—	—
EE3G	Macroeconomics IIIH .. ..	—	—	10	—	—
EC02	Accounting II .. ..	—	12	—	12	—
EE3F	*Mathematical Economics IIIH ..	—	11	—	—	—
EE4G	Microeconomics IIIH .. ..	—	—	5.15	—	—
<b>THIRD-YEAR SUBJECTS AND HALF-SUBJECTS</b>						
EC03	Accounting III .. ..	—	5.15	—	5.15	—
EE4H	Agricultural Economics IIIH ..	—	—	—	10	—
EC4H	Business Finance IIIH .. ..	—	—	11	—	—
EE8H	*Econometrics IIIH .. ..	—	12	—	—	—
EE13	Economic Development III ..	5.15-7.15	—	5.15-7.15	—	—
AJ9H	Economic Geography IIIH .. ..	≠	≠	—	≠	≠
EE8G	*Economic History IIIH .. ..	—	—	11	—	—
EE8F	*Economic Theory IIIH .. ..	—	2.15	—	2.15	—
EE33	Economics IIIA .. ..	—	—	10	—	10
EE3H	Economics of Labour IIIH .. ..	—	11	—	—	—
EC23	Industrial Sociology III .. ..	—	—	5.15	—	5.15
EC1H	Computerised Acctng Systems IIIH	3.15	—	—	—	—
EC2H	Management Decision Analysis IIIH	—	5.15	—	—	—
EE7H	Managerial Economics IIIH ..	—	—	—	6.15	—
EC5H	Marketing IIIH .. ..	—	—	6.15	—	—
EE9H	*Mathematical Economics IIIH ..	—	—	—	—	2.15
EE2H	*Public Finance IIIH .. ..	—	4.15	—	—	—

**NOTE:** Morning lectures in all subjects will commence at ten minutes past the hour shown in the time-tables (including those shown as 12 noon).

Afternoon and evening lectures will commence at the time shown in the time-tables.

Alternatives are indicated by A, B, C.

It is expected that those subjects and half-subjects (except those marked \*) which are given as day classes in 1979 will be given as evening classes in 1980 and vice versa.

Macroeconomics IH and Microeconomics IH will continue to be offered both as day and evening classes.

**FACULTY OF ECONOMICS—Continued**  
**TIME-TABLE OF SUBJECTS FOR THE**  
**DEGREE OF MASTER OF BUSINESS MANAGEMENT**  
**1979**

Syllabus No.	Subject	Monday	Tuesday	Wednesday	Thursday	Friday
<b>PART I</b>						
EC16	Economics (Business Management) ..	—	—	8.30-10.00	—	8.30-10.00
EC36	Quantitative Methods I .. ..	—	8.30-10.00	—	8.30-10.00	—
EC00	Accounting (Business Management)	—	4.30-6.00	—	4.30-6.00	—
EC26	*Industrial Sociology .. .. .	—	—	5.15	—	5.15
<b>PART II</b>						
<b>First Half of Year</b>						
EC17	Financial Management .. ..	—	—	—	9-11	—
EC27	Government and Administration ..	—	—	—	—	9-11
EC47	Quantitative Methods II .. ..	—	—	9-11	—	—
EC67	Business Finance .. .. .	—	9-11	—	—	—
<b>Second Half of Year</b>						
EC07	Business Policy .. .. .	—	—	3-5	—	—
EC37	Organisation Theory and Behaviour	—	9-11	—	—	—
EC77	Marketing Management .. .. .	—	—	—	—	9-11
EC87	Quantitative Methods III (1) Control of Operations .. .. .	—	—	—	3-5	—
EC97	Quantitative Methods III (2) Planning and Decision Analysis .. ..	—	—	9-11	—	—
EC68	Personnel Management .. ..	9-11	—	—	—	—
EC18	Management and Information Systems	—	3-5	—	—	—

\* Industrial Sociology—in addition to these two one-hour lectures there will be a 1½ hour tutorial at times to be arranged.

**FACULTY OF ENGINEERING**  
**TIME-TABLE OF SUBJECTS FOR THE DEGREE OF**  
**BACHELOR OF ENGINEERING**  
**1979**

**N.B.**—Students will be allocated to appropriate classes for which more than one session is provided. These allocations will be displayed on faculty or departmental noticeboards during orientation week.

Syllabus No.	Subject	Monday	Tuesday	Wednesday	Thursday	Friday
<b>FIRST-YEAR SUBJECTS</b>						
SC01	<b>Chemistry I—</b>					
	Lectures .. .. .	9	—	9	—	9
	(The 9 a.m., 12 noon and 5.15 p.m. lecture series are alternatives) ..	12 <sup>a</sup>	—	12 <sup>a</sup>	—	12 <sup>a</sup>
	Tutorial (1 hour) .. .. .	5.15	—	5.15	—	5.15
		—	—	11,* 12* <sup>a</sup>	—	—
		—	—	2.15*	—	—
	Practical (3 hours) .. .. .	—	10-1*	—	10-1*	10-1*
		—	2.10-5*	—	2.10-5*	2.10-5*
NX01	<b>Engineering I—</b>					
	Lectures .. .. .	11	—	11	—	11
	Tutorial (1 hour) .. .. .	—	—	—	12	—
	Practical (3 hours) .. .. .	—	10-1*	—	2.10-5*	2.10-5*
SB5H	<b>Environmental Biology IH</b> (half-subject)					
	Lecture .. .. .	—	9	—	—	—
	Practical/Tutorial (2 hours) ..	—	10-12 <sup>b</sup>	—	—	—
SG3H	<b>Geology IH(E)—</b>					
	Lectures (36 hours total) .. ..	—	2.10	—	9	—
	Practical (42 hours total) .. ..	—	3.10-5	—	—	—
AJ2H	<b>Human Geography IH</b> (First half of year) .. .. .	—	11	—	11	—
EE1G	<b>Macroeconomics IH .. .. .</b>	—	10*	12*	—	5.15*
QM01	<b>Mathematics I—</b>					
	Lectures .. .. .	10	—	10	10	10
	(The 10 a.m. and 4.15 p.m. lecture series are alternatives) ..	4.15	—	4.15	4.15	4.15
	Tutorial (2 hours) .. .. .	11-1*	11-1*	—	11-1*	11-1*
		2.15-4.05*	—	2.15-4.05*	—	2.15-4.05*
EE2G	<b>Microeconomics IH .. .. .</b>	—	—	5.15*	10*	11*
AJ1H	<b>Physical Geography IH</b> (Second half of year) .. .. .	—	11	—	11	—
SP01	<b>Physics I</b>					
	Lectures .. .. .	9	—	9	—	9
	(The 9 a.m., 12 noon and 5.15 p.m. lecture series are alternatives)	12	—	12	—	12
	Tutorial (1 hour) .. .. .	5.15	—	5.15	—	5.15
	Practical (3 hours) .. .. .	3*, 4*	—	11*, 3*, 4*	—	3*
		10-1*	10-1*	10-1*	10-1*	10-1*
		2.10-5*	2.10-5*	2.10-5*	2.10-5*	2.10-5*
		—	—	6.15-9-15*	—	—
	NOTE: For other alternative First-Year subjects as listed in the Schedules, refer to the time-tables of respective faculties.					
<b>SECOND-YEAR SUBJECTS</b>						
QN12	<b>Applied Mathematics IIB—</b>					
	Lectures .. .. .	9	9	9	9	—
	Tutorial (1 hour) .. .. .	—	—	—	12*	9*, 11*, 12*

**NOTE** Morning lectures in all subjects will commence at ten minutes past the hour shown in the time-tables (including those shown as 12 noon).  
Afternoon and evening lectures will commence at the time shown in the time-tables.

**FACULTY OF ENGINEERING—Continued**  
**TIME-TABLE OF SUBJECTS FOR THE DEGREE OF**  
**BACHELOR OF ENGINEERING**  
**1979**

Syllabus No.	Subject	Monday	Tuesday	Wednesday	Thursday	Friday
<b>SECOND-YEAR SUBJECTS (Contd.)</b>						
NH12	Chemical Engineering II—					
	Lectures .. .. .	10	10	10	—	—
	Tutorial .. .. .	2.10-4 <sup>d</sup>	—	—	2.10-3 <sup>d</sup>	—
	Practical .. .. .	—	2.10-5	—	—	—
SC22	Chemistry IIE—					
	Lectures .. .. .	11 or 12 <sup>f</sup>	—	11 or 12 <sup>f</sup>	—	11 or 12 <sup>f</sup>
	Tutorial (1 hour) .. .. .	—	—	2.15	—	—
	Practical (6 hours) .. .. .	—	—	—	—	9-5
NC02	Civil Engineering II—					
	Lectures .. .. .	—	10	10	10	10 *
	Tutorial .. .. .	10	—	—	—	—
	Practical (6 hours average) .. .. .	11-1	—	2.10-5 <sup>d</sup>	2.10-5 <sup>d</sup>	—
NE02	Electrical Engineering II—					
	Lectures .. .. .	11 <sup>d</sup>	—	11, 3.10 <sup>c</sup>	—	11
	Tutorial (2 hours) .. .. .	12*	—	12*	—	12
	Practical (3 hours) .. .. .	—	10-1*	—	10-1*	—
	Alternative Tutorial—					
	Practical Combinations:					
	Mon. 12 and Tues. 10-1					
	Wed. 12 and Thurs. 10-1					
NX12	Engineering IIC—					
	Electrical Circuits and Machines					
	Lecture .. .. .	—	11	—	—	—
	Practical <sup>b</sup> .. .. .	2.10-5*	2.10-5*	—	—	—
	Electronics					
	Lecture .. .. .	—	—	11	—	—
	Practical <sup>b</sup> .. .. .	2.10-5*	2.10-5*	—	—	—
	Engineering Materials					
	Lecture .. .. .	—	—	—	11	—
	Practical <sup>b</sup> .. .. .	2.10-5*	—	—	—	2.10-5*
NX42	Engineering IIM—					
	Stress Analysis					
	Lecture .. .. .	—	—	12	—	—
	Practical <sup>b</sup> .. .. .	—	2.10-5	—	—	—
	Structural Engineering					
	Lecture .. .. .	—	11	—	—	—
	Practical .. .. .	—	—	2.10-5 <sup>d</sup>	—	—
	Engineering Materials					
	Lecture .. .. .	—	—	—	11	—
	Practical <sup>b</sup> .. .. .	2.10-5	—	—	—	—
	Workshop Practice .. .. .	—	—	—	—	2.10-5
NM02	Mechanical Engineering II—					
	Lectures .. .. .	—	10	10	10	—
	Tutorial/Practical .. .. .	10-1	—	—	2.10-5	—
SC02	Physical and Inorganic Chemistry II—					
	Lectures .. .. .	11	—	11	—	11
	Tutorial (1 hour) .. .. .	4.15*	—	4.15*	—	4.15* <sup>a</sup>
	Practical (6 hours) .. .. .	—	10-5*	—	10-5*	9-5* <sup>a</sup>

**NOTE:** Morning lectures in all subjects will commence at ten minutes past the hour shown in the time-tables (including those shown as 12 noon).  
Afternoon and evening lectures will commence at the time shown in the time-tables.

**FACULTY OF ENGINEERING—Continued**  
**TIME-TABLE OF SUBJECTS FOR THE DEGREE OF**  
**BACHELOR OF ENGINEERING**  
**1979**

Syllabus No.	Subject	Monday	Tuesday	Wednesday	Thursday	Friday
<b>SECOND-YEAR SUBJECTS (Contd.)</b>						
SP02	Physics II—					
	Lectures .. .. .	10	—	10	—	10
	Tutorial (1 hour) .. .. .	—	—	2.15	—	—
	Practical (6 hours) .. .. .	2.10-5*	9-1*	—	9-1*	2.10-5*
		—	2.10-5*	—	2.10-5*	—
	Alternative Practical Combinations:					
	Mon. p.m. and Tues. a.m.					
	Thurs. p.m. and Fri. p.m.					
	Tues. p.m. and Thurs. a.m.					
	(Mon. p.m. and Fri. p.m.) <sup>g</sup>					
<b>THIRD-YEAR SUBJECTS</b>						
NH13	Chemical Engineering IIIA—					
	Lectures .. .. .	—	9	—	9	10
	Tutorial .. .. .	—	10	10	—	—
	Practical .. .. .	—	—	—	2.10-5	—
NH23	Chemical Engineering IIIB—					
	Lectures .. .. .	10, 12 <sup>d</sup>	—	—	10	—
	Tutorials .. .. .	11 <sup>d</sup>	—	—	11	12
		—	—	—	—	2.10-5 <sup>d</sup>
	Practical .. .. .	2.10-5 <sup>d</sup>	—	—	—	—
NC03	Civil Engineering IIIA—					
	Lectures .. .. .	—	11	11	11	—
	Tutorial/Practical .. .. .	10-1	—	—	2.10, 3.10-5 <sup>d</sup>	—
NC13	Civil Engineering IIIB—					
	Lectures .. .. .	—	10	10	10	—
	Tutorial/Practical (6½ hrs average)	2.10-5*	—	2.10-5*	—	2.10-5*
QA12	Computing Science IIC—					
	Lectures .. .. .	9	10	—	10	12
	Tutorials (1 hour) .. .. .	—	9,* 2.15*	10*	—	2.15*
NE13	Electrical Engineering III—					
	Lectures .. .. .	12	—	10, 11	12	—
	Tutorials (2 hours) .. .. .	10	11*	—	11*	—
	Practical (6 hours) .. .. .	—	—	2.10-5*	2.10-5*	9-5*
	Alternative Tutorial—					
	Practical Combinations:					
	Tues. 11 and Wed. 2.10-5 and					
	Thurs. 2.10-5					
	Thurs. 11 and Fri. 9-5					
NX53	Engineering IIIC—					
	Vibration, Control and Heat					
	Transfer					
	Lecture .. .. .	—	—	—	12	—
	Tutorial .. .. .	—	—	—	—	10 <sup>c</sup>
	Machine Design					
	Lecture .. .. .	—	12	—	—	—
	Practical .. .. .	—	2.10-5	—	—	—

**NOTE:** Morning lectures in all subjects will commence at ten minutes past the hour shown in the time-tables (including those shown as 12 noon).  
Afternoon and evening lectures will commence at the time shown in the time-tables.

**FACULTY OF ENGINEERING—Continued**  
**TIME-TABLE OF SUBJECTS FOR THE DEGREE OF**  
**BACHELOR OF ENGINEERING**

1979

Syllabus No.	Subject	Monday	Tuesday	Wednesday	Thursday	Friday
	<b>THIRD-YEAR SUBJECTS (Contd.)</b>					
	Numerical Analysis in Engineering					
	Lectures .. .. .	—	—	9	—	—
	Tutorial .. .. .	9 <sup>a</sup>	—	—	—	—
	Engineering Economics and Planning					
	Lectures .. .. .	—	—	—	—	9
	Tutorial .. .. .	9 <sup>a</sup>	—	—	—	—
NX23	Engineering IIIE—					
	Stress Analysis					
	Lecture .. .. .	—	—	12	—	—
	Practical <sup>b</sup> .. .. .	2.10-5*	2.10-5*	—	—	—
	Machine Design					
	Lecture .. .. .	—	12	—	—	—
	Practical .. .. .	—	2.10-5*	2.10-5*	—	—
NX52 } NX93 } NY93 }	Engineering IIH } —					
	Engineering IIHH }					
	Stress Analysis					
	Lecture .. .. .	—	—	12	—	—
	Practical <sup>b</sup> .. .. .	—	2.10-5	—	—	—
	Machine Design					
	Lecture .. .. .	—	12	—	—	—
	Practical .. .. .	—	—	2.10-5	—	—
	Electrical Circuits and Machines					
	Lecture .. .. .	—	11	—	—	—
	Practical <sup>b</sup> .. .. .	—	2.10-5	—	—	—
	Mathematics III (Engineering)—					
	Lectures .. .. .	—	—	9	—	9
	Tutorial .. .. .	9	—	—	—	—
NX73 } NX83 }	Engineering IIIM—					
	Electrical Circuits and Machines					
	Lecture .. .. .	—	11	—	—	—
	Practical <sup>b</sup> .. .. .	2.10-5	—	—	—	—
	Electronics					
	Lecture .. .. .	—	—	11	—	—
	Practical <sup>b</sup> .. .. .	2.10-5	—	—	—	—
	Materials Engineering					
	Lectures .. .. .	—	—	—	10	9
	Practical <sup>b</sup> .. .. .	—	—	—	2.10-5	—
	Mathematics III (Engineering)					
	Lectures .. .. .	—	—	9	—	9
	Tutorial .. .. .	9	—	—	—	—
NM03	Mechanical Engineering IIIA—					
	Lectures .. .. .	10	12	—	11	—
	Tutorial .. .. .	—	—	—	—	12
	Practical .. .. .	—	—	—	—	2.10-5

**NOTE:** Morning lectures in all subjects will commence at ten minutes past the hour shown in the time-tables (including those shown as 12 noon).  
Afternoon and evening lectures will commence at the time shown in the time-tables.



