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**BOARD OF PROFESSIONAL STUDIES**

**1974 HANDBOOK**

**EIGHTY CENTS**

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**THE UNIVERSITY OF NEW SOUTH WALES**

**P.O. Box 1, Kensington, N.S.W. 2033**

**Phone: 663 0351**

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## INTRODUCTION

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The Board of Vocational Studies was established for the purpose of supervising the teaching and examination of subjects which are primarily concerned with vocational training and which do not lend themselves to incorporation in the existing Faculty structure. Membership of the original Board was restricted, but as responsibilities increased with the expanded number of courses offered, it was decided, in 1970, to reconstitute the Board. The Board of Vocational Studies now functions on lines very similar to those of the normal university faculty, and the Board is responsible for all courses in the Schools of Education, Health Administration, Librarianship, Social Work, and the Department of Industrial Arts.

Students should note that since 1971 they have had three elected representatives on the Board of Vocational Studies. Members of the Board are aware of the contribution which student members can make to the activities of the Board; they welcome students as observers at their meetings.

Immediately before going to press in 1973 Council approval was given to change the name of the Board of Vocational Studies to the Board of Professional Studies. Although the title of handbook and some major headings have been changed in accordance with this ruling it was not possible to make the change throughout the publication. Thus, where Board of Vocational Studies remains you should read Board of Professional Studies.

This handbook provides information concerning the requirements for admission, enrolment and re-enrolment, conditions for the award of degrees, course structures, subject descriptions and the textbook requirements. It is important that students become well acquainted with the information presented here, and if there is any difficulty they should consult the University's Admissions Office (Ground Floor, Chancellery) or their School Office.

A. H. WILLIS  
PRO-VICE-CHANCELLOR  
BOARD OF VOCATIONAL STUDIES

# CALENDAR OF DATES FOR 1974

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- Session 1:** March 4 to May 19  
*May Recess:* May 20 to May 26  
 May 27 to June 16  
*Midyear Recess:* June 17 to July 21
- Session 2:** July 22 to August 25  
*August Recess:* August 26 to September 1  
 September 2 to November 3  
*Study Recess:* November 4 to November 10

## JANUARY

- Friday 11 Last date for application for review of results of annual examinations  
 Last day for application for admission under "show cause" rules
- Monday 14 Timetable for deferred examinations available
- Tuesday 15 Last day for acceptance of applications from students graduating in 1974 for admission to University degrees and diplomas
- Friday 18 Last day for application for deferred examinations  
 Last day for acceptance of applications to enrol by new students and students repeating first year
- Monday 28 Australia Day—Public Holiday
- Tuesday 29 Deferred examinations begin

## FEBRUARY

- Friday 8 Last day for students to appeal against exclusion under the re-enrolment rules
- Saturday 9 Deferred examinations end
- Monday 18 Enrolment period begins for new students and students repeating first year
- Monday 25 Enrolment period begins for students re-enrolling (second and later years)  
 Deferred examination results available

## MARCH

- Friday 1 Last date for application for review of deferred examination results  
 Last day for students with deferred examinations to appeal against exclusion under the re-enrolment rules
- Monday 4 **Session 1 commences**
- Friday 15 Last day for acceptance of enrolments by new students (late fee payable)
- Friday 22 Last day for application for review of results of deferred examinations
- Friday 29 Last day for changes in course programmes  
 Last day for acceptance of enrolments by students re-enrolling (late fee payable)

**APRIL**

Thursday 4	Last day for discontinuation without failure of subjects which extend over the first session only
Friday 12 to Monday 15	Easter
Thursday 25	Anzac Day—Public Holiday

**MAY**

Tuesday 7	Provisional timetable for June/July examinations published
Wednesday 8	Board of Vocational Studies meeting, 2 p.m.
Tuesday 14	Last day for acceptance of corrected enrolment details forms
Monday 20	<b>May Recess begins</b> Last day for students to advise of examination timetable clashes
Sunday 26	<b>May Recess ends</b> Last date for discontinuation without failure of subjects which extend over the academic year

**JUNE**

Tuesday 4	Timetable for June/July examinations published
Wednesday 12	Board of Vocational Studies meeting, 2 p.m.
Sunday 16	<b>Session 1 ends</b>
Monday 17	Queen's Birthday—Public Holiday
Tuesday 18	<b>Midyear Recess begins</b>
Sunday 30	Midyear examinations begin Last day for acceptance of applications for re-admission after exclusion under rules governing re-enrolment

**JULY**

Tuesday 2	Midyear examinations end
Sunday 21	<b>Midyear Recess ends</b>
Monday 22	<b>Session 2 begins</b>

**AUGUST**

Thursday 1	Foundation Day
Thursday 15	Board of Vocational Studies meeting, 2 p.m.
Thursday 22	Last date for discontinuation without failure of subjects which extend over the second session only
Monday 26	<b>August Recess begins</b> Holiday for non-academic staff

**SEPTEMBER**

Sunday 1	<b>August Recess ends</b>
Tuesday 10	Provisional timetable for annual examinations published
Monday 16	Last day for return of corrected enrolment details forms
Monday 23	Last day for students to advise of examination timetable clashes
Monday 30	Last date for applications from students graduating in 1975 for admission to University degrees and diplomas

**OCTOBER**

Monday 7	Eight Hour Day—Public Holiday
Wednesday 16	Board of Vocational Studies meeting, 2 p.m.
Tuesday 29	Timetable for annual examinations published

**NOVEMBER**

Monday 4	Study Recess begins
Sunday 10	Session 2 ends
Monday 11	Annual examinations begin

**DECEMBER**

Tuesday 3	Annual examinations end
Wednesday 25	Christmas Day—Public Holiday
Thursday 26	Boxing Day—Public Holiday

**1975**

<b>Session 1:</b>	March 3 to May 11 May Recess: May 12 to May 18 May 19 to June 15 Midyear Recess: June 16 to July 20
<b>Session 2:</b>	July 21 to August 24 August Recess: August 25 to August 31 September 1 to November 2 Study Recess: November 3 to November 9

**JANUARY**

Friday 10	Last date for application for review of results of annual examinations
Monday 13	Timetable for deferred examinations published
Friday 17	Last date for application for deferred examinations
	Last day for acceptance of applications to enrol by new students and students repeating first year
Tuesday 28	Deferred examinations begin

**FEBRUARY**

Saturday 8	Deferred examinations end
Monday 17	Enrolment period begins for new students and students repeating first year
Friday 21	Results of deferred examinations available
Monday 24	Enrolment period begins for students re-enrolling (second and later years)

**THE ACADEMIC YEAR**

The academic year is divided into two sessions, each containing 14 weeks for teaching. There is a recess of five weeks between the two sessions as well as short recesses of one week within each of the sessions.

Session 1 commences on the first Monday of March.

## BOARD OF PROFESSIONAL STUDIES

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*Pro-Vice-Chancellor:* Professor A. H. Willis

*Chairman:* Professor R. J. Lawrence

### SCHOOL OF EDUCATION

*Professor of Education and Head of School*

L. M. Brown, MA MEd Syd., PhD Lond.

*Professor of Science Education and Director of Science Teachers' Courses*

A. A. Hukins, MSc DipEd Syd., PhD Alta., MACE

#### *Lecturers*

R. M. Boyd, MA PhD Otago

M. C. Colless, BA DipEd Syd., BSc N.S.W.

C. J. Field, MA Syd.

C. F. Gauld, BSc DipEd PhD Syd.

B. C. Low, BSc BEd Qld.

P. H. Meade, MA LaT., BSc BEd Qld.

B. Newman, MSc PhD Syd.

Mrs. Shelley Phillips, BA Melb. PhD Syd.

K. Simpson, BA Monash, MA Macq.

Mrs. Shirley L. Smith, BA PhD Syd.

F. E. Trainer, BA Syd.

### STAFF SECONDED FROM THE NEW SOUTH WALES DEPARTMENT OF EDUCATION

#### *Lecturers*

Vilma M. Bell, BA Syd.

J. Fitzgerald, BA DipEd Syd., BLitt N.E., MA Macq.

G. J. Forth, BA BLitt N.E.

D. C. Geddes, BCom DipEd BEd Melb.

P. D. Henderson, BSc DipEd Syd.

Krysia Iskra, BA Syd.

G. Khamis, BA N.E.

P. T. Kitley, BA DipEd BEd N.E.

Mrs. Yvonne A. Larsson, BA Syd.

H. M. Mendham, BA N.E.

H. Plunkett, BA Syd.

Shirley A. Storrier, BA Syd.

K. V. Swinson, BA N.E.

K. E. Wheeler, BA N.E.

A. Williams, MA Syd.

## SCHOOL OF HEALTH ADMINISTRATION

*Professor and Head of School*

G. R. Palmer, BSc Melb., MEc Syd., PhD Lond., FSS FHA

*Senior Lecturers*

J. C. H. Dewdney, BA MB BS Melb., DPH Lond., FACMA

*Lecturers*

Mrs Erica Bates, BA DipSocStud Syd., PhD N.S.W.

S. S. W. Davis, LL.M. Syd.

C. Grant, MA Oxon., AHA

*Tutor*

Mrs. Audrey Ferguson, BA DipSocStud Syd.

## DEPARTMENT OF INDUSTRIAL ARTS

*Associate Professor*

L. M. Haynes, BA MEd Syd., FRSA, FBPsS, FAIM, MACE

*Lecturers*

K. A. Lodge, BE Syd., SAEA

O. C. McMichael, MSc N.S.W., ASTC

*Senior Instructors*

H. E. Larsen, DipDesign (Copenhagen)

B. N. Loftus, GradDip N.S.W., AWAIT, LIDIA

*Professional Officer*

Janice M. Waddell, BA Melb.

## SCHOOL OF LIBRARIANSHIP

*Professor of Librarianship and Head of School*

Vacant

*Senior Lecturer*

Mrs. Margaret Trask, BA N.E., MLib N.S.W., FLAA

*Lecturers*

Jennifer L. Affleck, BA Syd., DipLib N.S.W., ALAA

Carmel Maguire, BA Qld., MA A.N.U., ALAA

J. R. Nelson, MA Syd., ALAA

P. Orlovich, MA DipEd Syd., MLib N.S.W., ALAA

*Tutors*

Merilyn Bryce, BA Syd., DipLib N.S.W.

Patricia Byrne, BA N.E., ALAA

## SCHOOL OF SOCIAL WORK

*Professor of Social Work and Head of School*

R. J. Lawrence, BA DipSocS *Adel.*, MA *Oxon.*, PhD *A.N.U.*

*Senior Lecturers*

A. S. Colliver, BA DipEd DipSocStud *Melb.*, MSW *Mich.*

G. Audrey Rennison, MA *Camb.*, CertSocSci & Admin. *L.S.E.*

*Lecturers*

Dee Barlow, BA MSW *Calif.*

Mrs. Claire Bunday, BA *N.S.W.*, DipSocStud *Syd.*

C. M. R. Cornwell, BA BSocStud *Qld.*

Mrs. June Huntington, BA *Lond.*

Bethia C. Stevenson, BA DipSocStud *Melb.*

Pamela M. Thomas, BA DipSocStud *Syd.*, MS *Col.*

*Tutors*

Mrs. Caroline Bray, BA DipSocStud *Syd.*

Mrs. Elspeth Browne, BA DipSocStud *Syd.*

Mrs. Susan M. Burgoyne, BA *N.E.*, DipSocWk *Syd.*

*Administrative Officer*

Patricia McPaul, BA DipSocWk *Syd.*

# GENERAL INFORMATION

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## ADMISSIONS OFFICE

The Admissions Office which is located in the Chancellery on the upper campus provides intending students (both local and overseas) with information regarding courses, admission requirements, scholarships and enrolment. Office hours are from 9.00 a.m. to 1.00 p.m. and 2.00 p.m. to 5.00 p.m. Monday to Friday and an evening service is provided during the enrolment period.

Applications for special admission, admission with advanced standing and from persons relying for admission on overseas qualifications should be lodged with the Admissions Office. The Office also receives applications from students who wish to transfer from one course to another, resume their studies after an absence of twelve months or more, or seek any concession in relation to a course in which they are enrolled. It is essential that the closing dates for lodgment of applications are adhered to, and, for further details the sections on "Rules Relating to Students" and "Enrolment Procedure for Undergraduate Courses" should be consulted.

Applications for admission to undergraduate courses from students who do not satisfy the requirements for admission (see section on "Requirements for Admission"), from students seeking admission with advanced standing, and from students who have had a record of failure at another university, are referred by the Admissions Office to the Admissions Committee of the Professorial Board.

Students seeking to register as higher degree candidates should discuss their proposals initially with the Head of the School in which they wish to register. An application is then lodged on a standard form and the Admissions Office, after obtaining a recommendation from the Head of the School, refers the application to the appropriate Faculty or Board of Studies Higher Degree Committee.

Details of the procedure to be followed by students seeking entry to first year courses at the University may be obtained from the Admissions Office or the Metropolitan Universities Admissions Centre.

Persons seeking entry to first year courses in one or more of the three Universities in the Sydney Metropolitan Area (Macquarie University, The University of New South Wales and the



University of Sydney) are required to lodge a single application form with the Metropolitan Universities Admissions Centre, Third Floor, 13-15 Wentworth Avenue (near Museum Station), Sydney (P.O. Box 7049 G.P.O. Sydney, 2001). On the application form provision is made for applicants to indicate preferences for courses available in any one of the three Universities. Students are notified individually of the result of their applications and provided with information regarding the procedures to be followed in order to accept the offer of a place at this University and complete their enrolment at the Enrolment Bureau, Unisearch House, 221 Anzac Parade, Kensington.

*Bachelor of Social Work*—Since personal qualities are of particular significance in the practice of social work, it has been found useful for intending students to be interviewed by a member of staff in the School of Social Work at some stage prior to enrolment.

Matriculation requirements are described in the section headed "Matriculation and Admission Requirements", below.

### REQUIREMENTS FOR ADMISSION

A person who seeks to become a candidate for any degree of Bachelor of the University must first have qualified for matriculation and have satisfied the requirements for admission to the particular Faculty, course or subject chosen.

In addition to complying with these conditions candidates must be selected before being permitted to enrol in a course. In 1974 it will be necessary for the University to limit the number of students enrolling in all undergraduate courses.

#### *Special Assistance for Aboriginal Students*

The University may admit suitably qualified persons of Aboriginal descent outside of any quota restrictions.

Upon receipt of an application under this provision, the University will assess the applicant's potential to cope with University studies, and will make Student Counsellors available to discuss the choice of a course and subsequent career opportunities.

All enquiries relating to this scheme should be directed to the Registrar.

#### *Matriculated Student*

A candidate who has satisfied the conditions for matriculation and for admission to a course of study shall be classed as a "matriculated student" of the University, after enrolment.

A person who has satisfactorily met the conditions for admission may be provided with a statement to that effect on the payment of the prescribed fee.

**SECTION A****GENERAL MATRICULATION AND ADMISSION REQUIREMENTS**

1. A candidate may qualify for matriculation by attaining in recognised matriculation subjects at one New South Wales Higher School Certificate Examination or at one University of Sydney Matriculation Examination a level of performance determined by the Professorial Board from time to time.
2. The level of performance required to qualify for matriculation shall be
  - (a) passes in at least five recognised matriculation subjects, one of which shall be English and three of which shall be at Level 2 or higher;  
and
  - (b) the attainment of an aggregate of marks, as specified by the Professorial Board, in not more than five recognised matriculation subjects, such marks being co-ordinated in a manner approved by the Board.
3. The following subjects, and such other subjects as may be approved by the Professorial Board from time to time, shall be recognised matriculation subjects:—

English	Greek	Chinese
Mathematics	Latin	Japanese
Science	French	Hebrew
Agriculture	German	Dutch
Modern History	Italian	Art
Ancient History	Bahasa Indonesia	Music
Geography	Spanish	Industrial Arts
Economics	Russian	

4. A candidate who has qualified to matriculate in accordance with the provisions of Clauses 1, 2 and 3 may be admitted to a particular Faculty, Course or Subject provided that:—
  - (a) his qualification includes a pass at the level indicated in the subject or subjects specified in Schedule A as Faculty, Course or Subject Pre-Requisites;  
or
  - (b) the requirements regarding these particular Faculty, Course or Subject Pre-Requisites, as specified in Schedule A, have been met at a separate Higher School Certificate or University of Sydney Matriculation Examination.

5. Notwithstanding any of the provisions of Clauses 1 to 4, the Professorial Board may grant matriculation status to any candidate at the Higher School Certificate or University of Sydney Matriculation Examination who has reached an acceptable standard and may admit him to any Faculty, Course or Subject.

#### **NOTE**

1. For the purposes of Clause 2 (a), Mathematics and Science **BOTH PASSED** at First Level or Second Level Full Course shall together count as three subjects.
2. For the purposes of Clause 2 (b), Mathematics and Science **TAKEN** either singly or together at First Level or Second Level Full Course shall each count as one and one half subjects.

#### **SECTION B**

### **SUPPLEMENTARY PROVISIONS FOR MATRICULATION**

Notwithstanding the provisions of Section A above, candidates may be accepted as "matriculated students" of the University under the conditions which are listed in the University Calendar.

**Schedule A**

FACULTY OR COURSE	FACULTY OR COURSE PRE-REQUISITES
Applied Science (excl. Applied Geography and Wool and Pastoral Sciences courses) Biological Sciences Engineering Industrial Arts Course Medicine Military Studies (Engineering course and Applied Science course) Science Bachelor of Science (Education)	(a) Science at Level 2S or higher AND (b) either Mathematics at Level 2F or higher OR Mathematics at Level 2S, provided that the candidate's performance in this subject and his general level of attainment are at standards acceptable to the Professorial Board.
Architecture Applied Geography (Biogeography and Pedology specializations) Wool and Pastoral Sciences courses	(a) Science at Level 2S or higher AND (b) Mathematics at Level 2S or higher
Applied Geography (Economic Geography specialization)	Either Mathematics at Level 2F or higher OR Mathematics at Level 2S, provided that the candidate's performance in this subject and his general level of attainment are at standards acceptable to the Professorial Board.
Arts	English at Level 2 or higher
Commerce	(a) Mathematics at Level 2S or higher AND (b) either English at Level 2 or higher OR English at Level 3, provided that the candidate's performance in this subject and his general level of attainment are at standards acceptable to the Profes- sorial Board.

FACULTY OR COURSE	FACULTY OR COURSE PRE-REQUISITES
Law Combined Arts/Law Combined Commerce/Law Combined Jurisprudence/Law	Nil As for Arts As for Commerce Nil
Military Studies (Arts Course)	English at Level 2 or higher; OR English at Level 3, provided that the candidate's performance in this subject and his general level of attainment are at standards acceptable to the Professorial Board, and provided that a candidate so qualified shall not enrol in a course in English literature.
Social Work Course	English at Level 2 or higher OR English at Level 3, provided that the candidate's performance in the subject and his general level of attainment are at standards acceptable to the Professorial Board, and provided that a candidate so qualified shall not enrol in English 1.

**Schedule B**

SUBJECT	SUBJECT PREREQUISITES
1.011—Higher Physics I 1.001—Physics I	As for Faculty of Science
2.001—Chemistry I 17.011—Human Biology 25.001—Geology I 25.111—Geoscience I	Science at Level 2S or higher
10.011—Higher Mathematics I	Mathematics at Level 2F or higher
10.001—Mathematics I	Either Mathematics at Level 2F or higher OR Mathematics at Level 2S, provided that the candidate's performance in the subject and his general level of attainment are at standards acceptable to the Professorial Board.
10.021—Mathematics IT	Mathematics at Level 2S or higher
15.102—Economics II	As for Faculty of Commerce
50.111—English 51.111—History IA 51.121—History IB	English at Level 2 or Higher
56.111—French I	French at Level 2 or higher
59.111—Russian I	Russian at Level 2 or higher
64.111—German I	German at Level 2 or higher
65.111—Spanish I	Spanish at Level 2 or higher
59.001—Russian IZ 64.001—German IZ 65.001—Spanish IZ	A foreign language, other than that in which enrolment is sought, at Level 2 or higher

## ENROLMENT PROCEDURE

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Before enrolling in any of the courses supervised by the Board of Vocational Studies, intending students should contact the School or Department concerned.

### UNDERGRADUATE COURSES

#### FIRST ENROLMENTS:

(a) New South Wales residents already qualified for admission and persons who are applying for enrolment on the basis of qualifications gained or about to be gained outside New South Wales must lodge an application for enrolment with the Metropolitan Universities Admissions Centre, 13-15 Wentworth Avenue, Sydney (P.O. Box 7049 G.P.O., Sydney) by 26th October, 1973.

(b) New South Wales residents qualifying for admission by the 1973 New South Wales Higher School Certificate Examination or the 1974 Sydney University Matriculation Examination and those who have attended a University in New South Wales in 1973 must apply for enrolment to the Metropolitan Universities Admissions Centre, 13-15 Wentworth Avenue, Sydney (P.O. Box 7049 G.P.O., Sydney) by 18th January, 1974.

#### *Completion of Enrolment*

Students whose applications for enrolment are accepted will be required to complete their enrolment at a specified appointment time before the start of Session 1. Fees must be paid on the day of the appointment. However, in special circumstances and provided class places are still available students may be allowed to complete their enrolment after the prescribed week subject to the payment of a late fee.

#### *Failure in First Year*

First year students who failed more than half their programme at the 1973 Annual Examinations and who were not granted any deferred examinations will NOT follow the above procedure. They are required to 'show cause' why they should be allowed to continue in the course, and should await instructions in writing from the Registrar as to the procedure.

**LATER YEAR ENROLMENTS****Bachelor of Science (Education)**

Students will be re-enrolled in *Unisearch House* as follows:

Year II Wednesday, 27th February

9.30 a.m. to 12.30 p.m.

Years III and IV Tuesday, 26th February

9.30 a.m. to 12.30 p.m.

**Industrial Arts Course**

Students in the B.Sc. or B.Sc.(Tech.) degree course in Industrial Arts should attend *Hut 34, Western Grounds Area* for re-enrolment as follows:

All re-enrolling students

Wednesday, 27th February,

10.00 a.m. to 12.30 p.m.

2.00 p.m. to 4.30 p.m.

6.00 p.m. to 8.00 p.m.

**Social Work Course (BSW)**

Students in the Bachelor of Social Work degree course should attend for re-enrolment at the **School of Social Work** in accordance with the following timetable:

**Full-time Courses****Year II**

Students with surnames "A" to "K" Tuesday, 26th February,  
9.30 a.m. to 12.30 p.m.

Students with surnames "L" to "Z" Tuesday, 26th February,  
2.00 p.m. to 5.00 p.m.

**Year III**

Students with surnames "A" to "K" Wednesday, 27th February,  
9.30 a.m. to 12.30 p.m.

Students with surnames "L" to "Z" Wednesday, 27th February,  
2.00 p.m. to 5.00 p.m.

**Year IV**

Students with surnames "A" to "J" Thursday, 28th February,  
9.30 a.m. to 12.30 p.m.

Students with surnames "K" to "Z" Thursday, 28th February,  
2.00 p.m. to 5.00 p.m.

**Part-time Course**

Re-enrolling Students at all stages Friday, 1st March,  
9.30 a.m. to 12.30 p.m.

2.00 p.m. to 5.00 p.m.

**New Students with Advanced Standing**

Friday, 1st March,  
9.30 a.m. to 12.30 p.m.

2.00 p.m. to 5.00 p.m.

**Miscellaneous Students**

Friday, 1st March,  
2.00 p.m. to 5.00 p.m.



Students who fail to attend personally will be required to attend one of the late enrolment sessions.

In exceptional cases—illness or absence interstate or overseas—students may seek written permission from the enrolling officer of the School of Social Work to attend a late enrolment session without penalty, provided such permission is granted before the specified re-enrolment session.

### LATE ENROLMENTS

#### Bachelor of Science (Education)

Room 41	Wednesday, 6th March
Building M	5.00 p.m. to 7.00 p.m.
Western Grounds Area	Wednesday, 13th March
	5.00 p.m. to 7.00 p.m.

#### Industrial Arts Course

Hut 34	Wednesday, 6th March
Western Grounds Area	5.00 p.m. to 7.00 p.m.
(Northern end)	Wednesday, 13th March
	5.00 p.m. to 7.00 p.m.

#### Social Work Course

The School	Wednesday, 6th March
of Social	5.00 p.m. to 7.00 p.m.
Work	Wednesday, 13th March
	5.00 p.m. to 7.00 p.m.

### POSTGRADUATE COURSES

#### Diploma in Education

Lecture Hall 100	Wednesday, 13th February
Western Grounds Area	"A" to "L" 10.00 a.m. to 12.30 p.m.
	"M" to "Z" 2.00 p.m. to 4.30 p.m.

#### Master of Education

Room 26	Wednesday, 20th February
Building M	3.00 p.m. to 5.00 p.m.
Western Grounds Area	

#### Master of Health Administration and Graduate Diploma in Health Administration

Room G36	Friday, 1st March
The Chancellery	2.00 p.m. to 5.00 p.m.

### **Graduate Diploma in Industrial Design**

Students wishing to enrol in the Graduate Diploma Course in Industrial Design are required to apply for admission on the appropriate form to the Registrar at least two full calendar months before the commencement of the course.

They will then be notified by letter whether they are eligible to enrol and will be required to complete their enrolment at Hut 34, Western Grounds Area on Friday, 1st March, 6.00 p.m. to 7.30 p.m.

### **Master of Social Work (formal course work)**

School of Social Work      Friday, 1st March,  
2.00 p.m. to 5.00 p.m.

### **Master of Librarianship (by formal course work), Diploma in Librarianship and Diploma in Archives Administration**

Students continuing in these courses are required to attend the Office, School of Librarianship (Hut 12), on Wednesday, 27th February, 9.30 a.m. to 12 noon, 2.00 p.m. to 7.00 p.m.

## **ENROLMENT IN MISCELLANEOUS SUBJECTS**

Students may be permitted to enrol for miscellaneous subjects (i.e. as students not proceeding to a degree or diploma) provided the Head of the School offering the subject considers it will be of benefit to the student and there is accommodation available. Only in exceptional cases will subjects taken in this way count towards a degree or diploma. Where a student is under exclusion he may not be enrolled in miscellaneous subjects unless given approval by the Professorial Board.

## **UNIVERSITY UNION CARD**

All students other than miscellaneous students are issued with a University Union membership card. *This card must be carried during attendance at the University and shown on request.*

The number appearing on the front of the card above the student's name is the student registration number used in the University's records. *This number should be quoted in all correspondence.*

The card must be presented when borrowing from the University libraries, when applying for Travel Concessions and when notifying a change of address. It must also be presented when paying fees on re-enrolment each year when it will be made valid for the year and returned. Failure to present the card could result in some inconvenience in completing re-enrolment.

A student who loses a Union Card must notify the University Union as soon as possible.

New students will be issued with University Union cards at the University Union Enquiry Desk as soon as practicable after payment of fees. In the meantime, fees receipt form should be carried during attendance at the University and shown on request. A period of at least three weeks should be allowed to elapse after payment of fees before making application for the card. Cards will not be posted under any circumstances.

## FEES

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### *Payment of Fees*

As from 1st January, 1974, no fees for tuition will be payable. Other fees and charges will still be payable. These include those charges raised to finance the expenses incurred in operating student activities such as the University Union, the Students' Union, the Sports Association and the Physical Education and Recreation Centre. Late fees are also charged where a student fails to observe required procedures by the appropriate time. Charges may also be payable, sometimes in the form of a deposit, for the hiring of kits of equipment which are lent to students for their personal use during attendance in certain subjects. Accommodation charges and costs of subsistence on excursions, field work etc. and for hospital residence (medical students) are payable in appropriate circumstances. In order to become a student member of the University in any particular course of study it is necessary to meet the entrance requirements for the course and to enrol formally in it. To effect enrolment it is necessary to present a duly completed and authorised enrolment form to the University cashier together with, where payable, either the appropriate fees, or an authority authorising those fees to be charged to some other person or institution.

### *Completion of Enrolment*

All students are required to attend the appropriate enrolment centre during the prescribed enrolment period\* for authorisation of course programme. Failure to do so will incur a late fee of \$10.

First year students (including students repeating first year) must complete enrolment (including fee payment) before they are issued with class timetables or permitted to attend classes. A first year student who has been offered a place in a course to which entry is restricted and who fails to complete enrolment at the appointed time may lose the place allocated.

Fees should be paid during the prescribed enrolment period but will be accepted during the first two weeks of Session 1. (For late fees see below.) **No student is regarded as having completed an enrolment until fees have been paid.** Fees will not be accepted

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\* The enrolment periods for Sydney students are prescribed annually in the leaflets on enrolment procedures.

(i.e. enrolment cannot be completed) from new students in year-long courses after the end of the second week of Session 1 (i.e. 15th March, 1974), and after 31st March from students who are re-enrolling, except with the express approval of the Registrar, which will be given in exceptional circumstances only.

Students enrolling for the first time in any year at the commencement of Session 2 are required to pay all fees due within the first two weeks of that Session. Student Activities fees due will be one half of the annual fees.

These arrangements also apply to medical students and, although the structure of the academic year in the later years of the course in Medicine differs from that followed in other courses, medical students are required to observe the same dates for payment as apply to students in other courses.

### *Assisted Students*

Scholarship holders or sponsored students who have not received an enrolment voucher or appropriate letter of authority from their sponsor at the time when they are enrolling should complete their enrolment paying their own fees. A refund of fees will be made when the enrolment voucher or letter of authority is subsequently lodged with the Cashier.

### *Extension of Time*

Any student who is unable to pay fees by the due date may apply in writing to the Deputy Registrar (Student Services) for an extension of time. Such application must give year or stage, whether full-time or part-time, and the course in which the applicant wishes to enrol, state clearly and fully the reasons why payment cannot be made and the extension is sought, and must be lodged before the date on which a late fee becomes payable. Normally the maximum extension of time for the payment of fees is one month for fees due in Session 1 and for one month from the date on which a late fee becomes payable in Session 2.

Where an extension of time is granted to a first year student in Session 1, such student may only attend classes on the written authority of the Registrar, but such authority will not normally be given in relation to any course where enrolments are restricted.

### *Failure to Pay Fees and Other Debts*

Any student who fails to pay prescribed fees or charges or is otherwise indebted to the University and who fails to make a satisfactory settlement of his indebtedness upon receipt of due notice ceases to be entitled to the use of University facilities. Such a student is not permitted to register for a further session, to

attend classes or examinations, or to be granted any official credentials.

No student is eligible to attend the annual examinations in any subject where any portion of his fees for the year is outstanding after the end of the fourth week of Session 2 (16th August, 1974).

In very special cases the Registrar may grant exemption from the disqualification referred to in the two preceding paragraphs upon receipt of a written statement setting out all relevant circumstances.

### **Student Fees\***

**All undergraduate students and students taking miscellaneous subjects (with the exception of External Students) will be required to pay—**

University Union**	\$20.00—entrance fee
Student Activities Fees	
University Union**	\$30.00—annual subscription
Sports Association**	\$4.00—annual subscription
Students' Union**	\$7.00—annual subscription
Miscellaneous	\$17.00—annual fee

(The miscellaneous fee is used to finance expenses generally of a capital nature relating to student activities. Funds are allocated to the various student bodies for projects recommended by the Student Affairs Committee and approved by the University Council.)

**Depending on the subject being taken, students may also be required to pay—**

Psychology Kit Hiring Charge	\$2 per kit.
Additional payment for breakages and losses in excess of \$1.	
Biochemistry Kit Hiring Charge	\$4 per kit.
Additional payment for breakages and losses in excess of \$1 may be required.	
Chemistry Kit Hiring Charge	\$4 per kit.
Additional payment for breakages and losses in excess of \$1 may be required.	

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\* Fees quoted in the schedule are current at the time of publication and may be amended by the Council without notice.

\*\*Life members of these bodies are exempt from the appropriate fee or fees.

Anatomy Dissection Manual and Histology Slides deposit—  
\$10.

(Refundable on return in satisfactory condition.)

Pathology Instrument Kit \$10.

(Refundable on return in satisfactory condition.)

### *Special Examination Fees*

Examinations conducted under special circumstances	\$11 for each subject
Review of examination result	\$11 for each subject

### **Late Fees**

#### *Session 1—First Enrolments*

Fees paid in the late enrolment period and before com- mencement of Session 1 . . . . .	\$10
Fees paid during the 1st and 2nd weeks of Session 1 . . . . .	\$20
Fees paid after the commencement of the 3rd week of Session 1 with the express approval of the Registrar and Head of the School concerned . . . . .	\$40

#### *Session 1—Re-enrolments*

Failure to attend enrolment centre during enrolment week	\$10
Fees paid after the commencement of the 3rd week of Session 1 to 31st March . . . . .	\$20
Fees paid after 31st March where accepted with the express approval of the Registrar . . . . .	\$40

#### *Session 2—All Enrolments*

Fees paid in 3rd and 4th weeks of Session 2 . . . . .	\$20
Fees paid thereafter . . . . .	\$40

### **Withdrawal from Course**

1. Students withdrawing from a course are required to notify the Registrar in writing.
2. Where notice of withdrawal from a course is received by the Registrar before the first day of Session 1 a refund of all fees paid will be made.
3. On notice of withdrawal:
  - (a) a partial refund of the University Union Entrance Fee will be made on the following basis: any person who has paid the entrance fee in any year and who withdraws

from membership of the University Union after the commencement of Session 1 in the same year, or who does not renew his membership in the immediately succeeding year may on written application to the Warden receive a refund of half the entrance fee paid.

- (b) A partial refund of other Student Activities Fees will be made on the following basis:

University Union—\$7.50 in respect of each half session.

University of New South Wales Students' Union—where notice is given prior to the end of the fifth week of Session 1, \$3.50; thereafter no refund.

University of New South Wales Sports Association—where notice is given prior to the 5th week a full refund is made; thereafter no refund.

Miscellaneous Student Activities Fee—\$4.25 in respect of each half session.

4. Where initial enrolment is made at commencement of Session 2 in any year and the student subsequently withdraws, a refund of fees based on the above rules may be made.

#### **Postgraduate Student Fees\***

As from 1st January 1974 no fees for tuition will be payable. Other fees and charges will still be payable. They include those charges raised to finance the expenses incurred in operating student activities such as the University Union, the Students' Union, the Sports Association and the Physical Education and Recreation Centre.

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\* See University Calendar for further details.



# RULES RELATING TO STUDENTS

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## GENERAL CONDUCT

Acceptance as a member of the University implies an undertaking on the part of the student to observe the regulations, by-laws and other requirements of the University, in accordance with the declaration signed at the time of the enrolment.

In addition, students are expected to conduct themselves at all times in a seemly fashion: Smoking is not permitted during lectures, in examination rooms or in the University Library. Gambling is also forbidden.

Members of the academic staff of the University, senior administrative officers, and other persons authorized for the purpose, have authority, and it is their duty, to check and report on disorderly or improper conduct or any breach of regulations occurring in the University.

## ATTENDANCE AT CLASSES

Students are expected to be regular and punctual in attendance at all classes in the course or subject in which they are enrolled. All applications for exemption from attendance at lectures or practical classes must be made in writing to the Registrar.

In the case of illness or of absence for some other unavoidable cause a student may be excused by the Registrar from non-attendance at classes for a period of not more than one month, or on the recommendation of the Dean of the appropriate Faculty for any longer period.

Applications to the Registrar for exemption from re-attendance at classes, either for lectures or practical work, may only be granted on the recommendation of the Head of the appropriate School. The granting of an exemption from attendance does not carry with it exemption from payment of fees.

Application forms for exemption from lectures are available at the Admissions Office and should be lodged there (with a medical certificate where applicable). If session examinations have been missed this fact should be noted in the application.

Where a student has failed a subject at the annual examinations in any year and re-enrols in the same course in the following year, he must include in his programme of studies for that year the subject in which he has failed. This requirement will not be applicable

if the subject is not offered the following year; is not a compulsory component of a particular course; or if there is some other cause, which is acceptable to the Professorial Board, for not immediately repeating the failed subject.

Where a student has attended less than eighty per cent of the possible classes, he may be refused permission to sit for the examination in that subject.

### INDEBTEDNESS TO THE UNIVERSITY

Any student who is indebted to the University and who fails to make a satisfactory settlement of his indebtedness upon receipt of due notice ceases to be entitled to membership and privileges of the University. Such a student is not permitted to register for a further session, to attend classes or examinations, or to be granted any official credentials.

In very special cases the Registrar may grant exemption from the disqualification referred to in the preceding paragraph upon receipt of a written statement setting out all relevant circumstances.

### ADMISSION WITH ADVANCED STANDING

Any person who makes application to register as a candidate for any degree or other award granted by the University may be admitted to the course of study leading to such degree or award with such standing on the basis of previous attainments as may be determined by the Professorial Board.

Students should consult the University Calendar for complete details regarding "Admission with Advanced Standing."

### COURSE TRANSFERS

Students wishing to transfer from one course to another must apply on an application form obtainable from the Admissions Office, Chancellery, by Friday, 18th January. As quotas will operate on entry to all Faculties and the Board of Vocational Studies, failure to apply by 18th January, 1974, will probably result in the application for transfer being unsuccessful.

Students whose applications to transfer are successful are required to comply with the enrolment procedures for the year/stage of the new course in which they expect to enrol. Unless otherwise instructed they must present the letter granting approval of the transfer to the enrolling officer.

Students who have not received advice regarding their application to transfer before the date on which they are required to enrol should check with the Admissions Office.

Students should also advise the Enrolling Officer of the School in which they are enrolled of their intention to transfer.

### CHANGES IN COURSE PROGRAMMES

Students seeking approval to substitute one subject for another, add one or more subjects to their programme or discontinue part or all of their programme must make application to the Registrar through the Head of the School responsible for the course on forms available from School offices. The Registrar will inform students of the decision. Application to enrol in additional subjects must be submitted by 31st March.

Approval of withdrawal from subjects is not automatic, each application being determined after considering the circumstances advanced as justifying withdrawal.

It is emphasized that:

1. withdrawal from a subject, tuition in which extends over the academic year, at any time after the May recess;
2. withdrawal from a subject, tuition in which extends over only one session, at any time after one month from the commencement of the subject; or
3. failure to sit for the examinations in any subject in which the student has enrolled,

shall be regarded as failure to satisfy the examiners in the subject, unless written approval to withdraw without failure has been obtained from the Registrar.

### STUDENT RECORDS

All students will receive enrolment details forms by 30th April and 2nd September. It is not necessary to return the forms unless any information recorded thereon is incorrect. Amended forms must be returned to the Examinations and Student Records Section by 14th May and 16th September respectively. Amendments notified after the closing date will not be accepted unless exceptional circumstances exist and approval is obtained from the Registrar. Where a late amendment is accepted, a late fee of \$8 will be payable. Amended forms returned to the Registrar will be acknowledged in writing within fourteen days.

### RESUMPTION OF COURSES

Students wishing to resume their studies after an absence of twelve months or more are required to apply to the Admissions

Office for permission to re-enrol by 18th January, 1974. Students re-enrolling in this way will normally be required to satisfy conditions pertaining to the course at the time of re-enrolment. This condition applies also to students who have been re-admitted to a course after exclusion under the rules restricting students re-enrolling.

### APPLICATION FOR ADMISSION TO DEGREE OR DIPLOMA

Applications for admission to a degree or diploma of the University must be made on the appropriate form by 30th September, in a student's final year. Applicants should ensure that they have completed all requirements for the degree or diploma, including industrial training where necessary. Any variation such as cancelling of application in order to proceed to an honours degree or submission of an application following discontinuation of honours programme, must be submitted in writing to the Registrar no later than 30th January.

### RESTRICTION UPON STUDENTS RE-ENROLLING IN UNIVERSITY COURSES

The University Council has adopted the following rules governing re-enrolment with the object of requiring students with a record of failure to show cause why they should be allowed to re-enrol and retain valuable class places. These rules apply retrospectively from 1st January, 1971, and the attention of students is drawn to them.

- (1) (i) A student shall show cause why he should be allowed to repeat a subject in which he has failed more than once. (Failure in a deferred examination as well as in the initial examination counts, for the purpose of this regulation, as one failure.) Where such subject is prescribed as a part of the student's course he shall be required to show cause why he should be allowed to continue the course.

Notwithstanding the provisions of Clause 1 (i)—

- (ii) A student enrolled in the first year or first stage of any course, other than the medical course, who has failed in more than half the programme in which he is enrolled for that year or stage shall be required to show cause why he should be allowed to continue in the course.

- (iii) A student enrolled in the first year of the Medical course who has failed in more than one subject of that year shall be required to show cause why he should be allowed to continue in the Medical course.
  - (iv) The provisions of sections (ii) and (iii) of this rule shall be deemed to apply to any student on transfer from another course or institution whose programme of studies in the first year of enrolment immediately following transfer is comprised of subjects so chosen that half or more of such subjects are listed in the University Calendar as first year subjects.
- (2) Notwithstanding the provisions of Clause (1), a student shall be required to show cause why he should be allowed to continue a course which he will not be able to complete in the time set down in the following schedule.

<i>Number of years in course</i>	<i>Total time allowed from first enrolment to completion (Years)</i>
3	5
4	6
5	8
6	9
7	11
8	12

- (3) No full-time student shall, without showing cause, be permitted to continue a course unless all subjects of the first year of his course are completed by the end of his second year of attendance. No student in the Faculty of Arts shall (without showing cause, be permitted to continue a course) unless he completes four subjects by the end of his second year of attendance. No full-time student in the Bachelor of Social Work course shall without showing cause be permitted to continue with the course unless he completes the equivalent of four full subjects by the end of his second year of attendance.

No part-time student in a course in which progression is by stage shall without showing cause be permitted to continue a course in which he will not be able to complete all subjects of the first two stages by the end of

his fourth year of attendance and all subjects of the third year and fourth stages of his course by the end of his seventh year of attendance.

No part-time student in the Science course shall without showing cause be permitted to continue a course in which he will not be able to complete level one Mathematics and six other level one units by the end of his fourth year of attendance and fourteen units inclusive of at least three at level two of his course by the end of his seventh year of attendance.

No student in the Faculty of Medicine shall, without showing cause, be permitted to continue with the medical course unless he completes the second year of the course by the end of his third year of attendance, and the third year of the course by the end of his fourth year of attendance.

- (4) A student who has a record of failure in a course at another University shall be required to show cause why he should be admitted to this University. A student admitted to a course at this University following a record of failure at another University shall be required to show cause, notwithstanding any other provisions in these rules, why he should be permitted to continue in that course if he is unsuccessful in the annual examinations in his first year of attendance at this University.
- (5) Any student excluded under any of the Clauses (1)-(3) may apply for readmission after two academic years and such application shall be considered in the light of any evidence submitted by him.
- (6) A student wishing "to show cause" under these provisions shall do so in writing to the Registrar. Any such application shall be considered by a committee, hereinafter referred to as the Re-enrolment Committee, appointed by the Professorial Board, which shall determine whether the cause shown is adequate to justify his being permitted to continue his course or re-enrol, as the case may be.
- (7) The Vice-Chancellor may on the recommendation of the Re-enrolment Committee exclude from attendance in a course or courses any student who has been excluded from attendance in any other course under the rules governing re-enrolment and whose record at the University demonstrates, in the opinion of the

Re-enrolment Committee and the Vice-Chancellor, the student's lack of fitness to pursue the course nominated.

- (8) A student who has failed, under the provisions of Clause (6) of these rules, to show cause acceptable to the Re-enrolment Committee why he should be permitted to continue in his course, and who has subsequently been permitted to re-enrol in that course or to transfer to another course, shall also be required to show cause, notwithstanding any other provision in these rules, why he should be permitted to continue in that course if he is unsuccessful in the annual examinations immediately following the first year of resumption or transfer of enrolment as the case may be.
- (9) Any student who is excluded from attendance in any course or subject under the provisions of these rules may appeal to an Appeal Committee constituted by Council for this purpose. The decision of the Appeal Committee shall be final.
- (10) The notification to any student of a decision by the Re-enrolment Committee to exclude the student from attendance in any course or subject shall indicate that the student may appeal against the decision to an Appeal Committee. In lodging such appeal the student shall ensure that a complete statement is furnished of all grounds on which the appeal is based and shall indicate whether or not the student wishes to appear in person before the Appeal Committee. In considering an appeal the Appeal Committee, on the basis of the student's academic record and the stated grounds of appeal, shall decide:
  - (i) whether there are grounds which justify the Committee seeing the student in person, or
  - (ii) whether there is sufficient information available to the Committee to allow decision without seeing the student in personand so proceed to determine the application accordingly.

### ANNUAL EXAMINATIONS

Formal examinations in most faculties are held in June-July and November-December. Provisional timetables including the dates and times of examinations are posted on the central notice boards in the Wallace Wurth Medical School, Biological Sciences Building, the Chancellery, Central Lecture Theatre Block, Dalton

(Chemistry) School, Main Building (Mining and Physics), outside the Science Theatre and in the Western Grounds Area on 7th May and 10th September. Students must advise the Examinations Unit (Chancellery) of clash of examinations by 20th May and 23rd September. Final timetables will be displayed, and individual copies available for students, on 4th June and 29th October.

Misreading of the timetable is not an acceptable excuse for failure to attend an examination.

A student suffering from a physical disability which puts him at a disadvantage in written examinations should apply to the Registrar in writing, as early as possible, for special provisions to be made for him to take examinations. The request should be supported by medical or other evidence.

Examinations are conducted in accordance with the following rules and procedure:—

- (a) Candidates are required to obey any instruction given by an examination supervisor for the proper conduct of the examination.
- (b) Candidates are required to be in their places in the examination room not less than ten minutes before the time for commencement.
- (c) No bag, writing paper, blotting paper, manuscript or book, other than a specified aid, is to be brought into the examination room.
- (d) No candidate shall be admitted to an examination after thirty minutes from the time of commencement of the examination.
- (e) No candidate shall be permitted to leave the examination room before the expiry of thirty minutes from the time the examination commences.
- (f) No candidate shall be re-admitted to the examination room after he has left it unless during the full period of his absence he has been under approved supervision.
- (g) A candidate shall not by any improper means obtain, or endeavour to obtain, assistance in his work, give, or endeavour to give, assistance to any other candidate, or commit any breach of good order.
- (h) Smoking is not permitted during the course of examinations.
- (i) All answers must be in English unless otherwise directed. Foreign students who have the written approval of the Officer-in-Charge of Examinations may use standard translation dictionaries.
- (j) A candidate who commits any infringement of the rules governing examinations is liable to disqualification at the



particular examination, to immediate expulsion from the examination room and to such further penalty as may be determined in accordance with the By-laws.

A student who through serious illness or other cause outside his control is unable to attend an examination is required to bring the circumstances (supported by a medical certificate or other evidence) to the notice of the Registrar not later than seven days after the date of the examination, and may be required to submit to medical examination. A student who attempts an examination yet claims that his performance is prejudiced by sickness on the day of the examination, must notify the Registrar or Examination Supervisor before, during or immediately after the examination and may be required to submit to medical examination.

A student who believes that his performance at an examination has been affected by serious illness during the year or by other cause outside his control, and who desires these circumstances to be taken into consideration in determining his standing, is required to bring the evidence (supported by medical certificates or other evidence) to the notice of the Registrar not later than seven days after the date of the examination.

In the assessment of a student's progress, consideration is given to work in laboratory and class exercises and to any term or other tests given throughout the year, as well as to the results of written examinations.

Final examination results are posted to the term addresses of students and it is therefore essential that any change of address be advised to the Examination and Student Records Section. Results are also posted on School notice boards and in the foyer of the Library. No examination results will be given by telephone.

Examination results may be reviewed for a fee of \$11 a subject, which is refundable in the event of an error being discovered. Such a review will consist primarily in ensuring that all questions attempted by candidates have been marked and that the total of all marks awarded are correct. Applications for review must be submitted on the appropriate form to the Examinations and Student Records Section, together with the necessary fee by the date indicated on the notification of results.

## **Examination Results**

### *Graded Passes*

Passes will be graded as follows:

High Distinction—Indicates a quite superior performance.

Distinction—Indicates a superior performance.

Credit—Indicates a good but not superior performance.

**Pass**—Indicates the achievement of an acceptable minimum level of competence in relation to the course objectives.

*Pass Conceded*

A pass conceded may be granted to students where the mark in the subject is slightly below the required standard and whose overall performance warrants it.

*Terminating Pass*

A terminating pass may be granted where the mark for the subject is below the required standard. A terminating pass will not permit a student to progress further in the subject or to enrol in any other subject for which a pass in the subject is a co-requisite or pre-requisite. A student granted a terminating pass may attempt a deferred examination, if available, to improve his performance, but if the student fails the deferred examination, the terminating pass will stand.

### DEFERRED EXAMINATIONS

Deferred examinations may be granted in the following cases:—

- (i) When a student through illness or some other acceptable circumstance has been prevented from taking the annual examination or has been placed at a serious disadvantage during the annual examinations. Applications for deferred examination in this category must be lodged with the Registrar with appropriate evidence of the circumstances (e.g., medical certificate) not later than seven days after the examination concerned. All such applications shall be reported to the Head of the School responsible for the subject. Before a deferred examination is granted on medical grounds, regard shall be paid to the student's class and assignment work in the subject, to his general performance in the year, and to the significance of the annual examination in compiling the composite mark.
- (ii) To help resolve a doubt as to whether a student has reached the required standard in a subject.
- (iii) To allow a student by further study to reach the required standard in a subject. The granting of a deferred examination in such cases will be based on the general quality of the student's performance.
- (iv) Where a student's standing at the annual examinations is such that his progression or graduation could depend on his failure in one subject only, then his position in that subject shall be again reviewed with a view to determining whether a deferred examination may be granted notwithstanding his failure otherwise to qualify for such concession.

