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BOARD OF VOCATIONAL STUDIES

1970 HANDBOOK



BOARD OF VOCATIONAL STUDIES
1970 HANDBOOK
EIGHTY CENTS



THE UNIVERSITY OF NEW SOUTH WALES

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INTRODUCTION

The Board of Vocational Studies was appointed 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 into the existing Faculty structure. The Board has similar functions to a Faculty, and reports to the Professorial Board.

The Board governs courses conducted by the School of Education (Bachelor of Science (Education) and Graduate Diploma in Education courses); the School of Health Administration (Bachelor, and Master of Health Administration courses, and Graduate Diploma in Health Administration); the School of Social Work (Bachelor, and Master of Social Work); the School of Wool and Pastoral Sciences (Sheep and Wool Technology (Education Option) course); the Department of Industrial Arts (course in Industrial Arts and Graduate Diploma course in Industrial Design).

Certain Schools have a dual responsibility e.g. the School of Education is responsible for the Master of Education course in the Faculty of Arts, and the School of Wool and Pastoral Sciences for the undergraduate and graduate courses in Wool Technology in the Faculty of Applied Science.

The present membership of the Board of Vocational Studies comprises:

Professor A. H. Willis, Pro-Vice-Chancellor (Chairman).

Deans of the Faculties of Engineering, Science, Arts, Architecture, Commerce and Applied Science.

Heads of the Schools of Applied Psychology, Education, Health Administration, Social Work, Sociology, and Wool and Pastoral Sciences.

Head of the Departments of Industrial Arts.

Principal of the Alexander Mackie Teachers' College.

The Registrar.

Three members elected by the Professorial Board.

Such other persons as the Board may co-opt.

CALENDAR OF DATES FOR 1970

Term 1: March 2 to May 16
Term 2: June 1 to August 8
Term 3: August 31 to October 31

JANUARY

Monday, 19 Last day for acceptance of applications to enrol by new students and students repeating first year
Tuesday, 27 to Saturday, Feb. 7 Deferred examinations

FEBRUARY

Monday, 16 Enrolment week commences for new students and students repeating first year
Monday, 23 Enrolment week commences for students re-enrolling (second and later years)
Dip. Ed. students enrol

MARCH

Monday, 2 First term lectures commence
Friday, 13 Last day of enrolment for new students (late fee payable)
Friday, 27 to Monday, 30 Easter
Tuesday, 31 Last day for later year enrolments (late fee payable)

APRIL

Saturday, 25 Anzac Day—Public Holiday
Wednesday, 29 Captain Cook Bi-Centenary Day—Public Holiday

MAY

Saturday, 16 First term ends

JUNE

Monday, 1 Second term commences
Monday, 15 Queen's Birthday—Public Holiday
Friday, 26 Last day for acceptance of applications for re-admission after exclusion under rules governing re-enrolment

JULY

Tuesday, 7 Foundation Day
Friday, 17 Last day for acceptance of corrected enrolment details forms

AUGUST

Saturday, 8	Second term ends
Monday, 31	Third term commences

OCTOBER

Monday, 5	Eight-Hour Day—Public Holiday
Thursday, 29	Third term lectures cease—Dip. Ed. students only
Friday, 30 to Friday, Nov. 6	Examinations—Dip. Ed. Students only
Saturday, 31	Third term lectures cease

NOVEMBER

Saturday, 7 to Saturday, 28	Examinations (30-week courses)
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1971

Term 1: March 1 to May 15
Term 2: May 31 to August 7
Term 3: August 30 to October 30

JANUARY

Tuesday, 26 to Saturday, Feb. 6	Deferred examinations
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FEBRUARY

Monday, 15	Enrolment week commences for new students and students repeating first year
Monday, 22	Enrolment week commences for students re-enrolling (second and later years)

MARCH

Monday, 1	First term lectures commence
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BOARD OF VOCATIONAL STUDIES

Chairman—Professor A. H. Willis

SCHOOL OF EDUCATION

Professor of Education and Head of School

J. J. Pratt, BA Qld., BEd Melb., FACE

Associate Professor

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

Lecturers

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

C. J. Field, MA Syd.

J. O. Miller, BA MEd Syd., EdD Oregon

Mrs. Shirley L. Smith, BA PhD Syd.