**FACULTY OF ENGINEERING—Continued**  
**TIME-TABLE OF SUBJECTS FOR THE DEGREE OF**  
**BACHELOR OF ENGINEERING**  
**1979**

Syllabus No.	Subject	Monday	Tuesday	Wednesday	Thursday	Friday
NM13	Mechanical Engineering IIIB—					
	Lectures .. .. .	11	9	—	9	—
	Tutorial .. .. .	—	—	—	—	10
	Tutorial/Practical .. .. .	—	2.10-5	2.10-5	—	—
QM02	Pure Mathematics II—					
	Lectures .. .. .	—	9	9	9	9
	Tutorial (1 hour) .. .. .	9*, 10*	10*	—	10*	11*
	<b>FOURTH-YEAR SUBJECTS</b>					
	Time-table to be arranged by the Departments.					

**NOTE:** Morning lectures in all subjects will commence at ten minutes past the hour shown in the time-tables (including those shown as 12 noon).

Afternoon and evening lectures will commence at the time shown in the time-tables.

\* Alternatives.

≠ Time to be arranged.

a — Only if numbers warrant.

b — Nine three-hour practical sessions.

c — One term only.

d — Two terms only.

e — Alternate weeks.

f — The part of the course common to SC02 Physical and Inorganic Chemistry II is at 11 a.m.

g — Available only to students unable to attend other classes owing to unavoidable time-table clashes.

h — Tutorials are given in alternate weeks in the time allotted to practical work.

**FACULTIES OF MATHEMATICAL SCIENCES AND SCIENCE**  
**TIME-TABLE OF SUBJECTS FOR THE DEGREE OF**  
**BACHELOR OF SCIENCE**  
**1979**

N.B.—Students will be allocated by the University to appropriate classes for which more than one session is provided. These allocations will be displayed on departmental noticeboards during orientation week.

Syllabus No.	Subject	Monday	Tuesday	Wednesday	Thursday	Friday
<b>FIRST YEAR SUBJECTS</b>						
SP8H	Astronomy IH— Lectures/Tutorial .. .. Practical (3 hours fortnightly) ..	— — 6.15-9.15*	— — 6.15-9.15*	12 — 6.15-9.15*	— — 6.15-9.15*	2.15 — 6.15-9.15*
SZ71	Biology I— Lectures (The 9 a.m. and 5.15 p.m. lecture series are alternatives) .. .. Tutorial (1 hour) .. ..	— — —	9 5.15 10*, 11*, 12*, 2.15*, 3.15*6.15*, 7.15*	— — 10*, 12*, 2.15*, 3.15*, 4.15*	9 5.15 10*, 11*, 12*, 2.15*, 3.15*	— — 10*, 11*, 2.15*
SB6H	Practical (4 hours) <sup>a</sup> .. .. Botany IH (half subject)— Lecture .. .. Practical (2 hours)/Tutorial (1 hour fortnightly) .. ..	≠ — — —	≠ — — —	≠ 9* — —	≠ 9* 10-1 <sup>b</sup> —	≠ — — —
SC01	Chemistry I— Lectures (The 9 a.m., 12 noon and 5.15 p.m. lecture series are alternatives) .. .. Tutorial (1 hour) .. .. Practical (3 hours) .. ..	9 12 <sup>e</sup> 5.15 —	— — — 10-1*	9 12 <sup>e</sup> 5.15 11*, 12*, <sup>e</sup> 2.15*	— — — 10-1* <sup>e</sup> 2.10-5*	9 12 <sup>e</sup> 5.15 — 10-1* <sup>e</sup> 2.10-5*
QA7H	Computing IH (half-subject)— Lectures (students may attend either Mon. and Fri. or Tues. and Thurs.) .. .. Tutorial (1 hour) .. ..	11 2.15*, 3.15*	11 4.15* <sup>e</sup> —	— — —	11 — —	11 2.15*, 3.15*
NX01	Engineering I— Lectures .. .. Tutorial (1 hour) .. .. Practical (3 hours) .. ..	11 — —	— — 10-1*	11 — —	— 12 2.10-5*	11 — 2.10-5*
SB5H	Environmental Biology IH (half-subject)— Lecture .. .. Practical (2 hrs)/Tutorial (1 hr)	— — —	9 10-12 <sup>b</sup> —	— — —	— — —	— — —
SG7H	Environmental Geology IH— Lectures .. .. Tutorials <sup>d</sup> .. ..	— — —	5.15 — —	5.15 <sup>c</sup> — —	— 5.15 —	— — —
SJ7H	Genetics and Human Variation IH (half subject)— Lecture .. .. Practical/Tutorial .. .. (weekly 1½ hours)	— — —	12 — —	— — —	— 9-12* 2.10-5*	— — —
SG01	Geology I— Lectures (The 9 a.m. lectures are alternatives to the 5.15 p.m. lectures. Students may attend either the 11 a.m. or 5.15 p.m. lecture on Wednesdays) .. .. Tutorial (1 hour) .. .. Practical (3 hours) .. ..	— — 11*, 12*, 2.15*, 2.10-5*	9 5.15 — — 10-1*	11 5.15 — 2.15* —	9 5.15 — 11* 2.15* 2.10-5*	— — — — — —

**FACULTIES OF MATHEMATICAL SCIENCES AND  
SCIENCE—Continued**

**TIME-TABLE OF SUBJECTS FOR THE DEGREE OF  
BACHELOR OF SCIENCE**

1979

Syllabus No.	Subject	Monday	Tuesday	Wednesday	Thursday	Friday
<b>FIRST-YEAR SUBJECTS (Contd.)</b>						
QM01	Mathematics I—					
	Lectures (The 10 a.m. and 4.15 p.m. lecture series are alternatives)	10 4.15	— —	10 4.15	10 4.15	10 4.15
	Tutorial (2 hours) .. ..	11-1* 2.15-4.05*	11-1* —	— 2.15-4.05*	11-1* —	11-1* 2.15-4.05*
QM11	Mathematics IM—					
	Lectures .. ..	4.15 —	— —	2.15* 4.15	4.15* <sup>e</sup> —	4.15 —
	Tutorial (2 hours) .. ..	— —	— —	— —	11-1* —	11-1* 2.15-4.05*
QM7H	Mathematics IH (half subject)					
	Lectures .. ..	4.15 —	— —	4.15 —	— 11*	— 11*
	Tutorial (1 hour) .. ..	— —	— —	2.15* —	— —	2.15* —
SP01	Physics I—					
	Lectures (The 9 a.m., 12 noon and 5.15 p.m. lecture series are alternatives)	9, 12, 5.15	— —	9, 12, 5.15	— —	9, 12, 5.15
	Tutorial (1 hour) .. ..	3.15*, 4.15*	— —	11*, 3.15*, 4.15*	— —	3.15* —
	Practical (3 hours) .. ..	10-1*, 2.10-5*	10-1*, 2.10-5*	10-1* <sup>e</sup> , 2.10-5*, 6.15-9.15*	— 2.10-5*	10-1* <sup>e</sup> , 2.10-5*
AY01	Psychology I—					
	Lectures (The 10 a.m. and 5.15 p.m. lecture series are alternatives)	10 5.15	— —	10 5.15	— —	10 5.15
	Practical (2 hours) .. ..	9*, 11*, 12* 2*, 4*, 6*	9*, 10*, 11* 3*, 4*, 5*	9*, 11*, 12* 4*, 6*	9*, 11*, 4*, 5*	9*, 11*, 12* —
QT7H	Statistics IH (half subject)—					
	Lectures .. ..	12 —	— —	— —	— —	12 —
	Tutorial (1 hour) .. ..	2.15* —	— —	— —	— —	2.15* —

**NOTE:** Morning lectures in all subjects will commence at ten minutes past the hour shown in the time-tables (including those shown as 12 noon).  
Afternoon and evening lectures will commence at the times shown in the time-tables.  
The tutorial and practical classes listed may be varied according to student demand and/or availability of staff.  
\* Alternative classes.  
a — The laboratories are open during the following hours:  
10.10 a.m.-6.00 p.m. Monday.  
9.10 a.m.-6.00 p.m. Wednesday.  
9.10 a.m.-10.00 p.m. Tuesday and Thursday.  
9.10 a.m.-4.00 p.m. Friday.  
b — Tutorials are given in alternative weeks in the time allotted for practical work.  
c — A lecture will be given at this time only in first term. In terms 2 and 3 a tutorial will be held at this time.  
d — Additional tutorials may be arranged if numbers warrant.  
e — Class to be held only if numbers warrant.

**FACULTIES OF MATHEMATICAL SCIENCES AND  
SCIENCE—Continued**

**TIME-TABLE OF SUBJECTS FOR THE DEGREE OF  
BACHELOR OF SCIENCE**

1979

**NOTE:** Direct clashes between lecture classes cannot normally be resolved. However, clashes between lectures and practical classes may in some cases be accommodated. In the first instance, students with timetable clashes should consult an Assistant to the Dean.

Syllabus No.	Subject	Monday	Tuesday	Wednesday	Thursday	Friday
<b>SECOND-YEAR SUBJECTS</b>						
WX02	Agriculture II (B.Ag.Sc. students only)					
	Lectures .. .. .	11	—	11	—	11
	Tutorials (1 hour) .. ..	≠	≠	≠	≠	≠
	Practical (3 hours) .. ..	—	—	1.30-4.30	—	—
QN22	Applied Mathematics IIA—					
	Lectures .. .. .	12	12	12	12	—
	Tutorial (1 hour) .. ..	9*, 10*	9*, 10*	—	9*, 10*	12*
QN12	Applied Mathematics IIB—					
	Lectures .. .. .	9	9	9	9	—
	Tutorial (1 hour) .. ..	—	—	—	12*	9*, 11*, 12
SY02	Biochemistry II—					
	Lectures .. .. .	9	9	—	—	9
	Tutorial .. .. .	≠	≠	≠	≠	≠
	Practical (6 hours) .. ..	—	10-5*	9-5*	9-5*	—
SB02	Botany II—					
	Lectures .. .. .	—	12	5.15	12	—
	Practical (6 hours) .. ..	2-5	2-5	—	2-5	2-5
	(Mon. & Tues. are alternatives, Thurs. & Fri. are alternatives)					
NH12	Chemical Engineering II—					
	Lectures .. .. .	10	10	10	—	—
	Tutorial (2 hours) .. ..	2.15-4	≠	≠	≠	≠
	Practical (2 hours) .. ..	—	2-4	—	—	—
SC12	Chemistry II—					
	Lectures .. .. .	12	—	12	—	12
	Tutorial (1 hour) .. ..	—	12*d	2.15*d	—	—
	Practical (6 hours) .. ..	—	10-5*	—	10-5*	10-5**
SC22	Chemistry IIE—					
	Lectures .. .. .	11 or 12 <sup>b</sup>	—	11 or 12 <sup>b</sup>	—	11 or 12 <sup>b</sup>
	Tutorial (1 hour) .. ..	—	—	2.15	—	—
	Practical (6 hours) .. ..	—	—	—	—	9-5
QA02	Computing Science II					
QA12	Computing Science IIC					
	Lectures .. .. .	9	10	—	10	12
	Tutorials (1 hour) .. ..	—	9*, 2.15*	10*	—	2.15*
SJ02	Genetics II—					
	Lectures .. .. .	10	—	10	—	10
	Practical/Tutorial (5 hours) ..	2-5	2-5	2-4	—	3-5
	(Mon. & Tues. are alternatives, Wed. & Fri. are alternatives)					
SG02	Geology II—					
	Lectures .. .. .	—	9	9	—	9
	Tutorial (1 hour) .. ..	≠	≠	≠	≠	≠
	Practical (6 hours) .. ..	2-5	—	2-5 <sup>e</sup>	9-12 <sup>e</sup>	2-5
	(Mon. & Wed. are alternatives, Thurs. & Fri. are alternatives)					

FACULTIES OF MATHEMATICAL SCIENCES AND  
SCIENCE—Continued

TIME-TABLE OF SUBJECTS FOR THE DEGREE OF  
BACHELOR OF SCIENCE

1979

Syllabus No.	Subject	Monday	Tuesday	Wednesday	Thursday	Friday
<b>SECOND-YEAR SUBJECTS (Contd.)</b>						
SG72	Geophysics II—					
	Lectures . . . . .	—	10, 11	—	11	—
	Practical (6 hours) . . . . .	—	2-5	2-5	—	—
QT02	Mathematical Statistics II—					
	Lectures . . . . .	11	11 <sup>a</sup>	11	11	11
	Tutorial (2 hours) . . . . .	—	10-12 <sup>b,c</sup>	2.15-4 <sup>b,c</sup>	2.15-4 <sup>*</sup>	—
SO02	Organic Chemistry II—					
	Lectures . . . . .	12	—	12	—	12
	Tutorial (1 hour) . . . . .	4.15 <sup>*</sup>	—	4.15 <sup>*</sup>	—	4.15 <sup>b,c</sup>
	Practical (6 hours) . . . . .	—	9-5 <sup>*</sup>	—	9-5 <sup>*</sup>	—
SC02	Physical and Inorganic Chemistry II—					
	Lectures . . . . .	11	—	11	—	11
	Tutorial (1 hour) . . . . .	4.15 <sup>*</sup>	—	4.15 <sup>*</sup>	—	4.15 <sup>b,c</sup>
	Practical (6 hours) . . . . .	—	10-5 <sup>*</sup>	—	10-5 <sup>*</sup>	9-5 <sup>b,c</sup>
SP02	Physics II—					
	Lectures . . . . .	10	—	10	—	10
	Tutorial (1 hour) . . . . .	—	—	2.15	—	—
	Practical (6 hours) . . . . .	2-5	9-1, 2-5	—	9-1, 2-5	2-5
	Alternatives:					
	A Mon. p.m. and Tues. a.m.					
	B Thurs. p.m. and Fri. p.m.					
	C Tues. p.m. and Thurs. a.m. (Mon. p.m. and Fri. p.m.) <sup>c</sup>					
SS02	Physiology II—					
	Lectures . . . . .	11	—	11	—	11
	Practical (two 3 hour classes) . . . . .	—	—	2-5	9-1, 2-5 <sup>c</sup>	—
AY02	Psychology II—					
	Lectures . . . . .	3.15 (odd yrs.) 5.15 (even yrs.)	—	3.15 (odd yrs.) 5.15 (even yrs.)	—	2.15 (odd yrs.) 5.15 (even yrs.)
	Tutorial (1 hour) . . . . .	≠	≠	≠	≠	≠
	Practical (4 hours) . . . . .	≠	≠	≠	≠	≠
QM02	Pure Mathematics II—					
	Lectures . . . . .	—	9	9	9	9
	Tutorial (1 hour) . . . . .	9 <sup>*</sup> , 10 <sup>*</sup>	10 <sup>*</sup>	—	10 <sup>*</sup>	11 <sup>*</sup>
SZ02	Zoology II—					
	Lectures . . . . .	—	10	—	9, 5.15	—
	Practical (6 hours) . . . . .	—	11-6 <sup>*</sup>	—	10-5 <sup>*</sup>	—

**NOTE:** Classes in all subjects will commence at ten minutes past the hour shown in the time-tables, unless shown otherwise.

In some cases periods longer than the nominal number of hours indicated in the syllabuses have been set aside for practical classes in order to allow students to attend lectures which clash with the practical sessions.

\* Alternative class.

≠ Time to be arranged.

a — Lecture in first term only.

b — The part of the course common to Physical and Inorganic Chemistry II is at 11.00 a.m.

c — Practical class available only to students unable to attend other classes owing to unavoidable time-table clashes.

d — For tutorials in the Organic Chemistry section of the course.

e — Class to be held only if numbers warrant.

**FACULTIES OF MATHEMATICAL SCIENCES AND  
SCIENCE—Continued**

**TIME-TABLE OF SUBJECTS FOR THE DEGREE OF  
BACHELOR OF SCIENCE**

1979

Any student who is unable to pursue a combination of subjects due to an apparent clash in the hours set aside for practical work in these subjects should consult the appropriate departments before making a final decision.

NOTE:

These time-tables show the hours set aside for work in each department. Students taking a particular modification of a subject, e.g. Zoology IIIM instead of Zoology III, should consult the time-table in the department.