Deferred examinations must be taken at the centre in which the student is enrolled, unless he has been sent on compulsory industrial training to remote country centres or interstate. In this case the student must advise the Registrar, on a form available from his school or the Enquiry Desk, Chancellery, of relevant particulars, before leaving for his destination, in anticipation that deferred examination papers may have to be forwarded to him. Normally, the student will be directed to the nearest University for the conduct of the deferred examination.

A student eligible to sit for a deferred examination must lodge with the Accountant an application accompanied by the fee of \$8 per subject, by the date indicated on the notification of results.

#### *Conceded Deferred Examination*

A conceded deferred examination, may be granted to a student where the mark in the subject is below the standard at which deferred examinations have been granted in the subject but whose overall performance warrants such a concession.

### RE-ADMISSION AFTER EXCLUSION

Applications for re-admission must be made on the standard form and lodged with the Registrar not later than 30th June of the year prior to that for which re-admission is sought. An application should include evidence of appropriate study in the subjects (or equivalents) on account of which the applicant was excluded. In addition, evidence that the circumstances which were deemed to operate against satisfactory performance at the time of exclusion are no longer operative or are reduced in intensity, should be furnished. An applicant may be required to take the annual examinations in the relevant subjects as qualifying examinations in which case re-admission does not imply exemption from the subject. Late applications cannot be considered where, in the opinion of the University, insufficient time will be available for the student to prepare himself for any qualifying examinations which may be required.

It should be noted that a person under exclusion may not be enrolled in miscellaneous subjects unless he has received the approval of the Professorial Board on the recommendation of the Admissions Committee.

Persons who intend applying for re-admission to the University at a future date may seek advice as to ways in which they may enhance their prospects of qualifying for re-admission. Enquiries should be made on a form obtainable from the Examinations and Student Records Section, and lodged with the Registrar.

### OWNERSHIP OF STUDENTS' WORK

The University reserves the right to retain at its own discretion the original or one copy of any drawings, models, designs, plans and specifications, essays, theses or other work executed by students as part of their courses, or submitted for any award or competition conducted by the University.

### CHANGE OF ADDRESS

Students are requested to notify the Student Records Section of the Registrar's Division of any change in their address, as soon as possible. Failure to do this could lead to important correspondence not reaching students. The University cannot accept responsibility if official communications fail to reach students, who have not notified their change of address. A Change of Address Advice form is available at Faculty and School offices and at the Enquiry Counters on the Ground Floor of the Chancellery Building.

### NOTICES

Official University notices are displayed on the notice boards and students are expected to be acquainted with the contents of those announcements which concern them.

### LOST PROPERTY

All enquiries concerning lost property should be made to the Superintendent on Extension 2503 or to the Lost Property Office at the Union.

### APPLICATION OF RULES

#### *General*

Any student who requires information on the application of these rules or any service which the University offers, may make enquiries from the Admissions Office, the Student Counselling Centre or the Registrar.

#### *Appeals*

Section 5(c) of Chapter III of the By-laws provides that "Any person affected by a decision of any member of the Professorial Board (other than the Vice-Chancellor) in respect of breach of discipline or misconduct may appeal to the Vice-Chancellor, and in the case of disciplinary action by the Vice-Chancellor, whether on appeal or otherwise, to the Council".

## STUDENT SERVICES

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### THE LIBRARY

The University library is on the upper campus and adjacent to the Chancellery, and the Arts and Commerce Buildings. The Bio-Medical Library is in the Biological Sciences Building with a branch at Prince Henry Hospital ('Phone: 661-0111). The Law Library is temporarily housed on the 4th Floor of the Science Building on the upper campus. There are services at other centres as follows:—

Broken Hill Division—W. S. & L. B. Robinson University College Buildings, Broken Hill. 'Phone: 6022/3/4.

Wollongong University College—Wollongong: 'Phone: B-7301.

Water Reference Library—Manly Vale. 'Phone: 948-0261.

Each library provides a reference and lending service for staff and students, and is open in both Sessions 1 and 2 during day and evening periods, except the Water Reference Library which is only open during the day.

Staff and students must use a machine readable identification card to borrow from the main University Library. Personal identification is required in the other libraries listed. For students a current Union card is acceptable. Staff must apply to the Library for a library card.

### STUDENT ACCOMMODATION

#### RESIDENTIAL COLLEGES

##### *The Kensington Colleges*

Accommodation for students is provided within the group of The Kensington Colleges which comprise Basser College, Goldstein College and Philip Baxter College. The group houses 450 men and women students, as well as staff members. Tutors in residence provide tutorial assistance in a wide range of subjects.

Board and residence fees, which are payable on a session basis, amount to \$336 per session. Intending students should apply in writing to the Master, Box 24, Post Office, Kensington, N.S.W. 2033, from whom further information is available.

### *International House*

International House accommodates over 180 students of whom half are Australian; the remaining half is made up of students from some 20 different countries. First-year students who have come to the University straight from school are not eligible for residence because preference is given to mature undergraduates and postgraduate students. Fees are \$24 per week.

Students should apply as soon as possible if they wish to reside at International House at a later date. They should write to the Warden, International House, P.O. Box 88, Kensington, N.S.W. 2033 for information.

### *New College*

This Church of England College is the first of the independent Colleges on the Campus of the University. There are no religious tests, and accommodation is available for 210 men in single study-bedrooms. Fees are \$25 per week and may change in 1974.

Enquiries should be addressed to the Master, New College, Anzac Parade, Kensington, N.S.W. 2033.

### *Warrane College*

This College, an affiliated Roman Catholic residential college, was completed in 1970, and provides accommodation for 200 students and fourteen resident tutors.

Basic fees are \$28 per week for board and residence, payable on a session basis, and a registration fee of \$20. Fees may change in 1974. Intending students should write to The Master, Warrane College, Box 123, P.O. Kensington, N.S.W. 2033.

### *Shalom College*

Shalom College, first occupied in 1973, provides accommodation for 86 men and women students. The basic fee for residents is \$28 a week, although this may change in 1974. Non-resident membership is available to students who wish to avail themselves of the Kosher dining room and tutorial facilities.

Applications for residence and further information should be addressed to The Master, Shalom College, The University of New South Wales, Box 1, P.O. Kensington, N.S.W. 2033.

#### OTHER ACCOMMODATION

Students requiring other than Residential College accommodation may make personal application to the Housing Officer (Extn. 3260) at the Student Amenities Unit. Current lists are kept of accommodation available at recognized boarding houses, private homes, and in serviced and unserviced apartments.

#### THE UNIVERSITY UNION

The University Union, housed in the circular building and joined by a courtyard to an adjacent rectangular building, is located near the entrance to the Kensington campus from Anzac Parade. The third building in the Union complex was completed in 1971. Membership of the Union is compulsory for all registered students of the University and is also open to all members of staff and graduates of the University.

The full range of facilities provided by the Union includes a cafeteria service and other dining facilities, a large shopping centre, cloak room, banking and hairdressing facilities, showers, a women's lounge, common, games, reading, meeting, music, practice, craft and dark rooms. Photocopying, sign printing, and stencil cutting services are also available.

The Union also sponsors and conducts courses in many facets of the arts including weaving, photography, creative dance and yoga.

#### PARKING WITHIN THE UNIVERSITY GROUNDS

Because of the limited amount of parking space available, only the following categories of students may apply for a permit: motorcycle owners (annual fee \$3.90); higher degree students (limited issue, annual fee \$7.80); postgraduate and senior undergraduate students who have completed three years of a full-time or part-time course (annual fee \$3.90). A permit will allow access to the campus between 5 p.m. and 11 p.m. on weekdays and during library hours on Saturdays, Sundays and public holidays. Enquiries should be made to the Property Section, Room 240, The Chancellery Building, or 'phone 663 0351, extension 2920. It should be noted that increasing demand for parking space may require the imposition of further restrictions.

### CHAPLAINCY SERVICE

This service is provided for the benefit of students and staff by five Christian Churches and by the Jewish congregation. Chaplains are in attendance at the University at regular times. A Chapel is also available for use by all denominations.

The University Chapel and full-time chaplains are located in Hut F near the Chemistry Building. They may be contacted by phone at the following extensions: Anglican, 2684; Jewish, 3273; Roman Catholic, 2379; Churches of Christ, Methodist and Seventh Day Adventist, 2683.

### STUDENT HEALTH UNIT

Director: M. A. Napthali, MB BS

A student health and first aid centre is situated within the University. It is staffed by two qualified medical practitioners, assisted by a nursing sister and two secretaries. The medical service, although therapeutic, is not intended to replace private or community health services. Thus, where chronic or continuing conditions are revealed or suspected, the student is referred to a private practitioner or to an appropriate hospital for specialist opinion and/or treatment. The health service is not responsible for fees incurred in these instances. The service is confidential and students are encouraged to attend for advice on matters pertaining to health.

The service is available to all enrolled students by appointment, free of charge, between 9 a.m. and 5 p.m. Mondays to Fridays, and additionally to part-time students from 6 p.m. to 8 p.m. on Tuesdays and Thursdays during session. For staff members, immunizations are available, and first aid service in the case of injury or illness on the campus.

The centre is located in Hut E on the northern side of the campus in College Road.

Appointments may be made by calling at the centre or by telephoning extension 2679 or 3275 during the above hours.

### STUDENT EMPLOYMENT UNIT

The Student Employment Unit offers assistance with career employment for final year students and graduates of the University. This service includes the mailing of regular job vacancy notices to registered students and a campus interview programme for final



year students. Careers advice and assistance is also available to undergraduates. Assistance is offered in finding vacation employment which gives either course related experience or industrial training experience where this is a course requirement. Information and advice regarding cadetships, undergraduate and postgraduate scholarships is also available.

The service is located in the Chancellery on the ground floor. Telephone: 663 0351 ext. 3259 for employment and careers advice, or 663 0351 ext. 2086 for cadetships and industrial training information.

### STUDENT COUNSELLING AND RESEARCH UNIT

The Student Counselling and Research Unit offers a free, confidential counselling service to help students, individually or in groups, to deal with problems, and to make plans and decisions associated with their personal, academic and vocational progress.

Interviews and group programmes are available between 9 a.m. and 8 p.m. each week-day. Appointments may be made at the Unit, which is located at the foot of Basser Steps, or by ringing 663 0351, extensions 2600-2605, between 9 a.m. and 5 p.m.

### STUDENT AMENITIES UNIT

The Amenities Unit is concerned with student welfare and its activities are associated with sport and recreation, travel and student accommodation. It works in close liaison with the Sports Association, assisting the various clubs, and administers sporting facilities for both grade and social competitions. The Unit also has the added responsibility of the Physical Education and Research Centre where attractive recreational programmes for students and staff are provided. Concessional application forms for all types of travel may also be obtained at the Enquiry Desk in the Chancellery or at the Student Amenities Unit. A Housing Officer is also available to assist students with any off-campus accommodation problems.

Location: The Student Amenities Unit is located in Hut B at the foot of Basser Steps.

Phone: 663 0351, Extension 2235 Sports Association; 3271 Physical Education and Recreation Centre; 3261 Travel; 3260 Accommodation.

### PHYSICAL EDUCATION AND RECREATION CENTRE

The Physical Education and Recreation Centre consists of eight squash courts and a main building. The latter has a large gymnasium and ancillary practice rooms for fencing, table tennis, judo and weightlifting. The Supervisor of Physical Recreation is responsible for this Centre and provides a recreational programme for both students and staff. Those who desire to participate in the recreational programmes should contact the Supervisor on Extension 3271.

### THE UNIVERSITY REGIMENT

Enquiries should be made to the Adjutant at the Regimental Depot in Day Avenue just west of Anzac Parade.

### THE N.S.W. UNIVERSITY SQUADRON

Enquiries should be made to the Commanding Officer at Squadron Headquarters at the corner of City and Darlington Streets, Darlington 2008.

### ROYAL AUSTRALIAN NAVY

Enquiries should be made to the Royal Australian Naval Liaison Officer, Professor J. S. Ratcliffe, Commander, R.A.N.V.R., at the School of Chemical Engineering. Phone 663 0351, ext. 2406.

### UNIVERSITY CO-OPERATIVE BOOKSHOP LTD.

Membership is open to all students, on payment of a fee of \$5, refundable when membership is terminated. Members receive an annual rebate on purchases of books.

### CASHIER'S HOURS

The cashier's office is open for the payment of fees from 9.30 a.m. to 1.00 p.m. and from 2.00 p.m. to 4.30 p.m., Monday to Friday. It is open for additional periods during the first four weeks of Session 1. Students are advised to consult notice-boards for details.

### FINANCIAL ASSISTANCE TO STUDENTS

In addition to the Tertiary Allowances Scheme financed by the Australian Government, the following forms of assistance are available.

The Students' Union and the University have co-operated to provide assistance to students who are in financial difficulties

which are considered likely to prejudice their progress with their studies.

Three main forms of assistance are available:

1. *Deferment of Payment of Fees*

Deferments may be granted for a short period, usually one month, without the imposition of a late fee penalty, provided the deferment is requested prior to the due date for fee payments.

In exceptional circumstances the University may consider granting deferments for up to twelve months or even longer. In cases where payment is deferred to 31st December, examination results will not be published or made available until such time as the outstanding fees are paid. Where deferments are granted to a date beyond 31st December, the University may require the student to enter into a formal agreement to pay the fees.

2. *Short Term Cash Loans*

Donations from the Students' Union, the University Union and other sources have made funds available for urgent cash loans not exceeding \$100. These loans are normally repayable within one month.

3. *Long Term Cash Loans*

An amount of up to \$300 is available from this fund, repayable usually after twelve months or within twelve months of graduation or upon withdrawal from the course. This scheme is funded jointly by the University and the Students' Union. Students are required to enter into a formal agreement with the University to repay such a loan.

In all cases assistance is limited to students with reasonable academic records and whose financial circumstances warrant loans.

Early in 1973 the Australian Government made funds available to the University to provide loans to students in financial difficulty. The loans are to provide for living allowances and other approved expenses associated with attendance at University. Under this scheme allowances are paid approximately monthly during the academic year. Repayment usually commences after twelve months of graduation or upon withdrawal from the course. Students are required to enter into a formal agreement with the University to repay the loan.

From the same source of funds as mentioned in the preceding paragraph students who are in extremely difficult financial circumstances may apply for assistance by way of non-repayable grant. In order to qualify for a grant a student must generally show that the financial difficulty has arisen from misfortune beyond his control.

Applications may be made personally to the Deputy Registrar (Student Services).

## FINANCIAL ASSISTANCE TO ABORIGINAL STUDENTS

Financial assistance is available from a number of sources to help Aboriginal students. Apart from assistance under the Tertiary Allowances Scheme, there is also a Commonwealth Aboriginal Study Grant Scheme. Furthermore, the University may assist Aboriginal students with some essential living expenses in exceptional circumstances.

All enquiries relating to this scheme should be directed to the Deputy Registrar (Student Services).

## STUDENT ACTIVITIES

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Appropriate Faculty Associations are open to students in the various courses. Full details are available in other Faculty handbooks, the following list merely indicating the range.

The Commerce Society; The Arts Faculty Society; Dramsoc; The Historical Society; The Politics Club; The French Society; Socratic Society; The Julian Society.

### *Social Work Students' Association*

The Association's primary function is that of a communication channel operating not only among the students themselves but also between students and staff of the School. Opportunities for students to meet informally abound in the many functions held during the year. These include parties, lectures by professional social workers to give the student an insight into social work practice in many areas, and meetings where specific grievances may be aired or certain aspects of the course discussed.

Students become members of the Association automatically on admission to the School of Social Work, and elect an executive committee at an Annual General Meeting held during Session 1 each year. It is through this executive committee that formal liaison with the School's staff can be maintained.

A regular newsletter, "Catalyst", is produced to inform students of current events or planned activities, and to provide a forum for discussion among students.

Representatives of the Association attend meetings of the Australian Association of Social Workers (N.S.W. Branch) and the Council of Social Services of N.S.W., while contact with student bodies in other universities is maintained through the Federation of Australian Social Work Students Association. Further details may be obtained from the Social Work students notice board and the Enquiries Office of the School of Social Work.

### *Industrial Arts Society*

The Industrial Arts Society aims at providing opportunities for students to meet staff and fellow students through both social functions and educational activities such as films, lectures, seminars and visits. It is hoped that through these activities students will arrive at a better understanding of the purpose of their studies and become aware of the opportunities available in the field of Industrial Arts.

Membership is open to all students of the Department of Industrial Arts including postgraduate students. The Annual General Meeting is held in March. Further details regarding membership and activities may be obtained by contacting the Secretary of the Society, C/- Department of Industrial Arts, Western Grounds Area.

## SCHOLARSHIPS

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### **Tertiary Allowances Scheme**

In 1974, no new awards will be offered under the Commonwealth University Scholarship Scheme. Instead a new system of Australian Government Assistance for tertiary students, called the Tertiary Allowances Scheme, will operate. This scheme will apply to students who commence approved courses in 1974 as well as those who commenced their courses earlier.

*Means-tested* living and other allowances will be available to full-time students enrolled in an approved course who satisfy certain academic and residence requirements, are unbonded and who do not receive assistance in excess of \$350 from other scholarships. *No age limit will apply.*

Students enrolled in the following types of university courses will be eligible for assistance:

- Undergraduate and Postgraduate Bachelor degree courses
- Postgraduate diplomas
- Combined bachelor degree courses offered by institutions
- Master's qualifying courses

### *Benefits*

*Means-tested Living Allowance* The maximum rates of living allowance are \$850 per annum for students living at home and \$1400 per annum for students living away from home. The maximum rates of living allowance will be paid where the adjusted family income is equal to *or* less than \$5300 per annum. The adjusted family income is assessed by subtracting from the gross income of both parents business expenses and an amount of \$450 for each dependent child other than the student.

When the adjusted family income exceeds \$5300 p.a. the amount of living allowance will be reduced by \$2 for every \$10 of income until the family income exceeds \$10,600 per annum. After this level, the living allowance will be reduced by \$3 for every \$10 of income.

A concession may be made where there are other children in the family undertaking tertiary education with scholarship assistance from schemes other than the Tertiary Allowances Scheme of less than \$350 p.a.

Students qualifying for living allowance will also receive the following allowances, where appropriate:

***Incidentals Allowance*** The Incidentals Allowance of \$100 is designed to help the student meet cost of those fees which have not been abolished—the Students' Union Council, University Union and sports fees—and other expenses associated with their studies.

***Travel Allowance*** Students whose home is in the country may be reimbursed the cost of three return trips per year, during vacation time.

***Dependant's Allowance*** This is made up of allowances of \$8 per week for a dependant spouse and \$4.50 per week for each child.

***How to Apply*** Higher School Certificate students will be able to obtain application forms from their school. Students who do not already hold a scholarship may obtain forms from the Admission Office, or from The Regional Director, New South Wales State Office, Department of Education, Sydney Plaza Building, 59 Goulburn Street, Sydney, N.S.W. 2000 (Telephone 20929).

***N.B.*** Current Commonwealth Scholarship holders will have application forms posted to them. All forms should be returned to the above address as soon as possible.

### **Australian Postgraduate Course Awards**

The Australian Government provides a number of awards for full-time postgraduate study in courses leading to the degree of Master by formal course work. Persons permanently domiciled in Australia who are under 45 years of age on 1 January of the year in which the award is to be taken up and who are University graduates or will graduate in the current academic year, are eligible for the awards. Award holders receive a living allowance of \$2,900 paid over the academic year. Other allowances may also be paid in certain cases.

Application for awards tenable at the University must be lodged with the Registrar by 30 September each year.

### **Australian Postgraduate Research Awards**

The Australian Government also provides each year a number of awards for full-time postgraduate study and research. The awards are renewable annually up to a maximum duration of two years in the case of a candidate for a Masters degree or three years in the case of a PhD candidate. In special circumstances, a PhD candidate may be granted an extension of tenure into a fourth year. Persons permanently domiciled in Australia who are under 35 years of age on 1 January of the year in which the award is to be taken up and who are University graduates or will graduate



in the current academic year, are eligible for the awards. Award holders receive a living allowance of \$3,050 per annum. Other allowances may also be paid in certain cases. The closing date for applications is 31st October each year.

### **Cadetships and Traineeships**

*The Commonwealth Public Service* offers cadetships each year in a wide variety of fields. British subjects, with Australian citizenship, under the age of 28 years, or 33 years in the case of a cadet social worker, are eligible to apply. Details of vacancies at any one time may be obtained from the University's Student Employment Officer or the Inquiry Officer, Commonwealth Public Service Inspector's Office, Commonwealth Centre, Chifley Square (Cnr. Phillip and Hunter Streets). (Telephone 259-3969).

*The New South Wales Public Service* offers cadetships and traineeships from time to time for various departments. Enquiries should be made to the New South Wales Public Service Board, 19 O'Connell Street, Sydney. (Telephone 2-0355). Applications will close in October, and early application to the Board is advisable.

*The Health Commission of New South Wales, Red Cross* and other bodies also from time to time offer scholarships for social work students in later years.

### **Teachers' College Scholarships**

Scholarships are awarded in open competition in respect of the aggregate of the five best subjects presented at the Higher School Certificate Examination provided that the candidate has a pass in English at any level.

Applicants must have reached the age of sixteen years, and, in general, should not have passed the age of thirty-five years on the date at which training is commenced.

Applications must be made on the form provided. Full-time school pupils may obtain these forms from the principal of the school or college at the end of second term. Other applications may be made by contacting: Officer-in-Charge, Teacher Training Division, N.S.W. Department of Education, Blackfriars Street, Chippendale, N.S.W., 2008 (Telephone: 211 4566).

Applications for scholarships should be made by *September 30*. Late applications will be considered although no attempt is made to reserve places for late applicants.

Graduates and undergraduates are reminded that later year scholarships are made available from time to time.

Further advice regarding applications for Teachers College Scholarships may be had by contacting the School of Education.

### **Graduate Diploma in Industrial Design Scholarships**

Several scholarships are available for students who wish to enrol in the postgraduate course in Industrial Design leading to the award of a Graduate Diploma. Applicants should have a University degree or a professional level qualification from a Technical College, or such other qualification as may be approved by the University. Past and present employment experience in industrial design is desirable. The value of each scholarship is \$400 per annum.

### **Postgraduate Scholarship in Industrial Design**

Australian Consolidated Industries has made a scholarship available (annual stipend \$3250 for single scholars and \$3750 for married scholars) in order to promote postgraduate study and research for the degree of Doctor of Philosophy within the Department of Industrial Arts.

### **Scholarships in Health Administration**

A number of scholarships and cadetships are available to students enrolling in courses offered by the School of Health Administration. Details are available from the Head of the School.

## SCHOOL OF EDUCATION

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The School of Education offers a four-year Bachelor of Science (Education) degree course; a one year full-time course for graduates leading to the Diploma in Education; and also a course leading to the degree of Master of Education.

### THE BACHELOR OF SCIENCE (EDUCATION) DEGREE COURSE

The first year of a four-year Bachelor of Science (Education) degree course BSc(Ed), commenced in 1969. The course is designed primarily for the preparation of teachers of science in secondary schools.

One feature of the course is the breadth of study over a range of science subjects. The course also provides depth by requiring that at least one of the science subjects be taken to a minimum of three stages. Another feature is the study of education subjects along with science subjects in the second, third and fourth years. Two stages of History and Philosophy of Science are included in the course structure to give an understanding of science as a method of inquiry and of its relationship to society.

Students must complete at least one stage of physics, chemistry, mathematics, geology and biological sciences, and in the first year must undertake a programme in chemistry, physics and mathematics and either biology or geology. Stage I subjects have the same content as for the first year science course. Stage II, III and IV science subjects consist of units of science subjects or units designed to meet the special needs of teachers or a combination of these.

The course has undergone a minor revision, and in 1974 Years 2 and 3 of the revised course will be offered. Year 4 will be introduced in 1975.

#### *Honours*

The BSc (Ed) may be awarded with honours. The grade of honours is determined by the quality of work performed throughout the course which includes the fourth year honours research seminar and thesis. The classes and divisions of honours are: Class 1, Class 2 (Division 1), Class 2 (Division 2).

Applications for admission to the honours programme should be made in writing to the Head of School on the completion of third year.

*Progression*

Progression in the Bachelor of Science (Education) Course is permitted by subject. However:

- (1) Course programmes will continue to be stated and timetabled by year and it cannot be guaranteed that non-standard programmes can be completed in the minimum number of years. A non-standard programme is one which involves enrolment in subjects or units from more than one year or comprises subjects which do not normally constitute a particular year's course work.
- (2) Students must satisfy the rules governing re-enrolment; in particular, these require all subjects of the first year to be completed by the end of two years of full-time (or four years of part-time) study.
- (3) Before enrolling in any subject a student must have satisfied the relevant prerequisite and co-requisite requirements unless permission to vary this has been granted by the Head of the appropriate School.
- (4) Only in exceptional circumstances will a student be permitted to enrol for more than twenty-four hours of course work per week.
- (5) Notwithstanding the above, before a student can enrol in any non-standard programme, such programme must meet with the approval of the Head of School of Education.

## 406. SCIENCE (EDUCATION)—FULL-TIME COURSE

## Bachelor of Science (Education)

YEAR 1		Hours per week for 2 sessions	
		Lec. Lab./Tut.	
*1.011	Higher Physics I <i>or</i>	}	3 — 3
1.001	Physics I		
2.001	Chemistry I		2 — 4
10.001	Mathematics I <i>or</i>	}	4 — 2
10.011	Higher Mathematics I <i>or</i>		
10.021	Mathematics IT†		
17.011	Human Biology <i>and</i>	}	2 — 4
17.021	Comparative Functional Biology		
	<i>or</i>		
25.111	Geoscience I		2 — 4
			<hr/> 11 — 13 <hr/>

†Students taking 10.021 Mathematics IT will not be allowed to proceed beyond First Year Physics.

**YEAR 2**

	Hours per week
Stage II of major subject .. .. .	6
Two Science subjects selected from 17.001, 25.111 or Stage II subjects .. .. .	12
58.512 Introduction to Education* .. .. .	3
	<hr/> 21

\* Directed observations in schools are additional to this time.

**YEAR 3**

Stage III of major subject .. .. .	9
58.513 Education IA* .. .. .	4½
58.523 Education IB† .. .. .	5½
62.001 History & Philosophy of Science I .. .. .	3
	<hr/> 21½

\* 58.513 Education IA and 58.523 Education IB are corequisites and 58.512 Introduction to Education is a prerequisite.

† The following subjects are prerequisites for 58.523 Education IB: 1.011 Higher Physics I or 1.001 Physics I or 1.041 Physics IC and 2.001 Chemistry I, 17.011 Human Biology, 17.021 Comparative Functional Biology, 25.111 Geoscience I, and 58.512 Introduction to Education.

‡ School experience including teaching practice will be additional to these hours.

**YEAR 4**

Stage IV of major subject or one Science subject selected from Stage II subjects .. .. .	6
58.502 Education II .. .. .	14*
58.554 Research seminar and thesis† .. .. .	2
	<hr/> 22

\* School experience including teaching practice will be additional to these hours.

† Honours students only.

**The stages of Science subjects offered are:****‡ STAGE II**

Physics .. .. .	1.112A and 1.112B
Chemistry .. .. .	2.002A and 2.002B
Mathematics .. .. .	10.111A, 10.111B and 10.211A
**Geology .. .. .	25.502
* Biology .. .. .	two 90 hour units

**‡ STAGE III**

Physics .. .. .	1.112C, 1.113A, 1.113D, 1.113Z
Chemistry .. .. .	2.002C, 2.003A, 2.003D
**Geology .. .. .	25.503
* Biology .. .. .	three 90 hour units*

\* See overleaf (Biology)

‡ Students will be asked to enrol in the component units separately.

\*\*The Geology subject descriptions have been amended for 1974.

‡ **STAGE IV**

Physics .. .. .	1.113C and 1.143D
Chemistry .. .. .	2.003B and 2.003C
**Geology .. .. .	25.504
Biology .. .. .	two 90 hour units*

† Students are asked to enrol in the component units separately.

\*\*The Geology subject descriptions have been amended for 1974.

\***BIOLOGY:**

Stages two and three may be selected from the units:

- 41.101A Chemistry of Biologically Important Molecules
- 43.101A Genetics and Biometry
- 43.101B Plant Morphology A or
- 43.101C Plant Physiology
- 45.101B Invertebrate Zoology or
- 45.101C Vertebrate Zoology

One selected from units listed under Stage IV.

Stage IV may be selected from the units:

- 17.012 General Ecology
- 41.101B Metabolism
- 43.101B Plant Morphology A or
- 43.101C Plant Physiology
- 43.102E Environmental Botany
- 44.101A Introduction to Microbiology
- 45.101B Invertebrate Zoology or
- 45.101C Vertebrate Zoology
- 45.101D Field Ecology†
- 45.102A Marine Ecology
- 45.102B Animal Behaviour
- 45.102E Invertebrate Behaviour†
- 45.201A Insect Structure and Classification
- 73.011A Principles of Physiology

Selection of units is subject to agreement with the Heads of Schools concerned and in making the selection candidates must observe pre-requisites and co-requisites.

† Not available in 1974.

**BACHELOR OF SCIENCE (EDUCATION)****Amended Course**

(Year 1, Year 2 and Year 3 will operate in 1974; Year 4 will begin to operate in 1975.)

**YEAR 4 (FROM 1975)****Hours per week**

Stage IV of major subject or one Science subject selected from Stage II subjects .....	6
58.514 Education IIA* .....	4
58.524 Education IIB* .....	6**
58.554 Research seminar and thesis† .....	2
62.002 History and Philosophy of Science II .....	3
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	21
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\* 58.513 Education IA and 58.523 Education IIB are prerequisites for 58.514 Education IIA and 58.524 Education IIB.

\*\*Teaching practice will be additional to these hours.

† Honours students only.

## 556. DIPLOMA IN EDUCATION

Since 1966 a course leading to the award of the Diploma of Education (DipEd) has been available to graduates from the University or other approved universities. The Diploma is designed to give professional training in education to postgraduate students. It is a one-year full-time course, but it is also possible for this course to be taken over two years, and in some circumstances over three years, on a part-time basis. The course includes lecture-seminars and associated group activities, individual assignments, observations of teaching methods and practice teaching.

**The Study of Education**

58.016	Seminars .....	2
58.017	Education .....	3*

\* A weekly average for the two sessions. The amount per week will be related to practice teaching arrangements in the schools.

58.017 Education is a composite subject whose main components are Educational Psychology, Educational Practice, Philosophy and Theory of Education and Sociology of Australian Education.

**The Study of Methods of Teaching**

Two method subjects each for an average of 2½ hours per week (3 hours in Session 1 and 2 hours in Session 2) except in the case of Double Teaching Subjects which total 5 hours each per week (6 hours in Session 1 and 4 hours in Session 2). This will comprise lecture-seminars, and individual discussions with master teachers and method lecturers.

58.021	Commerce Method	
58.022	English Method	
58.023	French Method	
58.024	Geography/Social Studies Method	
58.025	German Method	
58.026	Guidance Method	
58.027	History Method	
58.028	Library Method	
58.029	Mathematics Method (Double Teaching Subject)	
58.030	Mathematics Method (Single Teaching Subject)	
58.031	Spanish Method	
58.032	Slow Learner Method .....	5
58.033	Science Method (Double Teaching Subject)	
58.034	Science Method (Single Teaching Subject)	

**Selected Activities**

58.040	Selected Activities .....	2
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Selected activities will include an elective subject. It may also include Health Education, Communication skills and other activities depending upon student needs and staff resources.

**Practical Teaching and Observation**

58.050 Practical Teaching and Observation ..... 7\*

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\* A weekly average made up of both concurrent and block practice.

Note: If arrangements for concurrent practice lapse, students will undertake seven weeks of block practice teaching.

*Re-enrolment in Diploma in Education*

A candidate who fails in half or more of his subjects will not be permitted to re-enrol unless the Higher Degree Committee of the Board of Professional Studies grants permission because it considers the circumstances to be exceptional.

Further, a candidate who fails in two subjects, one of which is either 58.017 Education or a 'Methods' subject, and whose overall performance is considered unsatisfactory by the Committee will be required to repeat all subjects. In exceptional cases the Committee may grant permission to re-enrol in only those subjects failed.

**MASTER OF EDUCATION**

The conditions for the award of the Master of Education degree are set out below. The course is designed for educationists who wish to study education at an advanced level and may be taken at two levels—pass and honours.

The Pass degree is generally taken by formal course work in four subjects together with a minor thesis or project. In approved cases students may take formal course work in two subjects only, and follow these with a major thesis. Applicants for registration for the honours degree are normally expected to satisfy in two formal courses at a suitable standard, and to submit a major thesis. Alternatively students without an honours degree in Education (or other relevant subject) may apply for registration after completing two formal courses at a suitable standard. Such successful applicants are expected to take two further formal courses, again at a suitable standard, and to submit a major thesis.

No student is permitted to proceed with experimental research in education unless he has included a formal course in Educational Research I. (This rule is waived only when the student has evidence of alternative qualifications or experience.)

	Hours per week
58.201G Comparative Education .....	2
58.202G Educational Planning and Administration .....	2
58.203G Educational Psychology .....	2
58.204G Educational Theory in the Twentieth Century ..	2
58.206G History of Education .....	2
58.207G Philosophy in Education .....	2



58.208G	Child Growth and Development .....	2
58.210G	Science Education .....	2
58.211G	Sociology of Education .....	2
58.212G	Mathematics Education .....	2
58.213G	Educational Research I .....	2
58.214G	Educational Research II .....	2

### **Conditions for the Award of Degree of Master of Education**

1. An application to register as a candidate for the Degree of Master of Education shall be made on the prescribed form which shall be lodged with the Registrar at least one full calendar month before the first session of the year for which the candidate requires to be registered.
2. An applicant for registration shall—
  - (i) hold a degree of the University of New South Wales or other approved University,
  - (ii) hold the Diploma in Education of the University of New South Wales or other approved university or possess qualifications accepted by the Higher Degree Committee of the Board of Vocational Studies (hereinafter referred to as "the Committee") as equivalent, and
  - (iii) have had at least one year's practical experience in some branch of education acceptable to the Committee.
3. In special circumstances a person may be permitted to register as a candidate for the degree if he submits evidence of such academic and professional attainments as may be approved by the Committee.
4. An approved applicant shall register in one of the following categories:
  - (i) student in full-time attendance at the University;
  - (ii) student in part-time attendance at the University;
  - (iii) student working externally to the University;
 and shall pay such fees as may be determined from time to time by the Council.
5. The degree shall be awarded in two grades, namely the Pass degree and the degree with Honours. There shall be two classes of Honours, namely Class I and Class II.
6. *Pass Degree*
  - (i) Notwithstanding any other provisions of the conditions for registration, the Committee may require an applicant

to demonstrate his fitness for registration for the pass degree by carrying out such work and passing such examinations as the Committee itself may determine.

- (ii) The programme for the pass degree shall include four formal courses in education and the submission of a report on a topic approved by the Committee, but in exceptional cases, and at the discretion of the Higher Degree Committee, the number of formal courses required may be reduced by either one or two.
- (iii) No student shall be considered for the award of the degree until the lapse of two sessions for a full-time student, or four sessions for a part-time or external student, from the date on which registration becomes effective. A student taking the Pass degree course on a full-time basis shall be required to complete it within four sessions, and one taking it part-time or working externally within eight sessions. Extension beyond these periods shall be granted only with the approval of the Committee.
- (iv) Each report as provided for in para. 6 (iv) shall have two examiners approved by the Committee.

#### 7. *Honours Degree*

- (i) An applicant for registration for the Honours degree of Master of Education shall have been admitted to a Bachelor's degree in an approved university by a school or department of education, or to a degree of any other school or department considered appropriate by the Committee, at a standard not below second class Honours.
- (ii) A student who does not satisfy the conditions for registration as provided in para. 7 (i) may apply for registration as an Honours candidate on completion of at least two of the formal courses provided for the Pass degree of Master of Education, at a standard approved by the Committee.
- (iii) Notwithstanding any other provisions of these conditions the Committee may, on the recommendation of the Head of the School, require an applicant to demonstrate fitness for registration as a candidate for the Honours degree by carrying out such work and passing such examinations as the Committee may determine.
- (iv) A student satisfying conditions for registration provided in para. 7 (i) shall be required to pass, at a standard approved by the Committee, two of the formal courses

provided for the pass degree of Master of Education except that in special circumstances he may be granted exemption from this requirement.

- (v) A student satisfying conditions for registration provided in para. 7 (ii) shall complete, at a standard approved by the Committee, a total of four such formal courses including the number passed prior to his registration as an Honours student.
  - (vi) No student shall proceed with experimental research in education unless he has included a formal course in 58.213G Educational Research I, or has such other qualifications or experience as the Committee considers appropriate.
  - (vii) Every candidate for the Honours degree shall submit a thesis embodying the results of an original investigation. He shall not submit as the main content of his thesis any work or material which he has previously submitted for a University degree or other similar award.
  - (viii) For each candidate submitting a thesis for the Honours degree there shall be at least two examiners appointed by the Professorial Board on the recommendation of the Committee, one of whom shall, if possible, be an external examiner.
  - (ix) No student shall be considered for the award of the degree until the lapse of four sessions for a full-time student, or six sessions for a part-time or external student, from the date on which registration becomes effective. A student taking the Honours degree course on a full-time basis shall be required to complete it within four sessions, and one taking it part-time or working externally within eight sessions. Extension beyond these periods shall be granted only with the approval of the Committee.
8. Every candidate who submits a thesis, for either an Honours or a Pass degree, shall submit three copies of the thesis in a form which complies with the requirements of the University for the preparation and submission of higher degree theses.
9. It shall be understood that the University retains the three copies of the thesis submitted for examination and is free to allow the thesis to be consulted or borrowed. Subject to the provisions of the Copyright Act, 1968, the University may issue the thesis in whole or in part in photostat or microfilm or other copying medium.

**Conditions for the Award of Graduate Diplomas in the  
Board of Professional Studies**

1. An application for admission to a graduate diploma course in the Board of Professional Studies shall be made on the prescribed form which should be lodged with the Registrar at least two full calendar months before the commencement of the course.
2. An applicant for admission to a graduate diploma course shall be—
  - (a) a graduate of the University of New South Wales or other approved university,
  - (b) a person with other qualifications as may be approved by the Higher Degree Committee of the Board of Professional Studies (hereinafter referred to as the Committee).
3. Notwithstanding clause (2) above, the Committee may require an applicant to take such other pre-requisite or concurrent studies and/or examinations as it may prescribe.
4. Every candidate for a graduate diploma shall be required to undertake the appropriate course of study, to pass any prescribed examinations, and if so laid down in the course, to complete a project or assignment specified by the Head of the School. The format of the report on such project or assignment shall accord with the instructions laid down by the Head of the School.
5. To qualify for the award of the graduate diploma a candidate shall:
  - (i) complete a one-year full-time course within four consecutive sessions, *or*
  - (ii) complete a two-year part-time course within six consecutive sessions.
6. In exceptional cases the Committee may extend the period in which a candidate must complete his graduate diploma course.
7. An approved applicant shall be required to pay the fee for the course in which he desires to register. Fees shall be paid in advance.

## SCHOOL OF HEALTH ADMINISTRATION

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The School of Health Administration, which was founded in 1956 with a grant from the W. K Kellogg Foundation, offers both undergraduate and graduate programmes. The undergraduate course may be taken on a part-time basis and leads to the award of Bachelor of Health Administration. The School also offers one formal course in Health Administration leading to the award of a Graduate Diploma and another to the degree of Master of Health Administration. In addition, the Master's degree and the degree of Doctor of Philosophy may be taken following periods of full-time or part-time research in hospital and health service administration for which the School offers excellent facilities.

Because the Bachelor's course has been revised, a student enrolled prior to 1973, who has passed in nine or more subjects, will be permitted to complete the requirements for the degree under the regulations which applied in 1972 (see page B 314, 1972 Calendar). A student enrolled prior to 1973, who has passed less than nine subjects under the old regulations, will complete the requirements for the degree under the new regulations. Where he has already passed 15.901 Economics (Health Administration), he will substitute 16.801 The Australian Health Care System for this subject in Year 2 (full-time) or Stage III (part-time external).

### BACHELOR OF HEALTH ADMINISTRATION

#### **Conditions for the Award of the Degree of Bachelor of Health Administration**

1. A candidate for the degree of Bachelor of Health Administration shall:—
  - (a) comply with the requirements for admission;
  - (b) follow the prescribed course of study in the School of Health Administration and satisfy the examiners in the necessary subjects.
2. A student who is following the prescribed course of study as a part-time (external) student shall in each year attend the residential school conducted by the School of Health Administration.
3. A full-time student shall be required to complete the first year of the course in not more than two years. A part-time student

shall be required to complete the first two stages of his course in not more than four years. Re-enrolment thereafter will be governed by the general regulations of the Professorial Board.

4. A student may be granted advanced standing by the Professorial Board on the recommendation of the Board of Vocational Studies. A student coming from another institution must follow an approved course of study in this University for at least two years if a full-time student or at least four years if a part-time student.

#### 404. HEALTH ADMINISTRATION—FULL-TIME COURSE

##### Bachelor of Health Administration

		Hours per week			
		SESSION 1†		SESSION 2‡	
YEAR 1*		Lec.	Tut.	Lec.	Tut.
14.001	Introduction to Accounting .....	4	2	0	0
14.023	Accounting for Health Administration ..	0	0	4	2
16.001	Management I .....	0	0	4	2
16.201	Law I .....	4	2	0	0
16.701	Statistics .....	0	0	4	2
16.801	The Australian Health Care System ....	4	2	0	0
		12	6	12	6
<hr/>					
YEAR 2		Lec.	Tut.	Lec.	Tut.
15.901	Economics (Health Administration) .....	4	2	0	0
16.002	Management II .....	4	2	0	0
16.003	Management III .....	0	0	4	2
16.202	Law II .....	0	0	4	2
16.921	Health Care Planning I .....	4	2	0	0
16.922	Health Care Planning II .....	0	0	4	2
		12	6	12	6
<hr/>					
YEAR 3		Lec.	Tut.	Lec.	Tut.
16.101	Comparative Health Care Systems .....	0	0	4	2
16.301	Political Science .....	4	2	0	0
16.302	Social Administration .....	0	0	4	2
16.601	Behavioural Science I .....	4	2	0	0
16.602	Behavioural Science II .....	0	0	4	2
16.923	Health Care Planning III .....	4	2	0	0
		12	6	12	6

† May be varied with approval of head of school.

\* Not offered in 1974.

# 404. HEALTH ADMINISTRATION—PART-TIME COURSE (EXTERNAL STUDIES)

## Bachelor of Health Administration

		Hours per week for 2 sessions	
		Lec.	Tut.
<b>STAGE 1</b>			
14.001	Introduction to Accounting .....	2	1
16.201	Law I .....	2	1
16.801	The Australian Health Care System .....	2	1
		<hr/> 6	<hr/> 3
<b>STAGE 2</b>			
14.023	Accounting for Health Administration .....	2	1
16.001	Management I .....	2	1
16.701	Statistics .....	2	1
		<hr/> 6	<hr/> 3
<b>STAGE 3</b>			
15.901	Economics (Health Administration) .....	2	1
16.002	Management II .....	2	1
16.921	Health Care Planning I .....	2	1
		<hr/> 6	<hr/> 3
<b>STAGE 4</b>			
16.003	Management III .....	2	1
16.202	Law II .....	2	1
16.922	Health Care Planning II .....	2	1
		<hr/> 6	<hr/> 3
<b>STAGE 5</b>			
16.301	Political Science .....	2	1
16.601	Behavioural Science I .....	2	1
16.923	Health Care Planning III .....	2	1
		<hr/> 6	<hr/> 3
<b>STAGE 6</b>			
16.101	Comparative Health Care Systems .....	2	1
16.302	Social Administration .....	2	1
16.602	Behavioural Science II .....	2	1
		<hr/> 6	<hr/> 3

### 558. GRADUATE DIPLOMA IN HEALTH ADMINISTRATION

The School of Health Administration offers a course in Health Administration leading to the award of a Graduate Diploma.

The course provides an educational programme for persons employed in the health services who hold a degree, or equivalent qualification, and who wish to qualify for or extend their knowledge of administrative practice.

The Diploma is awarded on the successful completion of the following programme. The course may be taken by one year of full-time study or over two years on a part-time basis.

#### FULL-TIME COURSE

YEAR 1—SESSION 1		Hours per week
16.901G	Health Services Statistics I .....	2
16.911G	Health Services Administration I .....	3
16.913G	Health Care Facilities A .....	2
16.914G	Health Care Facilities B .....	3
16.915G	Health Care Facilities C .....	3
16.916G	Health Care Facilities D .....	2
		<hr/> 15 <hr/>

#### YEAR 1—SESSION 2

16.902G	Health Services Statistics II .....	2
16.905G	Health Services Accounting .....	3
16.908G	Behavioural Science (Health Administration) ...	2
16.912G	Health Services Administration II .....	3
16.917G	Personnel Practice (Health Administration) .....	2
16.918G	Health Services Law .....	3
		<hr/> 15 <hr/>

### 890. MASTER OF HEALTH ADMINISTRATION

The conditions for the award of the degree of Master of Health Administration, together with an outline of the formal course are set out overleaf. Acceptance into this course is dependent on the attainment of a satisfactory score on the Princeton Test for Graduate Study in Business. Information about this Test is available from the School of Health Administration.



The course has been designed to equip students with the basic store of knowledge required for senior administrative and planning work in hospitals and other health services. It does not emphasize training in specialized techniques but aims to introduce basic concepts and to educate students for management in the broadest sense of that term. Satisfactory performance in the Princeton Admission Test for Graduate Study in Business is a necessary prerequisite.

YEAR 1—SESSION 1		Hours per week
16.901G	Health Services Statistics I .....	2
16.903G	Health Services Organization .....	3
16.904G	Australian Health Care System .....	2
33.302G	Behavioural Science I* .....	3
33.303G	Management Accounting and Information Systems I* .....	2
33.305G	Organization Theory I* .....	3
		<hr/> 15

YEAR 1—SESSION 2		
16.902G	Health Services Statistics II .....	2
16.905G	Health Services Accounting .....	3
16.908G	Behavioural Science (Health Administration) ...	2
33.308G	Behavioural Science II* .....	3
33.310G	Management Accounting and Information Systems II* .....	2
33.311G	Organization Theory II* .....	3
		<hr/> 15

YEAR 2—SESSION 1		
16.906G	Hospital Organization and Management I .....	3
16.909G	Community Health Planning .....	3
16.910G	Comparative Hospital and Health Services Administration .....	3
16.919G	Research Project .....	2
33.304G	Micro-economics and Business Decisions* .....	2
33.306G	Quantitative Analysis in Business I* .....	3
		<hr/> 16

YEAR 2—SESSION 2		
16.907G	Hospital Organization and Management II .....	3
16.919G	Research Project .....	2
16.918G	Health Services Law .....	3
33.309G	Macro-economics and Policy* .....	2
33.313G	Quantitative Analysis in Business II* .....	3
	Elective† .....	4
		<hr/> 17

\* This subject is offered by the Graduate School of Business as part of the requirements for the Master of Business Administration degree.

† Subject to approval of head of school.

**Conditions for the Award of the Degree of Master of Health Administration**

1. An application to register as a candidate for the degree of Master of Health Administration shall be made on the prescribed form which shall be lodged with the Registrar by the thirty-first of August of the year preceding that year in which the candidate desires to commence the course.
2. (i) An applicant for registration for the degree shall have been admitted to an appropriate degree in the University of New South Wales or other approved university.  
(ii) In special circumstances a person may be permitted to register as a candidate for the degree if he submits evidence of such academic and professional attainments as may be approved by the Board of Vocational Studies (hereinafter referred to as "the Board") on the recommendation of its Higher Degree Committee.
3. Notwithstanding any other provisions of these conditions, the Board may require an applicant to demonstrate fitness for registration by carrying out such work and sitting for such examinations as the Board may determine.
4. In every case, before permitting an applicant to register as a candidate, the Board shall be satisfied that adequate supervision and facilities are available.
5. An approved applicant shall pay such fees as may be determined from time to time by the Council.†
6. Every candidate for the degree shall be required:
  - (i) To carry out a programme of advanced study; to take such examinations and to perform such other work as may be prescribed by the Board.

The programme of advanced study shall include:—

- (a) attendance at the University in a prescribed course of formal work;
- (b) attachments to hospitals and other organisations for in-service experience;
- (c) the preparation and submission of a report on a project demonstrating originality.

The attachments referred to in paragraph 6(i)(b) and the investigation referred to in paragraph 6(i)(c) shall be under the direction of supervisors appointed by the Board or under such conditions as the Board may determine.

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† For details of fees, see earlier under "Fees".

A candidate who has already had adequate and satisfactory in-service experience may, with the approval of the Board, be exempt from the attachments referred to in paragraph 6(i)(b);

OR

- (ii) To carry out a programme of advanced study and take such examinations and perform such other work as may be prescribed by the Board. The programme shall include the preparation and submission of a thesis embodying the results of an original investigation or design. The candidate may submit also for examination any work he has published, whether or not such work is related to this thesis.
- 7. An approved applicant shall register in one of the following categories:—
    - (i) student in full-time attendance at the University;
    - (ii) student in part-time attendance at the University;
    - (iii) student working externally to the University.
  - 8. The report referred to in paragraph 6(i)(c) shall be on a topic approved by the Board on the recommendation of the Head of the School before the end of the third term of Year I. Unless permission to the contrary has been granted, a candidate shall be required to submit his report not earlier than four sessions, and not later than six sessions, from the date of registration.
  - 9. Candidates for the award under the conditions contained in paragraph 6(ii) shall not be considered for the award of the degree until the lapse of four complete sessions from the date from which the registration becomes effective, save that in the case of full-time candidate who has obtained the degree of Bachelor with Honours or who has had previous research experience, this period may with the approval of the Board be reduced by not more than two sessions.
  - 10. Every candidate for the degree shall be required to submit three copies of the report or thesis as the case may be. The thesis shall be presented in a form which complies with the requirements of the University for the preparation and submission of higher degree theses.\*
  - 11. It shall be understood that the University retains the three copies of the report or thesis submitted for examination, and is free to allow the report or thesis to be consulted or borrowed. Subject to the provisions of the Copyright Act,

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\* See Section "C" of the University Calendar.