Syllabus No.	Subject	Monday	Tuesday	Wednesday	Thursday	Friday
<b>THIRD-YEAR SUBJECTS</b>						
QN03 } QN83 } QN13 } SY03 } SY83 }	Applied Mathematics— Lectures (6 hours) .. .. Tutorial (1 hour) .. .. Biochemistry— Lectures .. .. Tutorial (1 hour) .. .. Practical (10 hours) .. ..	9, 2.15 ≠ 12 ≠ all day	9 ≠ — ≠ —	9, 10 ≠ 12 ≠ —	9 ≠ 12 ≠ all day(A)	9, 10, 2.15 ≠ 10 ≠ all day(B)
SB03 } SB83 }	Botany— Lectures .. .. Practical (6 hours/unit) ..	10, 11, 5.15 <sup>a</sup> 2.10-5	— — all day	10, 11, 2.15 <sup>d</sup> —	— — all day	10, 11 — all day
SC23	Chemistry— Lectures <sup>h</sup> .. .. Tutorial <sup>h</sup> .. ..					
QA03 } QA13 } QA83 } SJ03 }	Computing Science— Lectures .. .. Tutorial .. .. Genetics— Lectures (3 hours) .. .. Tutorial .. .. Practical (8 hours) .. ..	3.15, 4.15 ≠ — — ≠	2.15, 4.15 ≠ 10, 12 9 2.10-5 <sup>b</sup>	2.15, 4.15 ≠ — — ≠	2.15, 4.15 ≠ 9, 10 — 2.10-5 <sup>b</sup>	4.15 ≠ — — ≠
SG03 } SG23 } SG83 } SG73 }	Geology— Lectures .. .. Practical (6 hours/unit) <sup>c</sup> .. Geophysics— Lectures .. .. Practical .. ..	9, 10, 5.15 all day — ≠	9, 10, 5.15 all day — 5.15 <sup>d</sup> ≠	— — — ≠	9, 10, 5.15 all day — 5.15 <sup>d</sup> ≠	9, 10, 5.15 all day — ≠ ≠
MA13 } MA43 }	Histology and Cell Biology— Lectures .. .. Practical (10 hours) .. ..	— —	9 all day	— all day	11 —	12 —
QF03 } QF13 }	Mathematical Physics— Theoretical Physics— Lectures <sup>g</sup> .. .. Tutorial .. ..	— ≠	2.15 3.15	2.15, 3.15 ≠	2.15 3.15	— ≠
QT03	Mathematical Statistics— Lectures (5 hours) .. .. Tutorials (2 hours) .. ..	11 ≠	11 ≠	11 ≠	11 ≠	11 ≠
SK03	Microbiology— Lectures .. .. Tutorial .. .. Practical (10 hours) .. ..	— ≠ —	9 ≠ 9-1, 2.10-5	11 ≠ —	9 ≠ 9-1, 2.10-5	— ≠ —

NOTE: Morning lectures in all subjects will commence at ten minutes past the hour shown in the time-tables (including those shown as 12 noon).  
Afternoon and evening lectures will commence at the time shown in the time-tables.

FACULTIES OF MATHEMATICAL SCIENCES AND  
SCIENCE—Continued

TIME-TABLE OF SUBJECTS FOR THE DEGREE OF  
BACHELOR OF SCIENCE

1979

Syllabus No.	Subject	Monday	Tuesday	Wednesday	Thursday	Friday
<b>THIRD-YEAR SUBJECTS (Contd.)</b>						
SO03 } SO83 }	Organic Chemistry—					
	Lectures . . . . .	9, 4.15	5.15	9	—	9, 4.15
	Tutorial . . . . .	≠	≠	≠	≠	≠
	Practical (12 hours) . . . . .	all day <sup>e</sup>	all day(A)	all day(A)	all day(B)	all day(B)
SG13	Palaeontology—					
	Lectures . . . . .	≠	≠	≠	≠	≠
	Practical . . . . .	≠	≠	≠	≠	≠
SC03 } SC13 } SC83 }	Physical and Inorganic Chemistry—					
	Lectures . . . . .	5.15	9, 4.15	4.15, 5.15	9, 4.15	5.15
	Practical (12 hours) . . . . .	—	all day(A)	all day(A)	all day(B)	all day(B)
SP03	Physics—					
	Lectures . . . . .	11, 12	11, 12	11, 12	11, 12	11, 12
	Practical (9 hours) . . . . .	all day	—	all day	all day	all day
SS03 } SS43 } SS33 } SS83 }	Physiology—					
	Lectures . . . . .	10, 11 <sup>g</sup>	—	10, 11 <sup>g</sup>	—	11
	Practical (9 hours) . . . . .	—	—	all day <sup>f</sup>	all day	2.10-5
AY23	Psychology—					
	Lectures . . . . .	5.15	4.15	5.15	3.15	5.15
	Tutorial (1 hour) . . . . .	≠	≠	≠	≠	≠
	Practical (6 hours) . . . . .	≠	≠	≠	≠	≠
QM03 } QM13 } QM83 }	Pure Mathematics—					
	Lectures (6 hours) . . . . .	10, 12	10, 12	12	10, 12	12, 3.15
	Tutorial (1 hour) . . . . .	≠	≠	≠	≠	≠
SZ03 } SZ83 }	Zoology—					
	Lectures . . . . .	9, 5.15	—	9, 2.15	9	9
	Practical (9 hours) . . . . .	2.10-5(A)	2.10-5(B)	all day(B)	—	all day(A)

**NOTE:** Morning lectures in all subjects will commence at ten minutes past the hour shown in the time-tables (including those shown as 12 noon).

Afternoon and evening lectures will commence at the time shown in the time-tables.

Alternatives are indicated by A, B, C, etc.

≠ Time to be arranged.

*a* — One Botany unit may be held at these times. Alternative practical times may be arranged.

*b* — Two additional hours practical to be arranged.

*c* — Students taking subject SG03 are required to attend both Monday and Friday practical classes in Geology.

*d* — Second and third terms only.

*e* — Available only for those students who obtain prior permission from the Head of Department.

*f* — Alternative class to be held only in some units if number exceed laboratory capacity.

*g* — Lectures for Pharmacology units.

*h* — Times for lectures and practicals are within those times specified for Organic Chemistry and Physical and Inorganic Chemistry.

*i* — The unit F304 (P309) Relativity is common to Physics and is given at a Physics lecture time.

## TIME-TABLES FOR ARCHITECTURE, LAW, AND MUSIC

1979

Particulars of time-tables for subjects in these courses may, after enrolments are completed, be obtained as follows:

<i>Course</i>	<i>Particulars from</i>
<b>ARCHITECTURE</b>	Architecture General Office.
<b>LAW</b>	Law School Office.
<b>MUSIC</b>	Music General Office.



LATE AFTERNOON AND EVENING LECTURES, 1979

FACULTIES OF ARTS AND ECONOMICS

This table does not include subjects for which lectures are available at or after 4.15 p.m. but for which practical classes and tutorials are available only at earlier times.

Syllabus No.	Subject	Monday	Tuesday	Wednesday	Thursday	Friday
<b>FIRST-YEAR SUBJECTS AND HALF-SUBJECTS</b>						
AA01	Anthropology I	—	—	4.15	—	4.15
SZ71	Biology I ( <i>see</i> also under B.Sc., Faculties of Mathematical Sciences and Science)	—	5.15	—	5.15	—
LL2H	Commercial Law IH	—	6.15	—	—	—
AJ71	Economic Geography I	—	—	5.15	—	5.15
EE4F	Economic History IH	—	—	—	6.15	—
AE01	English I	—	5.15	—	5.15	—
SG7H	Environmental Geology IH	—	5.15	5.15	5.15	—
AH41	History IC	—	4.15	—	4.15	—
AL2H	Logic IH	—	5.15	—	—	—
EE1G	Macroeconomics IH	—	—	—	—	5.15
EE1F	Mathematics for Economists IH	5.15	—	5.15	—	—
EE2G	Microeconomics IH	—	—	5.15	—	—
UA51	Music I	4.15-6.15	—	4.15	—	—
UA61	Music IA	—	—	—	—	—
AL1H	Philosophy IH(A)	—	—	—	5.15	—
AL3H	Philosophy IH(B)	5.15 <sup>e</sup>	5.15 <sup>a</sup>	—	—	—
AP11	Politics IA	—	—	—	—	—
AP21	Politics IB	—	—	—	—	—
	P703 Political Sociology	—	4.15	—	4.15	—
	P711 History of Political Thought	5.15	—	5.15	—	—
	P712 Liberal Democracy in Australia	—	5.15	—	5.15	—
AY01	Psychology I	5.15	—	5.15	—	5.15

**LATE AFTERNOON AND EVENING LECTURES, 1979**  
**FACULTIES OF ARTS AND ECONOMICS—Continued**

Syllabus No.	Subject	Monday	Tuesday	Wednesday	Thursday	Friday
<b>SECOND-YEAR SUBJECTS AND HALF-SUBJECTS</b>						
AE82	American Literature II .. ..	5.15	—	5.15	—	—
AA12	Anthropology IIB .. ..	—	—	4.15	—	4.15
LL3H	Commercial Law IIH .. ..	—	—	—	—	5.15
EE22	Economic Statistics II .. ..	—	5.15	—	5.15	—
EE32	Economic Statistics IIA .. ..	—	5.15	—	5.15	—
AE02	English II .. ..	—	5.15	—	5.15	—
AG02	German II .. ..	—	5.15, 6.15	—	5.15, 6.15	—
AH02	History IIA } .. ..					
AH22	History IIB } .. ..					
	H704 Culture and Crisis: 1870-1970 .. ..	—	4.15	—	4.15	—
	H712 Social and Political Ideas since 17th Century ..	—	5.15	—	5.15	—
	H713 Nationalism and Revolution in Mod. S.E. Asia ..	4.15 <sup>a</sup>	4.15 <sup>a</sup>	—	4.15 <sup>a</sup>	—
AE92	Linguistics II .. ..	—	4.15	—	4.15	—
AL22	Logic II ( <i>see</i> Philosophy II)	—	—	5.15	—	—
EE4G	Microeconomics IIH .. ..	—	—	5.15	—	—
UA52	Music II .. ..	4.15-6.15	—	4.15-6.15	—	—
AL02	Philosophy II—					
	L201 Logic .. ..	—	—	4.15 <sup>a</sup>	—	4.15 <sup>a</sup>
	L204 Ethics .. ..	—	—	6.15 <sup>a</sup>	—	5.15 <sup>a</sup>
	L205 Modal Logic .. ..	—	—	4.15 <sup>b</sup>	—	4.15 <sup>b</sup>
	L217 Problems in Causation ..	—	—	6.15 <sup>b</sup>	—	5.15 <sup>b</sup>
	L208 Advanced Logic .. ..	—	—	4.15 <sup>c</sup>	—	4.15 <sup>c</sup>
	L206 Metaphysics or Mind ..	—	—	6.15 <sup>c</sup>	—	5.15 <sup>c</sup>
AP32	Politics IIA } .. ..					
AP42	Politics IIB } .. ..					
	P703 Political Sociology ..	—	4.15	—	4.15	—
	P709 International Politics ..	5.15	—	5.15	—	—
	P710 Contemporary Social Theory	—	5.15	—	5.15	—
	P711 History of Political Thought	5.15	—	5.15	—	—
	P712 Liberal Democracy in Australia .. ..	—	5.15	—	5.15	—

**LATE AFTERNOON AND EVENING LECTURES, 1979**  
**FACULTIES OF ARTS AND ECONOMICS—Continued**

Syllabus No.	Subject	Monday	Tuesday	Wednesday	Thursday	Friday
<b>THIRD-YEAR SUBJECTS AND HALF-SUBJECTS</b>						
EC03	Accounting III .. .. .	—	5.15	—	5.15	—
AA13	Anthropology IIIB .. .. .	—	—	4.15	—	4.15
EE13	Economic Development III .. .. .	5.15-7.15	—	5.15-7.15	—	—
AE13	English IIIB .. .. .	—	5.15	—	5.15	—
AJ13	Geography IIIA } .. .. .	4.15	4.15	4.15	4.15	4.15
AJ23	Geography IIIB }					
AJ8H	Geography IIIB }					
(not all these times will be needed)						
AH03	History IIIA } (see History II)	—	—	5.15	—	5.15
AH13	History IIIB }					
EC23	Industrial Sociology III .. .. .	—	—	5.15	—	5.15
AL23	Logic III (see Philosophy II)	—	—	—	—	—
EC2H	Management Decision Analysis IIIB	—	5.15	—	—	—
EE7H	Managerial Economics IIIB .. .. .	—	—	—	6.15	—
EC5H	Marketing IIIB .. .. .	—	—	6.15	—	—
AL03	Philosophy IIIA } (see Philosophy II)	—	—	—	—	—
AL13	Philosophy IIIB }					
AP03	Politics IIIA } .. .. .	5.15	—	5.15	—	—
AP13	Politics IIIB }					
	P709 International Politics .. .. .	5.15	—	5.15	—	—
	P710 Contemporary Social Theory	—	5.15	—	5.15	—
AY23	Psychology III .. .. .	5.15 <sup>f</sup>	4.15 <sup>f</sup>	5.15 <sup>f</sup>	3.15 <sup>f</sup>	5.15 <sup>f</sup>
EE2H	Public Finance IIIB .. .. .	—	4.15	—	—	—

- a — First term only.
- b — Second term only.
- c — Third term only.
- d — First and second terms only.
- e — Second and third terms only.
- f — Subject organised on optional unit system; not all times are needed.

**NOTE:** The following information about subjects which are normally available at late afternoon or evening lectures may help part-time students to plan their courses. All subjects and times are offered subject to availability of staff and are subject to revision.

*First-year subjects*

Anthropology I, Biology I, Elements of Accounting I, Environmental Geology IH, a first-year History, Macroeconomics IH, Microeconomics IH, Music I and IA, first-year half-subjects in Philosophy and Logic, at least one first-year Politics and Psychology I are normally available every year at late lectures.

*Three-year sequences*

**Anthropology**

Anthropology I, a second-year and a third-year Anthropology subject are normally available at late lectures.

**Economics and Commerce**

Macroeconomics IH and Microeconomics IH are normally offered at late lectures every year. The other compulsory B.Ec. subjects and half-subjects are normally offered in alternate years at late lectures. Some other subjects are available each year at evening lectures. For further details see B.Ec. syllabuses and time-tables.

**English**

At present English I and Linguistics II are offered at late lectures every year; English II, English IIIB and American Literature II in odd years; English IIIA and Australian Literary Studies II in even years.

**German**

German II is offered at both day and evening lectures in 1979; German III is expected to be available in 1980 at late lectures and German I in 1981 at late lectures.

**Geography**

*Even years*—Second-year subjects normally available at late lectures.

*Odd years*—Economic Geography I and third-year subjects normally available at late lectures.

**History**

At least one first-year subject and selected second- and third-year options normally available at late lectures each year.

**Philosophy**

First-year half-subjects in Philosophy and Logic, and selected second- and third-year options in either Philosophy or Logic are normally available at late lectures each year.

**Politics**

Selected options at first-, second- and third-year level are normally available at late lectures each year.

**Psychology**

Psychology I and III are normally available at late lectures every year; Psychology II is normally available at late lectures in even years.

## TABLES

Unacceptable Combinations of Subjects	- - -	1066
Faculties and Departments	- - - - -	1072
Syllabus Numbers of Subjects and Half-Subjects	-	1073
Table of Subjects (in alphabetical order)	- - -	1079
Unitised Subjects and Subjects with Options	-	1085
Code Lists for Enrolment Purposes	- - - -	1092

TABLE OF  
UNACCEPTABLE COMBINATIONS OF SUBJECTS

If a subject or half-subject in column A is counted towards a degree or diploma, the subject(s) or half-subject(s) set out opposite it in column B cannot also be counted.