1968, the University may issue the report or thesis in whole or in part, in photostat or microfilm or other copying medium.

12. For each candidate's report or thesis there shall be at least two examiners, appointed by the Professorial Board on the recommendation of the Board of Vocational Studies, one of whom shall if possible be an external examiner.
13. The award of the degree taken in accordance with paragraph 6 (i) shall depend upon:—
  - (i) the candidate's performance in his in-service attachments;
  - (ii) the candidate's performance in the examinations;
  - (iii) the quality of the candidate's report.

## DEPARTMENT OF INDUSTRIAL ARTS

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The Department of Industrial Arts offers a B.Sc. degree available through full-time study in the general field of Industrial Arts. The subjects required to qualify for the degree are set out elsewhere in this Handbook. At the postgraduate level, the Department offers a course in Industrial Design leading to the award of a Graduate Diploma.

### *The Subject Matter of Industrial Arts*

Through the ages, man has used his intellect, imagination and skill to create useful things. The term "industrial arts" has come to be used to describe these activities.

Man-made objects form a large part of the human environment — shelter, furniture, fabrics, vessels, tools, machines, vehicles and labour-saving devices of many kinds. Although these objects are designed and made primarily for some practical purpose, each individually makes some contribution to the total quality of the environment. Well-designed, well-made things of the practical kind may be considered "works of art"; thus the best products, whether handmade or factory produced are evidence of the industrial arts.

Before the growth of modern industrial society, it was possible to identify the industrial arts with certain skilled occupations, for example, gold and silversmithing, weaving, metalworking, wood-working and pottery. Industrial methods and mass production have changed the forms of intellect, imagination and skill required for the creation of useful objects. Products are now seldom the result of the activity of single individuals, rather they reflect the skills of many people applied through the industrial organisation. The study basic in Industrial Arts is the relationship between man and his material environment. The important elements in this study are man himself, the materials of his environment, the objects he produces and the processes he uses for production.

Such studies can be concerned as much with the useful objects of antiquity as with those of contemporary industrial civilisation. Thus the research activities of the Department of Industrial Arts range from an investigation into the traditional technologies of the ancient cultures to an analysis of the problems of industrial design in contemporary technological society.

### *The Industrial Arts Course*

The course offered by the Department of Industrial Arts is intended to provide a broad understanding of the man-product relationship, with studies in depth of the most relevant areas of knowledge drawn from natural science, technology, social science and other fields. Of central importance is the subject Industrial Arts. The core study in this subject is Tectonic Design. Tectonics is the science and/or art of making things that are both useful and beautiful. Tectonic design is the process whereby materials, functional requirements, appearance, mechanical factors, cost etc. are related and integrated into products which satisfy human needs. The design strand is supported by parallel studies in graphics, materials, education. Graphics — the “visual language” of design — includes a variety of methods of drawing as well as other methods of visual representation, communication and analysis. The other subjects provide specialised information which is needed for the study and teaching of design, in particular, and of industrial arts generally.

Also included are Engineering I and elective studies in the sciences and general studies.

The Industrial Arts course covers the major subject areas included in both the secondary and senior secondary school curricula. After completion of the degree, graduates will be eligible to become certificated by the Department of Education as four-year trained teachers.

The undergraduate degree also provides a sound basic education for people intending to seek employment in the design field. A Graduate Diploma course in Industrial Design is available for those wishing to become professional Industrial Designers in the product design field.

In general, the Industrial Arts course provides a broad education which embraces the sciences, technological studies, the humanities, social sciences, and the arts. Education of this type is becoming increasingly important for employment in semi-technical fields such as technical sales, engineering administration, work study, technical writing and information services.

## 400. INDUSTRIAL ARTS—FULL-TIME COURSE

### Bachelor of Science

A four year course of full-time study leading to the degree of Bachelor of Science (pass or honours).

		Hours per week for 2 sessions	
YEAR 1		Lec.	Lab./Tut.
1.011	Higher Physics I <i>or</i> .....	3	3
1.001	Physics I <i>or</i> .....		
1.041	Physics IC .....		
2.001	Chemistry I .....	2	4
5.001	Engineering I .....	3	3
12.001	Psychology I .....	3	2
		<hr/>	
		11	12
		<hr/>	

## YEAR 2

4.911	Materials Science .....	1	$\frac{1}{2}$
12.012	Psychology II .....	3	5
21.011	Industrial Arts I .....	1	2
21.201	Freehand Drawing .....	0	3
58.512	Introduction to Education .....	1	2†

*An elected science subject*

10.001	Mathematics I .....	4	2
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*or*

27.001	Applied Geography I .....	2	4
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## YEAR 3

4.951	Materials Technology .....	2	2
21.012	Industrial Arts II .....	1	3
21.211	Drawing and Design .....	0	2
21.902	Seminar .....	0	1
58.071	Methods of Teaching IA .....	2	1†
58.513	Education IA* .....	2 $\frac{1}{2}$	2
	General Studies .....	1	$\frac{1}{2}$

*An elected science subject*

10.111A	Pure Mathematics II—Algebra		
10.111B	Pure Mathematics II—Analysis		
10.211A	Applied Mathematics II—		
	Mathematical Methods	4 $\frac{1}{2}$	1 $\frac{1}{2}$

*or*

27.002	Applied Geography II .....	2	4
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\*In 1973 58.402/1 Education IIA, Part 1 will be taken in place of 58.513 Education IA.

†School experience including teaching practice will be additional to these hours.

## YEAR 4\*

## Hours per week for 2 sessions

		Lec.	Lab./Tut.	
21.013	Industrial Arts III .....	2	—	3
21.903	Project .....	0	—	3
58.072	Methods of Teaching IIA .....	2	—	1‡
58.514	Education IIA .....	2	—	2
<i>An elected science subject</i>				
10.111C	Pure Mathematics II—Abstract Algebra			
10.112D	Pure Mathematics III—Set Theory			
10.212A	Applied Mathematics III—Numerical Analysis <i>plus</i> one of 10.112C, 10.112E or 10.212D.	6	—	2
	<i>or</i>			
27.043	Geography IIIA .....	3	—	3
	<i>or</i>			
12.013	Psychology III† .....	4	—	5

\*The new syllabus does not apply to students enrolled in Year 4 in 1973. Please consult 1972 Calendar for course outline.

## INDUSTRIAL ARTS—PART-TIME COURSE

## Bachelor of Science (Technology)

This course is being progressively discontinued. Students should consult pages B319-B320 in the 1972 Calendar for the course outline.

## 557. INDUSTRIAL DESIGN GRADUATE COURSE

## (Graduate Diploma)

The Department of Industrial Arts offers a postgraduate course in Industrial Design leading to the award of a Graduate Diploma. The course provides a broad education in industrial design for those students who hold first degrees. Although it is expected that students will, in general, come from the professions of engineering and architecture, the course has been so structured that graduates with the necessary talents and interests from other disciplines are provided for. According to demand, the course may be available on a full-time basis over one year or on a part-time basis over two years.

† Students are required to undertake such additional field work and clinical studies, averaging 2 hours per week, as may be prescribed by the Head of the School of Applied Psychology.

‡ School experience including teaching practice will be additional to these hours.



## PART-TIME COURSE

YEAR 1		Hours per week for 2 sessions
21.501/1G	Industrial Design .....	4
21.511/1G	Design Projects .....	3
21.521/1G	Seminar .....	1
21.531/1G	Creative Art Elective .....	3
		<hr/> 11
		<hr/>
YEAR 2		
21.501/2G	Industrial Design .....	4
21.511/2G	Design Projects .....	3
21.521/2G	Seminar .....	1
21.531/2G	Creative Art Elective .....	3
		<hr/> 11
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## SCHOOL OF LIBRARIANSHIP

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The School of Librarianship offers postgraduate training leading to the Diploma in Librarianship (DipLib), the Diploma in Archives Administration (DipArchivAdmin) and the degree of Master of Librarianship (MLib).

### DIPLOMA COURSES

#### **Progression in School's Diploma Courses**

A candidate who fails in half or more of his subjects will not be permitted to re-enrol unless the Higher Degree Committee of the Board of Vocational Studies grants permission because it considers the circumstances to be exceptional.

#### **559. DIPLOMA IN LIBRARIANSHIP**

The course for the Diploma in Librarianship is designed to provide university graduates with a basic education in librarianship and some opportunity to specialize. Candidates must hold a degree, other than in Librarianship, from the University of New South Wales or other approved University, and those enrolling in the two School Libraries subjects must also hold a Diploma in Education or a qualification accepted by the Higher Degree Committee of the Board of Vocational Studies as equivalent. The University is unable, at this stage, to provide facilities for all eligible applicants, and admission is, therefore, competitive.

The course is a one-year full-time programme. In 1971 a revised programme was introduced and is known as the 1971 Course.

#### **The 1970 Course**

Details of the 1970 Course, which is being progressively discontinued, are given in the 1970 Calendar. Students registered for the diploma prior to 1971 will be able to satisfy requirements by completing 1970 Course subjects still being offered, or appropriate 1971 Course subjects approved by the Board of Vocational Studies. 1970 Course students must undertake the maximum number of compulsory subjects possible within their programme.

#### **The 1971 Course**

Students registering from 1971 onwards will undertake this course. It is made up of five compulsory subjects, four optional subjects and an assignment on an approved topic. The selection of optional subjects must be approved by the Head of the School of

Librarianship, and must generally include two from Group I and two from Group II (55.385 School Libraries I and 55.386 School Libraries II count as three subjects).

### FULL-TIME PROGRAMME\*

YEAR 1		Hours per session	Hours per week
Compulsory		SESSION 1	SESSION 2
55.112	Libraries and Information	42	0
55.114	Communication and Record	42	0
55.122	Library Materials Selection and Organization	56	5
55.123	Reference Service and Materials	56	0
55.124	Library Administration	14	2
55.991	General Assignment	0	0
Optional†			
<i>Group I</i>			
55.231	Subject Bibliography: The Humanities	0	2
55.232	Subject Bibliography: The Social Sciences	0	2
55.233	Subject Bibliography: Pure and Applied Sciences	0	2
55.236	Subject Bibliography: Law (Co-requisite 55.238)	0	2
55.238	Subject Bibliography: Government Publications	0	2
55.371	Literature for Young People	0	2
<i>Group II</i>			
55.362	Mechanized Systems for Libraries	0	2
55.373	Public Libraries	0	2
55.378	University and College Libraries	0	2
55.381	Special Libraries	0	2
55.385	School Libraries I (Co-requisites 55.371, 55.386)	0	3
55.386	School Libraries II (Co-requisites 55.371, 55.385)	0	3

### 560. DIPLOMA IN ARCHIVES ADMINISTRATION

The course for the Diploma in Archives Administration is designed to provide education in the principles and methods of the administration of archives and allied materials, including current records and collections of manuscripts.

\* In addition to formal course work there will be occasional field excursions, and students taking 55.385 and 55.386 will be required to serve an attachment to a public library and a school library for the equivalent of 4 hours weekly, or a 4-week block if totally outside of session.

† Not all the optional subjects will necessarily be available each year.

Candidates must hold a degree from the University of New South Wales or any other approved university. Candidates who have not studied Australian history and politics may be required to take a qualifying or concurrent programme approved by the Board of Vocational Studies.

Each candidate will complete the programme of study which may be taken as a full-time course in one year or as a part-time course over two years. Both are day-time courses.

In addition to formal course work there may be excursions to relevant institutions.

		Hours per week	
		SESSION 1	SESSION 2
<b>FULL-TIME</b>			
55.123	Reference Service and Materials .....	4	—
55.238	Subject Bibliography: Government Publications .....	—	2
55.712	Archives Theory and History .....	4	4
55.713	Archives Administration .....	4	7
55.714	Information Environment for Archivists and any one of .....	3	—
55.231	Subject Bibliography: The Humanities .....	—	2
55.232	Subject Bibliography: The Social Sciences .....	—	2
55.233	Subject Bibliography: Pure and Applied Sciences .....	—	2
55.236	Subject Bibliography: Law .....	—	2
		15	15
		—	—
<b>PART-TIME</b>			
<b>YEAR 1</b>			
55.123	Reference Service and Materials .....	4	—
55.238	Subject Bibliography: Government Publications .....	—	2
55.712	Archives Theory and History .....	4	4
	and any one of .....		
55.231	Subject Bibliography: The Humanities .....	—	2
55.232	Subject Bibliography: The Social Sciences .....	—	2
55.233	Subject Bibliography: Pure and Applied Sciences .....	—	2
55.236	Subject Bibliography: Law .....	—	2
		8	8
		—	—
<b>YEAR 2</b>			
55.713	Archives Administration .....	4	7
55.714	Information Environment for Archivists .....	3	—
		7	7
		—	—

**MASTER OF LIBRARIANSHIP (MLib) (BY RESEARCH)****Conditions**

1. The degree of Master of Librarianship (by research) may be awarded by the Council on the recommendation of the Professorial Board to a candidate who has demonstrated ability to undertake research by the submission of a thesis embodying the results of an original investigation.
2. *Qualifications*
  - (i) An applicant for registration for the degree shall—
    - (a) have been admitted to an appropriate degree in the University of New South Wales or other approved University at a level approved by the Higher Degree Committee of the Board of Vocational Studies (hereinafter referred to as the Committee) and
    - (b) hold the Diploma in Librarianship of the University of New South Wales or possess a qualification accepted by the Committee as equivalent.
  - (ii) In exceptional cases an applicant may be permitted to register as a candidate for the degree if he submits evidence of such academic and professional attainments as may be approved by the Committee.
  - (iii) Notwithstanding any other provisions of these conditions the Committee may require an applicant to demonstrate fitness for registration by carrying out such work and sitting for such examinations as the Committee may determine.
  - (iv) In every case before permitting an applicant to register as a candidate the Committee shall be satisfied that adequate supervision and facilities are available.
3. *Registration*
  - (i) An application to register as a candidate shall be made on the prescribed form which shall be lodged with the Registrar at least six (6) weeks before the commencement of the session in which the candidate desires to commence registration.
  - (ii) An applicant shall enrol in one of the following categories—
    - student in full-time attendance at the University;
    - student in part-time attendance at the University;
    - student working externally to the University.

In all cases the proposed course of study shall be submitted to the Head of the School of Librarianship for approval.

- (iii) A candidate shall be required to undertake an original investigation on a topic approved by the Committee. A candidate may also be required to perform other work as may be prescribed by the Committee. The Committee shall determine the maximum period of registration.
- (iv) The progress of a candidate shall be reviewed annually by the Committee on the recommendation of the Head of the School of Librarianship and as a result of such review the Committee may terminate the candidature.
- (v) No candidate shall be considered for the award of the degree until the lapse of three complete sessions in the case of a full-time candidate or four complete sessions in the case of a part-time or external candidate from the date from which registration becomes effective.
- (vi) Notwithstanding clause 3 (v) above, the Committee may approve remission of up to one session for a full-time candidate or two sessions for a part-time or external candidate.

#### 4. *Thesis*

- (i) A candidate for the degree shall be required to submit three copies of a thesis embodying the results of the original investigation referred to in 3 (iii) above. The thesis shall be presented in a form which complies with the requirements of the University for the preparation and submission of higher degree theses.
- (ii) It shall be understood that the University retains the three copies of the thesis submitted for examination and is free to allow the thesis to be consulted or borrowed. Subject to the provisions of the Copyright Act, 1968 the University may issue the thesis in whole or in part, in photostat or microfilm or other copying medium.

#### 5. *Examination*

- (i) A candidate shall give in writing two months' notice of his intention to submit his thesis and such notice shall be accompanied by the appropriate fee.
- (ii) For each candidate there shall be at least two examiners appointed by the Committee, one of whom shall be an external examiner.

- (iii) A candidate may be required to attend for an oral or written examination.
- (iv) Consequent upon consideration of the examiners' reports the Committee shall recommend to the Professorial Board whether the candidate may be admitted to the degree.

#### 6. *Fees*

An approved candidate shall pay such fees as may be determined from time to time by the Council.

### MASTER OF LIBRARIANSHIP (MLib) (BY FORMAL COURSE WORK)

#### Conditions

1. The degree of Master of Librarianship (by formal course work) may be awarded by the Council on the recommendation of the Professorial Board to a candidate who has satisfactorily completed a programme of advanced study comprising formal course work and including the submission of a report on a project approved by the Higher Degree Committee of the Board of Vocational Studies (hereinafter referred to as the Committee).

#### 2. *Qualifications*

- (i) An applicant for registration for the degree shall—
  - (a) have been admitted to an appropriate degree in the University of New South Wales or other approved University at a level approved by the Committee, and
  - (b) hold the Diploma in Librarianship of the University of New South Wales or possess a qualification accepted by the Committee as equivalent.
- (ii) In exceptional cases an applicant may be permitted to register as a candidate for the degree if he submits evidence of such academic and professional attainments as may be approved by the Committee.
- (iii) Notwithstanding any other provisions of these conditions the Committee may require an applicant to demonstrate fitness for registration by carrying out such work and sitting for such examinations as the Committee may determine.

### 3. *Registration*

- (i) An application to register as a candidate shall be made on the prescribed form which shall be lodged with the Registrar at least six (6) weeks before the commencement of the session in which the candidate desires to commence registration.
- (ii) A candidate for the degree shall be required to undertake such course of formal study, pass such examinations and submit a report on a project, as prescribed by the Committee.
- (iii) No candidate shall be considered for the award of the degree until the lapse of two sessions in the case of a full-time candidate or four sessions in the case of a part-time candidate from the date from which registration becomes effective. The Committee may approve remission of up to two sessions for a part-time candidate.
- (iv) The progress of a candidate shall be reviewed annually by the Committee on the recommendation of the Head of the School of Librarianship and as a result of such review the Committee may terminate the candidature.

### 4. *Project*

- (i) A report on a project approved by the Committee may be submitted at the completion of the formal section of the course, but in any case shall be submitted not later than one year after the completion of such course.
- (ii) The format of the report shall accord with the instructions of the Head of School and shall comply with the requirements of the Committee for the submission of project reports.
- (iii) (a) The report shall be examined by two examiners appointed by the Committee.  
(b) A candidate may be required to attend for an oral or written examination.

### 5. *Recommendation for Admission to Degree*

Consequent upon consideration of the examiners' reports and the candidate's other results in the prescribed course of study, the Committee shall recommend to the Professorial Board whether the candidate may be admitted to the degree.

### 6. *Fees*

An approved candidate shall pay such fees as may be determined from time to time by the Council.



## MASTER OF LIBRARIANSHIP COURSES

As the University's facilities are limited, admission may be competitive.

Not all subjects will necessarily be available each year.

### 298. MASTER OF LIBRARIANSHIP (BY RESEARCH)

In addition to the thesis requirement, each candidate will complete the following two subjects to be taken in one year:

		Hours per week	
		Session 1	Session 2
55.805G	Issues in Librarianship .....	0	2
55.807G	Research Methods in Librarianship .....	2	0

### 892. MASTER OF LIBRARIANSHIP (BY FORMAL COURSE WORK)

Advanced training in librarianship by formal course work is designed to provide education in broad areas of specialization beyond the basic professional level. The present programme of study provides a course for those who will specialize in the application of principles to the organization and management of libraries and library departments.

Each candidate will complete the programme of study which may be taken on a full-time basis in one year and on a part-time basis over two years.

In addition to the formal course work, each candidate will be required to submit a report on a project (55.901G) involving individual study and investigation.

There may be occasional field excursions at times to be arranged.

#### FULL-TIME PROGRAMME

		Hours per week	
		Session 1	Session 2
33.501G	Organization and Management Theory*	2	2
33.502G	Behavioural Science*	2	2
55.801G	Library and Information Services Management A .....	2	2
55.803G	Library and Information Services Management B .....	2	2
55.805G	Issues in Librarianship .....	0	2
55.807G	Research Methods in Librarianship .....	2	0
55.901G	Project Report		

\* Subject offered by the Graduate School of Business as part of the requirements for the Diploma in Administration.

**PART-TIME PROGRAMME****YEAR 1**

33.501G	Organization and Management Theory* ..	2	2
33.502G	Behavioural Science* .....	2	2
55.801G	Library and Information Services Management A .....	2	2

**YEAR 2**

55.803G	Library and Information Services Management B .....	2	2
55.805G	Issues in Librarianship .....	0	2
55.807G	Research Methods in Librarianship .....	2	0
55.901G	Project Report		

\* Subject offered by the Graduate School of Business as part of the requirements for the Diploma in Administration.

## SCHOOL OF SOCIAL WORK

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The School of Social Work offers a course leading to the degree of Bachelor of Social Work. The degree of Master of Social Work (MSW) is also available, and may be undertaken by course work or by research.

### BACHELOR OF SOCIAL WORK (BSW)

This undergraduate course may be taken full-time over four years or part-time over six years. It is designed to prepare students for the professional practice of social work.

The social work profession is primarily focused on problems in man's social relationships — in his interaction with other human beings and with man-made structures. The profession is concerned with the patterns, directions, quality, and outcomes of man's social relationships. It seeks to enhance social functioning by directing its attention both to the capacity of individuals, groups, organizations and communities for effective interaction, and to the contribution of socially-provided resources to social functioning.

Through their professional education, social work practitioners share common knowledge, values and skills. To become a professional person, the social work student needs to be as well informed about broad social welfare problems, policies and provision, and individual, group and sociocultural determinants of behaviour, as he is skilful in the use of social work methods. Members of the profession are particularly concerned that all people are treated with understanding and respect, especially those who are experiencing difficulties in their social living.

The objective of the course is to lay the ground-work for a variety of professional social work tasks. It is concerned with general approaches to problem-solving on a basis of scientific knowledge, professionally accepted values, and skills in interpersonal relations. While each student learns about all the main social work methods—social casework, social group work, community work, administration, and research—special care is taken to ensure that he acquires initial professional competence in at least one. In the later stages of the course the student concentrates upon the professional method of his choice.

The School provides opportunities, both in its regular subjects and in occasional special courses, for experienced social workers to keep abreast of educational developments in their specialized field, or method of work, or in some other field or method in which they have new responsibilities.

### *Field Education*

A fundamental aspect of the course is supervised learning in the field, and this is in fact a basic requirement for the professional recognition of the degree. In the field instruction subjects—Social Work Practice IB, Social Work Practice IIB, and Social Work Practice IIIB—a student is under the supervision of a field instructor of the School, usually in a social work agency, while he learns to apply the principles of professional practice in an actual practice setting. From half-way through second year or the third stage of the part-time course, a total of 178 seven-hour days are taken up in this way. About half of these days are scheduled during academic recess periods. A student's four field work placements will be in more than one type of social work setting. Some of the settings used are: medical, psychiatric, family and child welfare, services to the aged, and corrective services. Non-government agencies and agencies at all levels of government are included in the programme.

### *Admission to the Course*

Students should note that lack of facilities has caused restriction on entry to the course. Part-time students admitted are expected to have time available beyond that required by formal class attendance. **Both the full-time and part-time courses are day courses.**

### *Progression*

Except with the permission of the Head of School, a student may not proceed to the next year of the full-time course, or the next stage of the part-time course, until he has fulfilled all the requirements of the previous year or stage.

### *Honours*

An Honours degree is awarded for superior performance throughout the course, with greater weight being given to later years. There are three classes of Honours—First, Second (Division 1), and Second (Division 2).

## 403. SOCIAL WORK—FULL-TIME COURSE

## Bachelor of Social Work

## YEAR 1

## Hours per week

		First Session	Second Session
12.001	Psychology I .....	5	— 5
53.111	Sociology I .....	3	— 3
63.001	Australian Social Organization .....	3	— 3
	and one other subject approved as counting towards the B.A. degree.		

## YEAR 2

63.412	Social Philosophy and Policy .....	3	— 3
63.421	Social Welfare Systems I .....	3	— —
63.511	Human Behaviour I .....	6	— 3
63.611A	Social Work Practice IA .....	4	— 4
63.611B	Social Work Practice IB .....	—	— *
	General Studies Elective .....	1½	— 1½

\* 2-week block in mid-year recess + 2 days a week (no recess) for second half of the academic year—42 days (294 hours).

## YEAR 3

63.422	Social Welfare Systems II .....	4	— 4
63.512	Human Behaviour II .....	4	— 4
63.612A	Social Work Practice IIA .....	4	— 4
63.612B	Social Work Practice IIB .....	—*	—
63.621	Social Work Research Methods I .....	—	— 2
	General Studies Elective .....	1½	— 1½

\* 3-week block in February + 2 days a week (no recess) for Session 1—45 days (315 hours).

## YEAR 4

63.423	Social Welfare Systems III .....	4	— 4
63.613A	Social Work Practice IIIA .....	5	— 5
63.613B	Social Work Practice IIIB .....	—*	—*
63.622	Social Work Research Methods II .....	2	— —
	General Studies Elective** .....	1½	— 1½

\* Part 1: 8-week block in January and February—40 days (280 hours).  
Part 2: 3-week block in mid-year recess + 2 days a week (no recess) until the end of November (1 week break for examinations)—51 days (357 hours).

\*\*Not required of students who entered the course prior to 1972.

## 403. SOCIAL WORK—PART-TIME DAY COURSE

## Bachelor of Social Work

STAGE 1		Hours per week	
		First Session	Second Session
12.001	Psychology I .....	5	— 5
53.111	Sociology II .....	3	— 3
63.001	Australian Social Organization .....	3	— 3

## STAGE 2

63.412	Social Philosophy and Policy .....	3	— 3
	General Studies Elective* .....	1½	— 1½
	and one other subject approved as counting towards the BA degree.		

\* Not required of students who entered the course prior to 1972.

## STAGE 3

63.421	Social Welfare Systems I .....	3	— —
63.511	Human Behaviour I .....	6	— 3
63.611A	Social Work Practice IA .....	4	— 4
63.611B	Social Work Practice IB .....	—	— *

\* 2-week block in mid-year recess + 2 days a week (no recess) for Session 2 of the academic year—42 days (294 hours).

## STAGE 4

63.422	Social Welfare Systems II .....	4	— 4
63.512	Human Behaviour II .....	4	— 4
	General Studies Elective .....	1½	— 1½

## STAGE 5

63.612A	Social Work Practice IIA .....	4	— 4
63.612B	Social Work Practice IIB .....	—*	— —
63.621	Social Work Research Methods I .....	—	— 2
	General Studies Elective .....	1½	— 1½

\* 3-week block in February + 2 days a week (no recess) for Session 1—45 days (315 hours).

## STAGE 6

63.423	Social Welfare Systems III .....	4	— 4
63.613A	Social Work Practice IIIA .....	5	— 5
63.613B	Social Work Practice IIIB .....	—*	— *
63.622	Social Work Research Methods II .....	2	— —

\*Part 1: 8-week block in January and February—40 days (280 hours).

Part 2: 3-week block in mid-year recess + 2 days a week (no recess) until the end of November (1 week break for examinations)—51 days (357 hours).

## MASTER OF SOCIAL WORK

The degree of Master of Social Work may be undertaken by research or by formal course work.

The primary requirement for the research degree is the submission of a thesis embodying the results of an original investigation. Candidates are also required to complete the subjects 63.807G Social Policy Analysis and 63.814G Social Planning.

The course work Master's degree is designed to extend the professional knowledge of qualified social workers. Candidates may specialize either in interpersonal helping or in community work and administration. The course will be offered on a full-time basis in 1973, but may in the future be available over two years of part-time study.

### Conditions for the Award of the Degree of Master of Social Work (MSW) by Formal Course Work

1. The degree of Master of Social Work (by formal course work) may be awarded by the Council on the recommendation of the Professorial Board to a candidate who has satisfactorily completed a programme of advanced study comprising formal course work and including the submission of a report on a project approved by the Higher Degree Committee of the Board of Vocational Studies (hereinafter referred to as the Committee).
2. *Qualifications*
  - (i) An applicant for registration for the degree shall—
    - (a) at a level approved by the Committee, have been admitted to the degree of Bachelor of Social Work in the University of New South Wales, or hold equivalent qualifications accepted by the Committee; and
    - (b) have had at least one year's professional experience acceptable to the Committee.
  - (ii) In exceptional cases an applicant may be permitted to register as a candidate for the degree if he submits evidence of such academic and professional attainments as may be approved by the Committee.
  - (iii) Notwithstanding any other provisions of these conditions the Committee may require an applicant to demonstrate fitness for registration by carrying out such work and sitting for such examinations as the Committee may determine.

### 3. *Registration and Candidature*

- (i) An application to register as a candidate shall be made on the prescribed form which shall be lodged with the Registrar at least six weeks before the commencement of the session in which the candidate desires to commence.
- (ii) A candidate for the degree shall be required to undertake such course of formal study, submit a report on a project, and pass such examinations as prescribed by the Committee.
- (iii) The progress of a candidate shall be reviewed annually by the Committee on the recommendation of the Head of the School of Social Work and as a result of such review the Committee may terminate the candidature.

### 4. *Project*

- (i) The report on the project approved by the Committee may be submitted at the completion of the formal section of the course, but in any case shall be submitted not later than one session after the completion of such course.
- (ii) The format of the report shall accord with the instructions of the Head of the School of Social Work and shall comply with the requirements of the Committee for the submission of project reports.
- (iii) (a) The report shall be examined by two examiners appointed by the Committee.  
(b) A candidate may be required to attend for an oral or written examination.

### 5. *Recommendation for Admission to Degree*

Consequent upon consideration of the examiners' reports and the candidate's other results in the prescribed course of study, the Committee shall recommend to the Professorial Board whether the candidate may be admitted to the degree.

### 6. *Fees*

An approved candidate shall pay such fees as may be determined from time to time by Council.

## 893. MASTER OF SOCIAL WORK

### YEAR 1—SESSION 1

	Hours per week
63.622 Social Work Research Methods II .....	2
*63.801G Advanced Social Work Practice I (Interpersonal Helping) .....	4
or	

\*To be taken only by students specialising in Interpersonal Helping.



*63.803G	Advanced Social Work Practice I (Community Work and Administration)	4
63.805G	Issues for the Social Work Profession	1
63.806G	Behavioural Science Seminar	1
63.807G	Social Policy Analysis	2
63.808G	Interpersonal Competence Seminar	1
63.809G	Project	7
		<hr/>
		18

**YEAR 1—SESSION 2**

*63.802G	Advanced Social Work Practice II (Interpersonal Helping)	4
<i>or</i>		
†63.804G	Advanced Social Work Practice II (Community Work and Administration)	4
63.808G	Interpersonal Competence Seminar	1
63.809G	Project	7
63.811G	Practice Theory and Social Welfare Organisation	2
63.812G	Project Seminar	2
*63.813G	Practice Applications of Contemporary Behavioural Science	2
<i>or</i>		
†63.814G	Social Planning	2
		<hr/>
		18

\* To be taken only by students specialising in Interpersonal Helping.

† To be taken only by students specialising in Community Work and Administration.

### **Conditions for the Award of the Degree of Master of Social Work (MSW) by Research**

1. The degree of Master of Social Work (by research) may be awarded by the Council on the recommendation of the Professorial Board to a candidate who has demonstrated ability to undertake research by the submission of a thesis embodying the results of an original investigation, and who has completed a prescribed programme of advanced study extending over one academic year.

#### **2. Qualifications**

- (i) An applicant for registration for the degree shall—
  - (a) have been admitted to the degree of Bachelor of Social Work at honours standard in the University of New South Wales, or hold equivalent qualifications, or
  - (b) have been admitted to the degree of Bachelor of Social Work in the University of New South Wales or hold equivalent qualifications accepted by the

Higher Degree Committee of the Board of Vocational Studies (hereinafter referred to as the Committee) at a level approved by the Committee; and shall have had at least one year's professional experience acceptable to the Committee.

- (ii) In exceptional cases an applicant may be permitted to register as a candidate for the degree if he submits evidence of such academic and professional attainments as may be approved by the Committee.
- (iii) Notwithstanding any other provisions of these conditions the Committee may require an applicant to demonstrate fitness for registration by carrying out such work and sitting for such examinations as the Committee may determine.
- (iv) In every case before permitting an applicant to register as a candidate the Committee shall be satisfied that adequate supervision and facilities are available.

### 3. *Registration and Candidature.*

- (i) An application to register as a candidate shall be made on the prescribed form which shall be lodged with the Registrar at least six (6) weeks before the commencement of the session in which the candidate desires to commence registration.
- (ii) An applicant shall enrol in one of the following categories:
  - student in full-time attendance at the University
  - student in part-time attendance at the University
  - student working externally to the University.
- (iii) In all cases the proposed course of study shall be submitted to the Head of the School of Social Work for approval.
- (iv) Every candidate for the degree shall be required
  - (a) to prepare and submit a thesis on a topic approved by the Committee, embodying the results of an original investigation; and
  - (b) to carry out a prescribed programme of advanced study extending over one year, as approved by the Committee.
- (v) The progress of a candidate shall be reviewed annually by the Committee on the recommendation of the head of the School of Social Work and as a result of such review the Committee may terminate the candidature.

- (vi) Unless permission to the contrary has been granted, a full-time candidate shall be required to submit his thesis not earlier than three sessions, and not later than four sessions, from the date of registration; a part-time candidate, not earlier than four sessions, and not later than six sessions, from the date of registration.

#### 4. *Thesis*

- (i) A candidate for the degree shall be required to submit three copies of a thesis embodying the results of the original investigation referred to in 3 (iv) above. The thesis shall be presented in a form which complies with the requirements of the University for the preparation and submission of higher degree theses.
- (ii) It shall be understood that the University retains the three copies of the thesis submitted for examination and is free to allow the thesis to be consulted or borrowed. Subject to the provisions of the Copyright Act, 1968, the University may issue the thesis in whole or in part, in photostat or microfilm or other copying medium.

#### 5. *Examination*

- (i) A candidate shall give in writing two months' notice of his intention to submit his thesis and such notice shall be accompanied by the appropriate fee.
- (ii) For each candidate there shall be at least two examiners appointed by the Committee, one of whom shall be an external examiner.
- (iii) A candidate may be required to attend for an oral or written examination.
- (iv) Consequent upon consideration of the examiners' reports the Committee shall recommend to the Professorial Board whether the candidate may be admitted to the degree.

#### 6. *Fees*

An approved candidate shall pay such fees as may be determined from time to time by the Council.



# DESCRIPTION OF SUBJECTS

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*For General Studies booklists and descriptions of subjects please consult General Studies handbook which is available free of charge.*

## SCHOOL OF PHYSICS

The School of Physics offers most courses at lower and higher levels. The following descriptions refer to lower level courses. A student may substitute a corresponding higher level course, provided that the prerequisites and co-requisites are satisfied.

### 1.001 Physics I

Aims and nature of physics and the study of motion of particles under the influence of mechanical, electrical, magnetic and gravitational forces. Concepts of force, inertial mass, energy, momentum, charge, potential, fields. Application of the conservation principles to solution of problems involving charge, energy and momentum. Electrical circuit theory application of Kirchoff's Laws to AC and DC circuits. Uniform circular motion, Kepler's Laws and Rotational mechanics.

The application of wave and particle theories in physics. A review of the atomic theory of matter and the structure and properties of atomic nuclei. A molecular approach to energy transfer, kinetic theory, gas laws and calorimetry. The wave theories of physics, transfer of energy by waves, properties of waves. Application of wave theories to optical and acoustical phenomena such as interference, diffraction and polarisation. Interaction of radiation with matter, photoelectric effect, Compton effect, spectroscopy. Resolution of the wave—particle paradox by means of wave mechanics and the uncertainty principle.

### TEXTBOOK

Bueche, F. *Introduction to Physics for Scientists and Engineers*. McGraw-Hill.

### REFERENCE BOOKS

Ference, M., Lemon, H. and Stephenson, R. J. *Analytical Experimental Physics*. Chicago U.P.

Halliday, D. and Resnick, R. *Physics for Students of Science and Engineering*. Vols. I and II, Wiley.

Wiedner, R. T. V. and Sells, R. L. *Elementary Classical Physics*. Vols. I and II, Allyn & Bacon.

**1.112A, 1.112B, 1.112C****PREREQUISITES**

1.001 Physics I and 10.001 Mathematics I.

**CO-REQUISITE**

10.211A Mathematical Methods. (A course of special lectures may be substituted for this co-requisite at the discretion of the Head of the School of Physics.)

**1.112A Electromagnetism (Session 2)**

Electrostatics in vacuum and in dielectrics. Magnetostatics in vacuum and in magnetic materials. Maxwell's equations and simple applications.

**TEXTBOOK**

Reitz, J. R. and Milford, F. J. *Foundation of Electromagnetic Theory*. 2nd ed. Addison-Wesley.

**1.112B Modern Physics (Session 1)**

Special relativity. Quantum theory. Schrödinger wave equation and simple applications. Atomic and nuclear physics. Nuclear reactions.

**TEXTBOOK**

Beiser, A. *Perspectives of Modern Physics*. rev. ed. McGraw-Hill, 1969.

**1.112C Waves in Continuous Media and Thermodynamics (Whole Year)**

*Waves in continuous media*: oscillations and forced vibrations. Fourier analysis, travelling waves and wave packets. *Thermodynamics*: First and second laws of thermodynamics. Thermodynamic functions and simple applications. Statistical foundations of thermodynamics.

**TEXTBOOKS**

French, A. P. *Vibrations and Waves*. Nelson, 1971.

Mandl, F. *Statistical Physics*. Wiley, 1971.

**1.113A Wave Mechanics and Spectroscopy****PREREQUISITE**

1.112B

**CO-REQUISITE**

1.112C

Concepts; harmonic oscillator; uncertainty principle; the free particle; barriers, the hydrogen atom, many electron atoms, removal of degeneracy; spectroscopy; molecules; periodic potentials; band structure; perturbations.

**TEXTBOOK**

Beiser, A. *Perspectives of Modern Physics*. rev. ed. McGraw-Hill, 1969.

**1.113C Statistical Mechanics and Solid State****PREREQUISITES**

1.112B

**CO-REQUISITES****1.113A, 1.112C**

Thermodynamic potentials, ensembles and partition functions, lattice vibrations, the grand canonical ensemble, Pauli exclusion principle, Bose-Einstein and Fermi-Dirac distributions.

Structure of crystals, imperfections, specific heat. Band theory of solids, semiconductors.

**TEXTBOOKS**

Blakemore, J. S. *Solid State Physics*. Saunders, 1969.

Jackson, E. A. *Equilibrium Statistical Mechanics*. Prentice-Hall, 1968.

**1.113D Astrophysics and Nuclear Physics****PREREQUISITES****1.112B, 1.113A.**

The observational environment, optical astronomy, radio astronomy, X-ray astronomy, stellar evolution, radio sources, the sun. Detecting instruments and accelerators for nuclear particles, radioactive processes, nuclear reactions, angular distributions, mesons, baryons, excited nuclear states.

**TEXTBOOK**

Taylor, R. J. *The Stars, Their Structure and Evolution*. Wyneham Science Series.

**1.143D Conceptual Framework of Physics****PREREQUISITES**

1.112A, 1.112B & 1.112C (this last unit may be taken as a co-requisite in special cases).

Physics and Metaphysics: The place of speculation in theory formation. Space and Time: Systems of coordinates, the nature and arrow of time, parity, micro causality. Fundamental Physical Phenomena: The fundamental phenomena on which physical theories have been based; electrical, gravitational, inertial nuclear and entropy/probability. Field Theory: In particular e.m. and gravitational field theory. Mathematical formalization of physical phenomena, action at a distance, field propagation, field energy, connection to relativity. Relativity: The fundamental postulates, simultaneity, limiting speeds, connection with field theory, mass and energy. Relationship between Micro- and Macro-Cosmos: Divisibility of matter (molecules, atoms, nuclei, nucleon), matter and anti matter, statistical nature of the behaviour of large aggregates or systems, the concept of entropy, the second law of thermodynamics. The place of determinism in physics. Matter and Energy: Conservation laws, inertial mass, equivalence principle, field energy, spatial delimitation of material particles. Theory of Quantum Processes: Granularity effects, uncertainty principle, effects of measurements, virtual processes. Determinism vs. indeterminism in physics, application to nuclear phenomena.

**TEXTBOOKS**

No prescribed textbooks.

### 1.113Z Techniques and Design for Experimental Physics

Individual investigation to develop essential practical skills such as electronic assembly and glass-blowing. Individual or small group projects to solve associated practical and theoretical problems. This unit is a preparation for experimental research and is especially aimed to equip prospective physics teachers to devise experiments and design equipment.

#### TEXTBOOKS

No prescribed textbooks.

N.B. An alternative level III Physics Unit may be substituted for 1.113A, C or D with the approval of the Head of the School of Physics.

## SCHOOL OF CHEMISTRY

### 2.001 Chemistry I

Classification of matter and theories of the structure of matter. Atomic structure, the periodic table and chemical behaviour. Chemical bonds and molecular structure. Equilibrium and change in chemical systems. The structure, nomenclature and properties of organic compounds. Reactions of organic compounds.

#### TEXTBOOKS

Aylward, G. A. and Findlay, T. J. V. *SI Chemical Data*. John Wiley & Sons, Sydney, 1971.

*Chemistry I—Laboratory Manual*. University of N.S.W., 1974.

Kneen, W. R., Rogers, M. J. W. and Simpson, P. *Chemistry—Facts, Patterns and Principles*. Addison-Wesley, London, 1972.

Schaum Outline Series. *Theories and Problems of College Chemistry*. SI (metric) ed. McGraw-Hill.

#### REFERENCE BOOKS

Barrow, G. M., Kenney, M. E., Lasila, J. D., Litle, R. L. and Thompson, W. E. *Understanding Chemistry*. Benjamin, N.Y., 1969.

Brown, G. I. *A New Guide to Modern Valency Theory*. Longmans, 1967.

Eastwood, F. W., Swan, J. M. & Yonatt, J. B. *Organic Chemistry. A First University Course in Twelve Programs*. Science Press, 1967.

Gray, H. B. & Haight, G. P. *Basic Principles of Chemistry*. Benjamin, 1967.

Pauling, L. *College Chemistry*. 3rd ed. Freeman, 1964.

Runquist, O., Cresswell, C. J. & Head, J. T. *Chemical Principles. A Programmed Text*. Burgess, 1968.

Sisler, H. H., Van der Werf, C. A. & Davidson, A. W. *College Chemistry*. 3rd ed. Collier-Macmillan, 1967.

Vogel, A. I. *Macro and Semimicro Qualitative Analysis*. 4th ed. Longmans, 1954.



**2.002A Chemistry II (Physical Chemistry)**

Quantum mechanics; molecular energy and thermodynamics; chemical application of thermodynamics; surface and colloid chemistry.

**TEXTBOOKS**

- Aylward, G. H. and Findlay, T. J. V. *SI Chemical Data*, Wiley, 1971.  
Barrow, G. M. *Physical Chemistry*. 3rd ed., McGraw-Hill, 1973.  
Shaw, D. J. *Introduction to Colloid and Surface Chemistry*. 2nd ed. Butterworths, 1970.

**REFERENCE BOOKS**

- Adamson, A. W. *Textbook of Physical Chemistry*. Academic, 1973.  
Alexander, A. E. & Johnson, P. *Colloid Science*. Oxford, 1950.  
Barrow, G. M. *Structure of Molecules*. Benjamin, 1963.  
Daniels, F. & Alberty, R. A. *Physical Chemistry*. 3rd ed. Wiley, 1966.  
Daniels, F. et al. *Experimental Physical Chemistry*. 7th ed. McGraw-Hill, 1970.  
Glasstone, S. *Textbook of Physical Chemistry*. 2nd ed. Van Nostrand, 1948.  
Moore, W. J. *Physical Chemistry*. 4th or 5th ed. Longmans, 1963 or 1972.  
Shoemaker, D. P. & Garland, C. W. *Experiments in Physical Chemistry*. 2nd ed. McGraw-Hill, 1967.

**PREREQUISITES**

- 2.001 Chemistry I.  
10.001 Mathematics I or 10.011 Higher Mathematics I or 10.021 Mathematics II.  
1.001 Physics I or 1.011 Higher Physics I or 1.041 Physics IC.  
This unit consists of 6 hours per week for one session.

**2.002B Chemistry II (Organic Chemistry)**

Chemistry of the more important functional groups: aliphatic hydrocarbons, monocyclic aromatic hydrocarbons, halides, alcohols, phenols, aldehydes, ketones, ethers, carboxylic acids and their derivatives, nitro compounds, amines, and sulphonic acids.

**TEXTBOOKS**

- Morrison, R. T. and Boyd, R. N. *Organic Chemistry*. 3rd ed. Allyn and Bacon, 1973. International Student edition.  
Vogel, A. I. *Elementary Practical Organic Chemistry, Pt. II. Qualitative Organic Analysis*. Longmans, 1957 (only if proceeding to do 2.003B).

**PREREQUISITES**

- 2.001 Chemistry I.  
10.001 Mathematics I or 10.011 Higher Mathematics I or 10.021 Mathematics II.  
This unit consists of 6 hours per week for one session.

**2.002C Chemistry II (Inorganic/Analytical Chemistry)**

Chemistry of non-metals; chemistry of typical metals; transition metals, lanthanides and actinides; introduction to nuclear chemistry. Quantitative inorganic analysis.

**TEXTBOOKS**

- Fischer, R. B. & Peters, D. G. *Quantitative Chemical Analysis*. Saunders, 1968.  
Jolly, W. I. *The Chemistry of the Non-Metals*. Prentice-Hall, 1966.  
Quagliano, J. V. & Vallarino, I. M. *Coordination Chemistry*. Heath, 1969.

**REFERENCE BOOKS**

- Basolo, F. & Johnson, R. *Coordination Chemistry*. Benjamin, 1964.  
Carswell, D. J. *Introduction to Nuclear Chemistry*. Elsevier, 1967.  
Cotton, F. A. & Wilkinson, G. *Advanced Inorganic Chemistry*. 2nd ed. Wiley, 1966.

**PREREQUISITES**

- 2.001 Chemistry I.  
10.001 Mathematics I or 10.011 Higher Mathematics I or 10.021 Mathematics II.

**2.003A Chemistry III (Physical Chemistry)**

Physico-chemical aspects of spectroscopy—quantum mechanical approach; electronic and vibrational spectra; nuclear magnetic resonance and electron spin resonance spectroscopy. Chemical kinetics—transition state theory; theories of unimolecular reactions; chemistry of excited species.

**TEXTBOOKS**

- Banwell, C. N. *Fundamentals of Molecular Spectroscopy*. 2nd ed. McGraw-Hill, 1972.  
Barrow, G. M. *Physical Chemistry*. 2nd ed., McGraw-Hill, 1966.  
Dixon, R. N. *Spectroscopy and Structure*. Methuen, 1965.  
Laidler, K. J. *Chemical Kinetics*. 2nd ed., McGraw-Hill, 1965.

**REFERENCE BOOKS**

- Benson, S. W. *Thermochemical Kinetics*. Wiley, 1968.  
Calvert, J. G. and Pitts, J. N. *Photochemistry*. Wiley, 1966.  
Carrington, A. and McLachlan, A. D. *Introduction to Magnetic Resonance*. Harper & Row, 1967.  
Daniels, F., et al. *Experimental Physical Chemistry*. 6th or 7th ed. McGraw-Hill, 1962 or 1970.  
Gardiner, W. C. *Rates and Mechanisms of Chemical Reactions*. Benjamin, 1969.  
Glasstone, S., Laidler, K. J. and Eyring, H. *Theory of Rate Processes*. McGraw-Hill, 1941.  
King, G. W. *Spectroscopy and Molecular Structure*. Holt, Rinehart & Winston, 1964.  
Shoemaker, D. P. and Garland, C. W. *Experiments in Physical Chemistry*. 2nd ed. McGraw-Hill, 1967.  
Weston R. E. and Schwarz, H. A. *Chemical Kinetics*. Prentice-Hall, 1972.

**PREREQUISITES**

- 2.002A Physical Chemistry.  
This unit consists of 6 hours per week for one session.

**2.003D Chemistry III (Analytical Chemistry)**

Ionic equilibria in solution; advanced qualitative analysis; advanced electrochemical analysis; advanced spectrophotometry; separations and pre-concentrations.

**TEXTBOOKS**

- Eckschlager, K. (Trans. Ed. R. C. Chalmers). *Errors and Measurement in Chemical Analysis*. Van Nostrand, 1969.  
Ewing, G. W. *Instrumental Methods of Chemical Analysis*. McGraw-Hill, 1969.  
Fischer, R. B. and Peters, D. G. *Quantitative Chemical Analysis*. Saunders, 1968.

**PREREQUISITES**

2.002A Physical Chemistry.

This unit consists of 6 hours per week for one session.

**2.003B Chemistry III (Organic Chemistry)**

Stereochemistry of acyclic systems. *Alicyclic chemistry*: the synthesis and properties of monocyclic systems, conformational aspects of cyclohexane and related systems, rearrangement reactions and the chemistry of fused and bridged polycyclic compounds.

*Heterocyclic chemistry*: the chemistry of pyridine, quinoline, isoquinoline, and benzopyran and its derivatives. The chemistry of pyrrole, furan, and thiophene and their benzo derivatives. The chemistry of pyrimidine, imidazole, and pyrazole.

**TEXTBOOKS**

- Roberts, J. D. and Caserio, M. C. *Basic Principles of Organic Chemistry*. Benjamin, 1964. OR  
Morrison, R. T. and Boyd, R. N. *Organic Chemistry*. 3rd ed. Allyn and Bacon, 1973. International Student edition.  
Tedder, J. M., Nechvatal, A., Murray, A. W. and Carnduff, J. *Basic Organic Chemistry*. Pt. 3. Wiley, 1970.  
Vogel, A. I. *Elementary Practical Organic Chemistry*. Pt. II. Qualitative Organic Analysis. Longmans, 1957.

**REFERENCE BOOKS**

- Acheson, R. M. *An Introduction to the Chemistry of Heterocyclic Compounds*. 2nd ed. Wiley, 1967.  
Eliel, E. L. *Stereochemistry of Carbon Compounds*. McGraw-Hill, 1962.  
Eliel, E. L., Allinger, N. L., Angyal, S. J. & Morrison, G. A. *Conformational Analysis*. Interscience, 1965.  
Gould, E. S. *Mechanism and Structure in Organic Chemistry*. Holt, Rinehart & Winston, 1959.  
Hallas, G. *Organic Stereochemistry*. McGraw-Hill, 1965.  
March, J. *Advanced Organic Chemistry: Reactions, Mechanisms and Structure*. McGraw-Hill, 1968.  
Sykes, P. *A Guidebook to Mechanism in Organic Chemistry*. 3rd ed. Longmans, 1971.  
Whitham, G. H. *Alicyclic Chemistry*. Oldbourne Press.

**PREREQUISITES**

2.002B Organic Chemistry.

This unit consists of 6 hours per week for one session.

**2.003C Chemistry III (Inorganic Chemistry)**

Molecular structure determination, with particular reference to complex salts, optical activity, crystal structure, systematic chemistry of the lanthanides and transition elements, further chemistry of nitrogen, sulphur and the halogens.

**TEXTBOOKS**

Cotton, F. A. and Wilkinson, G. *Advanced Inorganic Chemistry*. 2nd ed. Wiley, 1966.

Vogel, A. I. *A Textbook of Macro and Semi-micro Qualitative Inorganic Analysis*. Longmans Green.

**REFERENCE BOOKS**

Bailar, J. C. *Chemistry of the Coordination Compounds*. Reinhold, 1960.

Barnard, A. K. *Theoretical Basis of Inorganic Chemistry*. McGraw-Hill, 1965.

Dwyer, F. P. & Mellor, D. P. *Chelating Agents and Metal Chelates*. Academic, 1964.

Lewis, J. & Wilkins, R. *Modern Coordination Chemistry*. Interscience, 1959.

Pauling, L. *Nature of the Chemical Bond*. 3rd ed. Cornell, 1960.

Sienko, M. J. & Plane, R. A. *Physical Inorganic Chemistry*. Benjamin, 1965.

Wells, A. F. *Structural Inorganic Chemistry*. 3rd ed. Oxford, 1962.

**PREREQUISITES**

2.002C Inorganic Analytical Chemistry.

**SCHOOL OF METALLURGY****4.911 Materials Science**

The atomic structure of metals. The grain structure of metals; origin; modification. Structure of alloys—theory. Structure, properties and heat treatment of commercially important alloys based on aluminium, copper and iron in particular. Corrosion. Control of structure and properties, commercial alloys, materials selection.

**TEXTBOOK**

Wulff, J., ed. *Structure and Properties of Materials*. Vols. I and III. Wiley.

**REFERENCE BOOK**

Guy, A. G. *Elements of Physical Metallurgy*. Addison-Wesley.

**4.951 Materials Technology**

Materials selection, based on structure and properties. Equilibrium and kinetics in metallic systems. The structure of ceramics with particular reference to silicates. Structural changes. Electroplating processes considered from a theoretical and practical standpoint. Structure and testing of electro-deposits; electrochemical protection.

The structure, properties and technology of wood.

SCHOOL OF MECHANICAL AND  
INDUSTRIAL ENGINEERING**5.010 Engineering A****PREREQUISITE**

None.

*Engineering Mechanics I*: Two and three dimensional force systems, composition and resolution of forces, laws of equilibrium. Statics of rigid bars, pin-jointed frames. Shear force, axial force, bending moment. Simple states of stress. Kinematics of the plane motion of a particle. Kinetics of the plane motion of a particle; equations of motion, dynamic equilibrium, work and energy.

*Introduction to Engineering Design*: Engineering method, problem identification, creative thinking, mathematical modelling, computer aided design, materials and processes, communication of ideas, the place of engineering in society.

*Materials (4.901)*: An introductory course on the production, structure and properties of the main types of engineering materials, with a brief introduction to the process used in shaping and fabricating them.

**TEXTBOOKS**

Svensson, N. L. *Introduction to Engineering Design*. N.S.W. University Press.

Waldron, K. J. *Engineering Mechanics*. Wiley.

Walshaw, A. C. *SI Units in Worked Examples*. Longman.

**REFERENCE BOOKS**

Aitchison, L. *A History of Metals*. Vols. I and II, MacDonald & Evans.

Beakley, G. C. and Chilton, E. G. *Introduction to Engineering Design and Graphics*. Macmillan.

Beer, F. P. and Johnston, E. R. *Statics and Dynamics*. Vector ed., McGraw-Hill.

Dennis, W. H. *Extractive Metallurgy*. McGraw-Hill.

Gilchrist, J. D. *Extraction Metallurgy*. Pergamon.

Guy, A. C. *Physical Metallurgy for Engineers*. Addison-Wesley.

Harrisberger, L. *Engineersmanship*. Wadsworth.

Higdon, A. and Stiles, W. B. *Engineering Mechanics*. Vector ed., Prentice Hall.

Krick, E. V. *Introduction to Engineering and Engineering Design*. Wiley.

McCormick, E. J. *Human Engineering*. McGraw-Hill.

Meriam, J. L. *Statics and Dynamics*. Wiley.

Newton, J. *Extractive Metallurgy*. Wiley.

Street, A. *Metals in the Service of Man*. Penguin.

Timoshenko, S. *History of the Strength of Materials*. Van Nostrand.

**5.030 Engineering C**

*Engineering Drawing*: Fundamental concepts of descriptive geometry, including reference systems, representation of point, line and plane; fundamental problems of position and measurement. Application of descriptive geometry to certain problems arising in engineering practice. Special emphasis on ability to visualize problems and processes involved in their solution. Instruction in the correct use of drawing instruments and the application of drawing standards. Measurements and dimensioning. Orthographic and isometric projections.

*Mechanics of Solids I*: Statics of bars. Free-body diagrams, bending moment, shear force, axial force. Direct stress and strain. Hooke's Law, Poisson's Ratio. Compound bars. Flexibility and stiffeners. Simple theory of bending. Shear flow and shear stress. Torsion. Strain energy. Mohr's circle of stress and strain. Combined stresses.

#### TEXTBOOKS

Hall, A. S. *Introduction to the Mechanics of Solids*. Wiley.  
Robertson, R. G. *Descriptive Geometry*. Pitman.  
Thomson, R. *Exercises in Graphic Communication*. Nelson.

#### REFERENCE BOOKS

Popov, E. P. *Introduction to Mechanics of Solids*. Prentice-Hall.  
Shanley, F. R. *Strength of Materials*. McGraw-Hill.  
Smith, J. O. & Sidebottom, O. M. *Elementary Mechanics of Deformable Bodies*. Macmillan.

### Production Technology

Description and appraisal of the processes classified as: forming from liquid or solid, material removal, material joining. Machines. Analysis of the primary functions of the machine tools and an appraisal of their limitations. Principles of operation of common machine tools and illustrations of their use.

#### TEXTBOOK

Richards, C. W. *Engineering Materials Science*. Chapman & Hall.

#### REFERENCE BOOKS

Davis, H. E., Troxell, G. E. and Wiskocil, G. T. *Testing and Inspection of Engineering Materials*. McGraw-Hill.  
Gordon, J. E. *The New Science of Strong Materials*. Pelican.

## SCHOOL OF MATHEMATICS

### 10.001 Mathematics I

Calculus, analysis, analytic geometry, linear algebra, an introduction to abstract algebra, elementary computing.

#### PRELIMINARY READING LIST

Allendoerfer, C. B. & Oakley, C. O. *Principles of Mathematics*. McGraw-Hill.  
Bell, E. T. *Men of Mathematics*. 2 vols. Pelican.  
Courant, R. & Robbins, H. *What is Mathematics*. O.U.P.  
Polya, G. *How to Solve It*. Doubleday Anchor.  
Sawyer, W. W. *A Concrete Approach to Abstract Algebra*. Freeman.  
Sawyer, W. W. *Prelude to Mathematics*. Pelican.

#### TEXTBOOKS

Blatt, J. M. *Introduction to Fortran IV Programming*. Prentice-Hall.  
Shields, P. C. *Elementary Linear Algebra*. Worth.  
Thomas, G. B. *Calculus and Analytic Geometry*. 4th ed., Addison-Wesley.

## REFERENCE BOOKS

- Blatt, J. M. *Basic Fortran IV Programming (IBM/360 Version)*. Computer Systems (Aust.).
- Campbell, H. F. *Matrices with Applications*. Appleton-Century-Crofts.
- Kaplan, W. & Lewis, D. J. *Calculus and Linear Algebra*. Vols 1 & 2. Wiley.
- Kelly, G. M. *Introduction to Linear Algebra and Vector Geometry*. Reed Education, Sydney, 1971.
- Lange, I. H. *Elementary Linear Algebra*. Wiley.
- Pedoe, D. *A Geometric Introduction to Linear Algebra*. Wiley.
- Purcell, E. J. *Calculus With Analytic Geometry*. Appleton-Century-Crofts.
- Smith, W. K. *Limits and Continuity*. Collier-Macmillan.
- Spivak, M. *Calculus*. Benjamin.
- Tetra, B. C. *Basic Linear Algebra*. Harper and Row.
- Zelinsky, D. *A First Course in Linear Algebra*. Academic.

**10.011 Higher Mathematics I**

Calculus, analytic geometry, linear algebra, an introduction to abstract algebra, elementary computing.

## PRELIMINARY READING LIST

As for 10.001 plus:

- Arnold, B. H. *Intuitive Concepts in Elementary Topology*. Prentice-Hall.
- David, F. N. *Games, Gods and Gambling*. Griffin.
- Felix, L. *The Modern Aspect of Mathematics*. Science.
- Huff, D. *How to Lie with Statistics*. Gollancz.
- Reid, C. *From Zero to Infinity*. Routledge.

## TEXTBOOKS

- Blatt, J. M. *Introduction to Fortran IV Programming*. Prentice-Hall.
- Fagg, S. V. *Differential Equations*. English Universities Press.
- Shields, P. C. *Elementary Linear Algebra*. Worth.
- Spivak, M. *Calculus*. Benjamin.

## REFERENCE BOOKS

As for 10.001 plus:

- Abraham, R. *Linear and Multilinear Algebra*. Benjamin.
- Brauer, F. & Nohel, J. *Ordinary Differential Equations*. Benjamin.
- Burkhill, J. C. *A First Course in Mathematical Analysis*. C.U.P.
- Crowell, R. H. & Williamson, R. E. *Calculus of Vector Functions*. Prentice-Hall.
- Hochstadt, H. *Differential Equations*. Holt, Rinehart & Winston.
- Lang, S. *Linear Algebra*. Addison-Wesley.
- Murdoch, D. C. *Linear Algebra for Undergraduates*. Wiley.
- Spivak, M. *Calculus on Manifolds*. Benjamin.

**10.021 Mathematics II**

Calculus, analysis, analytic geometry, algebra, probability theory, elementary computing.

## TEXTBOOKS

- Blatt, J. M. *Introduction to Fortran IV Programming*. Prentice-Hall.
- Greening, M. G. *First Year General Mathematics*. N.S.W.U.P.
- Youse, B. K. & Stalnaker, A. W. *Calculus for the Social and Natural Sciences*. International Textbook Co.

## REFERENCE BOOKS

- Allendoerfer, C. B. & Oakley, C. O. *Fundamentals of College Algebra*. McGraw-Hill.  
Bates, G. E. *Probability*. Addison-Wesley.  
Burford, R. L. *Introduction to Finite Probability*. Merrill.  
Christian, R. C. *Logic and Sets*. Blaisdell.  
Fine, N. J. *Introduction to Modern Mathematics*. Rand McNally & Co.  
Hoyt, J. P. *A Brief Introduction to Probability Theory*. International Text Book Co.  
Johnson, W. G. & Zaccaro, L. N. *Modern Introductory Mathematics*. McGraw-Hill.

**Mathematics II**

Consists of 10.111A, 10.111B and 10.211A.

**10.111A Pure Mathematics II—Linear Algebra**

Vector Spaces: inner products, linear operators, spectral theory, quadratic forms. Linear Programming: convex sets and polyhedra, feasible solutions, optimality, duality.

## TEXTBOOKS

## SESSION 1

Tropper, A. M. *Linear Algebra*. Nelson.

## SESSION 2

Gass, H. *Linear Programming*. ISE. McGraw-Hill.

## REFERENCE BOOKS

- Lang, S. *Linear Algebra*. Addison-Wesley.  
Hoffman, K. & Kunze, R. *Linear Algebra*. Prentice-Hall.

**10.111B Pure Mathematics II—Analysis**

Complex variables: analytic functions, elementary functions, Taylor and Laurent series, integrals, Cauchy's theorem, residues, evaluation of certain real integrals, maximum modulus principles. Linear differential equations of the second order: equations with constant coefficients, power series solutions, Laplace transforms, Bessel functions.

## TEXTBOOKS

## SESSION 1

Kolman, B. & Trench, W. F. *Elementary Multivariable Calculus*. Academic Press.

## SESSION 2

Churchill, R. V. *Complex Variables and Applications*. I.S.E. McGraw-Hill.

## REFERENCE BOOKS

- Hilton, P. J. *Partial Derivatives*. Routledge.  
Thomas, G. B. *Calculus and Analytic Geometry*. 4th ed. Addison-Wesley.



**10.211A Applied Mathematics II—Mathematical Methods**

Review of functions of two and three variables, divergence, gradient, curl; line, surface, and volume integrals; Green's and Stokes' theorems. Special functions, including gamma and Bessel functions. Differential equations and boundary value problems, including vibrating string and vibrating circular membrane; Fourier series.

**TEXTBOOKS**

- Blatt, J. M. *Introduction to Fortran IV Programming*. Prentice-Hall.  
 Sneddon, I. N. *Fourier Series*. Routledge and Keegan Paul.  
 Spiegel, M. R. *Theory and Problems of Vector Analysis*. Schaum.  
 Spiegel, M. R. *Advanced Mathematics for Scientists and Engineers*. Schaum.

**REFERENCE BOOKS**

- Betz, H., Burcham, P. B. & Ewing, G. M. *Differential Equations with Applications*. I.S.R. Harper.  
 Blatt, J. M. *Basic Fortran IV Programming*. Computer Systems (Aust.).  
 Dettman, J. W. *Mathematical Methods in Physics and Engineering*. McGraw-Hill.  
 Smith, G. D. *Vector Analysis Including the Dynamics of a Rigid Body*. O.U.P.

**SCHOOL OF PSYCHOLOGY****12.001 Psychology I**

An introduction to the content and methods of psychology as a behavioural science, with special emphasis on (a) the biological and social bases of behaviour, (b) learning, and (c) individual differences.

The course includes training in methods of psychological enquiry, and the use of elementary statistical procedures.

*Part A—Theory***TEXTBOOKS**

There is no set text for this course, but students are advised to obtain, as a general reference, an introductory text such as one of the following:—  
 CRM Books. *Psychology Today*. 1st ed., 1970 or 2nd ed., 1972.

Dember, W. N. and Jenkins, J. J. *General Psychology*. Prentice-Hall, N.J., 1970.

Morgan, C. T. and King, R. A. *Introduction to Psychology*. 4th ed. McGraw-Hill, N.Y., 1971.

The following is recommended as an additional text for intending honours students:—

Hebb, D. O. *Textbook of Psychology*. 3rd ed. Saunders, London, 1972.

**REFERENCE BOOKS**

Allport, G. W. *Pattern and Growth in Personality*. Holt, 1961.

Allport, G. W. *Personality*. Holt, 1937.

Anastasi, A. *Individual Differences*. Wiley 1965.

Beech, H. R. *Changing Man's Behaviour*. Penguin, 1969.

- Coopersmith, S. *Frontiers of Psychological Research*. Readings from Scientific American. Freeman, 1964.
- Cronbach, L. J. *Essentials of Psychological Testing*. Harper & Row.
- Deese, J. *Psycholinguistics*. Allyn & Bacon, Boston, 1970.
- Lazarus, R. S. *Personality*. 2nd ed. Prentice-Hall, 1971.
- McGaugh, J. L., Weinberger, N. M. & Whalen, R. E. *Psychobiology: The Biological Bases of Behaviour*. Readings from Scientific American. Freeman, 1966.
- McKinney, F. *Understanding Personality: Cases in Counselling*. Houghton, 1965.
- Reynolds, G. *Primer of Operant Conditioning*. Scott, Foresman, Glenview, 1968.
- Vernon, P. E. *Personality Assessment: A Critical Survey*. Methuen, 1964.
- Vernon, P. E. *Personality Tests and Assessments*. Methuen, 1953.
- Walker, E. L. *Conditioning and Instrumental Learning*. Brooks/Cole, 1967.

*Part B—Practical*

**TEXTBOOK**

Lumsden, J. *Elementary Statistical Method*. W.A.U.P., 1969.

**12.012 Psychology II**

Research Methods and topics selected from the following: Physiological Psychology, Human Information Processing, Abnormal Psychology, Social Psychology, Developmental Psychology, Learning, Personality, Motivation, Psychological Assessment and Perception.

**TEXTBOOKS**

Students should consult Head of School for details.

**12.013 Psychology III**

Research Methods and selected areas are studied at an advanced level. Candidates should select their areas of special study from the following list in consultation with the School of Psychology: Physiological Psychology, Human Information Processing, Abnormal Psychology, Social Psychology, Developmental Psychology, Learning, Personality, Motivation, Psychological Assessment, Perception, Guidance and Counselling, Industrial Psychology, Behavioural Control and Modification, and Psychological Techniques.

**SCHOOL OF ACCOUNTANCY**

**14.001 Introduction to Accounting**

An introduction for non-commerce students to the nature, purpose and conceptual foundation of accounting. Information systems including accounting applications. Analysis and use of accounting reports. Relevance of accounting to managerial and technological functions including planning, decision-making and control.

**PRELIMINARY READING**

Anthony, R. N. *Essentials of Accounting*. Addison-Wesley, 1964.

## TEXTBOOK

Fertig, P. E., Istvan, D. F. & Mottice, H. J. *Using Accounting Information*. 2nd ed. Harcourt Brace, 1971.

**14.023 Accounting for Health Administration**

Introduction to the fund theory of accounting. The recording of hospital transactions in the various funds and the preparation, analysis and interpretation of historical accounting reports. Internal control, budgeting and cost analysis in the hospital context.

## TEXTBOOKS

Fertig, P. E., Istvan, D. F. & Mottice, H. J. *Using Accounting Information*. 2nd ed. Harcourt Brace, 1971.

Li, D. H. *Accounting, Computers, Management Information Systems*. McGraw-Hill, 1968.

Moore, C. L. & Jaedicke, R. K. *Managerial Accounting*. 3rd ed. Southwestern, 1972.

Seawell, L. V. *Hospital Accounting and Financial Management*. Physicians Record, 1964.

Vatter, W. J. *Operating Budgets*. Prentice-Hall, 1969.

## SCHOOL OF ECONOMICS

**15.901 Economics (Health Administration)**

An introductory examination of the working of a modern economic system, with some reference to Australian economic institutions and conditions.

The main topics are: consumer demand, cost analysis, market equilibrium, money and banking, pricing of factors of production, investment decisions, international trade, social accounting, social welfare, population trends and policy; and Australian economic institutions, including trade unions, arbitration system, the Tariff Board, the Reserve Bank.

## TEXTBOOKS

Hancock, K., Hughes, B. and Wallace, R. *Applied Economics: Readings for Australian Students*. McGraw-Hill, Sydney, 1972.

Robinson, R., Hughes, B. and Hayles, J. *Study Guide, Economics: An Introductory Analysis*. McGraw-Hill, 1970.

Samuelson, P. A., Hancock, K. and Wallace, R. *Economics: An Introductory Analysis*. Aust. ed., McGraw-Hill, 1970.

## SCHOOL OF HEALTH ADMINISTRATION

**16.001 Management I**

Introduction to the theory of administration and management; concepts such as responsibility, authority, supervision, organization, delegation and control; decision-making, aids to decision-making; nature and place of communication in management.

## TEXTBOOKS

Half, J. F. *Study Guide and Cases to accompany Koontz & O'Donnell: Principles of Management*. 5th ed. McGraw-Hill, 1972.

Koontz, H. and O'Donnell, C. *Principles of Management*. 4th ed. McGraw-Hill, 1968.

## REFERENCE BOOK

Koontz, H. and O'Donnell, C. *Management: A Book of Readings*. 2nd ed. McGraw-Hill, 1968.

**16.002 Management II**

An introduction to general systems theory, and an examination of health care organizations as open socio-technical systems. Systems analysis. Operations research methods and the applications of these techniques to health care decision-making. A basic introduction to computer technology and the uses of computers in health services management. Hospital and health information systems.

## TEXTBOOKS

Griffith, J. R. *Quantitative Techniques for Hospital Planning and Control*. Heath Lexington Books, 1972.

Kast, F. E. and Rosenzweig, J. E. *Organization and Management. A Systems Approach*. McGraw-Hill, 1970.

Stinson, D. H. and Stinson, R. H. *Operations Research in Hospitals: Diagnosis and Prognosis*. Hospital Research and Education Trust, 1972.

**16.003 Management III**

Extends the principles introduced in Management I and Management II into the operation and management of health services. Examines concepts of health, systems theory and health, planning health systems and managerial functions in health services and hospital settings.

## TEXTBOOKS

Grant, C. *Hospital Management*. Churchill-Livingstone, 1972.

Durbin, R. L. and Springall, W. H. *Organization and Administration of Health Care*. Mosby, 1969.

Hetzel, B. S. *Life and Health in Australia*. A.B.C., 1971.

## REFERENCE BOOK

Sheldon, A., Baker, F. & McLaughlin, C. P. eds. *Systems and Medical Care*. MIT Press, 1970.

**16.101 Comparative Health Care Systems**

A comparative study of American, English and other selected health services, using the same bases as 16.801. The Australian Health Care System in relation to: public health services; personal health services; hospital services, comparing the roles of government and private enterprise; health manpower; financing; legislation; regionalisation; organizational developments.

**TEXTBOOKS**

Fry, J. *Medicine in Three Societies*. MTP, 1969.

Somers, A. R. *Health Care in Transition: Directions for the Future*. Hospital Research and Educational Trust, 1971.

**REFERENCE BOOK**

Lindsay, A. *Socialised Medicine in England and Wales*. Chapel Hill, 1962.

**16.201 Law I**

Introduction to the Australian legal system; the formal sources of law, the judicial process; rules of statutory interpretation; the nature of federation; the division of powers between the Commonwealth and the States; the Social Services power; introduction to the law of contract, insurance and bailment contracts; introduction to the law of tort, employers' liability, tort of negligent advice.

**TEXTBOOKS**

Derham, D. P., Maher, F. K. H. and Waller, P. L. *An Introduction to Law*, 2nd ed. Law Book Co., 1971.

Shtein, B. and Lindgren, K. *An Introduction to Business Law*. 2nd ed. Law Book Co., 1972.

**16.202 Law II**

General principles of the law of tort, vicarious liability; the "foreseeability" test, recent decision thereon; principles of medical negligence, law relating to consent and the principle of necessity; law relating to illegal operations; the liability of hospitals; occupiers' liability, industrial law, the Federal and State systems, industrial relations; workers' compensation; important Commonwealth and State legislations.

**TEXTBOOKS**

Fleming, J. G. *The Law of Torts*, 4th ed. Law Book Co., 1971.

O'Dea, R. *Industrial Relations in Australia*, 2nd ed. West, 1970.

**16.301 Political Science**

A general introduction to the study of politics, with special reference to Australian political institutions and administrative practices. Topics covered include the following: Concepts and theories of politics; Australian political institutions and the party system. The constitution and intergovernmental financial and legal relations; public administration with special reference to the Commonwealth and New South Wales public services.

**TEXTBOOKS**

Blau, P. M. *Bureaucracy in Modern Society*. Random House, N.Y., 1956.

Dahl, R. A. *Modern Political Analysis*. 2nd ed. Prentice-Hall, 1970.

Miller, J. D. B. and Jinks, B. *Australian Government and Politics: an Introductory Survey*. 4th ed. 1970.

Rorke, J. ed. *Politics at State Level*. University of Sydney, 1970.

Spann, R. N. ed. *Public Administration in Australia*, 3rd ed. Govt. Printer, 1971.

### 16.302 Social Administration

An historical overview of the development of social welfare policy in Australia with particular regard to income security and social service benefits. The present structure of social welfare services in Australia and other countries; current policy issues.

#### TEXTBOOK

Kewley, T. H. *Australia's Welfare State*. Macmillan, Sydney, 1969.

#### REFERENCE BOOKS

Benn, S. I. and Peters, R. S. *Social Principles and the Democratic State*. Allen & Unwin, 1958.

Titmuss, R. M. *Commitment to Welfare*. Allen & Unwin, 1968.

Warham, J. *Social Policy in Context*. Batsford, 1970.

### 16.601 Behavioural Science I

A general introduction to individual and group behaviour through the study of sociological, psychological and anthropological concepts. There will also be an introduction to the social aspect of exchange processes. As far as possible, the course will tend to integration rather than separation of these various disciplines so that students will learn about human behaviour, rather than learning psychology, sociology or anthropology.

#### TEXTBOOKS

Berger, P. L. *Invitation to Sociology*. Penguin, 1960.

Kuhn, A. *The Study of Society*. Social Science Paperbacks, Tavistock, 1966.

Toffler, A. *Future Shock*, Pan, 1972.

#### REFERENCE BOOKS

Bredemeir, H. C. and Stephenson, R. M. *The Analysis of Social Systems*. Holt, Rinehart & Winston, 1962.

Secord, P. F. and Backman, C. W. *Social Psychology*. McGraw-Hill, 1964.

### 16.602 Behavioural Science II

A study of one branch of behavioural science, namely the sociology of health. Students will consider the social role of medicine in our society, the nature of patient-healer relationships, the hospital as a social system, the processes of becoming a patient, illness as a social role, aspects of social class and status as they affect relationships in the health care system, social consequences of medical diagnosis and labelling, medical politics, and the place in society and in the health system of such special groups as the physically and mentally handicapped, the aged.

#### TEXTBOOKS

Goffman, E. *Stigma*. Pelican.

Leach, G. *The Biocrats*. Penguin, 1972.

Mechanic, D. *Medical Sociology: A Selective View*. Free Press, 1968.

## REFERENCE BOOKS

- Balint, M. *The Doctor, his Patient and the Illness*. Pitman, 1968.  
Freeman, H. E., Levine, S. & Reeder, L. G. *Handbook of Medical Sociology*.  
Prentice-Hall, 1963.  
Scott, W. R. & Volkart, E. H. *Medical Care*. Wiley, 1966.

**16.701 Statistics**

Sources of statistical data; errors and pitfalls in the use of statistics. Measures of central tendency, dispersion and skewness. Elementary treatment of probability. Introduction to statistical inference; estimation and hypothesis testing; elements of sampling and sample survey design. Correlation and regression. Index numbers. Time series analysis. Introduction to demography and vital statistics; measures of mortality, fertility and population replacement. Statistics of the Australian health care system.

## TEXTBOOKS

- Benjamin, B. *Health and Vital Statistics*. Allen & Unwin, 1968.  
Kazmier, L. J. *Statistical Analysis for Business and Economics*. McGraw-Hill, 1967.  
Pollard, A. H. *Demography: An Introduction*. Pergamon, 1968.  
Yamane, T. *Statistics: An Introductory Analysis*. 2nd ed. Harper & Row, 1967.

**16.801 The Australian Health Care System**

Historical introduction; the present pattern of health care delivery; environmental health services; institutional care; community health services for special groups; specialised and supporting services; health service personnel; health service finance; critique of the Australian health care system.

## TEXTBOOK

- Dewdney, J. C. H. *Australian Health Services*. Wiley, 1972.

## REFERENCE BOOKS

- Dewdney, J. C. H. and Weil, T. P. *Australian Health Care Bibliography—A Guide Book*. U.N.S.W., 1969.  
*The Australian & New Zealand Hospitals and Health Services Yearbook*. Latest edition.  
*The Commonwealth Year Book*. Latest edition.

**16.921 Health Care Planning I**

Health planning concepts; the determinants of provision; environmental health planning; planning for maternal and child health; health care planning for youth; services for the working population and the aged; planning to meet the needs of special groups; planning for the integration and evaluation of services.

## TEXTBOOK

- Reinke, W. A. ed. *Health Planning: Qualitative Aspects and Quantitative Techniques*. Johns Hopkins University, 1971.

## REFERENCE BOOKS

Arnold, M. F. *et al.* *Administering Health Services*. 1971.

Donebedian, A. *A Guide to Medical Care Administration: Vol. 11: Medical Care Appraisal*. A.P.H.A., 1969.

Myers, B. A. *A Guide to Medical Care Administration: Vol. 1 Concepts and Principles*. A.P.H.A., 1969.

**16.922 Health Care Planning II**

The planning and design process; composition and responsibilities of planning teams; briefing, proposal and approval of design projects; history of hospital design; planning for change and growth; national, regional and local planning requirements; location and siting of health care facilities; organisational requirements of hospital layout; supply and communication requirements; environmental design and safety; ergonomics of hospital equipment; hospital building structures and engineering services; building and equipment maintenance; modernisation and efficiency; building contract management; cost planning; commissioning and evaluation.

## TEXTBOOKS

Baynes, K. ed. *Hospital Research and Briefing Problems*. King Edward's Hospital Fund, London, 1971.

Great Britain, Department of Health & Social Security, *Capricode (Hospital Building Procedure Notes)*, DHSS, 1971.

Holroyd, W. A. H. ed. *Hospital Traffic & Supply Problems*. King Edward's Hospital Fund, 1968.

Jefford, R. ed. *Principles of Hospital Planning*. Pitman Medical, 1967.

Llewelyn-Davies, R. and Macauley, H. M. C. *Hospital Planning and Administration*. WHO, 1966.

**16.923 Health Care Planning III**

Planning and design for particular functions in health care facilities; nursing units, patient's room and equipment design; general and special nursing units; diagnostic and treatment facilities; outpatients and emergency services; health centres and G.P. surgeries; administrative, educational and residential accommodation; supply departments and works services.

## TEXTBOOKS

Baynes, K. ed. *Hospital Research and Briefing Problems*. King Edward's Hospital Fund, London, 1971.

Holroyd, W. A. H. ed. *Hospital Traffic and Supply Problems*. King Edward's Hospital Fund, 1968.

Llewelyn-Davies, R. and Macauley, H. M. C. *Hospital Planning and Administration*. WHO, 1966.

**16.901G Health Services Statistics I**

Statistical methods and theory: frequency distributions and their description; an introduction to probability; principles of sampling; estimation and hypothesis testing; statistical decision theory; normal, Poisson and binomial distributions; linear regression; index numbers; time series analysis.



## TEXTBOOKS

- Kazmier, L. J. *Statistical Analysis for Business and Economics*. McGraw-Hill, N.Y., 1967.
- Yamane, T. *Statistics, An Introductory Analysis*. 2nd ed. Harper and Row, N.Y., 1967.

## REFERENCE BOOKS

- Bradford Hill, A. *Principles of Medical Statistics*. 5th ed. Lancet, 1963.
- Hess, I. et al. *Probability Sampling of Hospitals and Patients*. University of Michigan, 1961.
- Hoel, P. G. *Elementary Statistics*. 2nd ed. Wiley, 1966.
- Hoel, P. G. *Introduction to Mathematical Statistics*. 3rd ed. Wiley, 1962.
- Moser, C. A. *Survey Methods in Social Investigation*. Heinemann, 1958.
- Palmer, G. R. *A Guide to Australian Economic Statistics*. 2nd ed. Macmillan, 1966.
- Yamane, T. *Elementary Sampling Theory*. Prentice-Hall, 1967.

**16.902G Health Services Statistics II**

The application of statistical methods to problems of management and problems of direct relevance to the health care field. Introduction to operations research (inventory theory, queuing theory, linear programming, PERT and CPM); applications of O.R. to hospital management problems; vital statistics and demography (measures of fertility and mortality, construction and use of life tables); hospital and health statistics; PAS/MAP and other hospital information systems.

## TEXTBOOKS

- Benjamin, B. *Health and Vital Statistics*. Allen and Unwin, London, 1968.
- Griffith, J. R. *Quantitative Techniques for Hospital Planning and Control*. Heath Lexington Books, 1972.
- Luck, G. M., Luckman, J., Smith, B. W. and Stringer, J. *Patients, Hospitals and Operational Research*. Tavistock, London, 1971.
- Pollard, A. H. *Demography; An Introduction*. Pergamon, Sydney, 1968.

## REFERENCE BOOKS

- Levin, R. I. and Kirkpatrick, C. A. *Quantitative Approaches to Management*. McGraw-Hill, 1965.
- Goetz, B. E. *Quantitative Methods. A Survey and Guide for Managers*. McGraw-Hill, 1965.
- McMillan, C. and Gonzalez, R. F. *Systems Analysis. A Computer Approach to Decision Models*. Irwin, 1968.

**16.903G Health Services Organization**

Relates the material presented in Behavioural Science I and Organization Theory I to the hospital and health care environment. Identification of formal and informal structures within the hospital and health services, and analysis of decision-making roles in these services.

## REFERENCE BOOKS

- Durbin, R. L. and Springall, W. H. *Organisation and Administration of Health Care*. Mosby, 1969.
- Kazmier, L. J. *Principles of Management*. 2nd ed. McGraw-Hill, 1969.
- Koontz, H. and O'Donnell, C. *Principles of Management*. 4th ed. McGraw-Hill, 1968.
- Sheldon, A., Baker F. and McLaughlin, C. P. eds. *Systems and Medical Care*. M.I.T., 1970.

**16.904G Australian Health Care System**

The historical, demographic and epidemiological background to the provision of health care in Australia. The role of the Commonwealth, the States, and other instrumentalities in providing health and hospital services. Financial and economic aspects of the provision of health care. Problems currently besetting the Australian health care system.

## TEXTBOOK

- Dewdney, J. C. H. *Australian Health Services*. Wiley, 1972.

## REFERENCE BOOKS

- Dewdney, J. C. H. and Weil, T. P. *Australian Health Care Bibliography—A Guide Book*. U.N.S.W., 1969.
- Sax, S. *Health Care in the Melting Pot: An Australian Review*. A. & R., 1972.
- The Australian and New Zealand Hospitals and Health Services Yearbook*. Latest edition.
- The Commonwealth Year Book*. Latest edition.

**16.905G Health Services Accounting**

This course commences with an examination of basic theory and concept in relation to health service accounting. Particular attention is given to the interrelationship between statistics and accounting; the nature and use of cost data; budget preparation; co-ordination and integration of budgets; accounting for planning and control; cost finding procedures.

**16.906G Hospital Organization and Management I**

Analysis of the organizational structure of the hospital and its major components in terms of functions, systems, goals, values, professionalism, co-ordination and innovation. The interaction between management and the physical structure. The planning process and the project team, building siting and design, contract administration, cost planning, environmental design, commissioning and evaluation.

## TEXTBOOK

- Sheldon, A., Baker, F. and McLaughlin, C. P. *Systems and Medical Care*. MIT, 1970.

## REFERENCE BOOKS

- Baynes, K. ed. *Evaluating New Hospital Buildings*. King Edward's Hospital Fund, 1969.
- Baynes, K. ed. *Hospital Research and Briefing Problems*. King Edward's Hospital Fund, 1971.
- Great Britain, Department of Health & Social Security, *Capricode (Hospital Building Procedure Notes)*, DHSS, 1971.
- Drysdale, J. W. *Designing Houses for Australian Climates*. Bulletin No. 6. Sydney, Commonwealth Experimental Building Station, 1959, reprinted 1969.
- Durbin, R. and Springall, W. *Organization and Administration of Health Care*. Mosby, 1969.
- Holroyd, W. A. H. ed. *Hospital Traffic and Supply Problems*. King Edward's Hospital Fund, 1968.
- Hopkinson, R. G. *Hospital Lighting*. Heinemann, 1964.
- Jefford, R. ed. *Principles of Hospital Planning*. Pitman Medical, 1967.
- King Edward's Hospital Fund for London. *Commissioning New Hospital Buildings*. King Edward's Hospital Fund, London, 1966.
- Llewelyn-Davies, R. and Macauley, H. M. C. *Hospital Planning and Administration*. WHO, 1966.
- Norton, D. *By Accident or Design?* Livingstone, 1970.

**16.907G Hospital Organization and Management II**

Further detailed analysis of the subsystems of the hospital in terms of operation, staffing, design and communication. Planning and design for particular clinical and non-clinical functions and departments.

TEXT AND REFERENCE BOOKS As for 16.906G Hospital Organization and Management I.

**16.908G Behavioural Science (Health Administration)**

This course is concerned with the social impact of illness upon families and communities; with attitudes towards birth, birth control, health, sickness, healing and death; the relation of culturally determined attitudes to the provision and utilization of health services; relationships between medical, para-medical, and non-medical workers in the health field; problems of health education and deviant social behaviour; the behaviour of the patient.

## TEXTBOOKS

- Goffman, E. *Stigma*. Pelican, 1963.
- Leach, G. *The Bocrats*. Penguin, 1972.
- Mechanic, D. *Medical Sociology*. Free Press, 1968.

## REFERENCE BOOKS

- Abrahamson, M. *The Professional in the Organization*. Rand, 1967. Paperback.
- Balint, M. *The Doctor, his Patient and the Illness*. Pitman, 1968.
- Freeman, H. E., Lavine, S. and Reeder, L. G. *Handbook of Medical Sociology*. Prentice-Hall, 1963.
- Jaco, E. S. *Patients, Physicians and Illness*. Free Press, 1958.
- Kosa, J. et al. eds. *Poverty and Health*. Harvard U.P., 1969.
- Scott, W. R. and Volkart, E. *Medical Care*. Wiley, 1966.

Taylor, C. In *Horizontal Orbit: Hospitals and the Cults of Efficiency*. Holt, Rinehart & Winston, 1970.

Von Mehring, O. and Kasdan, L. eds. *Anthropology and the Behavioral and Health Sciences*. University of Pittsburgh Press, 1970.

### **16.909G Community Health Planning**

Factors determining planning, provision and integration of community health care: environmental health services, provision for the aged, the physically handicapped and the mentally handicapped; occupational hygiene programmes; maternal and child health clinics; school medical and dental services; preventive and screening services; health centres; health education; ancillary services.

#### **TEXTBOOK**

Reinke, W. A. *Health Planning: Qualitative Aspects and Quantitative Techniques*. Johns Hopkins University, 1971.

#### **REFERENCE BOOKS**

Arnold, M. F. et al. *Administering Health Services*. Aldine Atherton, 1971.

Donebedian, A. *A Guide to Medical Care Administration: Vol. II: Medical Care Appraisal*. A.P.H.A., 1969.

Myers, B. A. *A Guide to Medical Care Administration: Vol. I: Concepts and Principles*. A.P.H.A., 1969.

### **16.910G Comparative Hospitals and Health Services Administration**

Systems of hospital and health services in the United Kingdom, the United States of America and other countries; their sources of finance and the media through which it is disbursed; the authority and responsibilities of administrative bodies concerned; the planning of their services; methods of staffing; demographic and other measures of performance; comparisons with the Australian system.

#### **TEXTBOOK**

Somers, A. R. *Health Care in Transition: Directions for the Future*. Hospital Research and Educational Trust, 1971.

#### **REFERENCE BOOK**

Fry, J. *Medicine in Three Societies*. MTP, 1969.

### **16.911G Health Services Administration I**

The essential elements of administration and the tools of management are examined and related to the particular problems of health service administration. Planning organization; staffing; direction; control; decision-making and communication.

#### **REFERENCE BOOKS**

Durbin, R. L. and Springall, W. H. *Organization and Administration of Health Care*. Mosby, 1969.

- Kazmier, L. J. *Principles of Management*. 2nd ed. McGraw-Hill, 1969.  
Koontz, H. and O'Donnell, C. *Principles of Management*. 4th ed. McGraw-Hill, 1968.  
Sheldon, A., Baker, F. and McLaughlin, C. P. *Systems and Medical Care*. MIT, 1970.

### **16.912G Health Services Administration II**

Administrative roles and relationships of the medical, nursing and other health service personnel, departmental organization, systems analysis, data processing and information systems.

#### **TEXTBOOK**

Sheldon, A., Baker, F. and McLaughlin, C. *Systems and Medical Care*. MIT, 1970.

#### **REFERENCE BOOK**

Durbin, R. and Springall, W. *Organization and Administration of Health Care*. Mosby, 1969.

### **16.913G Health Care Facilities A**

The Australian Health Scheme; the role of the Commonwealth, States and other instrumentalities in providing health and hospital services; authority and responsibility of the administrative bodies; legislation; sources and distribution of finance; planning of services; staffing; integration of services.

#### **TEXTBOOK**

Dewdney, J. C. H. *Australian Health Services*. Wiley, 1972.

#### **REFERENCE BOOKS**

- Dewdney, J. C. H. and Weil, T. P. *Australian Health Care Bibliography—A Guide Book*. U.N.S.W., 1969.  
Sax, S. *Health Care in the Melting Pot: An Australian Review*. A. & R., 1972.  
*The Australian and New Zealand Hospitals and Health Services Yearbook*. Latest edition.  
*The Commonwealth Year Book*. Latest edition.

### **16.914G Health Care Facilities B**

Comparative study of health services in various advanced and developing countries; major differences in policy and administration examined in relation to medical, social, political and economic patterns.

#### **TEXTBOOK**

Somers, A. R. *Health Care in Transition: Directions for the Future*. Hospital Research and Educational Trust, 1971.

#### **REFERENCE BOOK**

Fry, J. *Medicine in Three Societies*. MTP, 1969.

### 16.915G Health Care Facilities C

The organization and function of non-institutional health care facilities are examined. These facilities include environmental health services; domiciliary health and welfare services; provisions for the aged, physically and mentally handicapped; preventive and screening services; programmes of occupational hygiene; maternal and child welfare clinics; school medical and dental services; health education; ancillary services. The integration of services is discussed.

#### TEXTBOOKS

- Hobson, W. ed. *The Theory and Practice of Public Health*. O.U.P., 1970.  
Reinke, W. A. ed. *Health Planning: Qualitative Aspects and Quantitative Techniques*. Johns Hopkins University 1971.

#### REFERENCE BOOKS

- Arnold, M. F. et al. *Administering Health Services*. Aldine Atherton, 1971.  
Donebedian, A. *A Guide to Medical Care Administration: Vol. II: Medical Care Appraisal*. A.P.H.A., 1969.  
Myers, B. A. *A Guide to Medical Care Administration: Vol. I: Concepts and Principles*. A.P.H.A., 1969.

### 16.916G Health Care Facilities D

Institutional provision of health care; factors generating content of institutional provision; principles of planning and design as applied to general, special and teaching hospitals and to facilities for community health care and welfare; roles of members of the planning team and methods of communication and co-ordination; the planning process from briefing through planning proposals and construction to contract administration, commissioning, modification and evaluation. Planning and design for particular clinical, administrative and supply functions. Environmental factors in design and operation of buildings.

#### REFERENCE BOOKS

- Baynes, K. ed. *Evaluating New Hospital Buildings*. King Edward's Hospital Fund, 1969.  
Baynes, K. ed. *Hospital Research and Briefing Problems*. King Edward's Hospital Fund, 1971.  
Great Britain, Department of Health & Social Security, *Capricode (Hospital Building Procedure Notes)*, DHSS, 1971.  
Drysedale, J. W. *Designing Houses for Australian Climates*. Bulletin No. 6. Sydney, Commonwealth Experimental Building Station, 1959.  
Holroyd, W. A. H. ed. *Hospital Traffic and Supply Problems*. King Edward's Hospital Fund, 1968.  
Hopkinson, R. G. *Hospital Lighting*. Heinemann, 1964.  
Jefford, R. ed. *Principles of Hospital Planning*. Pitman Medical, 1967.  
King Edward's Hospital Fund for London. *Commissioning New Hospital Buildings*. King Edward's Hospital Fund, 1966.  
Llewelyn-Davies, R. and Macauley, H. M. C. *Hospital Planning and Administration*. WHO, 1966.  
Norton, D. *By Accident or Design?* Livingstone, 1970.

**16.917G Personnel Practice (Health Administration)**

Personnel practice—topics include recruitment and selection policies and methods; training; performance evaluation; work measurement; wage and salary administration; authority and discipline; service and benefit schemes; interviewing, counselling; safety.

**REFERENCE BOOKS**

- Bailey, N. *Hospital Personnel Administration*. Physicians Record Co., 1957.  
Cumings, M. W. *Hospital Staff Management*. Heinemann, 1971.  
Hepner, J. O., Boyer, J. M. and Westerhaus, C. L. *Personnel Administration and Labour Relations in Health Care Facilities*. Mosby, 1969.

**16.918G Health Services Law**

Following an examination of the sources and processes of law, students proceed to a consideration of the law relating to public health, hospitals and hospital authorities, welfare services, mental health and medical practice.

**TEXTBOOKS**

- Fleming, J. G. *The Law of Torts*. 4th ed. Law Book Co., 1971.  
O'Dea, R. *Industrial Relations in Australia*. 2nd ed. West Publishing Corporation, 1970.

**REFERENCE BOOKS**

- Burton, A. W. *Medical Ethics and the Law*. Australasian Medical, 1971.  
Leahy Taylor, J. *The Doctor and Negligence*. Pitman Medical, 1971.  
Nathan, L. *Medical Negligence*. Butterworths, 1957.  
Speller, S. R. *Law Relating to Hospitals and Kindred Institutions*. 5th ed. Lewis, 1971.  
Wedderburn, K. W. *The Worker and the Law*. 2nd ed. Penguin, 1971.

**BIOLOGICAL SCIENCES****17.011 Human Biology**

Mankind evolving—primate evolution; background of early man.

Evolution of technological man—biological problems associated with communication and tool-making; development of man as a hunting predator.

Development of utilisation of natural resources—development of man as a pastoralist and farmer; animal and plant domestication.

Evolution of urban man, culture, society—reproductive biology and genetics of man; population growth, fluctuation, control; natural history of disease, background of medical and industrial microbiology.

Effects of modern society—biology of social stress; effect of society in contemporary environments, planning and control.

**TEXTBOOKS**

- Abercrombie, M., et al. *A Dictionary of Biology*. Penguin, 1967.  
Boughy, A. S. *Man and the Environment*. MacMillan, 1971.  
Clarke, C. A. *Human Genetics and Medicine*. Arnold, 1970.

### 17.021 Comparative Functional Biology

Maintenance of the organism—gas exchange systems in plants and animals; transport inside organisms; uptake, digestions, absorption; enzymes structure and function; photosynthesis—process and structural relationships; metabolic systems, energy yields and pathways.

Developing organisms—sexual reproduction in plants and animals, general life cycle patterns; cell development and differentiation in flowering plants and mammals.

Control and co-ordination in organisms—organisms and water, uptake and effects; control mechanisms, urinary systems and kidney structure and function; stimuli and responses—plant hormones, hormones in vertebrate animals, muscle activity and muscle structure, eye structure and vision mechanism; ear structure and hearing mechanism; nerves, central nervous system, nerve action, brain structure and functioning.

#### TEXTBOOKS

Abercrombie, M., et al. *A Dictionary of Biology*. Penguin, 1967.

Roberts, M. B. V. *Biology: A functional approach*. Nelson, 1971.

#### REQUIREMENTS FOR PRACTICAL WORK

A list of equipment required for practical work will be posted on the notice board in the ground floor of the Biological Sciences Building. Students must purchase this material before the first practical class.

## DEPARTMENT OF INDUSTRIAL ARTS

### 21.011 Industrial Arts I

The nature of rigorous and structural design. The elements of creative design—design as aesthetic order—its relationship to perception theory and measurement of aesthetic judgment—the notion of value and value keys in design. The theory and nature of colour perception. A brief treatment of the historical background of industrial organization in society—the nature of work and some important psychological, sociological and economic factors in man-machine relationships. Basic industrial work situations and an analysis of the methods used to classify and describe them. Man-machine relationships as a problem in design—human qualities in opposition to and in co-operation with machines—an introduction to the problems associated with the transfer of information, energy and matter between man and machine.

*Laboratory and Studio*—The execution of prescribed projects in various media illustrative of the principles of design. The study and practice of the principal techniques used in work measurement.

#### TEXTBOOKS

Childe, G. *What Happened in History*. Pelican, A108.

Pye, D. *The Nature of Design*. Studio Vista, 1964.

Read, H. E. *Art and Industry*. 5th ed. Faber, 1966.

White, L. *Medieval Technology and Social Change*. O.U.P., 1962.

#### REFERENCE BOOKS

Brochmann, O. *Good and Bad Taste*. Eyre & Spottiswoode, 1955.

Childe, G. *Man Makes Himself*. 4th ed. Fontana, 1965.

Clark, K. *Civilization*. B.B.C. and John Murray (paperback ed.), 1971.



- de Saumarez, M. *Basic Design. The Dynamics of Visual Form*. Studio Vista, 1964.
- Forbes, R. J. and Dijksterhuis, E. J. *A History of Science and Technology*. Vols. I and II. Pelican A498/9, 1963.
- Jones, J. C. *Design Methods*. Wiley, 1970.
- Leach, B. H. *A Potter's Book*. Faber, 1955.
- Mumford, L. *Technics & Civilization*. Harcourt, Brace & World. Harbinger, 1934.
- Mumford, L. *Art & Technics*. Columbia U.P. paperback, 1960.
- Potter, N. *What is a Designer?* Studio Vista, 1969.
- Panero, J. *Anatomy for Interior Designers*. 3rd ed. Whitney, 1962.
- Street, A. and Alexander, W. *Metals in the Service of Man*. 4th ed. Pelican, A125.
- Zimelli, U. and Vergerio, G. *Decorative Ironwork*. 2nd ed. Hamlyn, 1969.