A	B
EE4H Agricultural Economics IIIH	EE63 Farm Prices and Policy
AC73 Ancient History III (Roman)	AC72 Ancient History II (before 1978)
QN22 Applied Mathematics IIA	QN02 Applied Mathematics II (before 1974)
	QN12 Applied Mathematics IIB
	QN32 Applied-Pure Mathematics IIC (before 1978)
	QN42 Applied-Pure Mathematics IID (before 1978)
	QA22 Computing-Applied Mathematics IIC (before 1977)
	QA32 Computing-Applied Mathematics IID (before 1977)
	QM22 Mathematics IIM (before 1976)
QN12 Applied Mathematics IIB	QN02 Applied Mathematics II (before 1974)
	QN22 Applied Mathematics IIA
	QN32 Applied-Pure Mathematics IIC (before 1978)
	QN42 Applied-Pure Mathematics IID (before 1978)
	QA7H Computing IH (before 1976)
	QA22 Computing-Applied Mathematics IIC (before 1977)
	QA32 Computing-Applied Mathematics IID (before 1977)
	QM22 Mathematics IIM (before 1976)
AQ42 Asian Civilisations: Past and Present II	AQ12 Asian Development II
AQ12 Asian Development II	AQ42 Asian Civilisations: Past and Present II
	AQ43 The Development of Asia III
SZ71 Biology I	SB01 Botany I (before 1971)
	SB5H Environmental Biology IH
	SB1H General Biology IH (before 1977)
	SB2H Plant Biology IH (before 1977)
	SZ01 Zoology I (before 1976)
SB6H Botany IH	SB5H Environmental Biology IH
NH12 Chemical Engineering II	SG72 Geophysics II
SC12 Chemistry II	SC22 Chemistry IIE
	SO02 Organic Chemistry II
	SC02 Physical and Inorganic Chemistry II

A	B
SC22 Chemistry IIE	SC12 Chemistry II SO02 Organic Chemistry II SC02 Physical and Inorganic Chemistry II
LL2H Commercial Law IH	LL92 Commercial Law IIA
LL3H Commercial Law IHH	LL92 Commercial Law IIA
LL92 Commercial Law IIA	LL2H Commercial Law IHH LL3H Commercial Law IHH
QA7H Computing IH	QN12 Applied Mathematics IIB (before 1976) QA12 Computing Science IIC QM22 Mathematics IIM (before 1976)
QA02 Computing Science II	QA22 Computing—Applied Mathematics IIC (before 1977) QA32 Computing—Applied Mathematics IID (before 1977) QA42 Computing—Pure Mathematics IIC (before 1977) QA52 Computing—Pure Mathematics IID (before 1977) QA12 Computing Science IIC
QA12 Computing Science IIC	QA7H Computing IH (after 1975) QA22 Computing—Applied Mathematics IIC (before 1977) QA32 Computing—Applied Mathematics IID (before 1977) QA02 Computing Science II QA42 Computing—Pure Mathematics IIC (before 1977) QA52 Computing—Pure Mathematics IID (before 1977) QM22 Mathematics IIM (before 1976)
QA03 Computing Science III QA13 Computing Science IIIA QA83 Computing Science IIIM	{ EC3H Information Systems and Data Processing IIH EC2H Introduction to Operations Research IIH
AQ43 The Development of Asia III	AQ12 Asian Development II
AJ71 Economic Geography I	SB5H Environmental Biology IH AJ01 Geography I AJ2H Human Geography IH AJ1H Physical Geography IH
EE02 Economic Statistics II	EE32 Economic Statistics IIA QT02 Mathematical Statistics II QT7H Statistics IH
EE32 Economic Statistics IIA	EE02 Economic Statistics II QT02 Mathematical Statistics II QT7H Statistics IH

A		B	
EE03	Economics III (Ag.Sc.)	QT02	Mathematical Statistics II
EE43	Economics of Natural Resource Use	EE2H	Public Finance IIIH
SB5H	Environmental Biology IH	SZ7I	Biology I
		SB6H	Botany IH
		AJ7I	Economic Geography I
		AJ0I	Geography I
		AJ1H	Physical Geography IH
		SB2H	Plant Biology IH (before 1977)
SG7H	Environmental Geology IH	SG1H	General Geology IH (before 1975)
		SG0I	Geology I
		SG7H	Geology IH (before 1976)
		SG2H	Physical Geology IH (before 1975)
EE63	Farm Prices and Policy	EE4H	Agriculture Economics IIIH
AF0I	French I	AF1I	French IA
AF1I	French IA	AF0I	French I
AF02	French II	AF12	French IIA
AF12	French IIA	AF02	French II
AJ0I	Geography I	AJ7I	Economic Geography I
		SB5H	Environmental Biology IH
		AJ2H	Human Geography IH
		AJ1H	Physical Geography IH
SG0I	Geology I	SG1H	General Geology IH (before 1975)
		SG7H	Geology IH (before 1976)
		SG7H	Environmental Geology IH
		SG2H	Physical Geology IH (before 1975)
SG72	Geophysics II	NH12	Chemical Engineering II
AG0I	German I	AG1I	German IA
AG1I	German IA	AG0I	German I
AG02	German II	AG12	German IIA
AG12	German IIA	AG02	German II
AC1I	Greek I	AC82	Greek IIA
		AC78	Greek IIIS
AC7I	Greek IA	AC77	Greek IIS
AC82	Greek IIA	AC1I	Greek I
		AC78	Greek IIIS
AC77	Greek IIS	AC7I	Greek IA
AC78	Greek IIIS	AC1I	Greek I
		AC82	Greek IIA

A		B	
AJ2H	Human Geography IH	AJ71	Economic Geography I
		AJ01	Geography I
EC3H	Information Systems and Data Processing IIIH	EC6H	Management Information Systems IIIH
		QA03	Computing Science III
		QA13	Computing Science IIIA
		QA83	Computing Science IIIM
EC2H	Introduction to Operations Research IIIH	QA03	Computing Science III
		QA13	Computing Science IIIA
		QA83	Computing Science IIIM
AQ21	Japanese I	AQ31	Japanese IA
AQ31	Japanese IA	AQ21	Japanese I
AC01	Latin I	AC41	Latin IA
		AC42	Latin IIA
		AC67	Latin IIIS
AC41	Latin IA	AC57	Latin IIS
AC42	Latin IIA	AC01	Latin I
		AC67	Latin IIIS
AC57	Latin IIS	AC41	Latin IA
AC67	Latin IIIS	AC01	Latin I
		AC42	Latin IIA
AL22	Logic II	AL23	Logic III
AL23	Logic III	AL22	Logic II
EE1G	Macroeconomics IH	EE83	Agricultural Economics I (before 1974)
		EE01	Economics I (before 1974)
EE3G	Macroeconomics IIIH	EE02	Economics II (before 1974)
EC6H	Management Information Systems IIIH	EC3H	Information Systems and Data Processing IIIH
EE2F	Mathematical Economics IH	QM01	Mathematics I
		QM7H	Mathematics IH
		QM11	Mathematics IM
		SM71	Mathematics IS (before 1971)
QF13	Mathematical Physics III	QF03	Theoretical Physics III
QT02	Mathematical Statistics II	EE03	Economics III (Ag.Sc.)
		EE02	Economic Statistics II
		EE32	Economic Statistics IIA
QM01	Mathematics I	EE2F	Mathematical Economics IH
		QM7H	Mathematics IH
		QM11	Mathematics IM
		SM71	Mathematics IS (before 1971)
		EE41	Mathematics (Economics) I (before 1978)



A	B
QM7H Mathematics IH	EE2F Mathematical Economics IH QM01 Mathematics I QM11 Mathematics IM SM71 Mathematics IS (before 1971) EE41 Mathematics (Economics) I (before 1978)
QM11 Mathematics IM	EE2F Mathematical Economics IH QM01 Mathematics I QM7H Mathematics IH SM71 Mathematics IS (before 1971) EE41 Mathematics (Economics) I (before 1978)
EE2G Microeconomics IH	EE83 Agricultural Economics I (before 1974) EE01 Economics I (before 1974)
EE4G Microeconomics IIIH	EE02 Economics II (before 1974)
UA51 Music I	UA61 Music IA
UA61 Music IA	UA51 Music I
SO02 Organic Chemistry II	SC12 Chemistry II SC22 Chemistry IIE
AL1H Philosophy IH(A)	AL1H Introductory Philosophy IH (before 1975) AL01 Philosophy I (before 1974)
AL3H Philosophy IH(B)	AL1H Introductory Philosophy IH (before 1975) AL01 Philosophy I (before 1974)
SC02 Physical and Inorganic Chemistry II	SC12 Chemistry II SC22 Chemistry IIE
AJ1H Physical Geography IH	AJ01 Geography I AJ71 Economic Geography I SB5H Environmental Biology IH
SG2H Physical Geology IH	SG7H Environmental Geology IH SG01 Geology I SG7H Geology IH (before 1976)
SP01 Physics I	SP7H Physics IH(M) SP7H Physics IM (before 1976) SP9H Physics, Man and Society IH
SP7H Physics IH(M)	SP01 Physics I SP7H Physics IM (before 1976)
SP9H Physics, Man and Society IH	SP01 Physics I
AP11 Politics IA	AP01 Politics I (before 1976)

A		B	
AY23	Psychology III	AY1H	Psychology IIIH(A)
		AY2H	Psychology IIIH(B)
AY1H	Psychology IIIH(A)	AY23	Psychology III
AY2H	Psychology IIIH(B)		
EE2H	Public Finance IIIH	EE43	Economics of Natural Resource Use
QM02	Pure Mathematics II	QN32	Applied-Pure Mathematics IIC
		QN42	Applied-Pure Mathematics IID
		QA42	Computing-Pure Mathematics IIC (before 1977)
		QA52	Computing-Pure Mathematics IID (before 1977)
		QM22	Mathematics IIM (before 1976)
EE71	Social Economics I	EE01	Economics I (before 1974)
		EE1C	Macroeconomics IH
		EE2C	Microeconomics IH
QT7H	Statistics IH	EE02	Economic Statistics II
		EE32	Economic Statistics IIA
QF03	Theoretical Physics III	QF13	Mathematical Physics III

## TABLE OF FACULTIES AND DEPARTMENTS

	<i>Code</i>	<i>Page</i>		<i>Code</i>	<i>Page</i>
<b>Faculty of Agricultural Science</b>	W—	530	<b>Board of Environmental Studies</b>	V—	1015
Agricultural Biochemistry	WB	530			
Agronomy	WA	534	<b>Faculty of Law</b>	L—	840
Animal Physiology	WN	536	Law	LL	840
Biometry Section	WY	538			
Entomology	WE	542	<b>Mathematical Sciences</b>	Q—	860
Plant Pathology	WP	545	Applied Mathematics	QN	869
Plant Physiology	WF	546	Computing Science	QA	860
Soil Science	WS	547	Mathematical Physics	QF	867
			Pure Mathematics	QM	869
<b>Faculty of Architecture and Planning</b>	R—	557	Statistics	QT	881
Architecture	RA	557			
M.U.R.P. subjects	RP	570			
			<b>Faculty of Medicine</b>	M—	901
<b>Faculty of Arts</b>	A—	580	Anatomy and Histology	MA	903
Anthropology	AA	580	Community Medicine	MU	905
Asian Studies, Centre for	AQ	586	Medicine	MM	907
Classics	AC	593	Obstetrics and Gynaecology	MO	909
Education	AD	679	Paediatrics	MC	909
English Language and Literature	AE	607	Pathology	MP	908
French Language and Literature	AF	616	Psychiatry	MH	908
Geography	AJ	625	Surgery	MS	907
German Language and Literature	AG	631			
History	AH	639	<b>Faculty of Music</b>	U—	935
Language Laboratory	AS	668	Music	UM	935
Library	AB	677	Drama (for B.A.)	UA	604
Philosophy	AL	647	Music (for B.A.)	UA	644
Politics	AP	654			
Psychology	AY	663	<b>Faculty of Science</b>	S—	953
			Biochemistry and General Physiology	SY	956
<b>Faculty of Dentistry</b>	D—	711	Botany	SB	959
Dental Health	DH	717	Economic Geology	SE	976
Oral Biology	DB	713	Genetics	SJ	973
Oral Pathology and Oral Surgery	DP	715	Geology and Mineralogy	SG	976
Restorative Dentistry	DR	713	Human Physiology and Pharmacology	SS	993
			Microbiology and Immunology	SK	984
<b>Faculty of Economics</b>	E—	740	Organic Chemistry	SO	971
Commerce	EC	754	Physical and Inorganic Chemistry	SC	967
Economics	EE	740	Physics	SP	986
			Zoology	SZ	999
<b>Faculty of Engineering</b>	N—	784			
Chemical Engineering	NH	784			
Civil Engineering	NC	791			
Electrical Engineering	NE	798			
Mechanical Engineering	NM	805			

## TABLE OF SYLLABUS NUMBERS

Syllabus Number	Subject	Page	Syllabus Number	Subject	Page
<b>A - ARTS</b>					
AA01	Anthropology I	580	AD30	Educational Psychology II	691
AA02	Anthropology IIA	581	AD34	Educational Psychology I	683
AA12	Anthropology IIB	581	AD35	Educational Psychology IIP	673
AA03	Anthropology IIIA	583	AD40	Comparative Education	692
AA13	Anthropology IIIB	583	AD44	Curriculum Studies and Teaching Practice	683
AA22	Anthropology IIC	582	AD50	History and Sociology of Science	692
AA23	Anthropology IIIC	584	AD60	Advanced Curriculum Studies in English	692
AA33	Anthropology IIID	584	AD65	Advanced Curriculum Studies in History and Social Science	693
AA99	Honours Anthropology	585	AD6H	Advanced Curriculum Studies in Mathematics	693
AB05	Introduction to Library Studies	678	AD70	Honours English (Education)	693
AB07	Information Systems Analysis and Design	678	AD75	Honours Mathematics (Education)	693
AB15	Bibliographical Organisation	678	AD80	Special Topic-English Curriculum Development	693
AB17	Non-print Materials	678	AD90	Philosophy of Education II	692
AB25	Reference Service and Resources	678	AD95	Philosophy of Education III	698
AB35	Academic and Research Library Management	678	AD96	Philosophy III (Education)	698
AB36	Library History	678	AE01	English I	607
AB45	Library Applications of Computing I	678	AE02	English II	608
AB46	Book Production and Book Arts	678	AE03	English IIIA	608
AB55	Research Methods	678	AE13	English IIIB	610
AB56	Library Applications of Computing II	678	AE72	Australian Literary Studies II	612
AB65	Special Assignment	678	AE82	American Literature II	613
AB75	Social Science Bibliography	678	AE87	Old and Middle English II	611
AB76	Library Planning	678	AE88	Old and Middle English III	612
AB85	Humanities Bibliography	678	AE92	Linguistics II	614
AB86	Special Topics in Bibliography	678	AE93	Linguistics III	614
AB95	Pure and Applied Science Bibliography	678	AE99	Honours English Language and Literature	615
AB96	Information Storage and Retrieval	678	AF01	French I	617
AC01	Latin I	593	AF02	French II	618
AC02	Latin II	594	AF03	French III	620
AC03	Latin III	594	AF11	French IA	616
AC11	Greek I	595	AF12	French IIA	619
AC12	Greek II	596	AF72	French IIB	619
AC13	Greek III	596	AF88	French IIIB	622
AC31	Classical Studies I	597	AF99	Honours French Language and Literature	623
AC32	Classical Studies II	598	AG01	German I	631
AC33	Classical Studies III	599	AG02	German II	632
AC41	Latin IA	593	AG03	German III	634
AC42	Latin IIA	593	AG11	German IA	634
AC57	Latin IIS	593	AG12	German IIA	635
AC67	Latin IIIS	594	AG74	Science German	638
AC71	Greek IA	595	AG87	German IIB	635
AC72	Ancient History II (Roman)	602	AG88	German IIIB	636
AC73	Ancient History III (Roman)	602	AG99	Honours German Language and Literature	637
AC77	Greek IIS	595	AH01	History IA	639
AC78	Greek IIIS	596	AH02	History IIA	642
AC79	Honours Classical Studies	601	AH03	History IIIA	643
AC82	Greek IIA	595	AH13	History IIIB	643
AC89	Honours Latin	594	AH22	History IIB	642
AC92	Greek Art and Archaeology II	602	AH31	History IB	639
AC99	Honours Classics	596	AH41	History IC	639
AD00	Theory of Education II	689	AH99	Honours History	643
AD04	Theory of Education I	682	AJ01	Geography I	625
AD14	History of Education I	682	AJ12	Geography IIA	627
AD15	History of Education IIA	691	AJ13	Geography IIIA	629
AD16	History of Education IIB	691	AJ1H	Physical Geography IH	625
AD24	Sociology of Education I	683	AJ22	Geography IIB	627
AD25	Sociology of Education IIA	691	AJ23	Geography IIIB	630
AD26	Sociology of Education IIB	691	AJ2H	Human Geography IH	625
			AJ71	Economic Geography I	625

TABLES

TABLE OF SYLLABUS NUMBERS

Syllabus Number	Subject	Page
AJ7H	Geography IIIH	627
AJ8H	Geography IIIH	630
AJ99	Honours Geography	630
AJ9H	Economic Geography IIIH	752
AL02	Philosophy II	650
AL03	Philosophy IIIA	651
AL13	Philosophy IIIB	651
AL1H	Philosophy IH(A)	647
AL22	Logic II	651
AL23	Logic III	652
AL2H	Logic IH	648
AL3H	Philosophy IH(B)	648
AL4H	Philosophy IIIH	652
AL99	Honours Philosophy	652
AP03	Politics IIIA	662
AP11	Politics IA	657
AP13	Politics IIIB	662
AP1H	Political Sociology IIIH	662
AP21	Politics IB	657
AP32	Politics IIA	660
AP42	Politics IIB	660
AP99	Honours Politics	662
AQ01	Chinese I	586
AQ02	Chinese II	587
AQ03	Chinese III	587
AQ12	Asian Development II	591
AQ21	Japanese I	589
AQ22	Japanese II	590
AQ23	Japanese III	590
AQ31	Japanese IA	589
AQ42	Asian Civilisations: Past and Present II	591
AQ43	The Development of Asia III	592
AS74	Service Course in French	668
AS84	Service Course in Russian	668
AY01	Psychology I	663
AY02	Psychology II	663
AY04	Developmental Psychology	673
AY05	Counselling and Psychotherapy	673
AY14	Human Skills	673
AY15	Psychological Assessment and Measurement	673
AY1H	Psychology IIIH(A)	665
AY23	Psychology III	665
AY25	Behaviour Analysis and Modification	673
AY2H	Psychology IIIH(B)	665
AY35	Applied Social Psychology	673
AY54	Statistics and Methodology	673
AY89	Honours Psychology (B.Sc.)	996
AY99	Honours Psychology (B.A.)	665
<b>D - DENTISTRY</b>		
DB02	Oral Anatomy	713
DB13	Microbiology (B.D.S.)	714
DB24	Pharmacology and Therapeutics	718
DB99	Oral Biology (Honours B.Sc.Dent.)	726
DH04	Children's Dentistry	717
DH14	Periodontology IV	718
DH15	Periodontology V	721
DH25	Preventive Dentistry	721
DH35	Orthodontics	720
DH99	Dental Health (Honours B.Sc.Dent.)	726
DP03	Oral Pathology III	715
DP04	Oral Pathology IV	717
DP15	Oral Surgery and Anaesthesia	720
DP25	Oral Medicine	720
DP35	Pain Control	721
DP79	Oral Surgery (Honours B.Sc.Dent.)	727
DP89	Oral Pathology (Honours B.Sc.Dent.)	727

Syllabus Number	Subject	Page
DR02	Restorative Dentistry II	713
DR03	Restorative Dentistry III	715
DR04	Restorative Dentistry IV	718
DR05	Restorative Dentistry V	721
DR99	Restorative Dentistry (Honours B.Sc.Dent.)	727
<b>E - ECONOMICS</b>		
EC00	Accounting (Business Management)	764
EC01	Accounting I	754
EC02	Accounting II	754
EC03	Accounting III	755
EC07	Business Policy	766
EC08	Personnel Management	769
EC16	Economics (Business Management)	765
EC17	Financial Management	766
EC18	Management and Information Systems	769
EC1G	Computerised Accounting and Systems IIIH	757
EC23	Industrial Sociology III	755
EC26	Industrial Sociology (M.B.M.)	765
EC27	Government and Administration	766
EC2G	Management Decision Analysis IIIH	758
EC33	Commerce III (Mathematical Sciences)	866
EC36	Quantitative Methods I	766
EC37	Organisation Theory and Behaviour (M.B.M.)	767
EC47	Quantitative Methods II	767
EC4H	Business Finance IIIH	758
EC57	Supervised Project Work	769
EC5H	Marketing IIIH	758
EC67	Business Finance (M.B.M.)	768
EC77	Marketing Management	768
EC87	Quantitative Methods III(1)	768
EC97	Quantitative Methods III(2)	768
EE03	Economics III (Agricultural Science)	541
EE03	Economics III (Arts)	606
EE03	Economics III (Mathematical Sciences)	866
EE13	Economic Development III	747
EE1F	Mathematics for Economists IH	741
EE1G	Macroeconomics IH	740
EE22	Economic Statistics II	746
EE2F	Mathematical Economics IH	742
EE2G	Microeconomics IH	741
EE2H	Public Finance IIIH	749
EE32	Economic Statistics IIA	746
EE33	Economics IIIA	748
EE3F	Mathematical Economics IIIH	746
EE3G	Macroeconomics IIIH	743
EE3H	Economics of Labour IIIH	749
EE43	Economics of Natural Resource Use	539
EE4F	Economic History IH	742
EE4G	Microeconomics IIIH	744
EE4H	Agricultural Economics IIIH	750
EE53	Farm Management	539
EE5F	Economic Institutions and Policy IH	742
EE63	Farm Prices and Policy	540
EE6F	Economic History IIIH(A)	745
EE71	Social Economics I	605
EE73	Economic Development Studies III	606
EE7F	Economic History IIIH(B)	745
EE7H	Managerial Economics IIIH	750
EE8F	Economic Theory IIIH	752
EE8G	Economic History IIIH	748
EE8H	Econometrics IIIH	751
EE99	Honours Economics	606, 753
EE9H	Mathematical Economics IIIH	751



TABLES

TABLE OF SYLLABUS NUMBERS

Syllabus Number	Subject	Page
NE07	Electrical Engineering for M.Eng.Sc. (One-third Project Work) .....	825
NE08	Electrical Engineering for M.Eng.Sc. (By Thesis Only) .....	825
NE13	Electrical Engineering III .....	799
NE14	Electrical Engineering IVA .....	801
NE15	Electrical Engineering for M.Eng.Sc. (Two-thirds Course Work) .....	824
NE24	Electrical Engineering IVB .....	802
NE34	Electrical Engineering IVC .....	804
NE99	Honours Electrical Engineering .....	816
NH05	Chemical Engineering for M.Eng.Sc. (One-third Course Work) .....	824
NH06	Chemical Engineering for M.Eng.Sc. (Two-thirds Project Work) .....	824
NH08	Chemical Engineering for M.Eng.Sc. (By Thesis Only) .....	824
NH12	Chemical Engineering II .....	785
NH13	Chemical Engineering IIIA .....	786
NH14	Chemical Engineering IVA .....	787
NH23	Chemical Engineering IIB .....	786
NH24	Chemical Engineering IVB .....	788
NH34	Chemical Engineering IVC .....	788
NH59	Materials Science (Honours B.Sc.Dent.) .....	728
NH62	Chemical Engineering IIS .....	789
NH63	Chemical Engineering IIIBS .....	789
NH64	Chemical Engineering IVBS .....	790
NH99	Honours Chemical Engineering .....	816
NM02	Mechanical Engineering II .....	805
NM03	Mechanical Engineering IIIA .....	806
NM05	Mechanical Engineering for M.Eng.Sc. (One-third Course Work) .....	825
NM06	Mechanical Engineering for M.Eng.Sc. (Two-thirds Project Work) .....	825
NM07	Mechanical Engineering for M.Eng.Sc. (One-third Project Work) .....	825
NM08	Mechanical Engineering for M.Eng.Sc. (By Thesis Only) .....	825
NM13	Mechanical Engineering IIIB .....	807
NM15	Mechanical Engineering for M.Eng.Sc. (Two-thirds Course Work) .....	825
NM24	Mechanical Engineering IVA .....	808
NM34	Mechanical Engineering IVB .....	809
NM44	Mechanical Engineering IVC .....	810
NM85	Engineering Management IV .....	810
NM99	Honours Mechanical Engineering .....	817
NX01	Engineering I .....	784
NX12	Engineering IIC .....	792, 812
NX23	Engineering IIIE .....	800, 812
NX42	Engineering IIIM .....	806, 812
NX52	Engineering IIH .....	790, 812
NX53	Engineering IIIC .....	795, 812
NX73	Engineering IIIMA .....	808, 812
NX83	Engineering IIIMB .....	808, 812
NX93	Engineering IIIBA .....	787, 812
NY93	Engineering IIHIB .....	787, 812

Q – MATHEMATICAL SCIENCES

QA02	Computing Science II .....	861
QA03	Computing Science III .....	864
QA04	Diploma Computing I .....	887
QA06	Computing Science IIIL .....	678
QA12	Computing Science IIC .....	861
QA13	Computing Science IIIA .....	864

Syllabus Number	Subject	Page
QA14	Diploma Computing II .....	887
QA24	Diploma Computing III .....	887
QA34	Diploma Project .....	887
QA7H	Computing IH .....	860
QA83	Computing Science IIIM .....	864
QA99	Honours Computing Science .....	864
OF03	Theoretical Physics III .....	867
OF13	Mathematical Physics III .....	867
QF99	Honours Mathematical Physics .....	868
OM01	Mathematics I .....	870
OM02	Pure Mathematics II .....	872
OM03	Pure Mathematics III .....	875
OM11	Mathematics IM .....	871
OM13	Pure Mathematics IIIA .....	876
OM7H	Mathematics IH .....	871
OM83	Pure Mathematics IIIM .....	876
OM99	Honours Pure Mathematics B.A. and B.Sc. ....	879
ON03	Applied Mathematics III .....	878
ON12	Applied Mathematics IIB .....	873
ON13	Applied Mathematics IIIA .....	878
ON22	Applied Mathematics IIA .....	872
ON83	Applied Mathematics IIIM .....	879
ON99	Honours Applied Mathematics B.A. and B.Sc. ....	880
OT02	Mathematical Statistics II .....	881
OT03	Mathematical Statistics III .....	882
OT7H	Statistics IH .....	881
OT99	Honours Statistics (B.A. and B.Sc.) .....	883

R – ARCHITECTURE AND PLANNING

RA01	Building Construction I .....	557
RA02	Building Construction II .....	559
RA03	Building Construction III .....	562
RA04	Building Construction IV .....	564
RA05	Building Construction V .....	566
RA11	Building Science I .....	558
RA12	Building Science II .....	560
RA13	Building Science III .....	562
RA14	Building Science IV .....	564
RA15	Building Science V .....	566
RA21	History of Architecture I .....	558
RA22	History of Architecture II .....	561
RA31	Architectural Design and Planning I .....	559
RA32	Architectural Design and Planning II .....	561
RA33	Architectural Design and Planning III .....	562
RA34	Architectural Design and Planning IV .....	564
RA41	Studio Work I .....	559
RA42	Studio Work II .....	561
RA43	Studio Work III .....	563
RA44	Studio Work IV .....	565
RA45	Studio Work V .....	567
RA53	Professional Practice I .....	563
RA54	Professional Practice II .....	565
RA55	Professional Practice III .....	567
RA64	Urban and Regional Planning and Urban Design I .....	565
RA65	Urban and Regional Planning and Urban Design II .....	566
RA71	Architectural and Free Drawing .....	559
RA75	Architectural Thesis .....	567
RA81	Art History and Appreciation .....	559
RA82	Architectural Surveying .....	561
RA89	Advanced Studies II (Hons. B.Arch.) .....	568
RA98	Advanced Studies I (Hons. B.Arch.) .....	565, 568
RA99	Honours Architecture .....	568
RP06	Urban and Regional Planning A .....	570
RP16	Urban and Regional Planning B .....	570

Syllabus Number	Subject	Page	Syllabus Number	Subject	Page
RP26	History and Philosophy of Planning	570	SP7H	Physics IH(M)	903
RP36	The Law in Relation to Planning	570	SP83	Physics IIIM	991
RP46	Practical Work IA	570	SP8H	Astronomy IH	986
RP56	Practical Work IIA	570	SP99	Honours Physics	992
RP66	Thesis Research (Planning A)	570	SP9H	Physics, Man and Society IH	653
RP76	Thesis Research (Planning B)	570	SS02	Physiology II	993
RP86	Practical Work IB	570	SS03	Physiology III	994
			SS12	Human Physiology (M.B., B.S.)	905
			SS13	Human Physiology and Pharmacology (M.B., B.S.)	906
			SS22	Human Physiology (B.D.S.)	712
			SS23	Human Physiology and Pharmacology (B.D.S.)	714
			SS33	Physiology IIIA (Physiology)	994
			SS39	Physiology (Hons. B.Sc.Dent.)	728
			SS43	Physiology IIIB (Pharmacology)	994
			SS49	Pharmacology (Hons. B.Sc.Dent.)	728
			SS69	Physiology (Hons. B.Med.Sc.)	918
			SS79	Pharmacology (Hons. B.Med.Sc.)	918
			SS83	Physiology IIIM	994
			SS89	Honours Pharmacology	995
			SS99	Honours Physiology	995
			SX33	Social Biology III	997
			SY02	Biochemistry II	956
			SY03	Biochemistry III	957
			SY72	Biochemistry (M.B., B.S.)	904
			SY79	Biochemistry (Hons. B.Sc.Dent.)	727
			SY82	Biochemistry (B.D.S.)	712
			SY83	Biochemistry IIIM	957
			SY89	Biochemistry (Hons. B.Med.Sc.)	918
			SY99	Honours Biochemistry	958
			SZ02	Zoology II	999
			SZ03	Zoology III	1002
			SZ71	Biology I	901, 1002
			SZ83	Zoology IIIM	1002
			SZ99	Honours Zoology	1003
				<b>U – MUSIC</b>	
			UA11	Drama I	604
			UA12	Drama II	604
			UA51	Music I	644
			UA52	Music II	645
			UA53	Music III	645
			UA61	Music IA	644
			UA68	Music IIIS (Hons.)	646
			UA69	Honours Music	646
			UM09	Honours Project	938
			UM21	Historical and Related Studies I	935
			UM22	Historical and Related Studies II	936
			UM23	Historical and Related Studies III	936
			UM31	Theoretical Studies I	935
			UM32	Theoretical Studies II	936
			UM33	Theoretical Studies III	937
			UM41	Practical Studies I	935
			UM42	Practical Studies II	936
			UM43	Practical Studies III	937
			UM51	Elective Studies I	936
			UM52	Elective Studies II	936
			UM53	Elective Studies III	937
			UM59	Ethnomusicology	938
			UM69	Music in Education	938
			UM79	Performance	938
			UM89	Musiology	938
			UM99	Composition	938
SB02	Botany II	960			
SB03	Botany III	963			
SB5H	Environmental Biology IH	959			
SB6H	Botany IH	959			
SB83	Botany IIIM	963			
SB99	Honours Botany	963			
SC01	Chemistry I	965			
SC02	Physical and Inorganic Chemistry II	967			
SC03	Physical and Inorganic Chemistry IIIA	970			
SC12	Chemistry II	965			
SC13	Physical and Inorganic Chemistry IIIB	970			
SC22	Chemistry IIE	966			
SC23	Chemistry III	966			
SC71	Chemistry IM	902			
SC83	Physical and Inorganic Chemistry IIIM	970			
SC99	Honours Physical and Inorganic Chemistry	970			
SG01	Geology I	976			
SG02	Geology II	977			
SG03	Geology III	981			
SG13	Palaeontology III	981			
SG23	Geology and Economic Geology IIIA	981			
SG33	Geology and Economic Geology IIIB	981			
SG3H	Geology IIE(E)	791			
SG72	Geophysics I	973			
SG73	Geophysics III	981			
SG7H	Environmental Geology IH	976			
SG83	Geology IIIM	981			
SG89	Honours Geophysics	983			
SG99	Honours Geology	982			
SJ02	Genetics II	973			
SJ03	Genetics III	974			
SJ3H	Social Biology IIIM (Arts)	666			
SJ69	Genetics (Hons. B.Sc.Dent.)	728			
SJ79	Honours Genetics (B.Ag.Sc.)	544			
SJ7H	Genetics and Human Variation IH	973			
SJ89	Genetics (Hons. B.Med.Sc.)	918			
SJ8H	Genetics IH(M)	902			
SJ99	Honours Genetics	975			
SK03	Microbiology and Immunology III	984			
SK79	Microbiology (Hons. B.Sc.Dent.)	727			
SK89	Microbiology (Hons. B.Med.Sc.)	918			
SK99	Honours Microbiology or Immunology	985			
SO02	Organic Chemistry II	971			
SO03	Organic Chemistry III	971			
SO83	Organic Chemistry IIIM	972			
SO99	Honours Organic Chemistry	972			
SP01	Physics I	987			
SP02	Physics II	987			
SP03	Physics III	991			



TABLES

Syllabus Number	Subject	Page
<b>V – ENVIRONMENTAL STUDIES</b>		
VX05	Environmental Biology .....	1015
VX15	Environmental Geoscience ...	1015
VX16	Ecology of Inland Waters ...	1016
VX25	Theory and Practice of Environmental Management .....	1015
VX26	Genetic and Biosocial Effects of Environmental Pollution	1016
VX35	Quantitative and Qualitative Methods ..	1016
VX36	History and Philosophy of Urban and Regional Planning .....	1016
VX45	Applied Geomorphology in Environmental Management .....	1016
VX55	Conservation and National Parks .....	1016
VX56	Medicine in the Community	1016
VX65	Environmental Chemistry .....	1016
VX75	Environmental Physics .....	1016
VX76	The Role of the Engineer in Environmental Management	1016
VX85	Environmental Psychology ...	1016
VX86	Urban and Regional Planning	1016
VX95	Exploitation and Management of Seafloor Resources and Coastal Zone Management	1016
VX96	Photogrammetric and Remote Sensing Methods of Data Acquisition—Interpretation in Environmental Planning	1016
<b>W – AGRICULTURAL SCIENCE</b>		
WA74	Agronomy .....	534
WA84	Plant Breeding .....	534
WA89	Honours Agronomy .....	535

TABLE OF SYLLABUS NUMBERS

Syllabus Number	Subject	Page
WB03	Agricultural Biochemistry I...	530
WB04	Agricultural Biochemistry II	530
WB89	Honours Agricultural Biochemistry .....	531
WE03	Entomology and Plant Pathology .....	542
WE04	Entomology II .....	542
WE99	Honours Entomology .....	543
WF03	Crop Physiology .....	546
WF04	Horticultural Science .....	546
WF89	Honours Plant Physiology .....	546
WF99	Honours Horticultural Physiology .....	546
WN03	Animal Physiology and Production I .....	536
WN04	Animal Physiology and Production II .....	536
WN99	Honours Animal Physiology and Production .....	537
WP03	Agricultural Microbiology .....	545
WP04	Plant Pathology II .....	545
WP99	Honours Plant Pathology .....	545
WS03	Soil Science I .....	547
WS04	Soil Science II .....	547
WS99	Honours Soil Science .....	548
WX02	Agriculture II .....	532
WX03	Agriculture III .....	532
WX04	Agriculture IV .....	533
WY73	Biometry I .....	538
WY89	Hons. Biometry .....	538

## TABLE OF SUBJECTS

## Titles of subjects:

- (a) The Roman numeral indicates the level of the subject, e.g. Latin I is a first-year subject, Latin III a third-year subject.
- (b) The letter H indicates a half-subject, e.g. Macroeconomics IH is a first-year half-subject.