## 21.012 Industrial Arts II

The principles of three-dimensional design and design analysis. Introduction to product design—visual fundamentals and visual presentation in two and three dimensions—functional and psychological aspects of product design. The theories of work factor systems, basic motion-time study, motion-time analysis, and methods-time measurement with particular reference to their human significance.

*Laboratory and Studio*—The execution of three-dimensional projects in various media. Projects in product design. Experimental work and directed observation involving the various methods of work analysis.

### TEXTBOOKS

- Jones, J. C. *Design Methods*. Wiley, Interscience, 1970.
- Landes, D. S. *The Rise of Capitalism*. Macmillan, 1966.
- \* Leach, B. *A Potter's Book*. Faber, 1955.
- \* McMeekin, I. J. *Notes for Potters in Australia*. Vol. 1. N.S.W.U.P., 1966.
- Mumford, L. *Technics and Civilization*. Harbinger Paperback. Harcourt, Brace & World, 1934.
- \* Parmelee, C. W. *Ceramic Glazes*. Industrial Publications, 1948.
- Pye, D. *The Nature and Art of Workmanship*. C.U.P., 1968.

### REFERENCE BOOKS

- Amaya, M. *Art Nouveau*. Studio Vista/Dutton, 1966.
- \* Andrews, A. I. *Ceramic Tests and Calculations*. Wiley, 1955.
- \* Barsali, I. B. *Medieval Goldsmith's Work*. 3rd ed. Hamlyn, 1969.
- Bayer, H. and Gropius, W., eds. *Bauhaus 1919-1928*. Branford, 1959.
- Blake, P. *Mies van der Rohe: The Architecture of Structure*. Pelican, A606.
- Brochmann, O. *Good and Bad Taste*. Eyre & Spottiswoode, 1955.
- \* Cardew, M. *Pioneer Pottery*. Longmans Green, 1969.
- Clark, K. *Civilization*. BBC and John Murray (paperback ed.), 1971.
- Dreyfuss, H. *The Measure of Man*. Whitney Library of Design, 1967.
- Forbes, R. J. and Dijksterhuis, E. J. *A History of Science & Technology*. Vols. I and II. Pelican A498/9, 1963.
- \* Grim, R. E. *Applied Clay Mineralogy*. McGraw-Hill, New York, 1962.
- Gregory, S. A. *The Design Method*. Butterworths, 1966.
- Jones, J. C. and Thornley, D. G. *Conference on Design Methods*. Pergamon, 1963.
- Kellerman, F., et al., eds. *Vademecum Ergonomics in Industry*. Philips Technical Library, 1963.

\*For students specializing in Ceramics.

- \*Leach, B. H. *A Potter's Portfolio*. Lund Humphries, 1961.  
 Mumford, L. *The Myth of the Machine*. Secker & Warburg, 1967.  
 Mumford, L. *The Pentagon of Power*. Secker & Warburg, 1970.  
 Murrell, K. E. *Ergonomics—Man in His Working Environment*. Chapman & Hall, 1965.  
 Nelson, G. *Problems of Design*. Whitney, 1957.  
 \*Norton, F. H. *Ceramics for the Artist Potter*. Addison-Wesley, 1956.  
 Panero, J. *Anatomy for Interior Designers*. Whitney, 1962.  
 Pevsner, N. *Pioneers of Modern Design*. Pelican, A497.  
 Untracht, O. *Enamelling on Metal*. Greenberg, 1957.  
 Zimelli, U. and Vergerio, G. *Decorative Ironwork*. 2nd ed. Hamlyn, 1969.

## 21.013 Industrial Arts III

The creative process and the factors influencing it—detailed study of and solutions to the problems associated with product design. The philosophy of comprehensive design and its relationship to work—an integrative overview of the attitudes and viewpoints of the designer and the techniques of analysis, synthesis and evaluation currently used. Industrial organization theory—the principal theories of industrial organization from the eighteenth century to the present day. The nature of management and its various functions and methods or organization in western industrial society.

*Laboratory and Studio*—The execution of advanced problems in product design in various media—analysis and criticism. Field work in industry involving the analysis and evaluation of methods of industrial organization.

### TEXTBOOKS

- Fields, A. *Method Study*. Cassell, 1969.  
 \* McMeekin, I. J. *Notes for Potters in Australia*. N.S.W.U.P., 1966.  
 \* Parmelee, C. W. *Ceramic Glazes*. Industrial Publications Inc., 1948.  
 Walker, C. R. *Technology, Industry and Man—the Age of Acceleration*. McGraw-Hill, 1968.

### REFERENCE BOOKS

- Abegglen, J. C. *The Japanese Factory*. Free Press, 1958.  
 Barnes, R. M. *Motion and Time Study*. 5th ed. Wiley, 1963.  
 Bell, W. *The Schools of Design*. Routledge and Kegan Paul, 1963.  
 \*Bushnell, G. H. S. and Digby, A. *Ancient American Pottery*. Faber, 1955.  
 Burlingame, R. *Machines that built America*. Signet Key, 1955.  
 \*Cardew, M. *Pioneer Pottery*. Longmans Green, 1969.  
 Chambers, J. *The Workshop of the World*. OUP, 1968.  
 Chapanis, A. *Man-Machine Engineering*. Tavistock, 1965.  
 Crossan, R. M. and Nance, H. W. *Master Standard Data*. McGraw-Hill, 1962.  
 Dreyfuss, H. *The Measure of Man*. Whitney Library of Design, 1967.  
 Drucker, P. F. *The Concept of the Corporation*. Mentor, 1964.  
 Drucker, P. F. *The Practice of Management*. Heinemann, 1955.  
 Etzioni, A. *Modern Organisations*. Prentice-Hall, 1964.  
 Etzioni, A. *Complex Organisations*. Holt, Rinehart & Winston, 1961.  
 Friedmann, G. *The Anatomy of Work*. Heinemann, 1963.  
 Friedmann, G. *Industrial Society*. Free Press, 1955.  
 Galbraith, J. K. *The Liberal Hour*. Pelican, 1963. A643.  
 \*Honey, W. B. *English Pottery and Porcelain*. Black, 1933.  
 \*Honey, W. B. *The Art of the Potter*. Faber, 1946.

\* For students specializing in Ceramics.

- \*Honey, W. B. *The Ceramic Art of China and other Countries of the Far East*. Faber, 1945.
- Krupp, S. *Pattern in Organisation Analysis*. Holt, Rinehart and Winston, 1961.
- \*Lane, A. *Early Islamic Pottery*. Faber, 1947.
- \*Lane, A. *Greek Pottery*. Faber, 1948.
- \*Leach, B. H. *A Potter's Portfolio*. Lund Humphries, 1951.
- Lockyer, K. G. *An Introduction to Critical Path Analysis*. Pitman, 1964.
- \*Miller, R. A. *Japanese Ceramics*. Toto Shuppan, Tokyo, 1960.
- Morison, E. E. *Man, Machines and Modern Times*. M.I.T. Press, 1966.
- Mumford, L. *The Myth of the Machine*. Secker & Warburg, 1967.
- Mumford, L. *The Pentagon of Power*. Secker & Warburg, 1970.
- \*Norton, F. H. *Ceramics for the Artist Potter*. Addison-Wesley, 1956.
- Pevsner, N. *Pioneers of Modern Design*. Pelican, A497.
- \*Rackham, B. *Early Staffordshire Pottery*. Faber, 1941.
- \*Rackham, B. *Medieval English Pottery*. Faber, 1948.
- \*Rose, M. *Artist Potters in England*. Faber, 1950.
- Sorensen, C. E. *My Forty Years with Ford*. Collier, 1962.
- Thompson, E. P. *The Making of the English Working Class*. Pelican, 1968.
- Tawney, R. H. *The Acquisitive Society*. Fontana, 1961.
- Townsend, R. *Up the Organisation*. Hodder Fawcett-Coronet, 1970.
- \*Wykes-Joyce, H. *7,000 Years of Pottery and Porcelain*. Peter Owen, 1958.
- Whyte, W. H. *The Organisation Man*. Pelican, A538. 1960.

## 21.201 Freehand Drawing

Teaches the student to see and draw objects as they are, to perceive the structure of natural forms, and to appreciate the causes behind their formation. The practical work in various media, pencil, pen, brush and charcoal, is intended also to develop the ability to express ideas in a visual way. This can later form a basis for the execution of projects in industrial design.

Subjects include: drawing of single objects and groups of objects, figure drawing, drawing from memory, and quick sketching; depiction by line and by light and shade; the principles of free perspective drawing.

### TEXTBOOK

Gill, R. W. *Rendering with Pen and Ink* (The Thames and Hudson Manual of). Thames-Hudson, 1973.

### REFERENCE BOOK

Rule, J. T. and Coons, S. A. *Graphics*. McGraw-Hill, 1961.

## 21.211 Drawing and Design

Advanced problems in engineering or architectural drawing and design. Assignments to be carried out in the studio, but tutorials will be given where necessary.

### TEXTBOOK

Rule, J. T. and Coons, S. A. *Graphics*. McGraw-Hill, 1961.

### REFERENCE BOOKS

Abbott, W. *Practical Geometry and Engineering Graphics*. Blackie, 1956.

Doblin, J. *Perspective: A New System for Designers*. Whitney, 1956.

\* For students specializing in Ceramics.

- Doughtie, J. L. and Vallance, A. *Design of Machine Members*. McGraw-Hill, 1964.  
Edel, D. H., Jr. ed. *Introduction to Creative Design*. Prentice-Hall, 1967.  
Hoelscher, R. P. and Springer, C. H. *Engineering Drawing & Geometry*. John Wiley, 1956.  
Ham, M. E. et al. *Mechanics of Machinery*. McGraw-Hill, 1958.  
Levens, A. S. *Graphics*. Wiley, 1968.

### **21.902 Seminar.**

### **21.903 Project.**

### **21.501G Industrial Design**

This area of the course is drawn from the existing body of knowledge concerning industrial design. In particular, it will emphasise design principles and the main functions, skills and responsibilities of the designer for industry. The subject matter will be communicated through lectures, tutorials and practical assignments, the aims of which will be to give the students a broad view of design in an industrial society, an aesthetic conviction and sensibility and the skills and methods required for the practice of industrial design.

*Historical, social and aesthetic bases of industrial design.*

*Design Methodology.*

*Design Principles.*

*Signs, Symbols and Communication.*

*Ergonomics*

*Professional, Commercial and Industrial Practice.*

*Design Media.*

### **TEXTBOOKS**

See 21.511G Design Projects.

### **21.511G Design Projects**

Throughout the course the students will be involved in a continuous series of design exercises and projects, graduated in scale and difficulty and with varying emphasis on particular aspects of design technology.

These projects form the central part of the course. The subjects chosen will relate to the current lecture or case study programmes, so that theory and practice can be integrated. Design projects provide an experience in which technology, design method, aesthetics and social need are synthesized and in which interrelationship must be sought and inconsistencies resolved. The student is brought to face problems involving judgment, choice and decision, some of which can be based on objective, analytical study, whilst others will be more subjective, intuitive and emotive.

The projects will be supervised by the academic staff of the Department with assistance from an appropriate practising designer and, when necessary, academic staff from other sections of the University. Tutorials as well as discussions with individual students will arise from the projects, especially during the design development phase. Opportunity will be given for the student to act as a member of a design team.

At the commencement of each design project the students will be briefed in detail as to the intention, and object of the exercise: this brief will also include basic information, controlling factors, a time schedule and requirements for presentation.

## 21.501G INDUSTRIAL DESIGN and 21.511G DESIGN PROJECTS

### TEXTBOOKS

- Ashford, F. C. *The Aesthetics of Engineering Design*. Business Books Ltd., 1969.
- Britt, S. H., ed. *Consumer Behaviour and the Behavioural Sciences*. Wiley, 1966.
- Gist, R. R. *Marketing and Society*. Holt, Rinehart & Winston, 1971.
- Jones, J. C. *Design Methods*. Wiley, Interscience, 1970.
- Pare, E., Lyman, F. and Kimbrell, J. *Introduction to Engineering Design*. Holt, Rinehart & Winston, 1963.

### REFERENCE BOOKS

- Beresford-Evans, J. *Form in Engineering Design*. Clarendon Press, Oxford, 1954.
- Doblin, J. *One Hundred Great Product Designs*. Van Nostrand Rinehold, 1971.
- Edel, D. H., ed. *Introduction to Creative Design*. Prentice Hall, 1967.
- Ferebee, A. *A History of Design From the Victorian Era to the Present*. Van Nostrand Rinehold, 1971.
- Galbraith, J. K. *The New Industrial Estate*. New American Library, N.Y., 1972.
- Hayakawa, S. I. *Language in Thought and Action*. George Allen Unwin, 1963.
- Hennessey, J. and Papanek, V. *Nomadic Furniture*. Pantheon, 1973.
- Schaefer, H. *The Roots of Modern Design*. Studio Vista, 1970.

## 21.521G Seminar

In general, seminars will be devoted to design theory and philosophy and to the presentation by students of papers on design problems. Seminars will be closely integrated with the other sections of the course work. From time to time, such matters as general design problems, current issues in design, unusual design problems and addresses by visiting designers, will also constitute the topics of seminars.

## 21.531G Creative Art Elective

## SCHOOL OF APPLIED GEOLOGY

### GEOLOGY, B.Sc. (Education)

## 25.501 Geology I, B.Sc. (Ed.)

As for 25.111 Geoscience I.

## 25.111 Geoscience I

*Physical Geology*—The structure and main surface features of the earth; geological cycle—processes of erosion, transportation, sedimentation and

lithification. Surface and sub-surface water. Weathering, lakes, rivers, glacial phenomena. Vulcanism, earthquakes, orogenesis and epeirogenesis. Introductory physiography.

*Crystallography and Mineralogy*—Introduction to crystal symmetry, systems, forms, habit, twinning. Occurrence, form and physical properties of minerals. Mineral classification. Descriptive mineralogy. Principal rock forming minerals. Basic structures of silicate minerals.

*Petrology*—Field occurrence, lithological characteristics and structural relationships of igneous, sedimentary and metamorphic rocks. Introduction to coal, oil and ore deposits.

*Stratigraphy and Palaeontology*—Basic principles of stratigraphy; introductory palaeontology. The geological time scale. The geological history of the Australian continent and more specifically that of New South Wales in introductory outline.

*Practical Work*—Preparation and interpretation of geological maps and sections. Map reading and use of simple geological instruments. Study of simple crystal forms and symmetry. Identification and description of common minerals and rocks in hand specimen. Recognition and description of examples of important fossil groups. Supplemented by three field tutorials, attendance at which is compulsory.

#### TEXTBOOKS

Bickford, M. E. *et al. Geology Today*. CRM Books, California, 1973.

Black, R. M. *Elements of Palaeontology*. C.U.P., 1970.

Rutley, F. *Rutley's Elements of Mineralogy*. Rev. by Read, H. H. Murby, London.

Tyrrill, G. W. *The Principles of Petrology*. Methuen.

#### REFERENCE BOOKS

Bryan, J. H., McElroy, C. T. and Rose, G. *Explanatory Notes to Accompany the Sydney 4-mile Geological Map (with map)*. 3rd ed. Bureau of Mineral Resources, 1966.

Holmes, A. *Principles of Physical Geology*. N.A.P. or

Longwell, C. R. and Flint, R. F. *Introduction to Physical Geology*. Wiley.

Kostov, I. *Mineralogy*. Oliver & Boyd, 1968.

Packham, G. H., ed. *The Geology of New South Wales. Vol. 16, Part 1, J. Geol. Soc. Aust.* Mercury Press, 1969.

#### 25.502, 25.503, 25.504 Geology II, III, IV, B.Sc. (Ed.)

The second, third, and fourth years will each consist of a compulsory CORE and a number of ELECTIVES which may be chosen from the list below and unless otherwise specified these electives may be taken in any year of study.

To complete each year the numbers of electives required are: one elective in Second Year, three electives in Third Year and two in the Fourth Year.

#### 25.502 Geology II, B.Sc. (Ed.)

*Sedimentary Environments*—Sedimentary rock classifications, modes of sediment transport, sedimentary structures and flow regime concepts; fluvial, deltaic and marine environments of deposition, origin and classification of limestones. Evaporite sedimentation.

*Australian Stratigraphy*—Tectonic and stratigraphic provinces of Australia. Stratigraphic principles, stratigraphy of the Lachlan Geosyncline, New England Geosyncline and the Sydney Basin.

*Invertebrate Palaeontology*—Principles of palaeontology and its relationship to the other branches of geology. Systematic description and detailed morphological study of the invertebrate phyla and their subdivisions. An introduction to Palaeobotany. *Laboratory*: detailed diagnostic and morphological description of common fossils with reference to their stratigraphic distribution.

*Petrology*—Hermann-Maugin notation. Chemistry, structure, physical and optical properties of main silicate mineral groups. Reaction series. Silicate metal crystallization. The more common igneous rocks. An introduction to economic mineral deposits. *Practical work*: elements of optical mineralogy; microscopic examination of the major silicate mineral groups.

*Field tutorials*—Approximately six days will be spent on field activity; attendance is compulsory.

*Electives*—one elective may be taken from the list below.

## TEXTBOOKS

### *Sedimentary Environments*

Blatt, H., Middleton, G. and Murray, R. *Origin of Sedimentary Rocks*. Prentice-Hall, 1972.

### *Australian Stratigraphy*

Brown, D. A., Campbell, K. S. W. and Crook, K. A. W. *Geological Evolution of Australia and New Zealand*. Pergamon, 1968.

### *Invertebrate Palaeontology*

Easton, W. H. *Invertebrate Palaeontology*. Harper & Bros., 1960.

### *Petrology*

Hurlbut, C. S. ed. *Dana's Manual of Mineralogy*. Wiley.

or  
Kostovc, I. *Mineralogy*. Oliver & Boyd, 1968.

or  
Mason, B. and Berry, L. G. *Elements of Mineralogy*. 2nd ed. W. H. Freeman, 1968.

Bayly, B. *Introduction to Petrology*. Prentice-Hall, 1968.

or  
Huang, W. T. *Petrology*. McGraw-Hill, 1962.

or  
Jackson, K. C. *Textbook of Lithology*. McGraw-Hill, 1970.

## REFERENCE BOOKS

### *Australian Stratigraphy*

Packham, G. H. ed. *The Geology of New South Wales*. Vol. 16, Pt. 1, *J. Geol. Soc. Aust.*, Mercury Press, 1969.

### *Palaeontology*

Moore, R. C., Lalicker, C. G. and Fisher, A. G. *Invertebrate Fossils*. McGraw-Hill, 1952.

Beerbower, J. *Search for the Past*. 2nd ed. Prentice-Hall, 1968.

Raup, D. M. and Stanley, S. M. *Principles of Palaeontology*. W. H. Freeman & Co., 1971.

*Petrology*

Deer, W. A., Howie, R. A. and Zussman, J. *An Introduction to the Rock Forming Minerals*. Longmans, 1966.

Heinrich, E. W. *Microscope Identification of Minerals*. McGraw-Hill, 1965.

Phillips, F. C. *An Introduction to Crystallography*. Longmans.

**25.503 Geology III, B.Sc. (Ed.)**

*Advanced Petrology*—Parent magmas and differentiation trends in igneous petrology. Metamorphic grade, zones, and facies, ACF and AKF diagrams. Introduction to space groups. Principles of X-ray diffraction. The major non-silicate mineral groups. *Practical work*: Petrographic examination of representative sedimentary, igneous and metamorphic rocks. *Field work*: at least two one-day field trips to cover aspects of the above course.

*Energy Resources—Coal*: The formation of coal and the present environment; sedimentary structures associated with coal seams, maceral concept and coal classification, type and rank, coal utilisation and economics. *Practical work*: Microscope study of coal in thin and polished section.

*Petroleum*: Modes of occurrence, reservoir properties, prospecting and formation evaluation; oil fields of Australia; mechanisms and modes of petroleum accumulation. *Practical work*: Problems in oil field stratigraphic correlation, reserves estimation, structure contouring, map analysis.

*Geophysics*—An introduction to the physics, shape, structure, constitution and dynamics of the Earth; seismology, gravity, geodesy, geothermy, geomagnetism and palaeomagnetism.

*Photogeology*—Principles of photogrammetry and photointerpretation. Selected air photographs illustrating geological features will be examined and photogeological map will be produced. Colour and infrared aerial photographs.

*Field tutorials*—Approximately four days will be spent on field activity; attendance is compulsory.

*Electives*—Three electives may be taken from the list below:

**TEXTBOOKS***Advanced Petrology*

Bowen, N. L. *The Evolution of the Igneous Rocks*.

Deer, W. A., Howie, R. A. and Zussman, J. *Rock Forming Minerals*. Longmans, 1962.

Joplin, G. A. *Petrography of Australian Igneous Rocks*. A. & R.

Turner, F. J. *Metamorphic Petrology*. McGraw-Mill, 1968.

Turner, F. J. and Verhoogen, J. *Igneous and Metamorphic Petrology*. McGraw-Hill, 1960.

Williams, H., Turner, F. J. and Gilbert, C. M. *Petrography*. Freeman, 1954.

*Geophysics*

Howell, B. *Introduction to Geophysics*. McGraw-Hill, 1959.

**REFERENCE BOOKS**

*Advanced Petrology*—As for 25.502, Petrology

*Geophysics*

Garland, G. D. *The Earth's Shape and Gravity*. Pergamon, 1964.

Howell, B. *Introduction to Geophysics*. McGraw-Hill, 1959.

Stacey, F. P. *Physics of the Earth*. Wiley, 1969.



**25.504 Geology IV, B.Sc. (Ed.)**

*Economic Geology*—Principles and theories of ore formation. Magmatic, hydrothermal, submarine exhalative deposits. Sedimentary deposits including biogenetic alluvial and residual deposits. Metallic and non-metallic economic minerals. Hand specimen and elementary mineragraphic practical work.

*Project*—Consists of a laboratory research project dealing with some aspect of geology related to the individual interests.

*Electives*—Two electives may be taken from the list below.

**TEXTBOOKS***Economic Geology*

Lindgren, W. *Mineral Deposits*. 4th ed. McGraw-Hill, 1933.

Bateman, A. M. *Economic Mineral Deposits*. 2nd ed. Wiley, 1950.

**REFERENCE BOOK***Economic Geology*

Park, C. F. and MacDiarmid, R. A. *Ore Deposits*. Freeman, 1964.

**Electives** (to be taken with 25.502, 25.503, 25.504)

The following electives are offered to complete the above requirements:

*Oceanography*—Dynamic properties of the oceanic water-masses. Physics and chemistry of sea water. Submarine geology and cartography. Recent sedimentation and its correlation with terrestrial stratigraphy. Sediments of organic origin. Ocean materials of economic importance.

\**Environmental Geology* (equivalent to two electives)—Geological resource distribution and the relation to urban development. The ecosystem and its geological constraints; conflicts between mining development and conservation, energy sources and their role in pollution. The estuarine and coastal environments, their ecology and the modifications caused by common pollutants. Extensive field activity and laboratory work form an important part of this course.

\**Field Mapping*—It consists of a geological survey camp to demonstrate field techniques. It will be of four days' duration during the Second Session.

\*†*Australian Igneous and Metamorphic Rocks*—The igneous and metamorphic geology of N.S.W. The igneous and metamorphic evolution of N.S.W. *Practical work*: preparation and petrographic examination of thin sections of rocks of N.S.W. *Field work*: at least one field trip to examine rocks discussed in this course.

\**Structural Geology*—Descriptions of structures, fractures, folds and their structural elements. Introduction to tectonics. *Practical work*: introduction to stereographic methods.

†*Geochemistry*—Some modern methods of rock and mineral analysis. Accuracy, precision and quality of geochemical data. The distribution of elements in Terrestrial rocks. Norms.

\**Vertebrate Palaeontology*—The rise of the vertebrates and the early amphibia; the reptiles. The flying reptiles and the birds. The early primates and the advent of man.

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\* A minimum enrolment of 6 students is necessary for any of these electives to be offered.

† These electives may be taken either in 25.503 or 25.504; all other electives may be taken in 25.502, 25.503 or 25.504.

## TEXTBOOKS

*Oceanography*

Pickard, G. L. *Descriptive Physical Oceanography*. Pergamon, 1964.

*Australian Igneous and Metamorphic Rocks*

Joplin, G. *A Petrography of Australian Igneous Rocks*. A. & R.

Joplin, G. *A Petrography of Australian Metamorphic Rocks*. A. & R., 1968.

*Structural Geology*

Spencer, E. W. *Introduction to the Structure of the Earth*. McGraw-Hill, 1969.

Ragan, D. M. *An Introduction to Geometrical Techniques*. Wiley, 1968.

*Geochemistry*

Ahrens, L. H. *Distribution of the Elements in our Planet*. McGraw-Hill.

Zussman, J. ed. *Physical Methods in Determinative Mineralogy*. Academic, 1967.

*Vertebrate Palaeontology*

Colbert, E. H. *Evolution of the Vertebrates*. Wiley.

Von Koenigswald, G. H. R. *The Evolution of Man*. University of Michigan, 1962.

## REFERENCE BOOKS

*Oceanography*

Menard, H. W. *Marine Geology of the Pacific*. McGraw-Hill, 1964.

Shepard, F. P. *Submarine Geology*. 2nd ed. Harper, 1968.

*Environmental Geology*

Detwyler, T. R. *Man's Impact on the Environment*. McGraw-Hill, 1971.

Moore, H. B. *Marine Ecology*. Wiley, 1965.

Sinden, J. A., ed. *The Natural Resources of Australia*. A. & R.

*Structural Geology*

Billings, M. *Structural Geology*. Prentice-Hall, 1954.

Hills, E. S. *Elements of Structural Geology*. Wiley, 1963.

Whitten, E. H. T. *Structural Geology of Folded Rocks*. Wiley, 1966.

*Geochemistry*

Wedepohl, K. H. *Handbook of Geochemistry*. Springer, 1969.

## SCHOOL OF BIOCHEMISTRY

**41.101A Chemistry of Biologically Important Molecules**

The chemical properties of amino acids, peptides and proteins, carbohydrates, nucleic acids and lipids, and porphyrins, and the biological roles of these compounds. The nature and function of enzymes. Practical work to illustrate the lecture course.

## TEXTBOOKS

Barker, R. *Organic Chemistry of Biological Compounds*. Prentice Hall, 1971.

Bohinski, R. C. *Modern Concepts in Biochemistry*. Allyn & Bacon Inc., 1973.

Montgomery, R. & Swenson, C. A. *Quantitative Problem in the Biological Sciences*. Freeman, 1969.

**REFERENCE BOOK**

White, A., Handler, R. and Smith, E. L. *Principles of Biochemistry*. 5th ed. McGraw-Hill, 1973.

**PREREQUISITES**

17.001 General and Human Biology. 2.001 Chemistry I.

**CO-REQUISITES**

41.101B Metabolism.

This unit is offered in Session 1.

**41.101B Metabolism**

The intermediary metabolism of carbohydrates, lipids and nitrogenous compounds. The molecular mechanism of gene expression and protein synthesis. Practical work to illustrate the lecture course.

**TEXTBOOKS**

As for 41.101A.

McGilvery, R. W. *Biochemistry: A Functional Approach*. 1st ed. Saunders, 1970.

**REFERENCE BOOK**

As for 41.101A.

**PREREQUISITES**

17.001 General and Human Biology. 2.001 Chemistry I.

**CO-REQUISITES**

41.101A Chemistry of Biologically Important Molecules.

This unit is offered in Session 1.

**SCHOOL OF BOTANY****43.101A Genetics and Biometry**

Analysis of the mitotic cycle; replication of DNA and its organization in the chromosomes, linkage, non-meiotic recombination; mutation, structural changes, polyploidy, aneuploidy; population genetics; cytoplasmic inheritance; episomes; gene structure and function. An introduction to statistical methods and their application to biological data, including an introduction to analysis of variance and experimental design.

**TEXTBOOKS**

Clarke, M. C. *Statistics and Experimental Design*. Arnold, 1969.

Rohlf, F. T. and Sokal, R. *Statistical Tables*. Freeman, 1969.

Srb, A. M., Owen, R. D. and Edgar, R. S. *General Genetics*. 2nd ed. Freeman, 1965.

**PREREQUISITES**

17.001 General and Human Biology.

This unit is offered jointly by the Schools of Botany and Zoology during Session 1.

**43.101B Plant Evolution and Ecology**

A study of the evolution of vegetative form and structure of vascular plants; an examination of their organization into terrestrial communities; identification, evolution and distribution of elements of the Australian flora. Students will be required to attend field excursions all of which form an integral part of the course.

**TEXTBOOKS**

Beadle, N. C. W., Evans, O. E. and Carolin, R. C. *Flora of the Sydney Region*. Reed, 1972.

Fahn, A. *Plant Anatomy*. Pergamon, 1967.

Whittaker, R. H. *Communities and Ecosystems*. Collier MacMillan, N.Y., 1970.

**PREREQUISITES**

17.001 General and Human Biology.

This unit is offered in Session 1.

**43.101C Plant Physiology**

A general introduction to the physiology of the whole plant including a consideration of photosynthesis, inorganic nutrition, transport, translocation, physiology of growth and development, and plant growth substances and their application in agriculture.

**TEXTBOOKS**

Galston, A. W. & Davies, P. J. *Control Mechanisms in Plant Development*. Prentice-Hall, 1970.

Richardson, M. *Translocation in Plants*. Arnold, 1968.

Sutcliffe, J. *Plants and Water*. Arnold, 1968.

Whittingham, C. P. *Photosynthesis*. O.U.P., 1971.

**PREREQUISITES**

17.001 General and Human Biology.

2.001 Chemistry I or

1.001 Physics I\* or

1.041 Physics IC\*

This unit is offered in Session 2.

\* In some circumstances this unit may be taken as a co-requisite.

**43.102E Environmental Botany**

An introduction to the soil and atmospheric environment in which terrestrial plants exist. Behaviour and response of the flowering plant to its environment, both in nature and agriculture. Students will be required to attend field excursions all of which form an integral part of the course.

**PREREQUISITES**

17.001 General and Human Biology.

1.001 Physics I or

1.041 Physics IC.

This unit is offered in Session 2.

**SCHOOL OF MICROBIOLOGY****44.101 Introductory Microbiology**

The general nature, occurrence and importance of micro-organisms. A systematic review of the major groups of micro-organisms: the eucaryotic protista (micro-algae, protozoa and fungi); procaryotic protista (blue-green algae, "higher" bacteria, typical unicellular bacteria and small bacteria-like forms); plant, animal and bacterial viruses. The relationship between micro-organisms and their environment; ecological considerations. Interactions between micro-organisms and higher organisms.

**TEXTBOOKS**

Brock, T. D. *Biology of Micro-organisms*. Prentice-Hall, 1970 or

Hawker, L. E. and Linton, A. H. eds. *Micro-organisms: Function, Form and Environment*. Arnold, 1971 or

Pelczar, M. J. & Reid, R. D. *Microbiology*. 3rd ed. McGraw-Hill, or

Stanier, R. Y., Doudoroff, M. and Adelberg, E. A. *The Microbial World*. 3rd ed. Prentice-Hall, 1970.

[Brock, or Pelczar & Reid, is the first choice if no more microbiology is to be taken.]

**PREREQUISITES**

17.001 General and Human Biology.

**SCHOOL OF ZOOLOGY****45.101A Genetics and Biometry**

See under 43.101A.

**45.101B Invertebrate Zoology**

A comparative study of the major invertebrate phyla with emphasis on morphology, systematics and phylogeny. Practical work to illustrate the lecture course.

Obligatory field camp.

This unit is offered in Session 2.

**TEXTBOOK**

Meglitsch, P. A. *Invertebrate Zoology*. 2nd ed. O.U.P., 1972.

**REFERENCE BOOKS**

Al-Hussaini, A. H. and Demian, E. J. *Practical Animal Morphology*. Macmillan, 1967.

- Barnes, R. D. *Invertebrate Zoology*. Saunders, 1968.  
 Fraenkel, G. S. and Gunn, D. L. *Orientation of Animals*. Dover, 1961.  
 Hyman, L. *The Invertebrata*. Vol. 1-6. McGraw-Hill.  
 Imms, A. D. *Textbook of Entomology*. Methuen, 1962.  
 MacGinitie, G. E. and MacGinitie, N. *Natural History of Marine Animals*. McGraw-Hill, 1968.  
 Nicol, J. A. C. *The Biology of Marine Animals*. Pitman, 1967.  
 Prosser, C. L. and Brown, F. A. *Comparative Animal Physiology*. Saunders, 1961.  
 Wilber, C. and Yonge, C. M. *Physiology of the Molluscs*. Vols. I & II. Wiley, 1967.

#### PREREQUISITES

- 1.001 Physics I or 1.011 Higher Physics I or 1.041 Physics IC.  
 2.001 Chemistry I.  
 10.001 Mathematics I or 10.011 Higher Mathematics I or 10.021 Mathematics II.  
 17.001 General and Human Biology.

#### 45.101C Vertebrate Zoology

A comparative study of the Chordata. Morphology, systematics, evolution, natural history, with reference to selected aspects of physiology and reproduction. Practical work to supplement the lecture course. Field excursions as arranged. Obligatory field camp.  
 This unit is offered in Session 2.

#### TEXTBOOKS

- Romer, A. S. *The Vertebrate Body*. 4th ed. University of Chicago Press, 1959. (Sixth impression 1971.)  
 Weichert, C. K. *Anatomy of the Chordates*. 3rd ed. McGraw-Hill, 1969.

#### REFERENCE BOOKS

- Bellairs, A. *The Life of Reptiles*. Vols. 1 & 2. Weidenfeld & Nicolson Natural History, 1969.  
 Berrill, N. J. *The Tunicata*. Ray Society Monograph, 1950.  
 Kurten, B. *The Age of the Dinosaurs*. Weidenfeld and Nicolson, 1968.  
 Kurten, B. *The Age of Mammals*. Weidenfeld and Nicolson, 1971.  
 Marshall, A. J. *Biology and Comparative Physiology of the Birds*. Vols. 1 & II. Academic Press 1960-61.  
 Saunders, J. T. and Manton, S. M. *A Manual of Vertebrate Morphology*. 4th ed. O.U.P., 1969.  
 Walker, E. P. *Mammals of the World*. 2nd ed. Johns Hopkins Press, 1968.  
 Young, J. Z. *The Life of Mammals*. Clarendon Press, 1957.  
 Young, J. Z. *The Life of the Vertebrates*. O.U.P., 1958.

#### PREREQUISITES

As for 45.101B above.

#### 45.101D Field Ecology

A lecture series on the basic principles of ecology followed by an examination and evaluation of the field methods used to measure the environment and the distribution and abundance of organisms.

This unit is offered as a lecture series (two per week) in Session 2 plus a two week camp in November/December at the University's Smith's Lake Field Station.

#### TEXTBOOK

Southwood, T. R. E. *Ecological Methods*. Methuen, 1966.

#### PREREQUISITES

43/45.101A Genetics and Biometry.

#### CO-REQUISITES

45.101B Invertebrate Zoology.

or

45.101C Vertebrate Zoology.

### 45.102A Marine Ecology

A study of the metabolic, regulatory and reproductive activities of marine organisms with particular reference to the physical, chemical and biological environment in which they occur. Both field and laboratory practical work are included.

This unit is offered in Session 1, and consists of 2 hours' lecture and 4 hours' laboratory time per week.

#### TEXTBOOK

Tait, R. V. *Elements of Marine Ecology. An Introductory Course*. 2nd ed. Butterworths, 1972.

#### REFERENCE BOOKS

McConnaughey, B. H. *Introduction to Marine Biology*. Mosby, 1970.

Moore, H. B. *Marine Ecology*. Wiley, 1958.

Newell, R. C. *Biology of Intertidal Animals*. Paul Elek, 1970.

Pickard, G. L. *Descriptive Physical Oceanography*. Pergamon, 1963.

Winberg, G. G. *Methods for the Estimation of Production of Aquatic Animals*. Academic Press, 1971.

#### PREREQUISITES

As for 45.101B above.

### 45.102B Animal Behaviour

An introduction to ethology, the biological study of behaviour. Physiological, ecological, developmental and evolutionary aspects of behaviour are examined as important elements of the study of causal factors underlying behaviour. Both field and laboratory work are included.

This unit is offered in Session 2, and consists of 2 hours' lecture and 4 hours' laboratory time per week.

#### TEXTBOOKS

Manning, A. *An Introduction to Animal Behaviour*. 2nd ed. Arnold, 1972.

Smith, F. V. *Purpose in Animal Behaviour*. Hutchinson, 1971.

## REFERENCE BOOKS

- Aronson, L., Tobach, E., Lehrman, D. S. & Rosenblatt, J. S. *Development and Evolution of Behaviour*. Freeman, 1970.  
Crook, J. H. *Social Behaviour in Birds and Mammals*. Academic Press, 1970.  
Hinde, R. A. *Animal Behaviour*. McGraw-Hill, 1970.  
Hinde, R. A. ed. *Bird Vocalization*. C.U.P., 1970.  
Klopfer, P. H. *Habitats and Territories*. Basic Books, 1969.  
Marler, P. & Hamilton, W. J. *Mechanisms of Animal Behaviour*. Wiley, 1966.  
Sluckin, W. J. *Early Learning in Animals and Man*. Allen & Unwin, 1969.

## PREREQUISITES

- 1.001 Physics I or 1.011 Higher Physics I or 1.041 Physics IC.  
2.001 Chemistry I.  
10.001 Mathematics I or 10.011 Higher Mathematics I or 10.021 Mathematics IT.  
17.001 General and Human Biology.

**45.102F Invertebrate Behaviour**

Phylogenetic examination of behaviour in relation to the increasing complexity of invertebrates, with emphasis on orientation and movement; feeding, defensive, reproductive, social and rhythmic behaviour. These studies involve both the exogenous and endogenous contributions to invertebrate behaviour.

This unit is normally offered in Session 1 and consists of 2 hours' lecture and 4 hours' laboratory time per week but is not available in 1974.

## TEXTBOOK

- Marler, P. and Hamilton, W. J. *Mechanisms of Animal Behaviour*. Wiley, 1965.

## REFERENCE BOOKS

- Fraenkel, G. S. and Gunn, D. C. *Orientation of Animals*. Dover, 1961.  
Harker, J. E. *The Physiology of Diurnal Rhythms*. C.U.P., 1964.  
Haskell, P. T. *Insect Sounds*. Witherby, 1961.  
Highnam, K. C. and Hill, L. *The Comparative Endocrinology of the Invertebrates*. Arnold, 1969.  
Howse, P. E. *Termites: A Study in Social Behaviour*. Hutchinson, 1970.  
Wells, M. J. *Brain and Behaviour in Cephalopods*. Heinemann, 1962.

## CO-REQUISITE

- 45.101B Invertebrate Zoology.

## PREREQUISITES

- 1.001 Physics I or 1.011 Higher Physics I or 1.041 Physics IC.  
2.001 Chemistry I.  
10.001 Mathematics I or 10.011 Higher Mathematics I or 10.021 Mathematics IT.  
17.001 General and Human Biology.



**45.201A Insect Structure and Classification**

A comparative study of the internal anatomy and external morphology of insects. Classification and bionomics of major groups and families. A collection of insects is to be made. Practical work to include dissections, a study of mouthparts, wing venations, segmentation, etc. Field excursions as arranged.

This unit is offered in Session 1 and consists of 2 hours' lecture and 4 hours' laboratory time per week.

**TEXTBOOK**

C.S.I.R.O. *The Insects of Australia*. M.U.P., 1969.

**REFERENCE BOOKS**

Guthrie, E. M. & Tindall, A. R. *The Cockroach*. Arnold.

Imms, A. D. *Textbook of Entomology*. Methuen.

Ross, H. H. *Textbook of Entomology*. Wiley.

Snodgrass, R. E. *Principles of Insect Morphology*. McGraw-Hill.

**PREREQUISITES**

45.101B Invertebrates.

43.101A/45.101A Genetics and Biometry.

**SCHOOL OF SOCIOLOGY****53.121 Sociology IT (a) 14 week course**

For students taking only one year of sociology (including 53.121 Sociology IT (b)). An introduction to sociology.

**53.121 Sociology IT (b) 14 week course**

An extension of the general introduction, demonstrating sociology as a perspective for understanding society and human interaction with emphasis on theoretical and methodological questions.

NOTE: The (a) and (b) courses constitute a double unit, and cannot be counted separately. The (a) course is a prerequisite for the (b) course.

**TEXTBOOKS**

Students are advised not to buy any books until they are enrolled in tutorial groups.

**SCHOOL OF LIBRARIANSHIP****55.112 Libraries and Information**

The role of the library in the total communication system of society, as an agency for the preservation, dissemination and development of knowledge and information. The history of libraries and their involvement in social and technological change. The provision, functions and services of

various types of library with particular reference to the Australian environment. The role of the librarian in the library and in the information process; the library profession. Librarianship in relation to information science.

#### REFERENCE BOOKS

- Balnaves, J. *Australian Libraries*. Cheshire, 1966.  
 Gates, J. K. *Introduction to Librarianship*. McGraw-Hill, 1967.  
 Hessel, A. *History of Libraries*. Scarecrow Press, 1950.  
 Kochen, M. ed. *The Growth of Knowledge*. Wiley, 1967.  
 Shaffer, D. E. *The Maturity of Librarianship as a Profession*. Scarecrow Press, 1968.  
 Shera, J. H. *Libraries and the Organization of Knowledge*. Cheshire, 1966.  
 Stone, E. W. *Factors Related to the Professional Development of Librarians*. Scarecrow Press, 1969.  
 System Development Corporation. *Technology and Libraries*. 1967.  
 Thornton, J. L. *Selected Readings in the History of Librarianship*. 2nd ed. Library Association, 1966.

### 55.114 Communication and Record

The communication process. The development of various kinds of record to serve communication and to preserve knowledge. The development of printing and the book, and of other forms of record. The effects of recent technical innovations in transmitting and recording information. Reprography in relation to the diffusion of knowledge and to libraries. The mass media and their role in communication. The inter-relationships of the printed word, reading and the mass media.

#### REFERENCE BOOKS

- Aranguren, J. L. *Human Communication*. World Univ. Library, 1967.  
 Barry, Sir G. *Communication and Language*. Macdonald, 1965.  
 Brown, J. W., Lewis, R. B. & Harclerod, F. F. *A.V. Instruction; Media and Methods*. 3rd ed. McGraw-Hill, 1969.  
 Fabre, M. *A History of Communications*. Leisure Arts, 1968.  
 Harrop, D. *Modern Book Production*. Cheshire, 1968.  
 Hoggart, R. *The Uses of Literacy*. Penguin, 1965.  
 McLuhan, M. *The Gutenberg Galaxy: the Making of Typographic Man*. Routledge, 1962.  
 McNally, P. T. *A Guide to the Practice of Non-book Librarianship*. The author, 1972.  
 Mason, D. *Document Reproduction in Libraries*. Assoc. of Assistant Librarians, 1968.  
 Schramm, W. *Mass Communications: a Book of Readings*. Univ. of Illinois, 1960.  
 Schramm, W. *The Process and Effects of Mass Communication*. Univ. of Illinois, 1955.  
 Steinberg, S. H. *Five Hundred Years of Printing*. 2nd ed. Penguin, 1961.

### 55.122 Library Materials Selection and Organization

The selection and acquisition of library materials in all physical forms. The book trade and other sources of supply. The cataloguing, classification, indexing and circulation of materials in relation to the needs of users. The role of mechanization and automation.

## TEXTBOOKS

- Akers, S. G. *Simple Library Cataloging*. 5th ed. A.L.A., 1969.  
*Anglo-American Cataloging Rules*. A.L.A., 1967.  
 Carter, M. D. & Bonk, W. J. *Building Library Collections*. 3rd ed. Scarecrow Press, 1969.  
 Foskett, A. C. *The Subject Approach to Information*. 2nd ed. Bingley, 1971.

## REFERENCE BOOKS

- American Library Association. *A.L.A. Rules for Filing Catalog Cards*. 2nd ed. abridged. 1968.  
 Australian Advisory Council on Bibliographical Services. National Book Resources Development Committee. *The Development of National Book Resources*. A.A.C.O.B.S., 1965.  
 Dewey, M. *Decimal Classification and Relative Index*. 3 vols. 18th ed. Forest Press, 1971.  
 Dunkin, P. S. *Cataloging U.S.A.* A.L.A., 1969.  
 Gaver, M. ed. *Background Readings in Building Library Collections*. 2 vols. Scarecrow Press, 1969.  
 Geer, H. T. *Charging Systems*. A.L.A., 1955.  
 George Fry & Associates, Inc. *Study of Circulation Control Systems*. A.L.A., 1961.  
 Horner, J. *Cataloguing*. Assoc. of Assistant Librarians, 1970.  
 Kujoth, J. S. *Readings in Nonbook Librarianship*. Scarecrow Press, 1968.  
 Metcalfe, J. W. *Subject Classifying and Indexing of Libraries and Literature*. A. & R., 1959.  
 Olding, R. K. *Readings in Library Cataloguing*. Crosby Lockwood, 1966.  
 Osborn, A. D. *Serial Publications; their Place and Treatment in Libraries*. A.L.A., 1958.  
 Tauber, M. F. *Technical Services in Libraries*. Columbia U.P., 1958.  
 Wulfekoetter, G. *Acquisition Work*. University of Washington Press, 1961.

## 55.123 Reference Service and Materials

(a) Information sources, especially reference books, and their uses in library processes and reader services. Using publications to provide information at various levels in different library situations. (b) The bibliography as a record of publication in the mass and as a guide to individual items. National, trade and subject bibliography. Indexes and abstracts. (c) Reference books not limited to a particular subject: publication methods, coverage, organization of content, studied in relation to purpose and use. (d) The principles and methods of reference work. Its place in the total information network and in library service. Question analysis, search strategy and presentation of results to the user. The relationship of traditional reference methods to the design of mechanized information retrieval systems.

## TEXTBOOK

- Barton, M. N. *Reference Books*. 7th ed. Enoch Pratt Free Library, 1970.

## REFERENCE BOOKS

- Cheney, F. N. *Fundamental Reference Sources*. A.L.A., 1971.  
 Galvin, T. J. *Problems in Reference Service: Case Studies in Method and Policy*. Bowker, 1965.  
 Grogan, D. *Case Studies in Reference Work*. Cheshire, 1967.

- Grogan, D. *More Case Studies in Reference Work*. Bingley, 1972.  
 Hutchins, M. *Introduction to Reference Work*. A.L.A., 1959.  
 Katz, W. A. *Introduction to Reference Work*. 2 vols. McGraw-Hill, 1969.  
 Lancaster, F. W. *Information Retrieval Systems*. Wiley, 1968.  
 Linderman, W. B. *The Present Status and Future Prospects of Reference Information Service*. A.L.A., 1967.  
 Robinson, A. M. L. *Systematic Bibliography*. 2nd ed. Cheshire, 1966.  
 Rowland, A. R. *Reference Services*. Shoe String Press, 1964.  
 Walford, A. J. *Guide to Reference Material*. 3 vols. 3rd ed. L.A., 1966-70.  
 Winchell, C. M. *Guide to Reference Books and Supplements*. 4 vols. 8th ed. A.L.A., 1967-72.

### 55.124 Library Administration

The principles of administration and their application to libraries. Setting library objectives and measuring library achievement. Tools and methods of administration. The management of library staff and library finance. Administrative implications in the provision of library services and the adoption of techniques including electronic data processing. The authority relationships of libraries; the library in the political process.

#### TEXTBOOK

- Tillett, A., Kempner, T. and Wills, G. *Management Thinkers*. Penguin Books, 1970.

#### REFERENCE BOOKS

- Bowler, R. ed. *Local Public Library Administration*. International City Managers' Assoc., 1964.  
 Chapman, E. A., St. Pierre, P. L. & Lubans, J. *Library Systems Analysis Guidelines*. Wiley—Interscience, 1970.  
 Dougherty, R. M. & Heinritz, F. J. *Scientific Management of Library Operations*. Scarecrow Press, 1966.  
 Metcalf, K. D. *Planning Academic and Research Library Buildings*. McGraw-Hill, 1965.  
 Morris, J. E. *Principles of Scientific and Technical Writing*. McGraw-Hill, 1966.  
 Stebbins, K. B. *Personnel Administration in Libraries*. 2nd ed. Scarecrow Press, 1966.  
 Wasserman, P. & Bundy, M. L. eds. *Reader in Library Administration*. NCR Microcard Editions, 1968.

### Subject Bibliography: The Humanities; The Social Sciences; Pure and Applied Sciences; Law; Government Publications

The structure of the literature, with special reference to the information and research needs of users. Publications embodying original work, criticism, exposition, popularisation. The major reference works in the field. Important collections in libraries, and other sources of publications and information. Problems of availability of resources.

### 55.231 Subject Bibliography: The Humanities

#### REFERENCE BOOKS

- Asheim, L. E. *The Humanities and the Library*. A.L.A., 1957.  
 British Academy. *Research in the Humanities and the Social Sciences*. O.U.P., 1961.

Commission on the Humanities. *Report*. 1964.

Price, A. G. ed. *The Humanities in Australia*. A. & R., 1959.

Stevens, R. E. *Reference Books in the Social Sciences and Humanities*. 2nd ed. Illini Union Bookstore, 1968.

## 55.232 Subject Bibliography: The Social Sciences

### REFERENCE BOOKS

Brittain, J. M. *Information and its Users*. Bath University Press, 1970.

Foskett, D. J. *Classification and Indexing in the Social Sciences*. Butterworths, 1963.

Hale, B. M. *The Subject Bibliography of the Social Sciences and Humanities*. Pergamon, 1970.

Hoselitz, B. F. *Reader's Guide to the Social Sciences*. rev. ed. Free Press, 1970.

Kister, K. *Social Issues and Library Problems: Case Studies in Social Sciences*. Bowker, 1968.

Lewis, P. R. *The Literature of the Social Sciences*. L.A., 1960.

Mukherjee, A. K. *Annotated Guide to Reference Materials in the Human Sciences*. Asia Pub. House, 1962.

White, C. M. *Sources of Information in the Social Sciences*. 2nd ed., rev. A.L.A., 1973.

## 55.233 Subject Bibliography: Pure and Applied Sciences

### REFERENCE BOOKS

Annan, G. L. & Felter, J. W. eds. *Handbook of Medical Library Practice*. 3rd ed. Medical Library Association, 1970.

Blake, J. B. & Roos, C. eds. *Medical Reference Works 1679-1966; a selected bibliography*. Medical Library Association, 1967. Supplement 1, by M. V. Clark. Medical Library Association, 1970.

Bottle, R. T. and Wyatt, H. V. *Use of Biological Literature*. 2nd ed. Butterworth, 1971.

Fox, Sir T. *Crisis in Communication: the Functions and Future of Medical Journals*. Athlone Press, 1965.

Hanson, C. W. *Introduction to Science Information Work*. Aslib, 1971.

Hutchins, W. J. *The Language Barrier: a study in depth of the place of foreign language materials in the research activity of an academic community*. Univ. of Sheffield, Postgraduate School of Library and Information Science, 1971.

Maizell, R. E. *Abstracting Scientific and Technical Literature*. Wiley—Interscience, 1971.

Price, D. J. De Solla. *Little Science, Big Science*. Columbia U.P., 1963.

Slater, M. & Fisher, P. *Use Made of Technical Libraries*. Aslib, 1969.

System Development Corporation. *National Document-Handling Systems for Science and Technology*. Wiley, 1967.

Thornton, J. L. and Tully, R. I. J. *Scientific Books, Libraries and Collectors: a study of bibliography and the book trade in relation to science*. 3rd ed. Library Assoc., 1971.

U.S. President's Science Advisory Committee. *Science, Government and Information: the Responsibilities of the Technical Community and the Government Transfer of Information*. 1963. (Weinberg Report.)

Walford, A. J. *Guide to Reference Material*. Vol. 1. Science and Technology. 2nd ed. Library Assoc. 1966.

**55.236 Subject Bibliography: Law****TEXTBOOK**

Campbell, E. M. and McDougall, D. *Legal Research: Materials and Methods*. Law Book, 1967.

**REFERENCE BOOKS**

Baalman, J. *Outline of Law in Australia*. 3rd ed. Law Book, 1969.

Sweet & Maxwell. *Guide to Law Reports and Statutes*. 4th ed. Sweet & Maxwell, 1962.

Sweet & Maxwell. *Legal Bibliography of the British Commonwealth of Nations. Vol. 6, Australia, New Zealand and their Dependencies*. 2nd ed. Sweet & Maxwell, 1958.

Way, D. *The Student's Guide to Law Libraries*. Oyez Publications, 1965.

**55.238 Subject Bibliography: Government Publications****TEXTBOOK**

Sawer, G. *Australian Government Today*. rev. ed. M.U.P., 1967.

**REFERENCE BOOKS**

Australia. Parliament. Committees. *Parliamentary and Government Publications: Report from the (Erwin) Joint Select Committee*. Govt. Printer, 1964.

Campbell, E. M. & McDougall, D. *Legal Research: Materials and Methods*. Law Book, 1967.

Cope, R. L. *Government Publications of the Commonwealth and New South Wales. Part 1 Introduction to their Study and Use*. Bullaburra Press, 1969.

Derham, D. P., Maher, F. K. H. & Waller, P. L. *An Introduction to Law*. 2nd ed. Law Book, 1971.

N.S.W. Parliament. Library. *Government Publications in Australia: Papers on their Use and Understanding*. 3rd ed. Govt. Printer, 1973.

Pemberton, J. E. *British Official Publications*. Pergamon, 1971.

Schmeckebier, L. F. & Eastin, R. B. *Government Publications and Their Use*. Rev. ed. Brookings Institute, 1969.

**55.362 Mechanized Systems for Libraries**

Systems analysis and design for libraries. The application of electronic data processing techniques to the control of library systems for acquisitions, serials processing, circulation control and for the production of library catalogues.

Computers and allied hardware. Basic concepts of programming with emphasis on the type of programming problems encountered in library automation and document organization. Programming languages and their suitability for the solution of library problems.

Principles and methods of information indexing, storage and retrieval for machine systems. Automatic indexing.

The state of automation in libraries and the impact on libraries of mechanized information systems such as MARC, MEDLARS, Chemical Abstracts Service, and of experiments in on-line systems such as Project INTREX.

## TEXTBOOKS

- Artandi, S. *An Introduction to Computers in Information Science*. 2nd ed. Scarecrow Press, 1972.
- Smith, G. L. *Library Use of Computers*. Special Libraries Association, 1969.

## REFERENCE BOOKS

- Cox, N. S. M., Dews, J. D. & Dolby, J. L. *The Computer and the Library*. University of Newcastle-upon-Tyne Library, 1966.
- Cox, N. S. M. & Grose, M. W. *Organization and Handling of Bibliographic Records by Computer*. Oriel, 1967.
- Dolby, J. L. *Computerized Library Catalogs: Their Growth, Cost and Utility*. M.I.T. Press, 1969.
- Eyre, J. & Tonks, P. *Computers and Systems; an Introduction for Librarians*. Bingley, 1971.
- Hayes, R. M. and Becker, J. *Handbook of Data Processing for Libraries*. Becker & Hayes Inc., 1970.
- Houghton, B. ed. *Computer Based Information Retrieval Systems*. Bingley, 1968.
- Kent, A. *Information Analysis and Retrieval*. Becker & Hayes, 1971.

## 55.371 Literature for Young People

A survey of printed materials for children and young adults in relation to their needs, interests and abilities. Criteria for evaluation and selection for library collections. Use of materials in reading guidance with children and young adults.

## REFERENCE BOOKS

- Arbuthnot, M. H. *Children and Books*. Scott, Foresman, 1947.
- Arbuthnot, M. H. *Children's reading in the Home*. Scott, Foresman, 1969.
- Cameron, E. *The Green and Burning Tree*. Little Brown, 1969.
- Chukovskii, K. I. *From Two to Five*. University of California Press, 1963.
- Darton, F. J. H. *Children's Books in England*. 2nd ed. C.U.P., 1958.
- Ellis, A. *How to Find Out about Children's Literature*. 2nd ed. Pergamon, 1968.
- Eyre, F. *British Children's Books in the Twentieth Century*. Longmans, Green, 1971.
- Hazard, P. *Books, Children and Men*. Horn Book, 1944.
- Mahony, B. E. *Illustrators of Children's Books, 1744-1956*. Horn Book, 1947-58.
- Pilgrim, G. M. & McAllister, M. K. *Books, Young People and Reading Guidance*. 2nd ed. Harper & Row, 1968.
- Saxby, H. M. *A History of Australian Children's Literature*, vol. 1, 1841-1941. vol. 2, 1942-1970. Wentworth, 1969-71.
- Smith, L. H. *The Unreluctant Years: A Critical Approach to Children's Literature*. A.L.A., 1953.
- Townsend, J. R. *A Sense of Story*. Macmillan, 1971.
- Viguers, R. H. *Margin for Surprise: about Books, Children and Librarians*. Little, 1964.
- White, D. N. *Books before Five*. N.Z. Council for Educ. Research, 1954.

## 55.373 Public Libraries

The purpose of the public library in the community examined through (a) a comparative study of public library services with emphasis on

special programmes of service to adults, young adults and children; (b) surveys and plans for the introduction of library service to specific regions.

#### REFERENCE BOOKS

- A.A.C.O.B.S. *Libraries for the Public; a Statement of Needs*. Canberra, 1968.
- American Library Association—Public Library Association. *Minimum Standards for Public Library Systems*, 1966. A.L.A., 1967.
- American Library Association—Public Library Association. *Young Adult Services in the Public Library*. A.L.A., 1960.
- American Library Association—Public Library Association. *Standards for Children's Services in Public Libraries*. A.L.A., 1964.
- Broderick, D. M. *An Introduction to Children's Work in Public Libraries*. Wilson, 1965.
- Fenwick, S. I. *School and Children's Libraries in Australia: Report to the Children's Libraries Section of the Library Association of Australia*. Cheshire, 1966.
- Great Britain—Ministry of Education. *Standards of Public Library Service in England and Wales: Report of the Working Party*. H.M.S.O., 1962.
- Hagger, M. J. *Public Library Services in Victoria*. Bennett, 1966.
- Horner, J. L. *Public Library Services in Tasmania*. Bennett, 1966.
- Martin, L. A. *Library Response to Urban Change*. A.L.A., 1969.
- Sinclair, D. *Administration of the Small Public Library*. A.L.A., 1965.
- Wheeler, J. L. *Public Administration of Public Libraries*. Harper & Row, 1962.

### 55.378 University and College Libraries

Trends and developments in tertiary education in relation to the purposes and functions of university and college libraries.

The library's response to the university environment and to the library user through its resources and services.

#### REFERENCE BOOKS

- Association of University Teachers. *The University Library*. Association of University Teachers, 1964.
- Australia—Committee on the Future of Tertiary Education in Australia. *Tertiary Education in Australia: Report ... to the Australian Universities Commission*. 3 vols. Govt. Printer, 1964-65.
- Australia—Commonwealth Advisory Committee on Advanced Education. *Report 1*—Govt. Printer, 1966.
- Australian Vice-Chancellors' Committee. *Teaching Methods in Australian Universities*. 1965.
- Bergen, D. & Duryea, E. D. *Libraries and the College Climate of Learning*. Syracuse U.P., 1966.
- Bryan, H. *Australian University Libraries Today and Tomorrow*. Bennett, 1965.
- Buck, P. *Libraries and Universities: Addresses and Reports*. Belknap Press, 1964.
- Federation of Australian University Staff Associations. *Report of Research in Universities*. The Federation, 1967.
- Great Britain—University Grants Committee. *Report of the Committee on Libraries*. H.M.S.O., 1967.
- Knapp, P. B. *The Montieth College Library Experiment*. Scarecrow Press, 1966.



- Lyle, G. R. *The Administration of the College Library*. 3rd ed. Wilson, 1961.  
Shores, L. *The Library-college U.S.A.* South Pass Press, 1970.  
Wilson, L. R. & Tauber, M. F. *The University Library*. 2nd ed. Columbia U.P., 1956.  
Wright, G. H. *The Library in Colleges of Commerce and Technology*. Deutsch, 1966.

### 55.381 Special Libraries

The nature of special libraries and the environments in which they operate. The evolution of the special library. The relationships of the special library to its parent organization, to its users and to other sources of information. The functions of the special library and their translation into appropriate services. Systems and techniques relevant to special libraries including mechanized information systems. Staffing, siting, planning special libraries. Measurement of special library effectiveness.

#### REFERENCE BOOKS

- Ashworth, W. ed. *Handbook of Special Librarianship and Information Work*. 3rd ed. Aslib, 1967.  
Burkett, J. ed. *Trends in Special Librarianship*. Bingley, 1968.  
Johns, A. W. *Special Libraries*. Scarecrow Press, 1968.  
Johnston, B. *Libraries of Australian Government Departments and Agencies*. Bennett, 1969.  
Lewis, C. M. ed. *Special Libraries: How to Plan and Equip Them*. S.L.A., 1963.  
Murray, J. M. *Special Libraries in Australia: Non-governmental*. Bennett, 1968.  
Strauss, L. J., Strieby, I. M. & Brown, A. L. *Scientific and Technical Libraries: Their Organization and Administration*. Interscience, 1964.

### 53.385 School Libraries I

The information environment of educators. Educational issues and their effect on libraries. The development of the role of the library in the school in relation to educational thought and practice.

The provision, administration and organization of school library resources and services on national, state and local levels.

The roles of school and public libraries and the community library concept.

#### TEXTBOOKS

- Australia. Commonwealth Secondary School Libraries Committee. *Standards for Secondary School Libraries*. 1971.  
Prostano, E. T. & Prostano, J. S. *The School Library Media Center*. Libraries Unlimited, 1971.

#### REFERENCE BOOKS

- American Association of School Librarians. *School Library Manpower Project* (Phase I—Final Report). A.L.A., 1970.  
American Association of School Librarians. *School Library Personnel Task Analysis Survey*. A.L.A., 1969.  
American Association of School Librarians. *Standards for School Media Programmes*. A.L.A., 1969.

- Australian UNESCO Seminar. *The Role of Libraries in Secondary Education, August 1970*. Australian National Advisory Committee for UNESCO, 1971.
- Douglas, M. P. *The Primary School Library and its Services*. UNESCO, 1968.
- Ellsworth, R. E. & Wagener, H. D. *The School Library*. Educ. Facilities Lab., 1963.
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- Fenwick, S. I. *New Definitions of School Library Service*. (24th Annual Conference of the Graduate Library School, University of Chicago.) Chicago U.P., 1962.
- Fenwick, S. I. *School and Children's Libraries in Australia*. Cheshire, 1966.
- Gaver, M. V. *Services of Secondary School Media Centers*. A.L.A., 1971.
- Lowrie, J. E. *Elementary School Libraries*. Scarecrow Press, 1961.
- McGrath, L. H. *Central Library Services of the Education Departments of the Australian States*. (Occasional Papers in Librarianship No. 2), Libraries Board of S.A., 1965.
- McNally, P. T. A. *A Guide to the Practice of Non-book Librarianship*. The author, 1972.
- Mahar, M. H. *The School Library as Materials Center*. U.S. Dept. of Health, Education and Welfare, 1962.
- National Association of Secondary School Principals. *Libraries in Secondary School*. (N.A.S.S.P. Bulletin 50, 1966.)
- Riddle, J., Lewis, S. & Macdonald, J. *Non-book Materials; the Organisation of Integrated Collections*. Canadian Library Assoc., 1970.
- Roe, E. *Teachers, Librarians and Children: a study of Libraries in Education*. 2nd ed. Cheshire, 1972.
- Saunders, H. E. *The Modern School Library*. Scarecrow, 1968.
- School Library Association. *The Library in the Primary School*. 1958.
- Sullivan, P. *Problems in School Media Management*. Bowker, 1971.

## 55.386 School Libraries II

Subject curriculum studies in relation to the selection of materials and library programmes. Materials studies in relation to the range and type of materials and their application to curriculum subjects.

The compilation of subject bibliographies.

Media production and services in relation to subject curriculum studies.

Methods of individual and group reader education and the teaching of library skills.

### REFERENCE BOOKS

- Brown, J. W., Lewis, R. B. & Harclerod, F. F. A. V. *Instruction; Media and Methods*. 3rd ed. McGraw-Hill, 1969.
- Davies, R. A. *The School Library; a Force for Educational Excellence*. 1969.
- Gerlach, V. S. & Ely, D. P. *Teaching and Media: a Systematic Approach*. Prentice-Hall, 1971.
- Hicks, W. B. & Tillin, A. M. *Developing Multi-media Libraries*. Bowker, 1970.
- Huck, C. & Young, D. *Children's Literature in the Elementary School*. Holt, Rinehart, 1968.
- Lowrie, J. E. *Elementary School Libraries*. Scarecrow, 1961.
- Mager, R. *Preparing Instructional Objectives*. Fearnon, 1967.
- Miller, J. D. *Media Canada: Guidelines for Educators*. Pergamon of Canada, 1969.

- Pavlovic, L. & Goodman, E. B. *The Elementary School Library in Action*. Parker Pub., 1968.
- Rossoff, M. *The Library in High School Teaching*. 2nd ed. Wilson, 1961.
- Rufsvold, M. I. & Guss, C. *Guides to Education Media*. 3rd ed. A.L.A., 1971.
- Saunders, H. E. *The Modern School Library*. Scarecrow, 1968.
- Thompson, J. J. *Instructional Communication*. Van Nostrand-Reinhold, 1969.
- Trinkner, C. L. *Better Libraries Make Better Schools*. Shoe String Press, 1962.
- Whitehead, R. *Children's Literature: Strategies of Teaching*. Prentice-Hall, 1968.
- Wofford, A. *Book Selection for School Libraries*. Wilson, 1962.

## 55.712 Archives Theory and History

Archives theory studied historically. Public administration, administrative history and government records. The history of archives institutions. Archives legislation. Business, institutional and other non-governmental archives. Private papers, local history collections. Uses of archives for information and in research. The development and role of the archives profession. National and international archives associations; constitutions, programmes, publications.

### TEXTBOOK

- Jenkinson, H. *Manual of Archive Administration*. 2nd ed. Lund, Humphries, 1966.

### REFERENCE BOOKS

- Benjafield, D. G. & Whitmore, H. *Principles of Australian Administrative Law*. 3rd ed. Law Book, 1966.
- Brooks, P. C. *Research in Archives: the Use of Unpublished Primary Sources*. Univ. of Chic. Press, 1969.
- Castles, A. C. *An Introduction to Australian Legal History*. Law Book Co., 1971.
- Geeves, P. *Local History in Australia*. 2nd ed. R.A.H.S., 1971.
- Hobbs, J. L. *Local History and the Library*. Deutsch, 1962.
- Hughes, C. A. & Graham, B. D. eds. *A Handbook of Australian Government and Politics, 1890-1964*. A.N.U. Press, 1968.
- Jenkinson, H. *The English Archivist: a New Profession*. Lewis, 1948.
- Jones, H. G. *The Records of a Nation: their Management, Preservation and Use*. Athencum, 1969.
- Lumb, R. D. *The Constitutions of the Australian States*. University of Queensland Press, 1972.
- Posner, E. *Archives and the Public Interest*. Public Affairs Press, 1967.
- Schellenberg, T. R. *Management of Archives*. Columbia U.P., 1965.
- Society of Archivists. *Essays in Memory of Sir Hilary Jenkinson*. 1962.
- Spann, R. N. ed. *Public Administration in Australia*. 2nd ed. N.S.W. Govt. Pr., 1973.

## 55.713 Archives Administration

(a) Relations between archive-creating bodies and archives institutions. Commercial and legal practice, forms and terminology relevant to the understanding of archives. The elements of records management.

(b) Archives management: acquisition, arrangement and description, the publication of finding aids, the application of automation, microcopying. Conservation of materials. Repository planning.

(c) The principles of administration and their application to archives institutions.

(d) Service to users of archives, including questions of access and copy-right. Publication of archives.

### TEXTBOOKS

Muller, S., Feith, J. A. & Fruin, R. *Manual for the Arrangement and Description of Archives*. 2nd ed. Wilson, 1968.

Schellenberg, T. R. *Modern Archives, Principles and Techniques*. Cheshire, 1956.

### REFERENCE BOOKS

Baalman, J. *Outline of Law in Australia*. 3rd ed. Law Book Co., 1969.

Bordin, R. B. & Warner, R. M. *The Modern Manuscript Library*. Scarecrow Press, 1966.

Carter, C. E. *Historical Editing*. U.S. National Archives, 1952.

Cunha, G. D. M. *Conservation of Library Materials*. Scarecrow Press, 1967.

Drucker, P. F. *The Practice of Management*. Pan Books, 1969.

Evans, F. B. *The Administration of Modern Archives: a Select Bibliographic Guide*. U.S. National Archives, 1970.

Gt. Brit. Committee on Departmental Records (Sir James Grigg, Chairman). *Report*. H.M.S.O., 1954.

Jenkinson, H. *Manual of Archive Administration*. 2nd ed. Lund, Humphries, 1966.

Kane, L. M. *A Guide to the Care and Administration of Manuscripts*. 2nd ed. Amer. Assoc. for State and Local History, 1966.

Langwell, W. H. *The Conservation of Books and Documents*. Pitman, 1958.

Leisinger, A. H. *Microphotography for Archives*. International Council on Archives, 1968.

Perotin, Y. ed. *Manual of Tropical Archivology*. Mouton, 1966.

Redstone, L. J. & F. W. Steer. *Local Records, their Nature and Care*. Bell, 1953.

Schellenberg, T. R. *Management of Archives*. Columbia Univ. Press, 1965.

Stevens, R. E. ed. *University Archives*. Illini Union Bookstore, 1965.

Winger, H. W. and Smith, R. D. eds. *Deterioration and Preservation of Library Materials*. Univ. of Chic. Press, 1970.

## 55.714 Information Environment for Archivists

Information sources which supplement archives: academies, learned societies, institutions including libraries, galleries and museums. Libraries of various types studied in relation to the needs of archivists; acquisition of materials by purchase, gift, exchange and legal deposit; organization of materials for use. Bibliographical description and national and international documentation standards. Documentary materials in non-book form and their use in research. Dissemination of texts and other types of record by reprography and in microform.

### REFERENCE BOOKS

Balnaves, J. *Australian Libraries*. Cheshire, 1966.

Barker, R. E. *Photocopying Practices in the United Kingdom*. Faber, 1970.

Commonwealth National Library. Australian Bibliographical Centre. *Australian Bibliography and Bibliographical Services*. A.A.C.O.B.S., 1960.

C.S.I.R.O. *Scientific and Technical Research Centres in Australia*. 1969.

- Currie, Sir J. ed. *Professional organizations in the Commonwealth*. Hutchinson, 1970.
- Gates, J. K. *Introduction to Librarianship*. McGraw-Hill, 1968.
- Hawken, W. R. *Copying Methods Manual*. Amer. Library Assoc., 1966.
- Houghton, B. ed. *Standardization for Documentation*. Bingley, 1969.
- Kochen, M. ed. *The Growth of Knowledge: Readings on Organization and Retrieval of Information*. Wiley, 1967.
- Kujoth, J. S. *Readings in Nonbook Librarianship*. Scarecrow Press, 1968.
- Lord, C. L. ed. *Keepers of the Past*. Univ. of North Carolina Press, 1965.
- Mander-Jones, P. *Manuscripts in the British Isles relating to Australia, New Zealand and the Pacific*. A.N.U. Press, 1972.
- Mozley, A. *A Guide to the Manuscript Records of Australian Science*. Aust. Academy of Science, 1966.
- National Library of Australia. *Guide to Collections of Manuscripts relating to Australia*. 1964.
- Williams, B. J. S. *Miniaturised Communications: a Review of Microforms*. Library Assoc. & National Reprographic Centre for Documentation, 1970.

## MASTER OF LIBRARIANSHIP

### **55.801G Library and Information Services Management A**

Legislative and financial aspects of library provision. Libraries in the political process. Authority relationships and the nature of the library as a bureaucracy.

Siting and planning of libraries. Patterns of administrative organization in libraries. Position classification and personnel administration. The management of library finances.

### **55.803G Library and Information Services Management B**

The assessment of information needs of various groups and the design of appropriate services. The integration of libraries in information networks.

Applications of operations research and computer technology in library management and in the dissemination of information by other agencies. Evaluation of libraries and other information services.

### **55.805G Issues in Librarianship**

Contemporary issues in librarianship, including the provision of libraries and information by governments and by private enterprise; automation, information, science and libraries; cataloguing, classification and bibliographical control; problems of publication growth and library size; libraries in the social environment.

### **55.807G Research Methods in Librarianship**

The nature, potentialities and limitations of research methods. The evaluation of a number of research programmes in librarianship and information science.

## SCHOOL OF EDUCATION

**58.016 · Seminars**

A study of educational issues by means of individually prepared student papers and a variety of small-group discussion techniques including panels, forums and debates.

**58.017 Education**

A composite subject whose main components are Educational Psychology, Educational Practice, Philosophy and Theory of Education and Sociology of Australian Education.

*Educational Psychology*

Learning in the classroom. Variables such as growth and development, motivation, personality and group behaviour related to the learning process.

## TEXTBOOK

C.R.M. Books. *Educational Psychology*. 1973.

## REFERENCE BOOKS

- Anderson, R. C. and Faust, G. W. *Educational Psychology*. Dodd, Mead & Co., 1973.
- Ausubel, D. P. *Educational Psychology: A Cognitive View*. Holt, Rinehart & Winston, 1968.
- Ausubel, D. P. and Robinson, F. G. *School Learning*. Holt, 1969.
- Baldwin, A. L. *Theories of Child Development*. Wiley, 1967.
- Bigge, M. L. *Learning Theories for Teachers*. Harper, 1964.
- Bruner, J. S. *The Process of Education*. Harvard U.P. 1960.
- Butcher, H. S. *Human Intelligence*. Methuen, 1970.
- De Cecco, J. P. *The Psychology of Learning and Instruction: Educational Psychology*. Prentice-Hall, 1968.
- Elkind, D. *A Sympathetic Understanding of the Child Six to Sixteen*. Allyn & Bacon, 1971.
- Glock, M. D. ed. *Guiding Learning: Readings in Educational Psychology*. Wiley, 1971.
- Johnson, P. E. *Psychology of School Learning*. Wiley, 1971.
- Klausmeier, J. J. and Ripple, R. E. *Learning and Human Abilities*. 3rd ed. Harper & Row, 1971.
- Lefrançois, G. R. *Psychology for Teaching*. Wadsworth, 1972.
- McCandless, B. R. *Children: Behaviour and Development*. 2nd ed. Holt, Rinehart & Winston, 1967.
- Mathis, B. C., Colton, J. W. & Sochrest, L. *Psychological Foundations of Education*. Academic Press, 1970.
- Morse, W. C. and Wingo, G. M. *Classroom Psychology*. 3rd ed. Scott, Foresman, 1971.
- Munsinger, H. *Fundamentals of Child Development*. Holt, Rinehart & Winston, 1971.
- Muuss, R. E. ed. *Adolescent Behaviour and Society: A Book of Readings*. Random House, 1971.
- Pittinger, O. E. and Gooding, C. T. *Learning Theories in Educational Practice*. Wiley, 1971.
- Travers, R. M. W. *Educational Psychology*. Macmillan, 1973.

Tyler, L. E. *The Psychology of Human Differences*. 3rd ed. Appleton-Century-Crofts, 1965.

### *Educational Practice*

Classroom organization and practice: individual and group techniques; management; teaching aids (including radio and television). Measurement in education. Curriculum construction and modification. School organization.

### TEXTBOOK

Gronlund, N. E. *Constructing Achievement Tests*. Brown, 1968.

### REFERENCE BOOKS

Brown, D. *Changing Student Behaviour: A New Approach to Discipline*. Brown, 1971.

Burns, R. W. *New Approaches to Behavioural Objectives*. Brown, 1972.

Clarizio, H. F. et al. *Contemporary Issues in Educational Psychology*. Allyn & Bacon, 1970.

Clarizio, H. F. *Toward Positive Classroom Discipline*. Wiley, 1971.

Dunn, S. S. *Measurement and Evaluation in the Secondary School*. A.C.E.R., 1967.

Gorman, A. H. *Teachers and Learners*. Allyn & Bacon, 1969.

Gronlund, N. E. *Stating Behavioral Objectives for Classroom Instruction*. Macmillan, 1970.

Hunter, E. *Encounter in the Classroom—New Ways of Teaching*. Holt, Rinehart & Winston, 1972.

Hyman, R. T. *Teaching: Vantage Points for Study*. Lippincott, 1968.

Hyman, R. T. *Ways of Teaching*. Lippincott, 1970.

Johnson, L. V. & Bany, M. A. *Classroom Management*. Macmillan, 1970.

Kibler, R. J. et al. *Behavioral Objectives and Instruction*. Allyn & Bacon, 1970.

Madsen, E. H. & Madsen, C. K. *Teaching/Discipline*. Allyn & Bacon, 1970.

Noll, V. H. *Introduction to Educational Measurement*. 2nd ed. Houghton Mifflin, 1965.

Ohles, J. F. *Introduction to Teaching*. Random House, 1970.

Ohles, J. F. *Principles and Practice of Teaching*. Random House, 1970.

Popham, W. J. & Baker, E. L. *Establishing Instructional Goals*. Prentice-Hall, 1970.

Remmers, H. H., Gage, N. L. & Rummell, J. F. *A Practical Introduction to Measurement and Evaluation*. 2nd ed. Harper, 1965.

Sulzer, B. and Mayer, G. R. *Behaviour Modification Procedures for School Personnel*. Dryden, 1972.

Risk, T. M. *Principles and Practices of Teaching in Secondary Schools*. American Book, 1958.

Roths, J., Pancella, J., Van Ness, J. *Studying Teaching*. Prentice-Hall, 1967.

Schoer, L. A. *Test Construction: A Programmed Guide*. Allyn & Bacon, 1970.

Smith, F. R. & McQuigg, R. B. *Secondary Schools To-day*. Houghton Mifflin, 1965.

Vernon, W. M. *Motivating Children—Behaviour Modification in the Classroom*. Holt, Rinehart & Winston, 1972.

### *Philosophy of Education*

Viewpoints on the purposes of education and their relationship to curriculum theory and development. Conceptual studies, connections

between education and general philosophy, and trends in philosophy of education.

### REFERENCE BOOKS

- Alberty, H. B. *Reorganizing the High School Curriculum*. 3rd ed. Macmillan, 1962.
- Brown, L. M. *Aims of Education*. Teacher's College, Columbia, 1970.
- Brown, L. M. *General Philosophy in Education*. McGraw-Hill, 1966.
- Buber, M. *Between Man and Man*. Fontana Library ed. Collins, 1966.
- Connell, W. F. *The Foundations of Education*. Novak, 1962.
- Dewey, J. *Democracy and Education*. Macmillan, 1916.
- Dewey, J. *The Child and the Curriculum, and the School and Society*. Phoenix Books, University of Chicago Press, 1956.
- Dewey, J. *Experience and Education*. Collier Books, 1938.
- Faunce, R. C. & Bossing, N. L. *Developing the Core Curriculum*. Prentice-Hall, 1958.
- Gribble, J. *Introduction to Philosophy of Education*. Allyn & Bacon, 1969.
- Nunn, T. P. *Education: Its Data and First Principles*. 3rd ed. Edward Arnold, 1945.
- Park, J. *Selected Readings in the Philosophy of Education*. Macmillan, 1958.
- Price, K. *Education and Philosophic Thought*. Allyn & Bacon, 1962.
- Reid, L. A. *Philosophy and Education*. Heinemann Educational Books, 1962.
- Scheffler, I. *Philosophy and Education*. 2nd ed. Allyn & Bacon, 1966.
- Smith, B. C. et al. *Fundamentals of Curriculum Development*. World Book, 1950.
- Whitehead, A. N. *Aims of Education and Other Essays*. Benn, 1962.
- Wynne, J. P. *Theories of Education*. Harper & Row, 1964.

### Sociology of Education

An investigation of the role of education in Australian society with particular attention given to Australian education systems, inequality and the role of the Commonwealth. A study of adolescent groups including deviants and cultural deprivation. An analysis of social structures in the secondary school and the school in the local community. A study of teacher groups including role and professionalism.

### REFERENCE BOOKS

- Blackington, F. H. and Patterson, R. S. *School, Society and the Professional Educator*. Holt, Rinehart and Winston, 1968.
- Butts, R. F. *Assumptions Underlying Australian Education*. A.C.E.R., 1966.
- Connell, W. F. et al. *The Foundations of Education*. Ian Novak, 1967.
- Crow, L. D. et al. *Educating the Culturally Disadvantaged Child*. David McKay, 1966.
- Dunn, S. S. & Tatz, C. H. *Aborigines and Education*. Sun Books, 1969.
- Dunphy, D. *Cliques, Groups and Crowds*. Cheshire.
- Fensham, P. J. ed. *Rights and Inequality in Australian Education*. Cheshire, 1970.
- Gordon, E. W. & Wilkerson, D. A. *Compensatory Education for the Disadvantaged*. College Entrance Examination Board, 1966.
- Graham, G. *The Public School in the New Society*. Harper & Row, 1969.
- Harvard Educational Review. *Equal Educational Opportunity*. Harvard U.P., 1969.
- Havighurst, R. J. & Neugarten, B. L. *Society and Education*. Allyn & Bacon, 1967.



- Karmel, P. Chairman. *Education in South Australia*. Report of the Committee of Enquiry into Education in South Australia 1969-70, S.A. Govt. Printer, Adelaide, 1971.
- Katz, F. M. & Browne, R. K. eds. *Sociology of Education*. A Book of Readings pertinent to the Australian Education System. Macmillan, 1969.
- Lieberman, M. *Education as a Profession*. Prentice-Hall, 1956.
- Mead, M. *Coming of Age in Samoa*. Pelican.
- McDonald, L. *Social Class and Delinquency*. Faber, 1969.
- Musgrave, F. & Taylor, H. *Society and the Teacher's Role*. Routledge and Kegan Paul, 1969.
- Partridge, P. H. *Society, Schools and Progress in Australia*. Pergamon Press, 1963.
- Roper, T. *Aboriginal Education and The Teacher's Role*. NUAUS.
- Westby-Gibson, D. *Social Perspectives on Education*. Wiley, 1965.

## The Study of Methods of Teaching

Two method subjects each for an average of 2½ hours per week (3 hours in Session 1 and 2 hours in Session 2) except in the case of Double Teaching Subjects which total 5 hours each per week (6 hours in Session 1 and 4 hours in Session 2). This will comprise lecture-seminars, and individual discussions with master teachers and method lecturers.

## Method Subjects

### 58.021 Commerce Method

#### REFERENCE BOOKS

- Duffy, D. G. ed. *Teaching About Society*. Rigby, 1970.
- Fenton, E. *The New Social Studies*. Holt, Rinehart & Winston, 1967.
- Fenton, E. *Teaching the New Social Studies in Secondary Schools*. Holt, Rinehart & Winston, 1968.
- Lee, N. ed. *Teaching Economics*. London English Economics Association, 1968.
- Price, Musselman, Hall & Weeks. *Teacher's Source Book and Key for General Business and Everyday Living*. McGraw-Hill, 1966.
- Prehn, E. C. *Teaching High School Economics*. Pitman, 1968.
- Calderwood, J. D., Lawrence, J. D. & Maher, J. E. *Economics in the Curriculum*. Wiley, 1970.

### 58.022 English Method

#### REFERENCE BOOKS

- Ashworth and Watson, eds. *Towards a New English*. Reed Education, 1972.
- Burton & Simmons. *Teaching English in Today's High Schools*. Holt, Rinehart & Winston, 1965.
- Dixon, J. *Growth through English*. Edgerton, National Assoc. for the Teaching of English, 1969.
- Flower, F. *Language and Education*. Longmans, 1966.
- Gordon, I. A. *The Teaching of English*. N.Z.C.E.R.

- Holbrook, D. *English for Maturity*. C.U.P., 1961.
- Laurence, M. J. *Citizenship Through English*. Oliver & Boyd.
- Mirrielees, L. B. *Teaching Composition and Literature*. Brace, 1952.
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### 58.023 French Method

#### TEXTBOOK

- Rivers, W. *Teaching Foreign Language Skills*. Chicago U.P., 1968.

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- Rivers, W. M. *The Psychologist and the Foreign Language Teacher*. Uni. of Chicago Press, 1966.
- Wykes, O. & King, M. G. *Teaching of Foreign Languages in Australia*. A.C.E.R., 1968.

### 58.024 Geography/Social Studies Method

#### TEXTBOOK

- Biddle, D. S. & Shortle, D. *Programming in Geography*. Martindale Press, 1969.

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- Biddle, D. S. *Readings in Geographical Education*. Whitcombe & Tombs, 1968.

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## 58.025 German Method

### TEXTBOOK

- Rivers, W. M. *Teaching Foreign Language Skills*. Chicago U.P., 1968.

### REFERENCE BOOKS

- Brooks. *Language and Language Learning*. Harcourt, Brace & World, 1964.
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## 58.026 Guidance Method

### REFERENCE BOOKS

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- Glanz, E. C. & Hayes, R. W. *Groups in Guidance*. Allyn & Bacon, 1967.
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**58.027 History Method****TEXTBOOK**

Walshe, R. D. & Little, N. A. eds. *Ways We Teach History*. H.T.A. of N.S.W.

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Fenton, E. ed. *Teaching the New Social Studies in Secondary Schools: An Inductive Approach*. Holt, Rinehart & Winston, 1966.

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**58.028 Library Method****REFERENCE BOOKS**

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Roe, E. *Teachers, Librarians and Children*. 2nd ed. Cheshire, 1972.

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**58.029 Mathematics Method****REFERENCE BOOKS**

A.C.E.R. *Background in Mathematics*. Govt. Printer, 1967.

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Smith, D. E. *History of Mathematics*. Vols. I, II. Dover, 1958.

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U.K. Ministry of Education. *Teaching Mathematics in Secondary Schools*. Pamphlet 36. H.M.S.O., London, 1958.

**58.031 Spanish Method****58.032 Slow Learner Method**

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 Baumeister, A. A. ed. *Mental Retardation*. London U.P., 1968.  
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- Strang, R., McCullough, C. M. & Traxler, A. E. *The Improvement of Reading*. 4th ed. McGraw-Hill, 1967.
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- Wall, W. D., Schonell, F. J. & Olson, W. C. *Failure in School*. U.N.E.S.C.O. Institute, 1962.
- Younie, W. J. *Instructional Approaches to Slow Learning*. Teachers College Press, Columbia University, 1967.

### 58.033 Science Method (Double Teaching Subject)

### 58.034 Science Method (Single Teaching Subject)

#### TEXTBOOK

- Collette, A. T. *Science Teaching in the Secondary School*. Allyn & Bacon, Boston, 1973.

### **58.040 Selected Activities**

Classes will also be arranged in some other areas relevant to teacher preparation as for example, Health Education and Physical Education and in subjects in which students have a particular interest such as Comparative Education, Philosophy in Education, Experimental Education, Educational Statistics, Society and Education. The subjects offered will be determined by the interest of students and the availability of staff and facilities.

### **58.050 Practical Teaching and Observation**

A weekly average of seven hours made up of both concurrent weekly practice and block practice.

## **Education Subjects in Science Education and Industrial Arts**

### **58.401 Education IA**

Educational psychology, especially child and adolescent development and learning. Philosophy and theory of education. Research methods in education.

See 58.513 Education 1A for text and reference books for Educational Psychology, Philosophy and Theory of Education and Research Methods in Education.

### **58.071 Methods of Teaching IA (Industrial Arts Course)**

Concerned with the application of principles dealt with in Philosophy and Theory of Education, and in Educational Psychology, to the particular case of teaching in the Industrial Arts subject area. For example, the aims of industrial arts teaching are analysed and the provision of effective learning experiences are discussed. There is consideration of the use of practical work, demonstrations by the teacher, audiovisual aids, programmed instruction, and the planning of lessons to incorporate such learning experiences effectively. Classroom management and workshop organisation are also dealt with, as is the teaching of various skills.

*School Experience* Students will begin teaching practice in their third year. The school experience in that year is designed to give them a gradual introduction to teaching and this will be consolidated in their fourth year.

### **TEXTBOOK**

Wilber, O. W. and Pendred, C. P. *Industrial Arts in General Education*. 3rd ed. International Text Book Co., Scranton, Pa, 1967.

### **REFERENCE BOOKS**

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Feirer, J. L. & Lindbeck, J. R. *Industrial Arts Education*. Center for Applied Research in Education. Washington, 1964.

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- Silvius, G. and Curry, E. H. *Teaching Successfully Industrial Education*. McKnight, 1967.
- Wolansky, W. D. et al. *Industrial Arts*. McGraw-Hill, 1968.

### 58.072 Methods of Teaching IIA

(For students studying in the Department of Industrial Arts for the Degree of Bachelor of Science.)

This subject deals with curriculum development in Industrial Arts, further discussion of instructional procedures, evaluation of student achievement and the planning and management of facilities. The aims and objectives of Industrial Arts teaching will be considered including reference to the influence of historical, social and technological factors upon them. The selection and sequencing of content will be dealt with as a basis for programming. Principles of evaluation introduced in Educational Psychology will be applied to the case of Industrial Arts and special techniques will be considered. Instructional procedures discussed will include questioning, explanation, exposition, group processes and the use of practical work. The planning and management of facilities will include consideration of the Planning Unit and the Resource Centre in the Integrated Industrial Arts Complex.

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- Bakamis, W. A. *Improving Instruction in Industrial Arts*. 2nd ed. Bruce, Milwaukee, 1966.
- Barlow, M. L. *History of Industrial Arts in the United States*. Bennett, Peoria, Ill., 1967.



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- Barlow, M. L. *History of Industrial Arts in the United States*. Bennett, Peoria, Ill., 1967.

**58.031 Spanish Method****58.032 Slow Learner Method**

The Slow Learner Method course is designed to prepare secondary teachers of "Activity" classes. These classes are for slow learners with a variety of problems such as mental or scholastic retardation (or a combination of the two). Student teachers taking this course will be prepared as class teachers in English (with special attention to reading), Mathematics and Social Studies, and in addition will study the method of teaching one particular subject (such as History or English) through the full range of secondary school forms. They will have complete promotion possibilities open to them in the secondary school, and will in no way be professionally limited by undertaking work with "Activity" classes in the early stages of their careers.

The Slow Learner Method course has the support of the Department of Education which will be approached to second a part-time lecturer in the subject to the School of Education.

**REFERENCE BOOKS**

- Aukerman, R. C. *Approaches to Beginning Reading*. Wiley, 1971.  
 Baumeister, A. A. ed. *Mental Retardation*. London U.P., 1968.  
 Baker, W. J. *Introduction to Exceptional Children*. Macmillan, 1959.  
 Basette, G. W. *Each One is Different*. A.C.E.R. publication.  
 Bell, P. *Basic Teaching for Slow Learners*. Muller Educational, 1970.  
 Clark, M. M. *Reading Difficulties in Schools*. Penguin, 1970.  
 Clough, M. F. ed. *Teaching the Slow Learner in the Secondary School*. Methuen, 1961.  
 Clough, M. F. *The Slow Learner: Some Educational Principles and Policies*. 2nd ed. Methuen, 1968.  
 Crosby, R. M. W. & Liston, R. A. *Reading and the Dyslexic Child*. Souvenir Press, 1968.  
 Cruickshank, W. *Psychology of Exceptional Children*. Staples, 1956.  
 De Boer, J. J. & Dallman, M. *The Teaching of Reading*. Holt, Rinehart & Winston, 1964.  
 Della-Piana, G. M. *Reading Diagnosis and Prescription: an Introduction*. Holt, Rinehart & Winston, 1968.  
 Ellis, D. R. ed. *Handbook of Mental Deficiency*. McGraw-Hill, 1963.  
 Flavell, J. H. *The Developmental Psychology of Jean Piaget*. Von Nostrand, 1963.  
 Flesch, R. *Why Johnny Can't Read*. Harper & Row.  
 Frampton & Gall, E. D. *Special Education for the Exceptional*. Sargent, 1956.  
 Gagne, R. M. *Learning and Individual Differences*. Merrill, 1967.  
 Garrison, K. C. & Ford, D. G. *The Psychology of Exceptional Children*. Ronald Press, 1965.  
 Goodacre, E. J. *Children and Learning to Read*. Routledge & Kegan Paul, 1971.  
 Gulliford, R. *Backwardness and Educational Failure*. National Foundation for Educational Research in England and Wales, 1969.  
 Gulliford, R. *Special Education Needs*. Routledge & Kegan Paul, 1971.  
 Holbrook, D. *English for the Rejected*. C.U.P., 1964.  
 Johnson, G. O. *Education for the Slow Learners*. Prentice-Hall, 1963.  
 Kennedy, E. C. *Classroom Approaches to Remedial Reading*. Peacock Publishers, Illinois, 1971.

- Kirk, S. *Educating the Exceptional Children*. Houghton-Mifflin, 1965.
- Kirk, S. & Weiner, B. B. *Behavioural Research on Exceptional Children*. Council for Exceptional Children.
- Neale, M. D. & Campbell, W. J. *Education for the Intellectually Limited Child and Adolescent*. Novak, 1963.
- Newsom, J. (Chairman). *Half our Future: A Report of the Central Advisory Council for Education (England)*. H.M.S.O., 1963.
- Olsen, A. V. and Ames, W. S. ed. *Teaching Reading Skills in Secondary Schools: Readings*. International Textbooks Coy., 1970.
- Piaget, J. & Inhelder, B. *The Psychology of the Child*. Routledge & Kegan Paul, 1966.
- Roger, R., Schroeder, W. & Uschold, K. *Special Education—Children with Learning Problems*. O.U.P., 1968.
- Robinson, H. M. ed. *Innovation and Change in Reading Instruction*. (67th Yearbook of Nat. Soc. for Study of Education. Part II.) Univ. of Chicago Press, 1968.
- Robinson, H. B. & Robinson, N. N. *The Mentally Retarded Child*. McGraw-Hill, 1965.
- Roswell F. and Natchez, G. *Reading Disability*. 2nd ed. Basic Books Inc., 1971.
- Schonell, F. *Backwardness in the Basic Subjects*. 4th ed. Oliver & Boyd, 1948.
- Schonell, F. E. & Schonell, F. J. *Diagnostic and Attainment Testing*. 4th ed. Oliver & Boyd, 1960.
- Schonell, F. J. *The Psychology and Teaching of Reading*. 4th ed. New York Philosophical Library, 1962.
- Schonell, F. J. et al. *The Slow Learner*. Queensland U.P., 1962.
- Smith, E. M. *Clinical Teaching: Methods of Instruction for the Retarded*. McGraw-Hill, 1968.
- Storen, H. F. *The Disadvantaged Early Adolescent: More Effective Teaching*. McGraw-Hill, 1968.
- Strang, R. *Diagnostic Teaching of Reading*. 2nd ed. McGraw-Hill, 1969.
- Strang, R., McCullough, C. M. & Traxler, A. E. *The Improvement of Reading*. 4th ed. McGraw-Hill, 1967.
- Tansley, A. E. *Reading and Remedial Reading*. Routledge and Kegan Paul, 1967.
- Tansley, A. E. & Gulliford, R. *Education of Slow Learning Children*. Routledge & Kegan Paul, 1961.
- Telford, C. W. & Sawrey, J. M. *The Exceptional Individual*. Prentice-Hall, 1967.
- Vernon, M. D. *Reading and Its Difficulties*. C.U.P., 1971.
- Wall, W. D., Schonell, F. J. & Olson, W. C. *Failure in School*. U.N.E.S.C.O. Institute, 1962.
- Younie, W. J. *Instructional Approaches to Slow Learning*. Teachers College Press, Columbia University, 1967.

### **58.033 Science Method (Double Teaching Subject)**

### **58.034 Science Method (Single Teaching Subject)**

#### **TEXTBOOK**

- Collette, A. T. *Science Teaching in the Secondary School*. Allyn & Bacon, Boston, 1973.

**58.040 Selected Activities**

Classes will also be arranged in some other areas relevant to teacher preparation as for example, Health Education and Physical Education and in subjects in which students have a particular interest such as Comparative Education, Philosophy in Education, Experimental Education, Educational Statistics, Society and Education. The subjects offered will be determined by the interest of students and the availability of staff and facilities.

**58.050 Practical Teaching and Observation**

A weekly average of seven hours made up of both concurrent weekly practice and block practice.

**Education Subjects in Science Education and Industrial Arts****58.401 Education IA**

Educational psychology, especially child and adolescent development and learning. Philosophy and theory of education. Research methods in education.

See 58.513 Education 1A for text and reference books for Educational Psychology, Philosophy and Theory of Education and Research Methods in Education.

**58.071 Methods of Teaching IA (Industrial Arts Course)**

Concerned with the application of principles dealt with in Philosophy and Theory of Education, and in Educational Psychology, to the particular case of teaching in the Industrial Arts subject area. For example, the aims of industrial arts teaching are analysed and the provision of effective learning experiences are discussed. There is consideration of the use of practical work, demonstrations by the teacher, audiovisual aids, programmed instruction, and the planning of lessons to incorporate such learning experiences effectively. Classroom management and workshop organisation are also dealt with, as is the teaching of various skills.

*School Experience* Students will begin teaching practice in their third year. The school experience in that year is designed to give them a gradual introduction to teaching and this will be consolidated in their fourth year.

**TEXTBOOK**

Wilber, O. W. and Pendred, C. P. *Industrial Arts in General Education*. 3rd ed. International Text Book Co., Scranton, Pa, 1967.

**REFERENCE BOOKS**

Ericson, E. E. & Seefeld, K. *Teaching the Industrial Arts*. 2nd ed. Bennett, 1960.

Feirer, J. L. & Lindbeck, J. R. *Industrial Arts Education*. Center for Applied Research in Education. Washington, 1964.

Friese, J. F. *The Role of Industrial Arts in Education*. Friese, 1964.

- Friese, J. F. & Williams, W. A. *Course Making in Industrial Arts*. 3rd ed. Bennett, 1966.
- Glenister, S. H. *The Technique of Handicraft Teaching*. 2nd ed. Harrap, 1964.
- Glenister, S. H. *The Teaching of Technical Drawing*. Harrap, 1966.
- Glenister, S. H. *The Technique of Craft Teaching*. 3rd ed. Harrap, 1968.
- Mays, A. B. *Essentials of Industrial Education*. McGraw-Hill, 1952.
- Mays, A. B. *Principles & Practices of Vocational Education*. McGraw-Hill, 1948.
- Miller, R., Small, T. and Lee, H. *Selected Readings for Industrial Arts*. McKnight, 1963.
- Newkirk, L. V. *Organising & Teaching the General Shop*. Manual Arts Press. Bennett, 1947.
- Silvius, G. et al. *Safe Practices in Woodworking & Plastics*. American Tech. Society, 1963.
- Silvius, G. H. and Curry, E. H. *Managing Multiple Activities in Industrial Education*. McKnight, 1960.
- Silvius, G. and Curry, E. H. *Teaching Successfully Industrial Education*. McKnight, 1967.
- Wolansky, W. D. et al. *Industrial Arts*. McGraw-Hill, 1968.

### 58.072 Methods of Teaching IIA

(For students studying in the Department of Industrial Arts for the Degree of Bachelor of Science.)

This subject deals with curriculum development in Industrial Arts, further discussion of instructional procedures, evaluation of student achievement and the planning and management of facilities. The aims and objectives of Industrial Arts teaching will be considered including reference to the influence of historical, social and technological factors upon them. The selection and sequencing of content will be dealt with as a basis for programming. Principles of evaluation introduced in Educational Psychology will be applied to the case of Industrial Arts and special techniques will be considered. Instructional procedures discussed will include questioning, explanation, exposition, group processes and the use of practical work. The planning and management of facilities will include consideration of the Planning Unit and the Resource Centre in the Integrated Industrial Arts Complex.