Subject	Syllabus Number	Page	Subject	Syllabus Number	Page
<b>A</b>					
Academic and Research Library Management	AB35	678	Applied Geomorphology in Environmental Management	VX45	1016
Accounting I	EC01	754	Applied Mathematics IIA	QN22	872
Accounting II	EC02	754	Applied Mathematics IIB	QN12	873
Accounting III	EC03	755	Applied Mathematics III	QN03	878
Accounting (Business Management)	EC00	764	Applied Mathematics IIIA	QN13	878
Administrative Law	LL07	843	Applied Mathematics IIIM	QN83	879
Advanced Curriculum Studies in English	AD60	692	Applied Social Psychology	AY35	673
Advanced Curriculum Studies in History and Social Science	AD65	693	Architectural and Free Drawing	RA71	559
Advanced Oral Biology	WB03	530	Architectural Design and Planning I	RA31	559
Agricultural Biochemistry I	WB04	530	Architectural Design and Planning II	RA32	561
Agricultural Biochemistry II	EE4H	750	Architectural Design and Planning III	RA33	562
Agricultural Economics IIH	WP03	545	Architectural Design and Planning IV	RA34	564
Agricultural Microbiology	WX02	532	Architectural Structures I	NC51	558
Agriculture I	WX03	532	Architectural Structures II	NC52	560
Agriculture II	WX04	533	Architectural Structures III	NC53	562
Agriculture III	WA74	534	Architectural Structures IV	NC54	564
Agriculture IV	AE32	613	Architectural Structures V	NC55	566
Agromony	MA02	903	Architectural Surveying	RA82	561
American Literature II	MA03	906	Architectural Thesis	RA75	567
Anatomy (M.B., B.S.)	MA51	914	Art History and Appreciation	RA81	559
Anatomy (M.B., B.S.)	MA61	915	Asian Civilisations: Past and Present II	AO42	591
Anatomy I (O.T.)	MA52	914	Asian Development II	AQ12	591
Anatomy IP	MA62	915	Associations (Law)	LF54	843
Anatomy II (O.T.)	AC72	602	Astronomy IH	SP8H	986
Anatomy IIP	AC73	602	Australian Literary Studies II	AE72	612
Ancient History II (Roman)	WN03	536	<b>B</b>		
Ancient History III (Roman)	WN04	536	Basic Clinical Science	MX07	923
Animal Physiology and Production I	AA01	580	Behaviour Analysis and Modification	AY25	673
Animal Physiology and Production II	AA02	581	Behavioural Science	MH71	901
Anthropology I	AA12	581	Behavioural Psychotherapy	MH27	922
Anthropology IIA	AA22	582	Bibliographical Organisation	AB15	678
Anthropology IIB	AA03	583	Biochemistry (B.D.S.)	SY82	712
Anthropology IIC	AA13	583	Biochemistry II	SY02	956
Anthropology IIIA	AA23	584	Biochemistry III	SY03	957
Anthropology IIIB	AA33	584	Biochemistry (M.B., B.S.)	SY72	904
Anthropology IIIC			Biochemistry IIIM	SY83	957
Anthropology IIID			Biology I	SZ71	901, 1002
Applied Clinical Science (Anaesthesia)	MX17	923	Biology of Disease (M.B., B.S.)	MP03	906
Applied Clinical Science (Clinical Pathology)	MX27	923	Biometry I	WY73	538
Applied Clinical Science (Community Medicine)	MX37	923	Book Production and Book Arts	AB46	678
Applied Clinical Science (Dermatology)	MX47	923	Botany IH	SB6H	959
Applied Clinical Science (General Practice)	MX57	923	Botany II	SB02	960
Applied Clinical Science (Medicine)	MX67	923	Botany III	SB03	963
Applied Clinical Science (Obstetrics and Gynaecology)	MX77	923	Botany IIIM	SB83	963
Applied Clinical Science (Paediatrics)	MX87	923	Building Construction I	RA01	557
Applied Clinical Science (Radiology)	MX97	923	Building Construction II	RA02	559
Applied Clinical Science (Surgery)	MX08	923	Building Construction III	RA03	562
			Building Construction IV	RA04	564
			Building Construction V	RA05	566
			Building Science I	RA11	558
			Building Science II	RA12	560
			Building Science III	RA13	562
			Building Science IV	RA14	564
			Building Science V	RA15	566
			Business Finance (M.B.M.)	EC67	768
			Business Policy	EC07	766
			Business Finance IIH	EC4H	758

TABLES

TABLE OF SUBJECTS

Subject	Syllabus Number	Page
<b>C</b>		
Chemical Engineering II	NH12	785
Chemical Engineering IIS	NH62	789
Chemical Engineering IIIA	NH13	786
Chemical Engineering IIIB	NH23	786
Chemical Engineering IIIBS	NH63	789
Chemical Engineering IVA	NH14	787
Chemical Engineering IVB	NH24	788
Chemical Engineering IVC	NH34	788
Chemical Engineering IVBS	NH64	790
Chemical Engineering for M.Eng.Sc. (One-third Course Work)	NH05	824
Chemical Engineering for M.Eng.Sc. (Two-thirds Project Work)	NH06	824
Chemical Engineering for M.Eng.Sc. (By Thesis Only)	NH08	824
Chemistry I	SC01	965
Chemistry IM	SC71	902
Chemistry II	SC12	965
Chemistry IIE	SC22	966
Chemistry III	SC23	966
Children's Dentistry	DH04	717
Chinese I	AQ01	586
Chinese II	AQ02	587
Chinese III	AQ03	587
Civil Engineering II	NC02	792
Civil Engineering IIIA	NC03	793
Civil Engineering IIIB	NC13	793
Civil Engineering IVA	NC14	795
Civil Engineering IVB	NC44	796
Civil Engineering IVC	NC34	796
Civil Engineering IVD	NC64	797
Civil Engineering for M.Eng.Sc. (One-third Course Work)	NC05	824
Civil Engineering for M.Eng.Sc. (Two-thirds Course Work)	NC15	824
Civil Engineering for M.Eng.Sc. (Two-thirds Project Work)	NC06	824
Civil Engineering for M.Eng.Sc. (One-third Project Work)	NC07	824
Civil Engineering for M.Eng.Sc. (By Thesis Only)	NC08	824
Classical Studies I	AC31	597
Classical Studies II	AC32	598
Classical Studies III	AC33	599
Commerce III (Mathematical Sciences)	EC33	866
Commercial Law IH	LL2H	756
Commercial Law IIA	LL92	757
Commercial Law IIH	LL3H	756
Commercial Transactions	LL73	842
Comparative Education	AD40	692
Comparative Law	LL77	843
Computerised Accounting and Systems IIH	EC1G	757
Computing IH	QA7H	860
Computing Science II	QA02	861
Computing Science IIC	QA12	861
Computing Science III	QA03	864
Computing Science IIIA	QA13	864
Computing Science IIIL	QA06	678
Computing Science IIIM	QA83	864
Conflict of Laws	LL57	844
Conservation and National Parks	VX55	1016
Constitutional Law I	LL11	840
Constitutional Law II	LL32	841
Counselling and Psychotherapy	AY05	673
Criminal Law	LL21	840
Criminology	LL87	844
Crop Physiology	WF03	546
Curriculum Studies and Teaching Practice	AD44	683
<b>D</b>		
Dental Radiology	—	722
Developmental Psychology	AY04	673

Subject	Syllabus Number	Page
Diploma Computing I	QA04	887
Diploma Computing II	QA14	887
Diploma Computing III	QA24	887
Diploma Project	QA34	887
Drama I	UA11	604
Drama II	UA12	604
<b>E</b>		
Ecology of Inland Waters	VX16	1016
Econometrics IIH	EE8H	751
Economic Development III	EE13	747
Economic Development Studies III	EE73	606
Economic Geography I	AJ71	625
Economic Geography IIH	AJ9H	752
Economic History IH	EE4F	742
Economic History IIH(A)	EE6F	745
Economic History IIH(B)	EE7F	745
Economic History IIH	EE8C	748
Economic Institutions and Policy IH	EE5F	742
Economic Statistics II	EE22	746
Economic Statistics IIA	EE32	746
Economic Theory IIH	EE8F	752
Economics IIIA	EE33	748
Economics III (Agricultural Science)	EE03	541
Economics III (Arts)	EE03	606
Economics III (Mathematical Sciences)	EE03	866
Economics (Business Management)	EC16	765
Economics of Labour IIH	EE3H	749
Economics of Natural Resource Use	EE43	539
Educational Psychology I	AD34	683
Educational Psychology II	AD30	691
Educational Psychology IIP	AD35	673
Elective Case Study (Dip.P.T.)	MH67	922
Elective Studies I	UM51	936
Elective Studies II	UM52	936
Elective Studies III	UM53	937
Electrical Engineering II	NE02	798
Electrical Engineering III	NE13	799
Electrical Engineering IVA	NE14	801
Electrical Engineering IVB	NE24	802
Electrical Engineering IVC	NE34	804
Electrical Engineering for M.Eng.Sc. (One-third Course Work)	NE05	824
Electrical Engineering for M.Eng.Sc. (Two-thirds Course Work)	NE15	824
Electrical Engineering for M.Eng.Sc. (Two-thirds Project Work)	NE06	825
Electrical Engineering for M.Eng.Sc. (One-third Project Work)	NE07	825
Electrical Engineering for M.Eng.Sc. (By Thesis Only)	NE08	825
Elements of Law	LL01	840
Engineering I	NX01	784
Engineering IIC	NX12	792, 812
Engineering IIIE	NX23	800, 812
Engineering IIH	NX52	790, 812
Engineering IIM	NX42	806, 812
Engineering IIIC	NX53	795, 812
Engineering IIIHA	NX93	787, 812
Engineering IIHIB	NY93	787, 812
Engineering IIIMA	NX73	808, 812
Engineering IIIMB	NX83	808, 812

Subject	Syllabus Number	Page
Engineering Management IV	NM85	810
English I	AE01	607
English II	AF02	608
English IIIA	AE03	608
English IIIB	AE13	610
Entomology II	WE04	542
Entomology and Plant Pathology	WE03	542
Environmental Biology (M.Env.St.)	VX05	1015
Environmental Biology IH	SB5H	959
Environmental and Planning Law	LL38	843
Environmental Chemistry	VX65	1016
Environmental Geology IH	SG7H	976
Environmental Geoscience (M.Env.St.)	VX15	1015
Environmental Physics	VX75	1016
Environmental Psychology	VX85	1016
Evaluative Techniques in Psychotherapy	MH37	922
Exploitation and Management of Seafloor Resources and Coastal Zone Management	VX95	1016
<b>F</b>		
Family Law	LL17	844
Farm Management	EE53	539
Farm Prices and Policy	EE63	540
Final (Sixth-Year) Examination (M.B., B.S.)	MX76	911
Financial Management	EC17	766
Fourth-Year Examination (M.B., B.S.)	MX74	907
French I	AF01	617
French IA	AF11	616
French II	AF02	618
French IIA	AF12	619
French IIB	AF72	619
French III	AF03	620
French IIIB	AF88	622

**G**

General Anatomy (B.D.S.)	MA72	712
General and Dental Histology	MA82	712
General Medicine (B.D.S.)	MM04	717
General Pathology (B.D.S.)	MP73	714
General Surgery (B.D.S.)	MS04	717
Genetics IH(M)	SJ8H	902
Genetics II	SJ02	973
Genetics III	SJ03	974
Genetics and Human Variation IH	SJ7H	973
Genetic and Biosocial Effects of Environmental Pollution	VX26	1016
Geography I	AJ01	625
Geography IIA	AJ12	627
Geography IIB	AJ22	627
Geography IIIH	AJ7H	627
Geography IIIA	AJ13	629
Geography IIIB	AJ23	630
Geography IIIH	AJ8H	630
Geology I	SG01	976
Geology IH(E)	SG3H	971
Geology II	SG02	977
Geology III	SG03	981
Geology IIIM	SG83	981
Geology and Economic Geology IIIA	SG23	981
Geology and Economic Geology IIIB	SG33	981
Geophysics II	SG72	978
Geophysics III	SG73	981
German I	AG01	631
German IA	AG11	634
German II	AG02	632
German IIA	AG12	635
German IIB	AG87	635

Subject	Syllabus Number	Page
German III	AG03	634
German IIIB	AG88	636
Government and Administration	EC27	766
Greek I	AC11	595
Greek IA	AC71	595
Greek II	AC12	596
Greek IIA	AC82	595
Greek IIS	AC77	595
Greek III	AC13	596
Greek IIIS	AC78	596
Greek Art and Archaeology II	AC92	602
Group and Milieu Therapy	MH57	922

**H**

(See also Section "Honours" below)

Histology and Cell Biology III	MA13	954
Histology and Cell Biology IHM	MA43	954
Historical and Related Studies I	UM21	935
Historical and Related Studies II	UM22	936
Historical and Related Studies III	UM23	936
History IA	AH01	639
History IB	AH31	639
History IC	AH41	639
History IIA	AH02	642
History IIB	AH22	642
History IIIA	AH03	643
History IIIB	AH13	643
History and Philosophy of Planning	RP26	570
History and Philosophy of Urban and Regional Planning	VX36	1016
History and Sociology of Science	AD50	692
History of Architecture I	RA21	558
History of Architecture II	RA22	561
History of Education I	AD14	682
History of Education IIA	AD15	691
History of Education IIB	AD16	691
Honours English (Education)	AD70	693
Horticultural Science	WF04	546
Human Geography IH	AJ2H	625
Human Physiology (M.B., B.S.) 2nd Year	SS12	905
Human Physiology and Pharmacology (M.B., B.S.) 3rd Year	SS13	906
Human Physiology (B.D.S.) 2nd Year	SS22	712
Human Physiology and Pharmacology (B.D.S.) 3rd Year	SS23	714
Human Skills	AY14	673
Humanities Bibliography	AB85	678

**HONOURS**

**AGRICULTURAL SCIENCE**

Agricultural Biochemistry	WB89	531
Agronomy	WA89	535
Animal Physiology and Production	WN99	537
Biometry	WY89	538
Entomology	WE99	543
Genetics	SJ79	544
Horticultural Physiology	WF99	546
Plant Pathology	WP99	545
Plant Physiology	WF89	546
Soil Science	WS99	548

**ARCHITECTURE**

Advanced Studies I (Hons. B.Arch.)	RA98	565
Advanced Studies II (Hons. B.Arch.)	RA89	568
Honours Architecture	RA99	568

TABLES

TABLE OF SUBJECTS

Subject	Syllabus Number	Page
<b>ARTS</b>		
Anthropology	AA99	585
Classical Studies	AC79	601
Classics	AC99	596
English Language and Literature	AE99	615
French Language and Literature	AF99	623
Geography	AJ99	630
German	AG99	637
History	AH99	643
Latin	AC89	594
<b>Music—</b>		
Music IHS	UA68	646
Final Honours	UA69	646
Philosophy	AL99	652
Politics	AL99	662
Psychology	AY99	665

Subject	Syllabus Number	Page
<b>DENTISTRY</b>		
Honours B.Sc.Dent.		
Anatomy and Histology	MA89	728
Biochemistry	SY79	727
Dental Health	DB99	726
Genetics	SJ69	728
Materials Science	NH89	728
Microbiology	SK79	727
Oral Biology	DB99	726
Oral Pathology	DP89	727
Oral Surgery	DP79	727
Pathology	MF89	728
Pharmacology	SS49	728
Physiology	SS39	728
Restorative Dentistry	DR99	727

Subject	Syllabus Number	Page
<b>ECONOMICS</b>		
Economics B.A. and B.Ec.	EE99	753

Subject	Syllabus Number	Page
<b>ENGINEERING</b>		
Chemical	NH99	816
Civil	NC99	816
Electrical	NE99	816
Mechanical	NM99	817

Subject	Syllabus Number	Page
<b>LAW</b>		
Honours Law	LL99	846

Subject	Syllabus Number	Page
<b>MATHEMATICAL SCIENCES</b>		
Applied Mathematics B.A. and B.Sc.	QN99	880
Computing Science B.A. and B.Sc.	QA99	864
Mathematical Physics	QF99	868
Pure Mathematics B.A. and B.Sc.	QM99	879
Statistics B.A. and B.Sc.	QT99	883