#### TEXTBOOKS

- Friese, J. F. and Williams, W. A. *Course Making in Industrial Arts*. Bennett, Peoria, Ill., 1966.
- Wilber, O. W. and Pendred, C. P. *Industrial Arts in General Education*. International Text Book Co., Scranton, Pa., 1967.

#### REFERENCE BOOKS

- American Industrial Arts Assoc. *Frontiers in Industrial Arts Education*. A.I.A.A., San Francisco, 1966.
- American Vocational Assoc. *A Guide for Improving Instruction in Industrial Arts*. 4th ed. Am. Voc. Assoc., Washington, 1968.
- Bakamis, W. A. *Improving Instruction in Industrial Arts*. 2nd ed. Bruce, Milwaukee, 1966.
- Barlow, M. L. *History of Industrial Arts in the United States*. Bennett, Peoria, Ill., 1967.



- Bennett, A. *History of Manual & Industrial Arts, Vols. I & II.*  
 Vol. I up to 1870. Bennett, Peoria, Ill.  
 Vol. II, 1870 to 1917. Bennett, Peoria, Ill.
- Bostwick, H. S. and Buell, C. E. *The Practical Pedagogue.* Chilton Co., Phil., 1957.
- Brown, R. D. *Industrial Arts Laboratory Planning and Admin.* Bruce, Milwaukee, 1969.
- Cochran, L. H. *Innovative Programs in Industrial Education.* McKnight's, Bloomington, Ill., 1970.
- Dept. of Education. *Manual of Safe Practice in School Workshops.* N.S.W. Department of Education, 1968.
- Earl, A. W. *Experiments with Materials & Products of Industry.* McKnight's, Bloomington, Ill., 1960.
- Edwards, R. *The Secondary Technical School.* Univ. of London Press, London, 1960.
- Evans/Methuen Educational. *Education through the Use of Materials.* Richard Clay (Chaucer Press) Ltd., Bangay, Suffolk, 1969.
- Fryklund, V. C. *Analysis Technique for Instructors.* Bruce, Milwaukee, 1965.
- Gerard, P. W. and Miller, J. G. *Computers and Education.* McGraw-Hill, Calif., 1967.
- Giachino, J. W. and Gallington. *Course Construction in Industrial Arts & Vocational Education.* 2nd ed. American Technical Society, London, 1961.
- Littrell, J. Jr. *Guide to Industrial Teaching.* Bennett, Peoria, Ill., 1970.
- Miller, R. and Smally, L. H. *Selected Reading in Industrial Arts.* McKnight's, Bloomington, Ill., 1963.
- Perry, R. W. *Blackboard Illustration.* The Manual Arts Press, Peoria, Ill.
- Roberts, R. W. *Vocational & Practical Arts Education—History Development & Principles.* Harper Row, N.Y., with John Weatherhill, Tokyo, 1965.
- Roucek, J. S. ed. *Programmed Teaching.* Peter Owen, London, 1965.
- Silvius, G. H. and Bohn, R. C. *Organising Course Materials for Industrial Education.* McKnight's, Bloomington, Ill., 1961.
- Silvius, G. H. and Curry, E. H. *Managing Multiple Activities in Industrial Education.* McKnight's, Bloomington, Ill., 1971.
- Struck, F. T. *Creative Teaching of Industrial Arts and Vocational Education.* Wiley, N.Y., 1956.

## PERIODICALS

- American Vocational Journal.* American Vocational Association, Washington.
- Education and Training.* London.
- Industrial Arts Bulletin.* N.S.W. Dept. of Educ., Sydney.
- Industrial Arts Education.* Institute of Industrial Arts, Sydney.
- Industrial Education.* Greenwich, Conn.
- Man/Society/Technology.* American Industrial Arts Assoc., Washington.
- Technical Teacher.* N.S.W. Dept. of Tech. Educ.
- The Vocational Aspects of Education.* Colleges of Education, Technical. London.

## 58.402 Education IIA

Australian education. Educational psychology especially psychological factors influencing learning, and evaluation. Philosophy of education. Sociology of education.

For text and reference books see 58.502 Education II (Educational Psychology, Sociology of Education, and Philosophy and Theory of Education).

### **58.513 Education IA**

#### **PREREQUISITES**

The prerequisite for 58.513 Education IA is 58.512 Introduction to Education.

#### **CO-REQUISITE**

58.523 Education IB.

#### *Educational Psychology*

Areas considered in this year will be: Learning, motivation, child and adolescent development, group processes, personality and other psychological factors related to learning and instruction.

#### **REFERENCE BOOKS**

Ausubel, D. P. *Educational Psychology: A Cognitive View*. Holt, Rinehart and Winston, 1968.

Bigge, M. L. and Hunt, M. P. *Psychological Foundation of Education*. Harper & Row, N.Y., 1960.

Butcher, H. J. *Human Intelligence*. Methuen, London, 1968.

Evans, E. D. *Adolescents: Readings in Behaviour and Development*. Dryden Press, Illinois, 1970.

Guilford, J. P. *The Nature of Human Intelligence*. McGraw-Hill, 1968.

Klausmeier, H. J. and Ripple, R. E. *Learning & Human Abilities*. Harper & Row, 1971.

Murray, E. J. *Motivation and Emotion*. Prentice-Hall, Englewood Cliffs, N.J., 1964.

Russell, I. L. *Motivation*. Wm. C. Brown, Dubuque, Iowa, 1971.

Schmuck, R. A. and Schmuck, P. A. *Group Processes in the Classroom*. Wm. C. Brown, 1971.

Skinner, B. F. *The Technology of Teaching*. Appleton-Century-Crofts, 1968.

Staats, A. W. *Child Learning, Intelligence and Personality*. Harper & Row, N.Y., 1971.

Wiseman, S. ed. *Intelligence and Ability*. Penguin Books, Harmondsworth, England, 1967.

#### *Educational Practice*

Basic aspects of lesson preparation and presentation; principles of classroom management

#### **REFERENCE BOOKS**

Brown, D. *Changing Student Behaviour*. Wm. C. Brown, 1971.

Clarizio, H. F. *Towards Positive Classroom Discipline*. Wiley, N.Y., 1971.

Gronlund, N. E. *Stating Behavioural Objectives for Classroom Instruction*. Wm. C. Brown, 1968.

Hyman, R. T. *Ways of Teaching*. J. B. Lippincott Co., 1970.

Vernon, W. M. *Motivating Children*. Holt, Rinehart & Winston, 1972.

*Philosophy and Theory of Education*

This course will deal with curriculum theory and curriculum development, theory in education with reference to educational objectives, and an analysis of values leading to a concept of education. Various concepts will be examined within the context of theory and values, such as: responsibility and punishment, indoctrination, equality, creativity.

## REFERENCES

- Brown, L. M. *Aims of Education*. Teachers' College, Columbia University, N.Y., 1970.
- Dearden, R. F. et al. eds. *Education and the Development of Reason*. Routledge and Kegan Paul, London, 1972.
- Hospers, J. *Human Conduct*. Harcourt, Brace and World, N.Y., 1961.
- Lytton, H. *Creativity and Education*. Routledge and Kegan Paul, London, 1971.
- Snook, I. A. *Indoctrination and Education*. Routledge and Kegan Paul, London, 1972.

*Research Methods in Education*

Introduction to the theory and practice of research methods in education in both the parametric and non-parametric fields including: measures of central tendency and dispersion, graphical representation of data, normal curve theory, reliability of difference between statistics, correlation, tests and examinations, an introduction to analysis of variance, regression and the nature of experiments.

## TEXTBOOK

- Guilford, J. P. *Fundamental Statistics in Psychology and Education*. 4th ed. McGraw-Hill, 1965.

## REFERENCE BOOKS

- Armour, S. J. *Introduction to Statistical Analysis and Inference*. Wiley, N.Y., 1966.
- Chase, C. I. et al. *Readings in Educational and Psychological Measurement*. Houghton Mifflin, Boston, 1966.
- Cook, D. R. A. *A Guide to Educational Research*. Allyn & Bacon, Boston, 1965.
- Croxton, F. E. et al. *Applied General Statistics*. 3rd ed. Prentice-Hall, Englewood Cliffs, N.J., 1967.
- Davis, F. B. *Educational Measurements and Their Interpretation*. Wadsworth, California, 1964.
- Dowrie, N. M. & Heath, R. W. *Basic Statistical Methods*. Harper & Row, N.Y., 1970.
- Edwards, A. L. *Statistical Methods for the Behavioural Sciences*. Holt, Rinehart & Winston, N.Y., 1957.
- Ferguson, G. A. *Statistical Analysis in Psychology and Education*. McGraw-Hill, N.Y., 1966.
- Good, C. V. *Essentials of Educational Research: Methodology and Design*. Appleton-Century-Crofts, N.Y., 1966.
- Horowitz, L. M. *Measurement*. Brown, 1966.
- Lindquist, E. F. *Educational Measurement*. American Council on Education, 1951.

- Lindquist, E. F. *A First Course in Statistics: Their Use and Interpretation in Education and Psychology*. Houghton Mifflin, Boston, 1961.
- Owen, D. B. *Handbook of Statistical Tables*. Addison-Wesley, Reading, Mass., 1962.
- Popham, W. S. *Education Statistics*. Harper & Row, N.Y., 1967.
- Siegel, S. *Nonparametric Statistics for the Behavioral Sciences*. McGraw-Hill, N.Y., 1956.
- Skager, R. W. et al. *Fundamentals of Educational Research*. Scott, Foresman and Company, London, 1971.
- Van Dalen, D. B. & Meyer, W. J. *Understanding Educational Research*. McGraw-Hill, N.Y., 1966.
- Wiersma, W. *Research Methods in Education: An Introduction*. Lippincott, Washington, 1969.
- Young, M. *Innovation and Research in Education*. Routledge, London, 1965.

### *Sociology of Education*

An introduction to the sociology of education. An investigation of the role of education in Australian society with particular attention given to inequality, adolescent groups including a study of deviants and cultural deprivation. A sociological analysis of classroom groups including group interaction, reference group theory and role theory. An analysis of social structure in the secondary school and the school in the local community. A study of teacher groups with particular attention given to role and professionalism.

### REFERENCE BOOKS

- Australian College of Education. *Teachers in Australia*. Cheshire, Melbourne, 1966.
- Ashley, B. J. *An Introduction to the Sociology of Education*. Macmillan, London, 1969.
- Banks, O. *Sociology of Education*. Batsford, London, 1968.
- Blackington, F. H. and Patterson, R. S. *School, Society and the Professional Educator*. Holt, Rinehart & Winston, N.Y., 1968.
- Brookover, W. B. et al. *A Sociology of Education*. 2nd ed. American Book Co., N.Y., 1964.
- Brookover, W. B. et al. *Society, Schools and Learning*. Allyn & Bacon, Boston, 1969.
- Broom, L. and Selnick, P. *Sociology. A Text with Adapted Readings*. Harper & Row, New York, 1968.
- Butts, R. F. *Assumptions Underlying Australian Education*. A.C.E.R., 1966.
- Caplan, G. et al. eds. *Adolescence: Psychosocial Perspective*. Basic Book, London, 1969.
- Cavan, R. S. *Juvenile Delinquency*. J. B. Lippincott Company, New York, 1969.
- Chapple, A. P. "The Role of the School in Controlling Juvenile Delinquency Education" (Perth). V. 17, July 1968, pp. 7-20.
- Chinoy, E. *Society: An Introduction to Sociology*. Random House, New York, 1967.
- Clark, B. R. *Educating the Expert Society*. Chandler Pub. Company, Chicago, 1962.

- Chen, A. K. *Delinquent Boys*. Free Press, Illinois, 1960.
- Commonwealth of Australia Bureau of Census and Statistics. *The Official Year Book and the Schools Bulletin*.
- Connell, W. F. et al. *The Foundations of Education*. Ian Novak, Sydney, 1967.
- Cosin, B. R. et al. *School and Society*. Routledge and Kegan Paul, and The Open University, London, 1971.
- Cotgrove, S. *The Science of Science*. George Allen & Unwin, London, 1967.
- Davies, A. F., Encel, S. eds. *Australian Society. A Sociological Introduction*. 2nd ed. Cheshire, Melbourne, 1970.
- Debenham, A. E. *The Innocent Victims*. Edwards and Shaw, Sydney, 1969.
- Dunphy, D. *Cliques, Groups and Crowds*. Cheshire.
- D'Urso, S. ed. *Critical Writings on Australian Education*. Wiley, Sydney, 1971.
- Eggleston, S. J. *The Social Context of the School*. Routledge and Kegan Paul, London, 1967.
- Encel, S. *Equality and Authority: A Study of Class, Status and Power in Australia*. Cheshire, Melbourne, 1970.
- Fensham, P. J. ed. *Rights and Inequality in Australian Education*. Cheshire, Melbourne, 1970.
- Graham, G. *The Public School in the Society*. Harper & Row, N.Y., 1969.
- Gross, C. H. et al. *School and Society*. D. C. Heath and Co., Boston, 1962.
- Halsey, A. H. et al. ed. *Education, Economy and Society*. Free Press, N.Y., 1961.
- Harvard Educational Review. *Equal Educational Opportunity*. Harvard Univ. Press, Cambridge, 1969.
- Havighurst, R. J. and Neugarten, B. L. *Society and Education*. Allyn & Bacon, Boston, 1967.
- Hirschi, T. *Causes of Delinquency*. Univ. of California Press, Berkeley, 1969.
- Howie, G. The Education of Teachers, from *It's People That Matter*, ed. McLean, D., A. & R., Sydney, 1969.
- Karmel, P. (Chairman). *Education in South Australia*. Report of the Committee of Enquiry into Education in South Australia 1969-70. S.A. Govt. Printer, Adelaide, 1971.
- Katz, F. M. et al. ed. *Sociology of Education*. Macmillan, Sydney, 1970.
- Lieberman, M. *Education as a Profession*. Prentice-Hall, Englewood Cliffs, N.J., 1956.
- McDonald, L. *Social Class and Delinquency*. Faber, London, 1969.
- McGreggor, C. *Profile of Australia*. Penguin.
- McLaren, J. *Our Troubled Schools*. Cheshire, Melbourne, 1968.
- Mead, M. *Coming of Age in Samoa*. Pelican.
- Merton, R. K. ed. *Social Theory and Social Structure*. Free Press, N.Y., 1968.
- Moylan, E. C. Problems of the Educator, *Australian and New Zealand Journal of Criminology*. V. 2, Dec. 1969, pp. 238-243.
- Musgrave, F. and Taylor, H. *Society and the Teacher's Role*. Routledge and Kegan Paul, London, 1969.
- Nisbet, R. A. *The Social Bond. An Introduction to the Study of Society*. Alfred A. Knopf, New York, 1970.

- Partridge, P. H. *Society, Schools and Progress in Australia*. Pergamon, N.Y., and Oxford, 1968.
- Simpkins, W. S. "Teacher Participation in School Decisions." *Forum of Education*. V. 29, N. 2, Sept. 1970.
- Social Problems (Journal)*. Vol. 13, pp. 35-45, 160-175, 307-314, 411-417. Vol. 14, pp. 35-47, 320-335.
- Stinnett, T. M. *Professional Problems of Teachers*. Macmillan, London, 1968.
- Thomas, K. A. A Report on the Role of School in Society, Parts I, II and III. *Tasmanian Journal of Education*. V. 4, pp. 2-21, 56-69, and 76-88, February-June 1970.
- Webb, L. C. The Teaching Profession. *Australian Journal of Education*. V. 7, N. 3, Oct. 1963.
- Westby-Gibson, D. *Social Perspectives on Education*. Wiley, N.Y., 1965.
- Wiseman, R. "Secondary School and Family Background—A Review of Some Recent Australian Studies." *Australian Journal of Education*, V. 14, March 1970, pp. 66-75.
- Woodmansey, A. C. Understanding Delinquency. *British Journal of Delinquency*. V. 11, N. 2, April 1971, pp. 155-166.
- Wood, W. Education Manpower in Australian Schools. *Australian Journal of Education*. V. 13, pp. 167-194, 1969.

### **58.523 Education IB**

#### **PREREQUISITES**

The prerequisites for Education IB are:

- 1.011 Higher Physics I or
- 1.001 Physics I or
- 1.041 Physics IC and
- 2.001 Chemistry I and
- 17.001 General and Human Biology and
- 25.001 Geology I
- 58.512 Introduction to Education

#### **CO-REQUISITE**

58.513 Education IA.

#### *Science Curriculum and Instruction*

This course is concerned with the application of principles dealt with in Educational Psychology and Philosophy and Theory of Education to the particular case of science teaching. For example, the curriculum strand deals with aids of science teaching and with planning and programming of course content and the influence of information above cognitive growth and conceptual patterns upon this. Again, the instruction strand deals with learning in science, e.g. teacher demonstrations, pupil practical work, the use of audiovisual aids, individualised instruction and lesson planning. The teaching of selected topics in Biology, Chemistry, Geology and Physics is commenced and this is developed further in the fourth year.

#### **TEXTBOOK**

Collette, A. T. *Science Teaching in the Secondary School*.

Tisher, R. P. et al. *Fundamental Issues in Science Education*. Wiley, 1972.

## REFERENCE BOOKS

- Andersen, H. O. *Readings in Science Education for the Secondary School*. Macmillan, N.Y., 1969.
- Association for Science Education. *The School Science Review* (Journal) Cambridge.
- Australian Science Teachers Association. *The Australian Science Teachers Journal*. Sydney.
- Howes, V. M. *Individualizing Instruction in Science and Mathematics*. Macmillan, London, 1970.
- Hurd, P. D. *New Directions in Teaching Secondary School Science*. Rand McNally, Chicago, 1969.
- Jevons, F. R. *The Teaching of Science*. Allen and Unwin, London, 1968.
- Nuclear Research Foundation. *Science for High School Students—A Teachers Manual*. Government Printer, Sydney, 1966.
- Romey, W. D. *Inquiry Techniques for Teaching Science*. Prentice-Hall, Englewood-Cliffs, N.J., 1968.
- Schools Council Curriculum Bulletin No. 3. *Changes in School Science Teaching*, Evans/Methuen, London, 1970.
- Schwab, J. J. *The Teaching of Science as Enquiry*. Harvard U.P., Cambridge, Mass., 1962.
- Science Teachers Association of N.S.W. *Science Education News* (Journal) Sydney.
- Shulman, L. S. & Keisler, E. R. eds. *Learning by Discovery: A Critical Appraisal*. Rand McNally, Chicago, 1966.
- Suchman, J. R. *Developing Inquiry*. Science Research Associates. Chicago, 1966.
- Sutcliffe, A. *School Laboratory Management*. Murray, London, 1961.
- The Science Foundation for Physics. *Science for High School Students*: Rev. ed. N.S.W. Government Printer, Sydney, 1970.
- Tricker, R. A. R. *The Contribution of Science to Education*. Mills and Boon, London, 1967.
- Woodburn, J. H. & Obourn, E. S. *Teaching the Pursuit of Science*. Macmillan, N.Y., 1965.

*Teaching Practice*

Students will be placed in high schools for one half-day per week to obtain a gradual introduction to the teaching process.

**58.502 Education II**

Australian education. Educational psychology. Philosophy and theory of education. Sociology of education. Science curriculum and instruction. Teaching practice.

*Educational Psychology*

## REFERENCE BOOKS

- Butcher, H. J. *Human Intelligence: Its Nature & Assessment*. Methuen, 1968.

- Ebel, R. L. *Measuring Educational Achievement*. Prentice-Hall, 1965.
- Edwards, A. L. *Techniques of Attitude Scale Construction*. McGraw-Hill, 1957.
- Gronlund, N. E. *Constructing Achievement Tests*. Prentice-Hall, 1968.
- Hunter, E. *Encounter in the Classroom*. Holt, 1972.
- Remmers, H. H., Gage, N. L. & Rummel, J. F. *Measurement and Evaluation*. Pt. 3. 2nd ed. Harper & Row, 1965.
- Schmuck, R. A. & Schmuck, P. A. *Group Processes in the Classroom*. Brown, 1971.
- Schoer, L. A. *Test Construction: A Programmed Guide*. Allyn & Bacon, 1970.
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### *Sociology of Education*

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- Wheeler, D. K. *Curriculum Process*. University of London Press, London, 1967.
- Woodburn, J. N. & Obourn, E. S. *Teaching the Pursuit of Science*. Macmillan, 1965.

### 58.512 Introduction to Education

The subject starts with an examination of the view commonly held by prospective teachers that their task in the classroom will be simply to teach specific subject matter. Some of the difficulties encountered in the communication of ideas to pupils are considered and a much broader view of the educational process is developed. Psychological, philosophical and sociological perspectives of the teaching-learning situation are discussed.

The subject serves as a basis for study in greater depth of educational psychology, philosophy and theory of education and sociology of education in succeeding years and shows the contribution of each to the practice of teaching. Lectures and seminars are closely related to a series of school visits extending throughout the year.

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## MASTER OF EDUCATION

**58.201G Comparative Education**

An examination of important educational problems as they occur in a number of countries, with special reference to South East Asia. Topics will include—the school and the school child, the professional preparation of teachers, technical education, tertiary education, the school and society. Topics treated in Comparative Education will be related to the Australian educational scene.

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 Dropkin, S., Full, H. & Schwarcz, E. eds. *Contemporary American Education*. Collier-Macmillan, 1965.  
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*World Yearbook of Education*. Evans Bros.

**58.202G Educational Planning and Administration**

General principles of planning and administration applied to the organization of education. The factors underlying the administration of the Australian educational systems, both government and independent. Particular

problems of Australian education—e.g. centralization of administration, the comprehensive secondary school, access to education, the role of the school inspector, the relationship between the state and independent school systems. The planning of educational programmes in developing countries with which Australia is associated. The economics of educational planning.

#### REFERENCE BOOKS

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 Butts, R. F. *Assumptions Underlying Australian Education*. A.C.E.R., 1955.  
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 Floud, J., Halsey, A. H. & Anderson, C. A. eds. *Education, Economy and Society*. The Free Press, 1961.  
 Getzels, J. B., Lipman, J. M. & Campbell, R. F. *Educational Administration as a Social Process*. Harper & Row, 1968.  
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#### 58.203G Educational Psychology

In this treatment of conceptualizations of instruction in educational settings, important psychological factors influencing the behaviour of teachers and learners will be investigated. In addition recent published

studies of aspects of classroom learning will be analysed with regard to their contributions to a theory of teaching in selected skill or subject areas.

### TEXTBOOK

Merrill, M. D. ed. *Instructional Design: Readings*. Prentice-Hall, 1971.

### REFERENCE BOOKS

Anderson, R. C. & Ausubel, D. P. eds. *Readings in the Psychology of Cognition*. Holt, Rinehart & Winston, 1965.

Anderson, R. C. et al. eds. *Current Research on Instruction*. Prentice-Hall, 1969.

Block, J. H. ed. *Mastery Learning*. Holt, Rinehart & Winston, 1971.

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Pribram, K. H. ed. *On the Biology of Learning*. Harcourt Brace & World, 1969.

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### PRELIMINARY READING FOR THE COURSE

De Cecco, J. P. *The Psychology of Learning and Instruction*. Prentice Hall, 1968.

Lefrançois, G. R. *Psychology for Teaching*. Wadsworth, 1972.

Morse, W. C. and Wingo, G. M. eds. *Classroom Psychology*. 3rd ed. Scott, Foresman, 1971.

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## 58.204G Educational Theory in the Twentieth Century

Concentrates on the views and influence of individual thinkers such as: Dewey, Kilpatrick, Childs, Buber, Berdyaev, Sartre, Russell, A. S. Neill, Homer Lane, Nunn, Riesman, Fromm, Frankl, Maritain, Hutchins, Mannheim, Makarenko. Recent educational theories relating to the curriculum, such as those of Bruner and Schwab. An introduction to modern social theory in relation to education.

### REFERENCE BOOKS

- Archambault, R. D. ed. *John Dewey on Education. Selected Writings.* Modern Library, 1964.
- Berdyaev, N. *Solitude and Society.* Geoffrey Bles, 1938.
- Blackington, F. H. ed. *School, Society and the Professional Educator.* Holt, Rinehart & Winston, 1968.
- Broudy, H. *Building a Philosophy of Education.* Prentice-Hall, 1954.
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- Brown, L. M. *Aims of Education.* Teachers' College, Columbia, 1970.
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- Mannheim, K. *Man and Society.* Kegan Paul, 1940.
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- Maritain, J. *Education at the Crossroads.* Yale U.P., 1943.
- Nash, P. et al. eds. *The Educated Man.* Wiley, 1965.
- Nunn, P. *Education. Its Data and First Principles.* Arnold, 1920.
- Perry, L. R. ed. *Bertrand Russell... Four Progressive Educators.* Collier Macmillan, 1967.
- Rich, J. M. *Education and Human Values.* Addison-Wesley, 1968.
- Sartre, J. P. *Existentialism and Humanism.* Methuen, 1948.
- Thomas, R. *The Search for a Common Learning: General Education, 1800-1960.* McGraw-Hill, 1962.
- Whitehead, A. N. *The Aims of Education.* Williams & Northgate, 1929.
- Wynne, J. P. *Theories of Education.* Harper & Row, 1964.

**58.206G History of Education**

(i) History of Western Education. (ii) History of Australian Education. In each part there will be both a study of movements and cultures as well as of distinguished thinkers. Part (i) will provide a background for understanding (ii) Australian education will trace the growth of national education, the relationship between denominational and national systems, the impact of various acts and the work and influence of men such as Wilkins, Parkes, Rusden and Board.

**REFERENCE BOOKS**

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- Austin, A. G. *Australian Education 1788-1900*. 2nd ed. Pitman, 1965.
- Austin, A. G. *George William Rusden and National Education in Australia, 1849-1862*. M.U.P., 1958.
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- Barclay, W. *Educational Ideals in the Ancient World*. Collins, 1961.
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- Gillett, M. A. *A History of Education: Thought and Practice*. McGraw-Hill, 1966.
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- Plato. *The Republic*. Any Edition.
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- Rusk, R. R. *Doctrines of the Great Educators*. Macmillan, 1952.
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- Selleck, R. J. W. *The New Education. The English Background, 1870-1914*. Pitman, 1968.
- Silbert, K. *Pestalozzi, The Man and his Work*. Routledge & Kegan Paul, 1966.
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- Taylor. *Plato, the Man and his Work*. Methuen, 1948.
- Ulich, R. H. *History of Educational Thought*. American Book, 1945.

**58.207G Philosophy in Education**

Relationship between philosophy and philosophy of education; aims of education; traditional theories such as idealism, pragmatism, existentialism;

the relationship between belief and practice, or theory and practice; the notion of education as "practical discourse"; conceptual studies of instruction, indoctrination, critical thinking, creativity etc.; ethical questions such as moral responsibility and character, and the philosophy of punishment; psychological and social aspects of freedom, such as authority and student power, education for aggression or co-operation.

### TEXTBOOKS

Brown, L. M. *Aims of Education*. Teachers' College Press, Columbia University, 1970.

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Baier, K. *The Moral Point of View*. Cornell U.P., 1958.

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Gribble, J. H. *Introduction to Philosophy of Education*. Allyn & Bacon, Boston, 1969.

Henry, N. B. ed. *Philosophy of Education*. Forty-first Yearbook, Part 1, The National Society for the Study of Education, Chicago U.P., 1942.

Henry, N. B. ed. *Modern Philosophies of Education*. The Fifty-Fourth Yearbook, Part 1, The National Society for the Study of Education, Chicago U.P., 1955.

Langford, G. *Philosophy and Education*. Macmillan, 1968.

Morris, V. C. *Existentialism in Education*. Harper & Row, 1966.

Niblett, W. R. ed. *Moral Education in a Changing Society*. Faber & Faber, 1963.

O'Connor, D. J. *An Introduction to the Philosophy of Education*. Routledge & Kegan Paul, 1957.

Park, J. ed. *Selected Readings in the Philosophy of Education*. Macmillan, 1958.

Peters, R. S. *Ethics in Education*. Scott Foresman, 1967.

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Reid, L. A. *Philosophy and Education*. Heinemann, 1962.

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Scheffler, I. *Conditions of Knowledge*. Scott Foresman, 1965.



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 Snook, I. A. *Indoctrination and Education*. Routledge & Kegan Paul, 1972.  
 Soltis, J. F. *An Introduction to the Analysis of Educational Concepts*. Addison-Wesley, 1968.

## 58.208G Child Growth and Development

This is a combined theoretical and practical course which gives a comprehensive coverage of cognitive, personality, social, emotional, moral, language and other aspects of development and individual differences in children. Each aspect is set within the context of contemporary society and education. The concept of development is itself examined, as are the major theories of child study and their basic concepts, assumptions, methodology and research. Course work concentrates on a practical application of research and theory and includes a child study.

### REFERENCE BOOKS

- Anderson, R. C. and Ausubel, D. P. *Readings in Psychology of Cognition*. Holt, Rinehart & Winston, 1965.  
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 Ausubel, D. P. *Theory and Problems of Adolescent Development*. Grune & Stratton, 1954.  
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## 58.210G Science Education

A survey of recent research in science education; discussion of recent thinking about aims, theories of cognitive growth and principles of curriculum development; an examination of new science curricula in Australia and overseas in the light of the information thus gained.

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- Andersen, H. O. *Readings in Science Education for the Secondary School*. Macmillan, 1969.
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- Mager, R. F. *Preparing Instructional Objectives*. Fearon Publications, 1962.
- Martin, M. *Concepts of Science Education*. Scott, Foresman and Co., Illinois, 1972.
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- National Science Teachers Association. *Theory into Action in Science Curriculum Development*. N.S.T.A. Washington, 1964.
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- Prince, J. R. *Science Concepts in a Pacific Culture*. A. & R., 1969.
- Robinson, J. T. *The Nature of Science and Science Teaching*. Wadsworth, 1968.
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- Schwab, J. J. *The Teaching of Science as Enquiry*. Harvard U.P., 1962.
- Shulman & Keisler. eds. *Learning by Discovery: A Critical Appraisal*. Rand McNally, 1966.
- Soltis, J. F. *An Introduction to the Analysis of Educational Concepts*. Addison-Wesley, 1968.
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- Wallace, J. G. *Concept Growth and the Education of the Child.* N.F.E.R., 1966.
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## 58.211G Sociology of Education

The methodology of social research including subject matter content of sociology of education, scientific method, and research procedures; the relation between education and society with particular attention given to stratification, social change, equality and inequality of educational opportunity, school systems and minority groups; group structures and dynamics, role theory and reference group theory applied to parent, teacher, and student groups.

### REFERENCE BOOKS

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- Cosin, B. R. et al. *School and Society.* Routledge & Kegan & the Open University, 1971.
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- Davies, A. F. & Encel, S. eds. *Australian Society: A Sociological Introduction.* Cheshire, 1970.
- Dunn, S. S. & Tatz, C. H. *Aborigines and Education.* Sun Books, 1969.
- Durkheim, E. *Rules of Sociological Method.* Free Press, 1964.
- Encel, S. *Equality and Authority. A Study of Class, Status and Power in Australia.* Cheshire, 1970.
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- Gibson, Q. B. *Logic of Social Enquiry.* Routledge, 1960.
- Graham, G. *The Public School in Society.* Harper & Row, 1969.
- Gross, C. H. et al. *School and Society.* Heath, 1962.
- Gross, L. ed. *Symposium of Sociological Theory.* Row, Peterson, 1959.
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- Havighurst, R. J. & Neugarten, B. L. *Society and Education.* Allyn & Bacon, 1967.
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- Madge, J. *The Tools of Social Science: An Analytical Description of Social Science Techniques*. A Doubleday Anchor Book, 1965.
- McDonald, L. *Social Class and Delinquency*. Faber, 1969.
- McEwen, W. P. *The Problem of Social-Scientific Knowledge*. Bedminster, 1963.
- Merton, R. ed. *Social Theory and Social Structure*. Free Press, 1968.
- Merton, R. et al. eds. *Sociology Today*. Harper & Row, 1965.
- Musgrave, F. & Taylor, H. *Society and the Teacher's Role*. Routledge & Kegan Paul, 1969.
- Nisbet, R. A. *The Social Bond. An Introduction to the Study of Society*. Knopf, 1970.
- Partridge, P. H. *Society, Schools and Progress in Australia*. Free Press, 1968.
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- Rex, J. *Key Problems of Sociological Theory*. Routledge, 1961.
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## 58.212G Mathematics Education

An investigation of theories of instruction, theories of cognitive growth and principles of curriculum development; the application of these theories and principles to aspects of a mathematics curriculum; an examination of new mathematics curricula in Australia and overseas in terms of the above theories and principles.

### REFERENCE BOOKS

- Abrahamson, B. *The Art of Algebra*. Rigby, 1971.
- Adler, I. *The New Mathematics*. Signet.
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- National Council of Teachers of Mathematics. *The Teaching of Secondary School Mathematics*. 33rd Yearbook, Washington, 1970.
- National Society for the Study of Education. *Theories of Learning and Instruction*. 63rd Yearbook of N.S.S.E., Chicago, 1964.
- National Society for the Study of Education. *Mathematics Education*. 69th Yearbook of NSSE, Part 1, Chicago, 1970.
- Phillips, J. L. *The Origins of Intellect: Piaget's Theory*. Freeman, 1969.
- Shulman & Deisler. eds. *Learning by Discovery: A Critical Appraisal*. Rand McNally, 1966.
- Sigel, I. E. and Hooper, F. H. *Logical Thinking in Children*. Holt, Rinehart & Winston, New York, 1968.
- The Report of the Cambridge Conference on the Correlation of Science and Mathematics in the Schools. *Goals for the Correlation of Elementary Science and Mathematics*. Houghton Mifflin, Boston, 1969.
- The Report of the Cambridge Conference on School Mathematics. *Goals for School Mathematics*. Houghton Mifflin, Boston, 1963.
- Wheeler, D. K. *Curriculum Process*. Univ. of London Press, 1967.

### 58.213G—Educational Research I

The design of educational experiments and surveys. The statistical analysis of results. The writing of a report on a research project. The evaluation of published research reports.

#### REFERENCE BOOKS

- Ary, D., Jacobs, L. C. and Razavieh, A. *Introduction to Research in Education*. Holt, Rinehart & Winston, 1962.
- Budd, W. C. & Kelly, S. P. *Educational Research by Practitioners*. Harper & Row, 1970.
- Davitz, J. R. & Davitz, L. J. *A Guide for Evaluating Research Plans in Psychology and Education*. Teachers College Press, 1967.
- Dayton, C. M. *The Design of Educational Experiments*. McGraw-Hill, 1970.

- Ebel, R. L. et al. *Encyclopaedia of Educational Research*. 4th ed. Macmillan, 1969.
- Edwards, A. L. *Experimental Design in Psychological Research*. 3rd ed. Holt, 1968.
- Ferguson, G. A. *Statistical Analysis in Psychology and Education*. 2nd ed. McGraw-Hill, 1966.
- Fox, D. J. *The Research Process in Education*. Holt, 1969.
- Gage, N. L. *Handbook of Research on Teaching*. Rand McNally, 1970.
- Hillway, J. *Handbook of Educational Research*. Houghton Mifflin, 1969.
- Kerlinger, F. N. *Foundations of Behavioural Research*. Holt, 1973.
- Nisbet, J. D. & Entwistle, N. J. *Educational Research Method*. U.L.P., 1970.
- Radford, W. C. *A Field for Many Tillings*. A.C.E.R., 1964.
- Ray, W. S. *An Introduction to Experimental Design*. Macmillan, 1960.
- Roscoe, J. T. *Fundamental Research Statistics for the Behavioural Sciences*. Holt, 1969.
- Runkel, P. J. & McGrath, J. E. *Research on Human Behaviour*. Holt, 1972.
- Sax, G. *Empirical Foundations of Educational Research*. Prentice-Hall, 1968.
- Siegel, S. *Nonparametric Statistics for the Behavioural Sciences*. McGraw-Hill, 1956.
- Travers, R. M. W. *An Introduction to Educational Research*. 3rd ed. Macmillan, 1968.
- Tuckman, B. W. *Conducting Educational Research*. Harcourt, Brace, Jovanovich, 1972.
- Turney, B. & Robb, G. *Research in Education*. Dryden, 1971.
- Wandt, E. *A Cross Section of Educational Research*. D. McKay, 1965.

## 58.214G—Educational Research II

The course provides a basis in some depth for applied educational research. Particular attention is given to longitudinal survey research, experimental and quasi-experimental designs in research, and the design and conduct of research projects.

Areas to be considered include theories, models and educational research, experimental and quasi-experimental designs, theory and methods of scaling, analysis of variance, analysis of covariance, multiple correlation and multiple regression analysis, non-parametric statistics used in educational research, applications of computers to data analysis with particular reference to the use of package programmes.

In considering appropriate research procedures, stress is placed on the assumptions underlying the use of each procedure and methods of testing these assumptions.

### REFERENCE BOOKS

- Cattell, R. *Handbook of Multivariate Experimental Psychology*. Rand McNally, Chicago, 1965.
- Cochran, W. G. and Cox, G. M. *Experimental Designs*. Wiley, N.Y., 1966.
- Cooley W. and Lohnes, P. *Multivariate Procedures for the Behavioural Sciences*. Wiley, N.Y., 1968.
- Cooper, S. *Statistics for Experimentalists*. Pergamon, N.Y., 1969.
- Davison, W. I. *Information Processing*. Appleton-Century-Crofts, N.Y., 1970.
- Dubin, R. *Theory Building (A Practical Guide to the Construction and Testing of Theoretical Models)*. Free Press, N.Y., 1969.
- Duncan, B. and Featherman, D. and Featherman, O. D., *Socioeconomic Background and Achievement*. Seminar Press, N.Y., 1972.
- Edwards, A. L. *Experimental Design in Psychological Research*. Holt, Rinehart & Winston, N.Y., 1960.



- Emerick, P. L. and Wilkinson, J. W. *Computer Programming for Business and Social Science*. The Dorsey Press, N.Y., 1970.
- Ferguson, G. A. *Statistical Analysis in Psychology and Education*. McGraw-Hill, N.Y., 1966.
- Gage, N. L. ed. *Handbook of Research on Teaching*. 2nd ed. Rand McNally, Chicago, 1970.
- Gruenberger, F. *Computing: An Introduction*. Harcourt, Brace & World, N.Y., 1969.
- Guilford, J. P. *Fundamental Statistics in Psychology and Education*. 4th ed. McGraw-Hill, N.Y., 1965.
- Kerlinger, F. N. *Foundations of Behavioural Research*. Holt, Rinehart & Winston, Inc. N.Y., 1973.
- Kerlinger, F. N. *Review of Research in Education*. Vol. I. Peacock, N.Y., 1973.
- Lindquist, E. F. *Design and Analysis of Experiments in Psychology and Education*. Houghton Mifflin & Co., Boston, 1953.
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- Van Dalen, D. B. and Meyer, J. *Understanding Educational Research*. McGraw-Hill, N.Y., 1966.
- Van de Geer, J. P. *Introduction to Multivariate Analysis for Social Sciences*. Freeman & Co., N.Y., 1971.
- Winer, B. *Statistical Principles in Experimental Design*. McGraw-Hill, N.Y., 1962.

## SCHOOL OF HISTORY AND PHILOSOPHY OF SCIENCE

### 62.001 History and Philosophy of Science I

#### The Origins of Modern Science (Session I)

An Introductory course dealing with the main developments in the history of science between 1300-1800. The main emphasis will be on the seventeenth century Scientific Revolution. The course will examine, among other things, the work of Copernicus, Kepler, Gilbert, Harvey, Galileo, Torricelli, Huygens and Newton. The decline of scholastic philosophy and the rise of a new mentality reflected in the writings of Bacon, Descartes and Galileo, will be discussed in some detail. Cartesian and Newtonian physics and the establishment of a mechanistic world view will also be examined.

#### TEXTBOOKS

- Butterfield, H. *The Origins of Modern Science 1300-1800*. Bell.
- Hall, A. R. *The Scientific Revolution 1500-1800*. Longmans.

#### REFERENCE BOOKS

- Bacon, F. *The New Organon and Related Writings*. Anderson, F. H. ed. Bobbs-Merrill.
- Cohen, I. B. *The Birth of a New Physics*. Heinemann.

- Dijksterhuis, E. J. *The Mechanization of the World Picture*. O.U.P.  
 Galilei, G. *Discoveries and Opinions of Galileo*. Drake, S. trans. Doubleday.  
 Kuhn, T. S. *The Copernican Revolution*. Random House.  
 Munitz, M. K. ed. *Theories of the Universe*. Free Press of Glencoe.  
 Rosen, E. *Three Copernican Treatises*. Dover.

## **The Social History of Science (Session II)**

An introduction to the study of the scientific enterprise in its social and cultural context. The course will deal with topics such as: the emergence of the scientific movement in Britain and Western Europe, the relations between the State and the community of science, the nature and functions of scientific societies and academies; the influence of technology on science and of science on technology; science and the State in the twentieth century with special reference to specific problems in the U.S.A., Britain, Soviet Union, Germany, and the developing nations.

### **TEXTBOOK**

Rose, H. & Rose, S. *Science and Society*. Penguin.

### **REFERENCE BOOKS**

- Ashby, E. *Technology and the Academics*. Macmillan.  
 Barber, B. *Science and the Social Order*. Collier.  
 Lilley, S. *Essays on the Social History of Science*. Centaurus.  
 Marsak, L. M. *The Rise of Science in Relation to Society*. Macmillan.  
 Mason, S. F. *A History of the Sciences*. Routledge.

## **62.002 History and Philosophy of Science II**

### **The Principles of the Philosophy of Science (Session I)**

A general introduction to the philosophy of science. Following a preliminary examination of the nature of some of the common forms of argument employed in natural science and mathematics, several of the more central problems of the philosophy of science will be discussed, such as—the structure of scientific theories; the nature of scientific explanation and prediction; the status of scientific laws; confirmation and falsification; the function of models and analogies; the status of theoretical entities; paradigms; and the dynamics of scientific development and change. Historical case studies taken from the post-Newtonian period will be used to illustrate the philosophical issues.

### **TEXTBOOKS**

- Hempel, C. G. *Philosophy of Natural Science*. Prentice-Hall.  
 Kuhn, T. S. *The Structure of Scientific Revolutions*. 2nd ed. Chicago U.P.  
 Medawar, P. B. *Induction and Intuition in Scientific Thought*. Methuen.

### **REFERENCE BOOKS**

- Cohen, M. R. & Nagel, E. *An Introduction to Logic and Scientific Method*.  
 Harcourt, Brace & World.  
 Madden, E. H. *The Structure of Scientific Thought*. Routledge & Kegan Paul.  
 Popper, K. R. *The Logic of Scientific Discovery*. Hutchinson.

Theobald, D. W. *An Introduction to the Philosophy of Science*. Methuen.  
Toulmin, S. E. *The Philosophy of Science*. Arrow Books.

## Selected Topics in the Histories of the Sciences (Session II)

Students will choose *two* of the following Histories:

### (i) *The History of Biology*

A critical consideration of the Darwin-Wallace theory of evolution and its place in the history of biology. The course will be centered on a detailed analysis of Darwin's arguments, particularly of *The Origin of Species* and will also relate Darwin's ideas to the general scientific and intellectual background of the period, in order to show their impact on biological science and other areas of thought.

### TEXTBOOKS

Darwin, C. *The Origin of Species*. Pelican.  
Darwin, C. *The Voyage of the Beagle*. Everyman.

### REFERENCE BOOKS

Appleman, P. ed. *Darwin. A Norton Critical Edition*. Norton.  
Darwin, C. *Autobiography*, ed. Darwin, F. Collier.  
de Beer, G. *Charles Darwin. Evolution by Natural Selection*. Nelson.  
Eiseley, L. *Darwin's Century*. Gollancz.  
Greene, J. C. *The Death of Adam*. Mentor.  
Himmelfarb, G. *Darwin and the Darwinian Revolution*. Norton.  
Moorehead, A. *Darwin and the Beagle*. Penguin.

### (ii) *The History of Chemistry*

The establishment of the atomic theory.

The evolution of the atomic theory is traced from the time of Dalton to that of Mendeleef, with a careful examination of the steps leading to the determination of atomic weights, the writing of chemical formulae, the establishment of the valencies of the elements, and the construction of the periodic table.

### TEXTBOOK

Mellor, D. P. *The Evolution of the Atomic Theory*. Elsevier.

### REFERENCE BOOKS

Berry, A. J. *From Classical to Modern Chemistry*. Dover.  
Cardwell, D. S. L. ed. *John Dalton and the Progress of Science*. Manchester U.P.  
Conant, J. B. ed. *Harvard Case Histories in Experimental Science*. 2 volumes. Harvard U.P.  
Dalton, J. *A New System of Chemical Philosophy*. Dawsons.  
Greenaway, F. *John Dalton and the Atom*. Heinemann.  
Ihde, A. *The Development of Modern Chemistry*. Harper & Row.  
Knight, D. M. *Atoms and Elements: a Study of Theories of Matter in England in the Nineteenth Century*. Hutchinson.  
Leicester, H. M. *The Historical Background to Chemistry*. Wiley.  
Leicester, H. M. & Klickstein, H. S. *A Source Book in Chemistry 1400-1900*. McGraw-Hill.

Leveré, T. M. *Affinity and Matter—Elements of Chemical Philosophy 1800-1865* O.U.P.

Palmer, W. G. *A History of the Concept Valency to 1930*. Cambridge U.P.

Russell, C. A. *The History of Valency*. Leicester U.P.

Van Melsen, A. G. M. *From Atomos to Atom: The History of the Concept Atom*. Harper.

### (iii) *The History of Geology*

The history of geology in outline from antiquity to the present, with more detailed consideration of the following topics: the uniformitarian/catastrophist debate in the early nineteenth century; the birth of glacial geology; Kelvin and the age of the earth; the history of the hypothesis of continental drift from Wegener to the present; paradigmatic geology in the first half of the twentieth century; some new directions—geophysics, geochemistry, oceanography, tectonics, paleoecology, Quaternary geology and the evolution of the hominids, lunar geology, environmental geology.

### INTRODUCTORY READING

Fenton, C. R. & Fenton, M. A. *Giants of Geology*. Dolphin.

### TEXTBOOKS

Adams, F. D. *The Birth and Development of the Geological Sciences*. Dover.

Gillispie, C. C. *Genesis and Geology*. Harper.

### REFERENCE BOOKS

Albritton, C. C. ed. *The Fabric of Geology*. Freeman, Cooper & Co.

Bailey, E. *Charles Lyell*. Doubleday.

Bailey, E. *James Hutton—the Founder of Modern Geology*. Elsevier.

Chambers, R. *The Vestiges of the Natural History of Creation*. Leicester U.P.

Cloud, P. *Adventures in Earth History*. Freeman.

Darwin, C. *The Voyage of the Beagle*. Everyman.

Davies, G. L. *The Earth in Decay—A History of British Geomorphology, 1578-1848*. Oldbourne.

Eiseley, L. *Darwin's Century*. Gollancz.

Geikie, A. *The Founders of Geology*. Dover.

Greene, J. C. *The Death of Adam*. Mentor.

Haber, F. C. *The Age of the World, Moses to Darwin*. Baltimore.

Hooykaas, R. *The Principle of Uniformity in Geology, Biology and Theology*. Leiden.

Lyell, C. *The Principles of Geology*. John Murray.

Mather, K. F. & Mason, S. O. *A Source Book in Geology*. Hafner.

Schneer, C. J. *Toward a History of Geology*. M.I.T. Press.

von Zittel, K. A. *History of Geology and Palaeontology*. Scott. Reprinted Cramer.

### (iv) *The History of Physics*

A critical study of the origins and development of modern theories of space and time, and matter and radiation. The course will begin with the "two small dark clouds" on the horizon of classical physics, the null result of the Michelson-Morley experiment and the ultra-violet catastrophe highlighted in the Rayleigh-Jeans law, and will go on to consider the empirical and theoretical background to the major revolution in the conceptual evolution of physics, which finally resulted in the theories of relativity and quantum

mechanics. The logical structures of these theories will be examined and some famous "paradoxes" will be discussed in order to demonstrate the incomplete nature of some orthodox interpretations of relativistic and quantum phenomena.

Selections from primary sources will be issued by the School.

### TEXTBOOKS

Einstein, A. *Relativity, The Special and General Theory*. University Paperbacks.

Einstein, A. & Infeld, L. *The Evolution of Physics*. Cambridge.

Silva, A. & Lochak, G. *Quanta*. World University Library.

### REFERENCE BOOKS

Einstein, A. & Loretz, H. A. *The Principle of Relativity*. Dover.

Bunge, M. *Foundations of Physics*. Springer-Verlag.

Hesse, M. *Forces and Fields*. Nelson.

Hoffman, B. *The Strange Story of the Quantum*. Dover.

Jammer, M. *The Conceptual Development of Quantum Mechanics*. McGraw-Hill.

Prokhovnik, S. J. *The Logic of Special Relativity*, C.U.P.

Whittaker, E. *A History of Theories of Aether and Electricity*. Nelson.

Williams, L. P. *Relativity Theory: Its Origins and Impact*. Wiley.

## SCHOOL OF SOCIAL WORK

### 63.001 Australian Social Organization

After an examination of the demographic characteristics of Australia, a number of major organizational areas of Australian society are studied, for example, its organization with respect to industry and commerce, government, the law, religion, and the institutions of social welfare.

The subject calls for extensive reading, associated with regular classroom exercises.

### TEXTBOOKS

Atkins, R. & Graycar, A. *Governing Australia*. Wiley, 1972.

Cox, P. R. *Demography*. Cambridge U.P., 1972.

Downing, R. I. *National Income and Social Accounts: An Australian Study*. M.U.P. Melbourne, 1971.

Downing, R. I., Arndt, H. W., Boxer, A. H. and Mathews, R. L. *Taxation in Australia*. M.U.P., Melbourne, 1964.

Grant, J. McB., Hagger, A. J. and Hocking, A. *Economic Institutions and Policy*. Cheshire, Melbourne, 1969.

Rennison, G. A. *We Live Among Strangers*. M.U.P., 1970.

Sawer, G. *Australian Government Today*. M.U.P., Melbourne, 1970.

Wrong, D. H. *Population and Society*. Random House, New York, 1967. Paperback.

### Commonwealth Legislation

Marriage Act, 1961-1966.

Matrimonial Causes Act, 1971.

National Health Act, 1953-1970.

Social Services Act, 1947-1970 and as amended.

*New South Wales State Legislation*

Adoption of Children Act, 1965-1966 and as amended.

Child Welfare Act, 1939-1964 and as amended.

Mental Health Act, 1958-1965 and as amended.

## REFERENCE BOOKS

Borrie, W. D. and Spencer, G. *Australia's Population Structure and Growth*.

Committee for Economic Development of Australia. Melbourne, 1965.

Rennison, G. A. *Man on his Own*. M.U.P., 1962.**63.412 Social Philosophy and Policy**

Social policy and administration as a developing subject area overseas and in Australia. The relevance of philosophy.

The analysis of social norms and the underlying values which regulate behaviours in the modern welfare state:—

(a) The diverse forms of norms, rules or behavioural prescriptions which exist in this kind of society, and methods of classifying these.

(b) The language and logic of rules.

(c) Societal values and ideologies (social, political, religious), and their relationship to behavioural prescriptions.

(d) The various principles and modes of justification used to support behavioural prescriptions—key social concepts like justice, rights, obligation, equality, democracy, legality, morality.

(e) The need for and limits of rationality.

(f) The values of social welfare.

(g) The values of the social work profession. Professional ethics.

As an exercise in social philosophy and policy analysis, students examine in seminars policy issues under current public discussion in the press, radio, television and parliament.

## TEXTBOOKS

Benn, S. I. and Peters, R. S. *Social Principles and the Democratic State*. Allen & Unwin, London, 1958.

Howard, D. S. *Social Welfare: Values, Means and Ends*. Random House, New York, 1969.

Wilson, Paul R. ed. *Australian Social Issues of the 70's*. Butterworth, 1972.

## REFERENCE BOOKS

*An Intercultural Exploration: Universals and Differences in Social Work Values, Functions and Practice*. Council on Social Work Education, 1967.

Angell, R. C. *Free Society and Moral Crisis*. Uni. of Michigan Press. Paperback, 1965.

Barrett, W. *Irrational Man: A Study in Existential Philosophy*. Mercury Books, 1964.

Bennett, J. *Freedom of Expression in Australia*. Vic. Council for Civil Liberties, 1968.

Berofsky, B. ed. *Free Will and Determinism*. Harper & Row, 1966.

Beteille, A. ed. *Social Inequality*. Penguin, 1969.

Biddle, B. J. & Thomas, E. J. eds. *Role Theory: Concepts and Research*. Wiley, 1966.

- Bisno, H. *The Philosophy of Social Work*. Public Affairs Press, 1952.
- Bottomore, T. B. *Elites and Society*. Penguin, 1964.
- Brandt, R. B. ed. *Social Justice*. Prentice-Hall, 1962.
- Campbell, E. & Whitmore, H. *Freedom in Australia*. Sydney U.P., 1966.
- Coombs, H. C. *The Fragile Pattern: Institutions and Man*. The A.B.C., 1970.
- Cox, H. *The Secular City*.
- Cuber, J. F., Harper, R. A. & Kenkel, W. F. *Problems of American Society: Values in Conflict*. Holt.
- de Crespigny, A. and Wertheimer, A. eds. *Contemporary Political Theory*. Nelson, 1971.
- Donnison, D. V. et al. *Social Policy and Administration*. Allen & Unwin, 1965.
- Downie, R. S. *Roles and Values: Introduction to Social Ethics*. Methuen, 1971.
- Edel, A. *Ethical Judgement: The Use of Science in Ethics*. Free Press Paperback, 1964.
- Edwards, I. ed. *A Humanist View*. A. & R., 1969.
- Emmet, D. *Rules, Roles and Relations*. Macmillan, 1966.
- Foot, P. *Theories of Ethics*. O.U.P., 1967.
- Friedmann, W. *Law in a Changing Society*. Penguin, 1964.
- Ginsberg, M. *On Justice in Society*. Penguin, 1965.
- Grice, G. R. *The Grounds of Moral Judgement*. C.U.P., 1967.
- Halverson, W. H. *A Concise Introduction to Philosophy*. Random House, 1967.
- Hare, R. M. *Freedom and Person*. O.U.P. Paperback, 1965.
- Hart, H. L. A. *Law, Liberty and Morality*. O.U.P., 1963.
- Hospers, J. *Human Conduct: An Introduction to the Problems of Ethics*. Rupert Hart-Davis, 1969.
- Kateb, G. *Political Theory: Its Nature and Uses*. St. Martins Press, 1968.
- Kluckhohn, F. R. & Strodtbeck, F. L. *Variations in Value Orientations*. Row, Peterson, 1961.
- Laslett, P. & Runciman, W. G. eds. *Philosophy, Politics and Society*. Basil Blackwell, 1967.
- Manual, F. E. ed. *Utopias and Utopian Thought*. Beacon Press, 1967.
- Marsh, D. C. ed. *An Introduction to the Study of Social Administration*. Routledge & Kegan Paul, 1965.
- Odegard, P. H. *Political Power and Social Change*. Rutgers U.P., 1966.
- Partridge, P. H. *Liberty in Australia*. A.I.P.S. Monograph: 2.
- Peters, R. *Authority, Responsibility and Education*. Allen & Unwin, 1968.
- Popper, K. R. *The Open Society and its Enemies*. 5th ed. Routledge & Kegan Paul.
- Pumphrey, M. W. *The Teaching of Values and Ethics in Social Work Education*. Council on Social Work Education, 1969.
- Quinton, A. ed. *Political Philosophy*. O.U.P., 1967.
- Riesman, D. *Individualism Reconsidered and Other Essays*. The Free Press, 1954.
- Roper, T. *The Myth of Equality*. N.U.A.U.S., 1970.
- Runciman, W. G. *Relative Deprivation and Social Justice*. Routledge & Kegan Paul, 1966.
- Sawer, G. *The Australian and the Law*. Pelican, 1968.
- Social Welfare and Human Rights*. National Committee Report, XIV International Conference on Social Welfare; Australian Council of Social Service, 1968.
- Tawney, A. H. *Equality*. Capricorn Books, 1961.
- Titmuss, R. M. *Essays on "The Welfare State"*. Allen & Unwin, 1963.

- Titmuss, R. M. *Commitment to Welfare*. Allen & Unwin, 1968.
- Titmuss, R. M. *The United Nations Declaration of Human Rights: A Standard of Achievement*. United Nations, 1963.
- Titmuss, R. M. *Values in Social Work: A Re-examination*. National Association of Social Workers, 1967.
- Warnock, G. J. *Contemporary Moral Philosophy*. Macmillan, 1967.
- Weldon, T. D. *The Vocabulary of Politics*. Penguin, 1953.
- Western, J. S. & Hughes, C. A. *Mass Media in Australia: Uses and Evaluation*. Q.U.P., 1971.
- Williams, R. M. *American Society: A Sociological Interpretation*. Knopf, 1965.
- Wilson, B. R. *Religion in Secular Society*. Penguin, 1969.
- Wolin, S. S. *Politics and Vision: Continuity and Innovation in Western Political Thought*. Little, Brown, 1960.
- Young, M. *The Rise of the Meritocracy 1870-2033*. Penguin, 1961.
- Younghusband, E. ed. *Social Work and Social Values*. Allen & Unwin, 1967.

### 63.421 Social Welfare Systems I

The major historical determinants of the pattern of development of social welfare systems in Australia: overseas and local influences.

#### TEXTBOOKS

- Aron, R. *Main Currents of Sociological Thought*. Vol. I. Pelican, 1965.
- Aron, R. *German Sociology*. Free Press, 1964.
- Mills, C. Wright. *The Sociological Imagination*. Pelican, 1970.

#### REFERENCE BOOKS

- Aron, R. *Eighteen Lectures on Industrial Society*. Weidenfeld & Nicholson, 1967.
- Birch, A. & Macmillan, D. S. *The Sydney Scene*. M.U.P., 1962.
- Bredemeier, M. C. & Stephenson, R. M. *The Analysis of Social Systems*. Holt, Rinehart & Winston, 1962.
- Broom, L. & Selznick, P. *Sociology*. Row Peterson, 1963.
- Brown, J. *Poverty is Not a Crime*. Tasmanian Historical Society, 1972.
- Clark, M. *Selected Documents in Australian History. 1788-1850 and 1851-1900*.
- Clark, M. *A History of Australia, Vols. I and II*. M.U.P., 1962 and 1963.
- Evans-Pritchard, E. E. *Social Anthropology*. Routledge & Kegan Paul, 1957.
- Finlayson, J. *Historical Statistics of Australia*. A. N. U., 1970.
- Grant, J. & Serle, G. *The Melbourne Scene*. M.U.P., 1957.
- Inglis, K. *Hospital and Community*. M.U.P., 1958.
- Kewley, T. H. *Social Security in Australia: Social Security and Health Benefits from 1900 to the Present*. 2nd ed. Sydney U.P.
- Kiddle, M. *Men of Yesterday*. M.U.P., 1961.
- Kiddle, M. *Caroline Chisholm*. M.U.P., 1950.
- Merton, R. K. *On Theoretical Sociology*. Free Press, 1967.
- Mortlock, J. F. *Experiences of a Convict*, eds. Wilkes, G. A. & Mitchell, A. G. S.U.P., 1965.
- Parsons, T. & Shils, E. *Towards a General Theory of Social Action*. Harper, 1962.
- Rennison, G. A. *We Live Among Strangers: A Sociology of the Welfare State*. M.U.P., 1970.
- Ward, R. *The Australian Legend*. O.U.P., 1958.



- Weber, M. *The Theory of Social and Economic Organization*. Glencoe F.P., 1947.
- Wolff, K. H. *The Sociology of Georges Simmel*. Free Press, 1970.

## 63.422 Social Welfare Systems II

### *Organizational Analysis of Social Welfare Systems:*

The relevance of organization theory for understanding social welfare systems. Five concepts of organizational level—international, national, community, agency, and professional. Dimensions of the system—goals, the objectives, clients and potential clients, the use and availability of resources (personnel, fiscal and technological), auspice or sponsorship, location, external and internal influences, stability and change, the politics of the system. Policy issues inherent in the range of alternatives within and between dimensions.

### *Social Welfare Sub-Systems:*

A comparative study of the main social welfare sub-systems in an urban industrial society, with particular reference to Australia. Categories of sub-system—defined by a common social goal—income security, health, housing, education, civil and political rights. Each sub-system is studied in terms of its major organizational dimensions, as outlined above, and an attempt is made to evaluate the efficiency and effectiveness of each sub-system.

### TEXTBOOKS

- Kaim-Caudle, P. R. *Comparative Social Policy and Social Security*. Cambridge U.P., London, 1973.
- Kewley, T. H. *Social Security in Australia*. 2nd ed. Sydney U.P., 1973.
- Titmuss, R. M. *Income Distribution and Social Change*. Allen & Unwin, London, 1958.
- Titmuss, R. M. *Essays on "The Welfare State"*. 2nd ed. Allen & Unwin, London, 1963.
- Titmuss, R. M. *Commitment to Welfare*. Allen & Unwin, London, 1968.
- Wilensky, H. L. & Lebeaux, C. N. *Industrial Society and Social Welfare*. Free Press, N.Y., 1958.

### REFERENCE BOOKS

- Burns, E. *Social Security and Public Policy*. McGraw-Hill Book, N.Y., 1956.
- Zald, M. N. *Social Welfare Institutions: A Sociological Reader*. Wiley, N.Y., 1965.

## 63.423 Social Welfare Systems III

### *Social Welfare Sub-Systems:*

A comparative study of the main social welfare sub-systems in an urban industrial society, with particular reference to Australia. Categories of sub-system: Defined by population category—age groups, physical disability, mental disability, sex, ethnicity, war service, religion, socio-legal deviance, geographic location, occupation, economic status.

Each sub-system is studied in terms of its major organizational dimensions. Its efficiency and effectiveness.

### *Social Welfare Planning:*

Different bases of planning and co-ordination:

(a) The relationship between different levels of social organization; functional divisions on the one level of social organization and other linkage questions.

(b) Definition of a social problem as a basis for organization.

Students undertake a project on a selected social problem, studying its definition, incidence, theories of causation, and policies and provision to cope with it.

(c) The role of the social worker and the social work profession in social welfare planning.

The objective in this subject is to develop sound professional judgement in relation to social welfare problems, policies and provision, not to teach social policy practice roles as such.

### TEXTBOOKS

Kahn, A. J. *Theory and Practice of Social Planning*. Russell Sage Foundation, N.Y., 1969.

Lochhead, A. V. S. ed. *A Reader in Social Administration*. Constable, London, 1968.

*Directory of Social Service Agencies*. Council of Social Service of N.S.W., Sydney. Latest edition.

## 63.511 Human Behaviour I

The processes of "normal" growth and development, using a multi-disciplinary approach. The maturational phases of the life cycle, beginning with the prenatal period, proceeding to birth, new-born, infancy, pre-school, childhood, adolescence, young adulthood, middle years, old age. The various frames of reference—biological, psychological, and sociological—used to define and interpret the phases. The interaction of physical, intellectual, emotional, spiritual, and social influences and attributes in a human being. Individual "careers"—varying conceptions of effective social functioning and well-being. Particular attention is given to the influence of social structures (e.g. families, groups, organizations, communities, and societies) and social processes on the behaviour of individuals; and also on the behaviour of groups and communities. The nature and changing character of these structures in interaction with individuals, groups and communities. The potential for change in the social functioning of individuals, groups and communities.

Classroom learning is reinforced by observation of behaviour, under simulated and actual life conditions.

### TEXTBOOKS

Bell, C. & Newby, H. *Community Studies*. Allen & Unwin, London, 1971.

Davies, A. F. and Encel, S. *Australian Society: A Sociological Introduction*. 2nd ed. Cheshire, Melbourne, 1970.

Hunt, F. J. *Socialization in Australia*. Angus & Robertson, Sydney, 1972.

Rappoport, L. *Personality Development. The Chronology of Experience*. Scott Foresman, 1972.

Rose, A. M. *Human Behaviour and Social Processes*. Routledge Paperback, London, 1971.

Smith, A. *The Body*. Pelican, 1971.

Warren, R. L. *Studying Your Community*. Free Press (Paperback), New York, 1965.

## REFERENCE BOOKS

- Adler, A. *Understanding Human Nature*. Greenberg Publisher Inc. (Paperback), New York, 1963.
- Baldwin, A. L. *Theories of Child Development*. Wiley, 1967.
- Bell, N. W. & Vogel, E. P. *A Modern Introduction to the Family*. Routledge & Kegan Paul, 1961.
- Bertalanffy, L. Von. *General Systems Theory*. George Braziller, New York, 1968.
- Biddle, B. J. & Thomas, E. J. eds. *Role Theory: Concepts and Research*. Wiley, 1966.
- Bion, W. R. *Experiences in Groups*. Tavistock, 1961.
- Bowlby, J. *Attachment*. Basil Books, 1969.
- Bowlby, J. *Child Care and the Growth of Love*. Penguin, 1951.
- Bromley, D. B. *The Psychology of Human Ageing*. Pelican (Paperback), 1971.
- Brown, J. A. C. *Freud and the Post-Freudians*. Pelican, 1961.
- Burton, A. and Harris, R. E. eds. *Clinical Studies of Personality, Vol. 2*. Harper Torchbooks, Harper & Row, New York, 1966.
- Clark, D. S. *What Freud Really Said*. Schocken Books, New York, 1966.
- Connell, W. F., Francis, E. P. & Shilbeck, E. E. *Growing Up in an Australian City*. A.C.E.R., 1957.
- Conway, R. *The Great Australian Stupor*. Sun Books (Paperback), 1972.
- Cummings, G. & Henry, W. *Growing Old. The Process of Disengagement*. Basic Books, 1964.
- Donahue, W. & Tibbitts, C. *The New Frontiers of Ageing*. University of Michigan.
- Dunphy, D. C. *Cliques, Crowds and Gangs: Group Life of Sydney Adolescents*. Cheshire, 1969.
- Elkin, A. P. ed. *Marriage and Family in Australia*. A. & R., 1957.
- Erikson, E. *Childhood and Society*. Pelican, 1950.
- Erikson, E. *Identity and the Lifecyle*. International U.P., 1959.
- Frankl, V. E. *Man's Search for Meaning*. Washington Square Press, Inc. (Paperback), New York, 1967.
- Fraser, R. ed. *Work*. Vols. I & II. Penguin.
- Freud, A. *The Ego and the Mechanisms of Defence*. Hogarth, 1937.
- Freiberg, S. *The Magic Years*. Scribner, 1959.
- Friedmann, E. A. & Havighurst, R. J. *The Meaning of Work and Retirement*. Chicago U.P., 1954.
- Fromm, Erich. *The Heart of Man: Its Genius for Good and Evil*. Harper & Row, New York, 1964.
- Grinker, R. R. *Toward a Unified Theory of Human Behaviour: An Introduction to General Systems Theory*. Basic Books, New York, 1967.
- Group for the Advancement of Psychiatry. *Normal Adolescence: Its Dynamics and Impact*. Scribner's, 1968.
- Guntrip, H. *Personality Structure and Human Interaction*. Hogarth, 1961.
- Hall, C. S. *A Primer of Freudian Psychology*. Mentor Book (Paperback).
- Hare, A. P. *Handbook of Small Group Research*. Free Press, 1962.
- Hare, A. P., Borgotten, E. G. & Bales, R. F. *Small Groups and Studies in Interaction*. Knopf, 1966.
- Homans, G. *The Human Group*. Routledge & Kegan Paul, 1951.
- Jackson, D. D. *Myths of Madness*. Macmillan, New York, 1964.
- Jackson, D. D. and Lederer, W. *The Mirages of Marriage*. W. W. Norton, New York, 1968.

- Jackson, D. D. ed. *Communication, Family and Marriage*. Science & Behaviour Books, Palo Alto, Calif., 1968.
- Josselyn, I. *Psychosocial Development of Children*. Family Service Assoc. of America, 1948.
- Klein, J. *Working with Groups*. Hutchinson University Library, 1963.
- Koestler, A. *The Ghost in the Machine*. Macmillan, New York, 1967.
- Kohler, W. *Gestalt Psychology*. 2nd ed. Liveright Pub., New York, 1947.
- Maier, H. W. *Three Theories of Child Development*. Harper & Row N.Y. and John Weatherill, Tokyo, 1969.
- Martin, W. & Stendler, C. R. *Readings in Child Development*. Harcourt Brace & World, 1961.
- May, R. *Existential Psychology*. 2nd ed. Random House, New York, 1969.
- Miller, D. R. *Inner Conflict and Defense*. Henry Holt & Corp., New York, 1960.
- Mills, T. M. *The Sociology of Small Groups*. Prentice-Hall, 1967.
- Mussen, P. H., Conger, J. J. and Kagan, J. *Child Development and Personality*. 4th ed. Harper & Row, New York, 1973.
- Pikunas, J. *Human Development: A Science of Growth*. McGraw-Hill, 1969.
- Pollak, O. *Integrating Psychoanalytic and Social Science Concepts*. Russell Sage, 1956.
- Rapoport, R. & R. *Dual Career Families*. Pelican, 1971.
- Sanford, N. *Self and Society: Social Change and Individual Development*. Atherton, 1966.
- Saul, L. J. *Emotional Maturity*. 2nd ed. Jib Lippincott Co., 1960.
- Scheff, T. J. ed. *Mental Illness and Social Processes*. Harper & Row, New York, 1967.
- Sears, R. R., Maccoby, E. E. and Levin, H. *Patterns of Child Rearing*. Row & Peterson, Evanston, Illinois, 1957.
- Sears, R. R. *Identification and Child Rearing*. Tavistock Pub., London, 1966.
- Sprott, W. J. H. *Human Groups*. Penguin, 1958.
- Stoodly, B. H. ed. *Society and Self*. The Free Press, 1962.
- Thomas, E. I. *Behavioural Science for Social Workers*. Free Press, New York, 1967.
- Toffler, A. *Future Shock*. Bodley Head Ltd., London, 1970.
- Townsend, P. *The Family Life of Old People*. Penguin, 1963.
- Warren, R. L. ed. *Perspectives on the American Community*. Rand McNally, 1966.
- Wheelis, A. *The Quest for Identity*. W. W. Norton (Paperback), New York, 1958.
- Winnicott, D. W. *The Child, the Family and the Outside World*. Penguin, 1964.
- Winnicott, D. W. *The Family and Individual Development*. Tavistock, 1965.

### 63.512 Human Behaviour II

An interdisciplinary approach to the development of deviant behaviour at various age stages, in individuals, groups and communities—biological, psychological, and social deviance. Concepts of disease and pathology; of social problems—definition, incidence, aetiology. Differences and similarities. Classroom learning is reinforced by observation of behaviour, under simulated and actual life conditions.

#### TEXTBOOKS

- Batchelor. *Henderson and Gillespie's Textbook of Psychiatry*. Oxford, 1969.
- Cameron, N. *Personality Development & Psychopathology: A Dynamic Approach*. Houghton Mifflin, 1963.

- Clinard, M. B. *Sociology of Deviant Behaviour*. Holt, Rinehart and Winston, New York, 1968.
- Cohen, A. K. *Deviance and Control*. Prentice-Hall, 1966.
- Eskin, F. *Medical Notes for Social Workers*. John Wright, Bristol, 1971.
- Fischer, W. F. *Theories of Anxiety*. Harper & Row, New York, 1970.
- Freud, Anna. *Ego and Defence Mechanisms*. Tavistock, London.
- Goffman, E. *Stigma: Notes on the Management of Spoiled Identity*. Penguin Books, 1968.
- May, R. *The Meaning of Anxiety*. Ronald Press, 1950.
- Smith, A. *The Body*. Pelican, 1971.

### 63.611A Social Work Practice IA

The analysis of various forms of interpersonal communication with particular emphasis on its behavioural effects; the principles and techniques of interviewing. Emphasis is placed on experiential learning—through role-playing and skill-practice exercises, video-tapes and tape-recordings, students learn preliminary skills in interpersonal helping.

An introduction to social casework—its historical and present level of development, the nature of basic social casework theory.

A brief introduction to the social work methods of social group work, community work, and social welfare administration. Relationships between the major social work methods.

#### TEXTBOOKS

- Biestek, F. P. *The Casework Relationship*. Unwin University Books (1957), 1967.
- Combs, A. W., Avila, D. L. and Purkey, W. W. *Helping Relationships: Basic Concepts for the Helping Professions*. Allyn & Bacon, Boston, 1971.
- Day, P. R. *Communication in Social Work*. Pergamon, 1972.
- Hollis, F. *Casework: A Psychosocial Therapy*. Random House, New York, 1964.
- Kadushin, A. *The Social Work Interview*. Columbia U.P., 1972.
- Parad, H. J. ed. *Ego Psychology and Dynamic Casework*. Family Service Association of America, N.Y., 1958.
- Schubert, M. *Interviewing in Social Work Practice*. Council on Social Work Practice, N.Y., 1971.
- Smith, Gilbert. *Social Work and the Sociology of Organisations*. Routledge & Kegan Paul, London, 1970.
- Strean, H. S. *The Casework Digest*. Scarecrow Press, N.J., 1969.

#### REFERENCE BOOKS

- Bartlett, M. H. *The Common Base of Social Work Practice*. The National Association of Social Workers, 1970.
- Berlo, D. K. *The Process of Communication*. Holt, Rinehart & Winston, 1960.
- Etzioni, A. *Modern Organizations*. Prentice-Hall, 1964.
- Fink, E. A., Wilson, E. E. & Canover, M. B. *The Field of Social Work*. 4th ed. Holt, Rinehart & Winston, 1969.
- Hicks, H. G. *The Management of Organizations*. McGraw-Hill, 1967.

- Kahn, R. L. and Cannell, E. F. *The Dynamics of Interviewing*. Wiley, N.Y., 1957.
- Konopka, G. *Social Group Work: A Helping Process*. 2nd ed. Prentice-Hall, 1972.
- Kramer, R. & Specht, A. eds. *Readings in Community Organization Practice*. Prentice-Hall, 1969.
- Lurie, H. L. ed. *Encyclopaedia of Social Work*. National Association of Social Workers, 1965.
- Polansky, N. *Ego-Psychology and Communication: Theory for the Interview*. Allerton Press, 1971.
- Roberts, R. W. & Nee, R. H. eds. *Theories of Social Casework*. University of Chicago Press, 1970.
- Rogers, C. *On Becoming a Person*. Houghton Mifflin, 1961.
- Satir, V. *Conjoint Family Therapy*. Science & Behaviour Books, 1967.
- Watzlawick, P. *An Anthology of Human Communication*. (Text and Tape). Science & Behaviour Books, 1964.
- Watzlawick, P., Beavin, J. H. & Jackson, D. D. *Pragmatics of Human Communication*. Norton, 1967.

### 63.611B Social Work Practice IB

Under the supervision of a field instructor of the School, usually in a fairly structured social work agency, a student begins to learn to apply the principles of professional practice. The emphasis is on work with a range of clients and of social problems, rather than on depth of experience. The prime purpose is to begin to acquire, in an actual practice setting, skills and responsibility in interpersonal relations.

The duration of this first field placement is 42 working days (294 hours).

#### REFERENCE BOOKS

- Austin, Lucille N. "The Changing Role of the Supervisor." *Smith College Studies in Social Work* (June 1961), Vol. XXXI, No. 3, pp. 182-183, 193-195.
- Australian Association of Social Workers. *Statement of Minimal Educational Requirements*.
- Dwyer, M. and Urbanowski, M. "Student Process Recording—A Plan for Structure." *Social Casework*, XLVI, No. 5, May 1965.
- MacGuffie, Robert A. et al. "The Expression and Perception of Feelings Between Students and Supervisors in a Practicum Setting." *Counsellor Education and Supervision* (Summer 1970), Vol. 9, No. 4, esp. pp. 266-270.
- Norma Parker's Record of Service*, ed. R. J. Lawrence, Items 50-52 and passim.
- Rose, Sheldon. "Students View Their Supervision: A Scale Analysis." *Social Work*, April 1965, pp. 90-96.
- Stiles, Evelyn. "Supervision in Perspective." *Social Casework* (January 1963), esp. pp. 24-25.
- Towle, Charlotte. "The Learner in Education for the Professions." (Chicago, U.P., 1954) passim.
- Wells, Richard A. "The Use of Joint Field Instructor-Student Participation as a Teaching Method in Casework Treatment." *Social Work Education Reporter*, Vol. XIX, No. 1, December-January 1971, pp. 58-62.
- Wilson, Doreen. "The Role of the Student Unit in Social Work Education." *Social Work Today—Journal of the British Association of Social Workers*, Volume 2, Number 3, May 1971.

- Woodcock, G. D. C. "Tutor, Supervisor, Student." *Brit. J. Psychiat. Social Work*, VIII, 1966, No. 3.
- Young, P. *The Student Supervision in Social Work Education*. Routledge & Kegan Paul, London, 1967.

### 63.612A Social Work Practice IIA

One stream deals in turn with further learning in social casework, social group work, community work, and social welfare administration.

A parallel stream considers: The professions in modern industrial societies. The professionalization of social work. The organization of the social work profession in Australia, the U.S.A. and Britain, and internationally—its educational institutions, employing agencies, and professional associations. The size, characteristics, location, objectives, and values of the profession. Current challenges and growing points of the profession.

#### TEXTBOOKS

- Elliott, P. *The Sociology of the Professions*. Macmillan, London, 1972.
- Foren, R. and Bailey, R. *Authority in Social Casework*. Pergamon, Oxford, 1968.
- Johnson, T. J. *Professions and Power*. Macmillan, London, 1972.
- Kramer, R. M. and Specht, H. ed. *Readings in Community Organization Practice*. Prentice-Hall, New Jersey, 1969.
- Leaper, R. *Community Work*. National Council of Social Service, London, 1968.
- Lees, R. *Politics and Social Work*. Routledge & Kegan Paul, 1972.
- Meyer, C. H. *Social Work Practice: A Response to the Urban Crisis*. Free Press, N.Y., 1970.
- Parad, H. J. *Crisis Intervention*. Family Service Association of America, N.Y., 1970.
- Parad, H. J. ed. *Ego-oriented Casework*. Family Service Association of America, N.Y., 1963.
- Perlman, R. & Gurin, A. *Community Organisation and Social Planning*. Wiley, N.Y., 1972.
- Trecker, H. *Social Group Work: Principles and Practice*. 2nd ed. Association Press, N.Y., 1972.

### 63.612B Social Work Practice IIB

Usually as a member of a student unit located in a social work learning experiences which help him to acquire skills mainly in the casework agency and supervised by a field instructor of the school, student has method but with some introduction to group work and community organisation. Stress is placed on gaining self-awareness, understanding of conscious use of self in interpersonal relationships, and skills in problem definition and interpersonal helping. In the course of this placement the student gains understanding and responsibility in job management.

The duration of this second field work placement is 45 days (315 hours).

**63.613A Social Work Practice IIIA**

Divided into two major concurrent sections. The first section, taken by all students, deals with social welfare administration, followed by a study of social work practice delineated by field, such as the health field, family and child welfare, corrective services.

The second section, which uses a variety of educational methods, concentrates upon gaining professional competence in one of the following social work methods—social casework, social group work, community work, or social welfare administration. The last two of these elective methods can only be taken with the permission of the lecturer concerned.

*Social Welfare Administration (General Stream)***TEXTBOOKS**

Schatz, H. A. *Social Work Administration*. Council on Social Work Education, 1970.

Schatz, H. A. *A Casebook in Social Work Administration*. Council on Social Work Administration, 1970.

**REFERENCE BOOKS**

Brim, O. G. Jr. & Wheeler, S. *Socialisation after Childhood*. Wiley, 1966.

Etzioni, A. *Complex Organisations: A Sociological Reader*. Holt, Rinehart & Winston, 1966.

Etzioni, A. *Modern Organizations*. Prentice-Hall, 1962.

Katz, D. & Kahn, R. L. *The Social Psychology of Organisations*. Wiley, 1966.

March, J. G. ed. *Handbook of Organisations*. Rand McNally, 1965.

Newman, W. H. *Administrative Action*. Pitman, 1966.

Pfiffner, J. M. & Sherwood, F. P. *Administrative Organisation*. Prentice-Hall, 1960.

Ready, R. K. *The Administrator's Job: Issues and Dilemmas*. McGraw-Hill, 1967.

Strauss, A. et al. *Psychiatric Ideologies and Institutions*. Free Press of Glencoe, 1964.

Street, D., Vinter, R. D. & Perrow, C. *Organisation for Treatment*. The Free Press, 1966.

Thompson, J. D. *Organisations in Action*. McGraw-Hill, 1967.

*Social Welfare Administration Elective***TEXTBOOKS**

Schatz, H. A. *Social Work Administration*. Council on Social Work Education, 1970.

Schatz, H. A. *A Casebook in Social Work Administration*. Council on Social Work Administration, 1970.

**REFERENCE BOOKS**

Argyris, C. *Integrating the Individual and the Organisation*. Wiley, 1964.

Baker, F., McEwan, P. J. M. & Sheldon, eds. *Industrial Organisations and Health*. Tavistock, 1969.

Barnard, C. *The Functions of the Executive*. Harvard U.P., 1938.

Bennis, W. G. *Changing Organisations*. McGraw-Hill, 1966.

Blau, P. M. *Bureaucracy in Modern Society*. Random House, 1956.

Brim, O. G. Jr. & Wheeler, S. *Socialisation after Childhood*. Wiley, 1966.

Byrt, W. J. *The Idea of Management*. Sun Books, 1968.



- Byrt, W. J. *People and Organisations*. McGraw-Hill, 1971.
- Emery, F. E. ed. *Systems Thinking*. Penguin, 1969.
- Etzioni, A. *Complex Organisations: A Sociological Reader*. Holt, Rinehart & Winston, 1966.
- Etzioni, A. *Modern Organisations*. Prentice-Hall, 1962.
- Etzioni, A. *Readings on Modern Organisations*. Prentice-Hall, 1969.
- Fanshel, D. ed. *Research in Social Welfare Administration*. National Association of Social Workers, 1962.
- Greenblatt, Levinson & Williams. eds. *The Patient and the Mental Hospital*. Katz, D. & Kahn, R. L. *The Social Psychology of Organisations*. Wiley, 1966.
- Keith-Lucas, A. *Decisions about People in Need*. University of North Carolina Press, 1957.
- McGregor, D. *The Human Side of Enterprise*. McGraw-Hill, 1960.
- March, J. G. & Simon, H. A. *Organisations*. Wiley, 1966.
- March, J. G. ed. *Handbook of Organisations*. Rand McNally, 1965.
- Newman, W. H. *Administrative Action*. Pitman, 1966.
- Pfiffner, J. M. & Sherwood, F. P. *Administrative Organisation*. Prentice-Hall, 1960.
- Ready, R. K. *The Administrator's Job: Issues and Dilemmas*. McGraw-Hill, 1967.
- Simon, H. A. *Administrative Behaviour*. The Free Press, 1966.
- Spencer, S. *The Administration Method in Social Work*. Council of Social Work Education, 1959.
- Strauss, A. et al. *Psychiatric Ideologies and Institutions*. Free Press of Glencoe, 1964.
- Street, D., Vinter, R. D. & Perrow, C. *Organisation for Treatment*. The Free Press, 1966.
- Thompson, J. D. *Organisations in Action*. McGraw-Hill, 1967.

### Community Work Elective

#### TEXTBOOKS

- Bentley, C. F. *Secretaries' Handbook*. W.E.A., Sydney, 1970.
- Commonwealth Yearbook of Australia*. Australian Commonwealth Printer, Canberra, 1971.
- Commonwealth Directory*. Australian Commonwealth Printer. Latest edition.
- Eckstein & Lauffer. *Community Organizers and Social Planners*. (Council on Social Work Education). Wiley, N.Y., 1972.
- Kahn, A. *Social Planning: Theory & Practice*. Russell Sage Foundation, N.Y., 1970.
- Kahn, A. *Studies in Social Policy & Planning*. Russell Sage Foundation, N.Y., 1970.
- Kramer & Specht. eds. *Readings in Community Organization Practice*.
- Leaper, R. *Community Work*. National Council of Social Service, London, 1968.
- Lippett & Watson. *Dynamics of Planned Change*. Harcourt Brace, N.Y., 1958.
- Directory of Community Services*. N.S.W. Council of Social Service, Sydney, 1971.
- Local Government Directory*. N.S.W. Shires and Local Government Assn. Latest edition.
- N.S.W. State Year Book*. N.S.W. Govt. Printer, Sydney. Latest edition.
- Perlman & Gurin. *Community Organization and Social Planning*. (Council on Social Work Education). Wiley, N.Y., 1972.

- Rothman, J. *Strategies in Community Organization*. 1969.  
Warren, R. L. ed. *Perspective on the American Community: A Book of Readings*. Rand McNally, Chicago, 1966.  
Zald, M. ed. *Social Welfare Institutions*. Wiley, N.Y., 1965.

#### REFERENCE BOOKS

- Alinsky, S. *Reveille for Radicals*.  
Bennis, Bennis & Chin. eds. *The Planning of Change*. Holt, Rinehart & Winston, 1971.  
Etzioni, A. *Active Society*. Collier MacMillan, 1968.  
Etzioni, A. *A Sociological Reader on Complex Organizations*. Holt, Rinehart & Winston, 1970.  
Halliwell, L. *People Working Together*. Q.U.P. 1969.  
Moore, W. *Social Change*. Prentice-Hall, 1963.  
Morris, P. & Rein, N. *Dilemma of Social Reform*. 1969.  
Ross & Lippin. *Community Organization Casebook*. Harper, 1967.  
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Rothman & Jones. *A New Look at Field Instruction*. C.S.W.E. Assn. Press, 1971.  
Toffler, A. *Future Shock*. Bodley Head, 1970.  
Warren, R. L. *The Community in America*. Rand McNally, 1968.  
*Directory of Services for Older People*. N.S.W. Council on the Ageing.

#### Casework Elective

#### TEXTBOOKS

- Briar, S. & Miller, M. *Problems and Issues in Social Casework*. Columbia U.P., 1971.  
Reid, W. J. and Epstein, L. *Task-centered Casework*. Columbia U.P., N.Y., 1972.  
Roberts, R. W. & Nee, R. H. *Theories of Social Casework*. Chicago U.P.  
Strean, N. S. ed. *Social Casework: Theories in Action*. Scarecrow Press, Metuchen, N.J., 1971.  
Turner, F. ed. *Differential Diagnosis and Treatment in Social Work*. Collier-Macmillan, 1968.

#### Group Work Elective

#### TEXTBOOKS

- Klein, A. F. *Effective Group Work: An Introduction to Principle and Method*. Associated Press, N.Y., 1972.  
Shulman, L. *A Casebook of Social Work with Groups*. Council on Social Work Education, N.Y., 1968.  
Trecker, H. *Social Group Work—Principles and Practices*. 2nd ed. Associated Press, 1972.

#### REFERENCE BOOKS

- Berne, E. *Games People Play*. Penguin, 1967.  
Berne, E. *Transactional Analysis in Psychotherapy*. Grove, 1961.  
Berne, E. *Principles of Group Treatment*.  
Bodin, A. M. "Conjoint Family Therapy" in Vinacke, W. E. ed. *Readings in General Psychology*. American Book, 1968.

- Bradford, L., Gibb, J. & Benne, K. *T-Group Theory & Laboratory Method*. Wiley, 1964.
- Coyle, G. L. & Hartford, M. E. *Social Process in the Community and the Group*. Council on Social Work Education, 1958.
- Davis, J. D. *Group Performance*. Addison Wesley, 1969.
- Dunphy, D. *The Primary Group: A Handbook for Analysis and Field Research*. Appleton-Century-Crofts, 1972.
- Durkin, H. *The Group in Depth*. International Press, 1971.
- Golembiewski, R. T. & Blumberg, A. eds. *Sensitivity Training and the Laboratory Approach*. Peacock, 1970.
- Gustaitis, R. *Turning On*. Weidenfeld & Nicholson, 1969.
- Homans, G. *The Human Group*. Routledge, 1957.
- Jackson, D. ed. *Therapy, Communication and Change*. Science and Behaviour Books, 1968.
- Johnson, J. A. *Group Therapy: A Practical Approach*. McGraw-Hill, 1963.
- Kadushin, A. *The Social Work Interview*. Columbia, 1972.
- Klein, A. *Social Work Through Group Process*. State University of New York at Albany, 1970.
- Klein, M. W. *Street Gangs and Street Workers*. Prentice-Hall, 1971.
- Klein, J. *Working with Groups*. Hutchinson University Library, 1961.
- Klein, M. W. *Juvenile Gangs in Context*. Prentice-Hall, 1967.
- Kogan, L. S. ed. *Social Science Theory and Social Work Research*. National Assoc. of Social Workers, 1960.
- Konopka, G. *Social Group Work: A Helping Process*. 2nd ed. Prentice-Hall, 1972.
- Kubie, S. H. & Landau, G. *Group Work with the Aged*. International Universities Press, 1969.
- Levine, B. *Fundamentals of Group Treatment*. Whitehall, 1967.
- McCulloch, M. K. & Ely, P. *Social Work with Groups*. Routledge & Kegan Paul, 1968.
- Maier, H. *Group Work as Part of Residential Treatment*. National Assoc. of Social Workers, 1965.
- Mann, R. D. *Interpersonal Styles and Group Development*. Wiley, 1967.
- Middleman, R. *The Non-Verbal Method in Working with Groups*. Association Press, 1968.
- Milson, F. *Youth in a Changing Society*. Routledge & Kegan Paul, 1972.
- Morse, M. *The Unattached*. Penguin, 1965.
- N.A.S.W. *Trends in Social Work Practice and Knowledge*. N.A.S.W., 1960.
- Northern, H. *Social Work with Groups*. Columbia, 1969.
- Ottway, A. K. C. *Learning Through Group Experience*. Routledge & Kegan Paul, 1966.
- Perls, F. et al. *Gestalt Therapy*. Dell, 1951.
- Perls, F. *Gestalt Therapy Verbatim*. Real People Press, California, 1969.
- Polansky, N. A. *Ego Psychology and Communication: Theory for the Interview*. Atherton, 1971.
- Rogers, C. *Encounter Groups*. Allan Lane, Penguin, 1970.
- Ruitenbeek, H. M. *The New Group Therapies*. Discus/Avon Books, 1969.
- Sager, C. J. and Kaplan, H. S. *Progress in Group and Family Therapy*. Brunner/Mazel, N.Y., 1972.
- Satir, V. *Conjoint Family Therapy*. Science and Behaviour Books, 1967.
- Schwartz, W. and Zalba, S. R. eds. *The Practice of Group Work*. Uni. Columbia, 1971.
- Shaftel, F. and Shaftel, G. *Role-playing for Social Values: Decision-making in Social Studies*. Prentice-Hall, 1967.

- Slavson, S. R. *An Introduction to Group Therapy*. International Universities Press, 1943.
- Small, L. *The Briefer Psychotherapies*. Brunner/Mazel, N.Y., 1971.
- Smalley, R. *Theory for Social Work Practice*. Columbia, 1967.
- Smith, P. B. ed. *Group Processes*. Penguin, 1970.
- Tropp, E. *A Humanistic Foundation for Group Work Practice*. Associated Educational Services, 1969.
- Turner, F. J. *Differential Diagnosis and Treatment in Social Work*. Free Press, 1968.
- Van Krevelen, A. *Children in Groups: Psychology and the Summer Camp*. Wadsworth, Calif., 1972.
- Vinter, R. ed. *Readings in Group Work Practice*. Campus Publications, 1967.
- Walton, H. ed. *Small Group Psychotherapy*. Penguin, 1970.
- Wassman, H. ed. *Individual and Group Services in the Mobilization for Youth Experience*. Association Press, 1969.
- Whitaker, D. S. & Lieberman, M. *Psychotherapy through the Group Process*. Atherton, 1964.
- Yalom, I. *The Theory and Practice of Group Psychotherapy*. Basic Books, 1971.

### 63.613B Social Work Practice IIIB

Part 1—The emphasis in this third supervised field placement is upon field evaluation of aspects of service, using a theoretical basis gained from classroom teaching. For instance, students may devise means to evaluate their own interpersonal practice or the agency's method of delivery of service to clients or the effectiveness of a particular form of social work or social welfare intervention.

The duration of this placement is 40 days (280 hours).

Part 2—Usually as a member of a student unit located in a social work agency and supervised by a field instructor of the School, the student has further learning experiences in the social work method on which he has elected to concentrate in Social Work Practice IIIA.

The duration of this fourth and final placement is 51 days (357 hours).

### 63.621 Social Work Research Methods I

A general introduction to the philosophical basis of research: relationship between propositions; the nature of concepts and theories; theory and theory building; exploration and prediction; relationships between knowledge research and practice, with particular reference to social work.

Basic statistical procedures: collection and classification of data; descriptive statistics; inferential statistics; non-parametric statistics.

This course provides students with the opportunity to develop competence in the selection and use of appropriate statistical procedures. Emphasis is placed on preparation for third field placement, in which students are required to carry out a statistical analysis of certain aspects of social work practice in at least some of which they are directly involved.

#### TEXTBOOKS

- Anderson, T. R. & Zelditch, M. *A Basic Course in Statistics with Sociological Applications*. 2nd ed. Holt, Rinehart & Winston, 1971.
- Goldstein, H. K. *Research Standards and Methods for Social Workers* (revised edition). Whitehall, 1969.

## REFERENCE BOOKS

- Ackoff, R. L. *The Design of Social Research*. London, University of Chicago Press, 1965.
- Blalock, H. M. *Social Statistics*. McGraw-Hill, 1960.
- Goode, W. J. & Hatt, P. *Methods in Social Research*. McGraw-Hill, 1952.
- McMillen, W. *Statistical Methods for Social Workers*. University of Chicago Press, London, 1952.

**63.622 Social Work Research Methods II**

A general introduction to the design, execution, and evaluation of social work research: principles of experimentation; research design; formulating objectives and hypotheses; sources of data; observations and methods of making them; classifying observations; parameter-statistic relationships, presenting conclusions; evaluative and non-evaluative research; ethical considerations; elementary computer programming.

The objective in this subject is to develop both students' knowledge about how social work research is carried out and their ability to critically evaluate completed research.

## TEXTBOOKS

- Goldstein, H. K. *Research Standards and Methods for Social Workers*. revised ed. Northbrook, 1969.
- Tripodi, T., Fellini, P. & Meyer, H. J. *The Assessment of Social Research*. Peacock, 1969.

## REFERENCE BOOKS

- Ackoff, R. L. *The Design of Social Research*. University of Chicago Press, London, 1965.
- Anderson, T. R. & Zelditch, M. *A Basic Course in Statistics with Sociological Applications*. 2nd ed. Holt, Rinehart & Winston, 1971.
- Blalock, H. M. *Social Statistics*. McGraw-Hill, 1960.
- Goode, W. J. & Hatt, P. *Methods in Social Research*. McGraw-Hill, 1952.
- Hern, G. *The General Systems Approach*. National Council on Social Work Education, 1968.
- Kogan, L. S. ed. *Social Science Theory and Social Work Research*. National Assoc. of Social Workers, 1960.
- McMillen, W. *Statistical Methods for Social Workers*. University of Chicago Press, 1952.
- Moser, C. A. & Kalton, G. *Survey Methods in Social Investigation*. 2nd ed. Heinemann, 1971.

**63.801G Advanced Social Work Practice I (Interpersonal Helping)**

This course is concerned with existing and established social casework and social group work theory. Various casework and group work models are critically evaluated, particular attention being paid to their local applicability. The notion of interpersonal helping as including both social casework and social group work methods is introduced, emphasis being placed on the integration of the two methods.

**63.802G Advanced Social Work Practice II (Interpersonal Helping)**

Further detailed analysis of the commonalities of social casework and social group work practice, including the following topics: accountability, sanction and authority, supervision, consultation, teamwork. Interpersonal helping as part of professional social work practice is compared and contrasted with the related practice of other helping professions. An analysis by fields is made of local social work practice; the current situation in each field is examined, special attention being directed to challenges to growth and development in particular fields.

Current controversial views about interpersonal helping are examined, emphasis being placed on problems of integration.

**63.803G Advanced Social Work Practice I (Community Work and Administration)**

Different types and aspects of organisational theory and various approaches to community analysis. Dimensions and structure of the Australian community, and the organisational arrangements for the delivery of social welfare services. Forces which bring about change and different methods and strategies of directing change and modifying social policy and organisational structure. Laboratory training and field experience designed to increase skills in management and community work process.

**63.804G Advanced Social Work Practice II (Community Work and Administration)**

This subject builds upon the work in 63.803G dealing with advanced organisational theory and programming and community work method. Special attention is given to practitioner skills in community work and administration looking at common elements and differences between each. In laboratory training and field experience attention is given not only to the acquisition of skills but also to the development of attitudes and values appropriate to the various tasks.

**63.805G Issues for the Social Work Profession**

Contemporary issues facing the social work profession—its distribution within social welfare services, by professional methods, and geographically; its sex composition; problems of professional organization; international responsibilities; relationships with client and other population groups; relationships with other professions; relationships with other welfare personnel; the profession's priorities.

**63.806G Behavioural Science Seminar**

Recent and current developments in the behavioural and social sciences.

**63.807G Social Policy Analysis**

A comparative examination of the development of social policy and social administration as a subject area in Britain, Australia, the United States, and other countries. Boundary problems, characteristic concerns, social policy and economic policy, social policy and the social sciences, the movement towards more systematic analysis.

**63.808G Interpersonal Competence Seminar**

Through both structured and unstructured group experiences, students have the opportunity to assess and increase their level of interpersonal competence, to develop a greater ability to be empathic with others, and to understand better the dynamics of small groups.

**63.809G Project**

A research project will be undertaken by each candidate, to be submitted not later than one session after completion of the formal course work. The project will be an original but limited investigation into some area of social welfare.

Each candidate will have a project supervisor.

**63.811G Practice Theory and Social Welfare Administration**

This course will review the contemporary development in all four methods of social work practice—casework, group work, community work and social welfare administration—and the implications of these developments for the structuring of social welfare services.

Candidates will contribute knowledge of their own elective method gained from Session I and its application to organizational structures.

**63.812G Project Seminar**

Candidates will be expected to present formally the progress of their projects. This will provide for discussion of projects between candidates and an opportunity to deal collectively with problems encountered.

**63.813G Practice Applications of Contemporary Behavioural Science**

This subject builds upon the work done in 63.806G. Recent behavioural science theory is applied to social work practice.

**63.814G Social Planning**

An analysis of social planning processes—task definition, policy formulation, programming, and evaluation and feedback. Australian and overseas examples. The location and scope of planning structures. A critical review of the stage of development of social planning theory.

## SCHOOL OF PHYSIOLOGY

**73.011A Principles of Physiology**

An introductory course in physiology. It considers in some detail the basic problems of homeostasis encountered in man and animals. Function is considered at cellular and systemic levels, and examples are drawn from mammalian and invertebrate species.

**TEXTBOOK**

Vander, A. J., Sherman, J. H. and Luciano, D. S. *Human Physiology*. McGraw-Hill, 1970.

**PREREQUISITES**

17.001 General and Human Biology.

10.001 Mathematics I or 10.011 Higher Mathematics I or 10.021 Mathematics II.

2.001 Chemistry I.

This is a two-unit course that will continue for 6 hours each week throughout the year.