Subject	Syllabus Number	Page
<b>MEDICAL SCIENCE</b>		
Anatomy and Histology	MA99	918
Behavioural Science	MH89	918
Biochemistry	SY89	918
Community Medicine	MU99	918
Genetics	SJ89	918
Medicine	MM99	918
Microbiology	SK89	918
Obstetrics and Gynaecology	MO99	918
Paediatrics	MC99	918
Pathology	MP99	918
Pharmacology	SS79	918
Physiology	SS69	918
Psychiatry	MH99	918
Surgery	MS99	918

Subject	Syllabus Number	Page
<b>MUSIC</b>		
Composition	UM99	938
Ethnomusicology	UM59	938
Honours Project	UM09	938
Music in Education	UM69	938
Musicology	UM89	938
Performance	UM79	938

Subject	Syllabus Number	Page
<b>SCIENCE</b>		
Anatomy and Histology	MA79	955
Biochemistry	SY99	958
Botany	SB99	963
Genetics	SJ99	975
Geology	SG99	982
Geophysics	SC89	983
Microbiology or Immunology	SK99	985
Organic Chemistry	SO99	972
Pharmacology	SS89	995
Physical and Inorganic Chemistry	SC99	970
Physics	SP99	992
Physiology	SS99	995
Psychology	AY89	996
Zoology	SZ99	1003

Subject	Syllabus Number	Page
<b>I</b>		
Individual Psychotherapy	MH17	921
Income Tax ITH (B.Ec.)	LL1H	756
Industrial Law	LL27	844
Industrial Sociology III	EC23	755
Industrial Sociology (M.B.M.)	EC26	765
Information Storage and Retrieval	AB96	678
Information Systems Analysis and Design	AB07	678
Institutional Business Transactions	LL64	842
International Law	LL37	844
International Trade Law	LL97	845
Introduction to Library Studies	AB05	678
Introduction to Dentistry—Dental Care I	—	711

Subject	Syllabus Number	Page
<b>J</b>		
Japanese I	AQ21	589
Japanese IA	AQ31	589
Japanese II	AQ22	590
Japanese III	AQ23	590
Jurisprudence	LL47	845

Subject	Syllabus Number	Page
<b>L</b>		
Latin I	AC01	593
Latin IA	AC41	593
Latin II	AC02	594
Latin IIA	AC42	593
Latin IIS	AC57	593
Latin III	AC03	594
Latin IIIS	AC67	594
Legal Ethics and Accounts	LL15	845
Legal History	LL28	845
Library Applications of Computing I	AB45	678
Library Applications of Computing II	AB56	678
Library History	AB36	678
Library Planning	AB76	678
Linguistics I	AE92	614
Linguistics II	AE93	614
Linguistics III	AL2H	648
Logic I	AL22	651
Logic II	AL23	652
Logic III	AL23	652

Subject	Syllabus Number	Page
<b>M</b>		
Macroeconomics IH	EE1G	740
Macroeconomics IIIH	EE3G	743
Management and Information Systems	EC18	769
Management Decision Analysis IIIH	EC2G	758
Managerial Economics IIIH	EE7H	750
Marital and Family Therapy	MH47	922
Marketing IIIH	EC5H	758
Marketing Management	EC77	768
Mathematical Economics IH	EE2F	742



TABLES

TABLE OF SUBJECTS

Subject	Syllabus Number	Page
<b>S</b>		
Science German .....	AG74	638
Seminar Course A (LL.B.) .....	LL08	845
Seminar Course B (LL.B.) .....	LL18	845
Service Course in French .....	AS74	668
Service Course in Russian .....	AS84	668
Social Biology III (B.Sc.) .....	SX83	997
Social Biology IIIH (B.A.) .....	S13H	666
Social Economics I .....	EE71	605
Social Science Bibliography .....	AB75	678
Sociology of Education I .....	AD24	683
Sociology of Education IIA .....	AD25	691
Sociology of Education IIB .....	AD26	691
Soil Science I .....	WS03	547
Soil Science II .....	WS04	547
Special Assignment (Dip.Lib.St.) ..	AB65	678
Special Topic-English		
Curriculum Development .....	AD80	693
Special Topics in Bibliography .....	AB86	678
Statistics IH .....	QT7H	881
Statistics and Methodology .....	AY54	673
Studio Work I .....	RA41	559
Studio Work II .....	RA42	561
Studio Work III .....	RA43	563
Studio Work IV .....	RA44	565
Studio Work V .....	RA45	567
Supervised Project Work (M.B.M.)	EC57	769
<b>T</b>		
Taxation Law .....	LL84	842
The Development of Asia III .....	AQ43	592
The Law in Relation to Planning ..	RF86	570
The Law of Contract .....	LL02	841

Subject	Syllabus Number	Page
The Law of Evidence .....	LL44	842
The Law of Procedure .....	LL74	842
The Law of Property .....	LL22	841
The Law of Torts .....	LL31	841
The Role of the Engineer in Environmental Management .....	VX76	1016
Theoretical Studies I .....	UM31	935
Theoretical Studies II .....	UM32	936
Theoretical Studies III .....	UM33	937
Theoretical Physics III .....	QF03	867
Theory and Practice of Environmental Management .....	VX25	1015
Theory of Education I .....	AD04	682
Theory of Education II .....	AD00	689
Thesis Research (Planning A) .....	RP66	570
Thesis Research (Planning B) .....	RP76	570
Trusts and Succession .....	LL43	841
<b>U</b>		
Urban and Regional Planning (M.Env.St.) .....	VX86	1016
Urban and Regional Planning and Urban Design I .....	RA64	565
Urban and Regional Planning and Urban Design II .....	RA65	566
Urban and Regional Planning A .....	RP06	570
Urban and Regional Planning B .....	RP16	570
<b>Z</b>		
Zoology II .....	SZ02	999
Zoology III .....	SZ03	1002
Zoology IIIM .....	SZ83	1002

TABLE OF UNITISED SUBJECTS AND SUBJECTS WITH OPTIONS

Department	Syllabus Number	Subject	Unit Code	Title of Unit or Option
Anatomy	MA13	Histology and Cell Biology III	H301	General Cytology
	MA43	Histology and Cell Biology IIIM	H302	Neurocytology
			H303	Methods in Cell Biology
			H304	Histochemistry and Cytochemistry
			H305	Neuroendocrinology
			H306	Reproductive Biology
			J333	Social Biology
Applied Mathematics	QN03	Applied Mathematics III	N301	Elasticity
	QN13	Applied Mathematics IIIA	N302	Applied Probability
	QN83	Applied Mathematics IIIM	N303	Calculus of Variations
			N304	Hydrodynamics
			N305	Mathematical Programming
			N306	Differential Equations
			N308	Optimisation
			N309	Queues
			N310	Mathematical Biology
	Biochemistry	SY03	Biochemistry III	Y301
SY83		Biochemistry IIIM	Y302	Synthesis Organisation and Function of DNA
			Y303	Synthesis Organisation and Function of RNA
			Y304	Molecular Biology of Viruses
			Y305	Structure and Biological Activity of Proteins
			Y306	Regulation of Eukaryote Metabolism
Botany		SB03	Botany III	B301
	SB83	Botany IIIM	B302	Marine Plant Biology A
			B303	Marine Plant Biology B
			B304	Plant Nutrition
			B305	Plant Biochemistry
			B306	Mycology
			B307	Evolution of Seed Plants
			B308	Evolutionary Processes
			B309	Comparative Morphology and Palaeobotany
			B310	Plant Water Relations
			B311	Phytoplankton Ecology and the Production of Inland Waters
	Classical Studies	AC32	Classical Studies II	C701
AC33		Classical Studies III	C702	Roman Poetry
			C704	Pastoral, Satire and the Novel
			C706	Comparative Literature
			C707	Greek and Roman Historiography
			C708	Ancient Philosophy
			C709	Later Roman Empire
			C710	Narrative and Didactic Poetry
			C711	Greek Art and Archaeology (2)
			C712	Greek Art and Archaeology (Special Topics)



Department	Syllabus Number	Subject	Unit Code	Title of Unit or Option
Commerce (Ma.Sc.)	EC33	Commerce III (Ma.Sc.)	EC03	Accounting III
			EC4H	Business Finance IIIH
			LL2H	Commercial Law IH
			EC23	Industrial Sociology III
			EC5H	Marketing IIIH
(Commerce options are no units, therefore in addition to enrolling for EC33, a candidate should also enrol in section D of the Enrolment Form for the options chosen. Section E of the form (subjects <i>with</i> units or options) should NOT be used for Commerce options.				
Commerce (M.B.M.)	EC57	Supervised Project Work	C471	Project, Stage I
			C472	Project, Stage II
Computing Science	QA03	Computing Science III	A301	Computer Architecture
	QA13	Computing Science IIIA	A302	Numerical Analysis I
	QA83	Computing Science IIIM	A303	Operating Systems I
	QA06	Computing Science IIIL	A304	Programming Languages I
			A305	Programming Languages II
			A306	Simulation
			A307	Graphs
			A308	COBOL and Data Base Management
			A309	COBOL Project
Economics (Arts, Ag. Science and Math. Science)	EE03	Economics III (Arts or Agricultural Science or Mathematical Sciences)	EE4H	Agricultural Economics IIIH
			EE8H	Econometrics IIIH
			EE13	Economic Development III
			EE8G	Economic History IIIH
			EE8F	Economic Theory IIIH
	EE73	Economic Development Studies III (Arts)	EE33	Economics IIIA
			EE3H	Economics of Labour IIIH
			EE7H	Managerial Economics IIIH
			EE9H	Mathematical Economics IIIH
			EE2H	Public Finance IIIH
(Economics options are not units, therefore in addition to enrolling for EE03 and/or EE73, a candidate should also enrol in section D of the Enrolment Form for the options chosen. Section E of the form (subjects with units or options) should NOT be used for Economics options.				
Engineering (B.E.)	NX12 NX53 NX23 NX42 NX73 NX83 NX52 NX93 NY93	Engineering IIC Engineering IIIC Engineering IIIE Engineering IIM Engineering IIIM A Engineering IIIM B Engineering IIH Engineering IIH A Engineering IIH B	C201	Stress Analysis A
			C202	Stress Analysis B
			C203	Structural Engineering
			C204	Numerical Analysis in Engineering
			C205	Engineering Economics and Planning
			E201	Electrical Circuits and Machines
			E202	Electronics
			H201	Engineering Materials
			H202	Materials Engineering
			M201	Vibration, Control and Heat Transfer
			M202	Machine Design
			Q201	Mathematics III (Engineering)

TABLE OF UNITISED SUBJECTS  
AND SUBJECTS WITH OPTIONS

TABLES

Department	Syllabus Number	Subject	Unit Code	Title of Unit or Option				
Engineering (M.Eng.Sc.)	NC05	Civil Engineering for M.Eng.Sc. (One-third Course Work)	}	C521	Concrete Properties and Structural Design			
				C522	Coastal Zone Dynamics			
				C523	Geotechnical Engineering			
	NC15	Civil Engineering for M.Eng.Sc. (Two-thirds Course Work)	}	C524	Plastic Analysis of Structures			
				NE05	Electrical Engineering for M.Eng.Sc. (One-third Course Work)	}	E541	Computer Aided Circuit Design
				NE15	Electrical Engineering for M.Eng.Sc. (Two-thirds Course Work)		E542	Digital Systems
	E543	Power System Dynamics						
	NE15	Electrical Engineering for M.Eng.Sc. (Two-thirds Course Work)	}	E544	Signal Processing—Linear Prediction			
				E545	Stochastic Processes in Communication Systems			
				E546	Synthesis of Passive and Active Networks			
				E547	Power Electronics			
				E548	Numerical Solution of Electromagnetic Fields			
	NM05	Mechanical Engineering for M.Eng.Sc. (One-third Course Work)	}	M561	Vibration and Random Processes			
				M562	Automobile Dynamics			
				M563	Applied Acoustics and Noise Control			
	NM15	Mechanical Engineering for M.Eng.Sc. (Two-thirds Course Work)	}	M564	Advanced Heat Transfer			
				M565	Fluid Power Control			
				M566	Automatic Control			
Geography	AJ12	Geography IIA	}	J710	Biogeography and Climatology			
				AJ22	Geography IIB			
				AJ7H	Geography IIH			
	AJ13	Geography IIIA	}	J711	Economic Geography			
				J712	Geomorphology and Pedology			
				J713	Social Geography			
				J720	Biogeography			
				J721	Cartography			
				J722	Climatology			
				J723	Cultural Geography			
				J724	Economic Geography			
				J725	Geomorphology			
				J726	Rural Geography			
				J727	South-East Asia			
				J728	Urban Geography			
				J730	Geographic Thought			
				J731	Techniques in Human Geography			
				J733	Remote Sensing Techniques			
Geology	SG03	Geology III	}	G301	Stratigraphy A			
				G302	Sedimentology			
				G303	Structural Geology A			
	SG23	Geology and Economic Geology IIIA	}	G304	Igneous and Metamorphic Petrology A			
				G305	Igneous and Metamorphic Petrology B			
	SG33	Geology and Economic Geology IIIB	}	G306	Mineral Deposits A			
	SG73	Geophysics III						
SG83	Geology IIIM							

Department	Syllabus Number	Subject	Unit Code	Title of Unit or Option		
Geology ( <i>Continued</i> )						
			G307	Mineral Deposits B		
			G308	Structural Mineralogy		
			G309	Geochemistry and Isotope Geology		
			G310	General Palaeontology and Biostratigraphy		
			G311	Palaeontology A		
			G312	Palaeontology B		
			G313	Geophysics A		
			G314	Geophysics B		
			G315	Mining Geology		
			G316	Structural Geology B		
			G317	Stratigraphy B		
			G318	Tectonics		
History						
	AH02	History IIA	H701	Popular Religion and the Pre- Scientific World View in Early Modern England, c. 1500-1700		
	AH22	History IIB				
	AH03	History IIIA				
	AH13	History IIIB				
			H702	The Rise of China and Japan. Conflict and Crisis in Modern East Asia		
			H703	France 1850-1918		
			H704	Culture and Crisis: England and Europe 1870-1970		
			H707	Bismarck to Hitler		
			H708	Medieval Europe		
			H709	Australia: Outpost of Empire in the Antipodes		
			H710	Pacific History		
			H712	Social and Political Ideas since the Seventeenth Century		
			H713	Nationalism and Revolution in Modern South East Asia		
Mathematical Physics						
	QF03	Theoretical Physics III	F301	Mathematical Methods		
	QF13	Mathematical Physics III				
					F302	Advanced Dynamics
					F303	Quantum Mechanics I
					F304	Theory of Relativity (Same as Physics Unit P309)
					F305	Quantum Mechanics II
					F306	Continuum Mechanics
			F307	Statistical Mechanics		
Organic Chemistry						
	SO03	Organic Chemistry III	O301	Spectroscopy		
	SO83	Organic Chemistry IIIM				
					O302	Pericyclic Reactions and Free Radical Chemistry
					O303	Physical Organic Chemistry
					O304	Mechanism and Synthesis I
					O305	Mechanism and Synthesis II
					O306	Heterocyclic Chemistry and Natural Products
					O307	Organic Chemicals in the Environment

Department	Syllabus Number	Subject	Unit Code	Title of Unit or Option
Philosophy	AL02 AL22 AL03 AL13 AL23	Philosophy II Logic II Philosophy IIIA Philosophy IIIB Logic III	L201	Logic
			L203	Philosophy of Religion
			L204	Ethics
			L205	Modal Logic
			L206	Topics in Metaphysics OR Philosophy of Mind
	L208	Advanced Logic		
	L209	Science, Progress and Truth		
	L211	Marxism		
	L213	Theories of Human Nature		
	L217	Problems in Causation		
	L221	Relativism, Witchcraft, Truth and Logic		
	L230	Aesthetics		
	C708	Ancient Philosophy		
	Physical and Inorganic Chemistry	SC03 SC13	Physical and Inorganic Chemistry IIIA Physical and Inorganic Chemistry IIIB	C301
C302				Statistical Thermodynamics
SC83		Physical and Inorganic Chemistry IIIB Chemistry IIIM	C303	Crystallography
			C304	Reaction Kinetics
C305		Molecular Spectra		
C306		Organometallic Chemistry		
C307		Macromolecular Chemistry		
C308		Metal Complexes		
C309		Inorganic Reaction Mechanisms		
C310		Electrolyte Solutions		
Physics	SP03 SP83	Physics III Physics IIIM	P301	Electromagnetism
			P302	Electromagnetic Waves
	P303	Quantum Mechanics		
	P304	Optics		
	P305	Statistical Mechanics		
	P306	Atomic Physics		
	P307	Nuclear Physics		
	P308	Solid State Physics		
	P309	Relativity (Same as Maths. Physics Unit F304)		
	P310	Astrophysics		
	P311	Atmospheric Physics		
	P312	Planetary Interiors		
	P313	History and Philosophy of Physics		
	P314	Environmental Physics		
	P315	Biophysics		
Physiology	SS03 SS33 SS43 SS83	Physiology III Physiology IIIA (Physiology) Physiology IIIB (Pharmacology) Physiology IIIM	S301	Principles of Pharmacology and Toxicology
			S302	Cellular Neurophysiology
			S303	Systematic Pharmacology
			S304	Systematic Neurophysiology
			S305	Cardiovascular and Renal Physiology
			S306	Neuropharmacology
J333	Social Biology			

TABLES

TABLES OF UNITISED SUBJECTS  
AND SUBJECTS WITH OPTIONS

Department	Syllabus Number	Subject	Unit Code	Title of Unit or Option		
Politics .. .. .	AP11	Politics IA	} P701	Introduction to Politics and Political Economy		
	AP21	Politics IB				
	AP32	Politics IIA				
	AP42	Politics IIB				
	AP03	Politics IIIA				
	AP13	Politics IIIB				
					P702	Political Development in Australia
					P703	Political Sociology
					P704	Third World Political Economy
					P705	Chinese Politics
					P706	Marxism-Leninism
					P707	Public Policy in Australia
					P708	Sociology of Power
		P709	International Politics			
		P710	Contemporary Social Theory			
		P711	History of Political Thought			
		P712	Liberal Democracy in Australia			
		P713	Modern Political Thought			
Psychology .. .. .	AY23	Psychology III	} Group A: Personality and Social Psychology	Y780 Personality		
	AY1H	Psychology IIIH(A)				
	AY2H	Psychology IIIH(B)				
					Y781	Cognitive Organisation and Social Behaviour
					Y782	Social Psychology
					Y783	The Philosophy and Psychology of Consciousness
					Group B: Human Performance	
					Y784	Human Decision Processes
					Y785	Applied Experimental Psychology
					Y786	Environmental Psychology
					Group C: Physiological and Comparative Psychology	
					Y787	Physiological Psychology
					Y788	Motivation
					Y789	Animal Behaviour
			Compulsory Unit			
		Y774	Psychological Statistics			
		Details of other units will be available from the Department of Psychology prior to enrolment.				
Pure Mathematics ..	QM03	Pure Mathematics III	} M321	Applicable Analysis		
	QM13	Pure Mathematics IIIA				
	QM83	Pure Mathematics IIIM				
					M322	Analysis
					M323	Complex Analysis
					M324	Integration
					M331	Groups
					M332	Rings and Modules
		M333	Geometry			
		M334	Number Theory			
		M341	Sets and Logic			
		M343	History of Mathematics			
Social Biology (Science)	Certain IIIM subjects with permission of the Head/Chairman of department concerned.		J333	Social Biology		

TABLE OF UNITISED SUBJECTS  
AND SUBJECTS WITH OPTIONS

TABLES

Department	Syllabus Number	Subject	Unit Code	Title of Unit or Option
Statistics	QT03	Mathematical Statistics III	T301	Probability and Distribution Theory
			T302	Statistical Inference I
			T303	Statistical Inference II
			T304	Linear Models I
			T305	Linear Models II
			T306	Special Topics
Zoology	SZ03 SZ83	Zoology III } Zoology IIIM }	Z301	Population Biology
			Z302	Comparative Biochemistry and Pollution
	Z303	Environmental Physiology		
	Z304	Parasites and Parasitism		
	Z305	Systematics and Biogeography		
	Z306	Freshwater Ecology		
	J333	Social Biology		

## Code Lists for Enrolment Purposes

## (Statistical Data Codes)

## CODE 1—COURSE CODES

*Agricultural Science*

WB Bachelor of Agricultural Science (B.Ag.Sc.)  
 WH Honours Agricultural Science  
 (B.Ag.Sc.Hons.)  
 WM Master of Agricultural Science (M.Ag.Sc.)  
 WP Ph.D.—Agricultural Science  
 WA Miscellaneous Agricultural Science  
 WV Visiting Student—Agricultural Science

*Architecture*

RB Bachelor of Architecture (B.Arch.)  
 RH Honours Architecture (B.Arch.Hons.)  
 RT Master of Urban and Regional Planning  
 (M.U.R.P.)  
 RT Master of Town Planning (old course)  
 RM Master of Architecture (M.Arch.)  
 RP Ph.D.—Architecture  
 RA Miscellaneous Architecture  
 RV Visiting Student—Architecture

*Arts*

AB Bachelor of Arts (B.A.)  
 AH Honours Arts (B.A. Hons.)  
 AX Diploma in Applied Psychology  
 (Dip.App.Psych.)  
 AL Diploma in Library Studies (Dip.Lib.St.)  
 AG Diploma in Education (Dip.Ed.)  
 AZ Advanced Diploma in Education  
 (Adv.Dip.Ed.)  
 AT Master of Education (M.Ed.)  
 AQ Master Qualifying—Arts  
 AM Master of Arts (M.A.)  
 AP Ph.D.—Arts  
 AD Doctor of Letters (D.Litt.)  
 AA Miscellaneous Arts  
 AV Visiting Student—Arts

*Dentistry*

DB Bachelor of Dental Surgery (B.D.S.)  
 DH Bachelor of Science in Dentistry (Honours  
 Degree) (B.Sc.Dent.)  
 DM Master of Dental Surgery  
 DP Ph.D.—Dentistry  
 DD Doctor of Dental Science (D.D.Sc.)  
 DA Miscellaneous Dentistry  
 DV Visiting Student—Dentistry

*Economics*

EB Bachelor of Economics (B.Ec.)  
 EH Honours Economics (B.Ec.Hons.)  
 ET Master of Business Management (M.B.M.)  
 EM Master of Economics (M.Ec.)  
 EP Ph.D.—Economics  
 EA Miscellaneous Economics  
 EV Visiting Student—Economics

*Engineering*

NU Bachelor of Engineering (Chemical) (B.E.)  
 NN Bachelor of Engineering (Civil) (B.E.)  
 NO Bachelor of Engineering (Electrical) (B.E.)  
 NR Bachelor of Engineering (Mechanical) (B.E.)  
 NH Honours Engineering (B.E.Hons.) (all depts.)  
 NM Master of Engineering (M.E.)  
 NT Master of Engineering Science (M.Eng.Sc.)  
 NS Master of Applied Science (M.App.Sc.)  
 NP Ph.D.—Engineering  
 ND Doctor of Engineering  
 NA Miscellaneous Engineering  
 NV Visiting Student—Engineering

*Environmental Studies*

VT Master of Environmental Studies  
 VP Ph.D.—Environmental Studies

*Law*

LB Bachelor of Laws (LL.B.)  
 LH Honours Law (LL.B.Hons.)  
 LM Master of Laws (LL.M.)  
 LP Ph.D.—Law  
 LD Doctor of Laws (LL.D.)  
 LA Miscellaneous Law  
 LV Visiting Student—Law

*Mathematical Sciences*

QB Bachelor of Science in the Faculty of  
 Mathematical Sciences (B.Sc.)  
 QH Honours Mathematical Sciences  
 (B.Sc.Hons.)  
 QG Diploma in Computing Science  
 (Dip.Comp.Sc.)  
 QM Master of Science in the Faculty of  
 Mathematical Sciences (M.Sc.)  
 QP Ph.D.—Mathematical Sciences  
 QD Doctor of Science in the Faculty of  
 Mathematical Sciences (D.Sc.)  
 QA Miscellaneous Mathematical Sciences  
 QV Visiting Student—Mathematical Sciences

*Medicine*

MB Bachelor of Medicine and Bachelor of  
 Surgery (M.B., B.S.)  
 MH Bachelor of Medical Science (Honours  
 Degree) (B.Med.Sc.)  
 MX Diploma in Psychotherapy  
 MM Master of Surgery (M.S.)  
 MP Ph.D.—Medicine  
 MD Doctor of Medicine (M.D.)  
 MA Miscellaneous Medicine  
 MV Visiting Student—Medicine

*Music*

UB Bachelor of Music (B.Mus.)  
 UH Honours Music (B.Mus.Hons.)  
 UM Master of Music (M.Mus.)  
 UP Ph.D.—Music  
 UD Doctor of Music (D.Mus.)  
 UA Miscellaneous Music  
 UV Visiting Student—Music

*Science*

SB Bachelor of Science in the Faculty of  
 Science (B.Sc.)  
 SH Honours Science (B.Sc.Hons.)  
 SM Master of Science in the Faculty of  
 Science (M.Sc.)  
 SP Ph.D.—Science  
 SD Doctor of Science in the Faculty of  
 Science (D.Sc.)  
 SA Miscellaneous Science  
 SV Visiting Student—Science

*S.A.I.T. Students*

VX Diploma in Technology—Physiotherapy  
 VY Diploma in Technology—Occupational  
 Therapy

CODE 2—CONTACT DEPARTMENT CODES

Alphabetical List of Departments

*Note:* Higher Degree students should nominate the department in which they receive supervision. Other students should nominate the department in which they will spend most time.

*Agricultural Science*

WB Agricultural Biochemistry  
WA Agronomy  
WN Animal Physiology  
WY Biometry  
WE Entomology  
WP Plant Pathology  
WF Plant Physiology  
WS Soil Science

*Architecture*

RA Architecture  
RP Planning

*Arts*

AA Anthropology  
AQ Asian Studies  
AC Classics  
AD Education  
AE English  
AF French  
AJ Geography  
AG German  
AH History  
AB Library Studies  
AL Philosophy  
AP Politics  
AY Psychology

*Dentistry*

First Year B.D.S. students should nominate a suitable contact department in the Faculty of Science. Other B.D.S. students should nominate the Dental School Office (code DD). Higher Degree and Honours students should nominate the department in which they are working.

DH Dental Health  
DD Dental School Office  
DB Oral Biology  
DP Oral Pathology and Oral Surgery  
DR Restorative Dentistry

*Economics*

EC Commerce  
EE Economics

*Engineering*

NH Chemical Engineering  
NC Civil Engineering  
NE Electrical Engineering  
NM Mechanical Engineering

*Environmental Studies*

VV Environmental Studies

*Law*

LL Law

*Mathematical Sciences*

QN Applied Mathematics  
QA Computing Science  
QF Mathematical Physics  
QM Pure Mathematics  
QT Statistics

*Medicine*

First Year M.B., B.S. students should nominate a suitable contact department in the Faculty of Science. Other M.B., B.S. students should nominate the Medical School Office (code MD). Higher Degree and Honours students should nominate the department in which they are working.

MA Anatomy  
MU Community Medicine  
MD Medical School Office  
MM Medicine  
MO Obstetrics and Gynaecology  
MC Paediatrics  
MP Pathology  
MH Psychiatry  
MS Surgery

*Music*

UM Music/Elder Conservatorium  
UB Centre for Aboriginal Studies

*Science*

SY Biochemistry  
SB Botany  
SE Economic Geology  
SJ Genetics  
SG Geology  
SS Human Physiology  
SI Mawson Institute  
SK Microbiology  
SO Organic Chemistry  
SR Pharmacology  
SC P and I Chemistry  
SP Physics  
SZ Zoology

*S.A.I.T. Students*

TT Occupational Therapy  
TT Physiotherapy

CODE 3—STATUS FOR UNIVERSITY ELECTIONS

- |                                     |   |
|-------------------------------------|---|
| 1 Not a University graduate         | 3 A graduate (or its equivalent) of another University but not a graduate of Adelaide |
| 2 A graduate of Adelaide University |   |

*Note:* Students who have qualified for a degree but who have not yet had it conferred are NOT graduates for this purpose.

CODE 4—WHO PROVIDES YOUR ACCOMMODATION DURING TERM?

- |   |  |
|---|--|
| 1 Parent(s)   | 5 Yourself or a group (including rented accommodation) |
| 2 Other relation(s) or guardian(s)                                    | 6 Other (including boarding house)                     |
| 3 The University or an affiliated College of the University           | 9 Not known  |
| 4 Another institution (including armed forces, religious communities) |  |



## TABLES

CODE LISTS FOR  
ENROLMENT PURPOSES

## CODE 5—TYPE OF ACCOMMODATION DURING TERM

1 House	5 Non-collegiate housing
2 Flat/unit	6 Other institutional accommodation
3 Affiliated College	7 Board and lodging
4 Hall of Residence	9 Not known

CODE 6—LOCATION OF HOME RESIDENCE ON FIRST ENROLLING AT  
THE UNIVERSITY OF ADELAIDE

If home residence was in Australia use the appropriate Australian postcode. If overseas, use one of the codes below.

<i>Oceania</i>	0408 Hong Kong
0101 Christmas Island	0411 India
0102 Cocos (Keeling) Island	0413 Malaysia
0103 Norfolk Island	0415 Singapore
0120 Papua New Guinea	0417 Sri Lanka
0142 Fiji	0419 Other Commonwealth Asia
0144 Nauru	0424 Israel
0145 New Zealand	0429 Other Middle East (excl. Africa)
0146 Solomon Islands	0443 Bangladesh
0148 Tonga	0446 Burma
0149 Other Commonwealth Pacific Islands	0449 Cambodia
0167 Western Samoa	0452 China (People's Republic)
0169 Other Pacific Islands	0455 Indonesia
	0458 Japan
	0464 Korea (North or South)
	0471 Laos
	0474 Pakistan
<i>Africa</i>	0477 Philippines
0201 The Gambia	0480 Taiwan
0206 Ghana	0483 Thailand
0211 Kenya	0486 Turkey
0216 Lesotho	0489 Vietnam (North or South)
0221 Malawi	0499 Other Asia
0226 Mauritius	
0231 Nigeria	<i>Europe</i>
0236 Republic of South Africa	0501 United Kingdom and Ireland (including Northern Ireland and Republic of Ireland)
0241 Rhodesia	0535 France
0246 Tanzania, United Republic of	0538 Germany, Federal Republic of
0251 Uganda	0546 Italy
0256 Zambia	0552 Malta
0269 Other Commonwealth Africa	0554 The Netherlands
0299 Other Africa	0585 U.S.S.R.
	0590 The Nordic Countries (Denmark, Finland, Norway and Sweden)
<i>America</i>	0599 Other Europe
0308 Canada	<i>Not Elsewhere Classified</i>
0313 Mexico	0989 Not elsewhere classified
0317 U.S.A.	
0321 West Indies	<i>Not Stated</i>
0389 South America	0999 Not stated
0399 Other America	
<i>Asia</i>	
0402 Brunei	
0405 Cyprus	

## CODE 7—HIGHEST QUALIFICATION ATTEMPTED

<i>Secondary</i>	<i>Tertiary</i>
51 Matriculation Standard	01 Doctorate
52 Adult or concessional matriculation	03 Masters —University
53 Special Entry	04 —CAE
59 Other	06 Graduate Diploma—University
	07 —CAE
<i>Other Post-Secondary</i>	11 Bachelor —University
41 Technical College qualification	12 —CAE
49 Other	17 Other —University
	18 —CAE
	99 Not elsewhere classified

## CODE 8—LOCATION OF INSTITUTION WHERE HIGHEST QUALIFICATION ATTEMPTED

01 Adelaide University	16 Tasmania
11 N.S.W.	17 N.T.
12 Victoria	18 A.C.T.
13 Queensland	80 Overseas
14 School or other institution in S.A.	99 Not known
15 W.A.	

CODE 9—FINANCIAL ASSISTANCE

97 Self-supported	21 State Govt.—Postgraduate award
98 Supported by parents	22 —Cadetship
01 Aust. Govt.—Postgraduate award	23 —Teacher Training
02 —Cadetship	24 —Other
03 —Colombo Plan	41 University —Postgraduate award
04 —Teacher Training	42 —Other
05 —T.E.A.S.	61 Overseas award
06 —Other	71 Other assistance
	99 Not known

CODE 10—OCCUPATION

01 Professional, technical and related workers	07 Workers in transport and communication not elsewhere classified
02 Administrative, executive and managerial workers	08 Tradesmen, production-process workers and labourers not elsewhere classified
03 Clerical workers	09 Service, sport and recreation workers not elsewhere classified
04 Sales workers	10 Members of armed services
05 Farmers, fishermen, hunters and related workers	99 Miscellaneous
06 Miners, quarrymen and related workers	

CODE 11—CATEGORY OF EMPLOYER

1 Federal Government	6 Non-profit body
2 State or Local Government	7 Private organisation
3 Adelaide University	8 Self-employed
4 Other Tertiary Educational Institution	9 Other
5 Other public organisation	

CODE 12—CONCURRENT ATTENDANCE

013 Flinders University	236 Salisbury College of Advanced Education
239 South Australian Institute of Technology	269 Sturt College of Advanced Education
104 Adelaide College of Advanced Education	311 Torrens College of Advanced Education
170 Kingston College of Advanced Education	399 Another institution in S.A.
188 Murray Park College of Advanced Education	499 An interstate tertiary institution
230 Roseworthy Agricultural College	599 An overseas tertiary institution