SCHOOL OF HEALTH ADMINISTRATION

Professor of Health Administration and Head of School

J. R. Griffith, MA BLitt Oxon., FHA

Professor

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

Senior Lecturers

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

R. C. Gillam, BA Syd., LittB DipEdAdmin N.E., AHA

J. R. B. Green, ARIBA

Lecturers

C. Grant, MA Oxon.

W. J. Penfold, BA Melb., LLB N.Z.

T. Walther, BA N.S.W., AMRSA

Tutor

Mrs. Audrey Ferguson, BA DipSocStud Syd.

Honorary Associates

D. M. Storey, MB BS Syd., FHA

R. L. Thomas, BCom Melb., FHA, FCIS, AASA

DEPARTMENT OF INDUSTRIAL ARTS

Associate Professor

L. M. Haynes, BA MEd Syd., FAIM, ABPsS, MACE

Lecturers

K. A. Lodge, BE Syd., AIAAE

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

Senior Instructor

H. E. Larsen, DipDesign (Copenhagen)

Teaching Fellow

T. D. Kirk, BSc N.S.W.

Professional Officer

Janice M. Waddell, BA Melb.

SCHOOL OF SOCIAL WORK

Professor and Head of School

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

Senior Lecturers

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

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

Lecturer

M. R. McCouat, MSocStud Qld.

Instructors

Mrs. Claire Bunday, DipSocStud Syd.

Mrs. Julia Moore, DipSocStud Syd.

SCHOOL OF WOOL AND PASTORAL SCIENCES

*Professor of Wool Technology and Head of School*P. R. McMahon, MAgrSc N.Z., PhD Leeds, ARIC, ARACI,
MAIAS*Associate Professors of Wool Technology*

I. L. Johnstone, BVSc Syd., MAIAS

W. R. McManus, BScAgr Syd., PhD N.S.W., MAIAS

K. J. Whiteley, BSc N.S.W., PhD Leeds, MAIAS

Administrative Assistant

J. E. Lawrence

Senior Lecturers

J. W. James, BA Qld.

J. P. Kennedy, MSc N.S.W., BSc Oxon., MAIAS

J. D. McFarlane, BScAgr DipED Syd., MSc N.S.W., MAIAS

E. M. Roberts, MAgrSc N.Z., PhD N.S.W., MAIAS

Lecturers

S. J. Filan, BAgEcon N.E.

C. L. Goldstone, BAgSc N.Z., RCA (N.Z.), MAIAS

Tutor Demonstrator

Jean J. Carter, MSc Syd.

Senior Instructors

J. R. Paynter

R. E. Sallaway

Professional Officers

G. Hayes, BAgSc Melb.

A. Trounson, BSc N.S.W.

GENERAL INFORMATION

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 the same as for the Faculty of Arts.

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.

It should be noted that compliance with these conditions does not in itself entitle a candidate to enter upon a course. While it is the policy of the University to endeavour to admit all properly qualified applicants who have lodged applications by the appropriate closing date, it may be necessary at times to restrict the entry to one or more faculties because of lack of facilities.*

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.

* Note: Facilities available to the University are likely to cause restrictions in 1970 on entry to the Faculties of Architecture, Arts, Commerce and Medicine, and the School of Social Work.

SECTION A**GENERAL MATRICULATION AND ADMISSION REQUIREMENTS**

(for entry to the University in 1969 and until further notice)

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.

FACULTY OR COURSE	FACULTY OR COURSE PRE-REQUISITES
Applied Science (excl. Wool Technology course) 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 Wool Technology course (Faculty of Applied Science) Sheep and Wool Technology (Education option) course	(a) Science at Level 2S or higher AND (b) Mathematics at Level 2S or higher
Arts Social Work Degree Course	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 Professorial Board.
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.

SUBJECT	SUBJECT PRE-REQUISITES
1.011—Higher Physics I 1.001—Physics I 1.041—Physics IC	As for Faculty of Science
2.011—Higher Chemistry I 2.001—Chemistry I 17.001—General and Human Biology 25.001—Geology 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 I	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

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:

Students with Overseas Entry Qualifications

Overseas students and Australian Residents relying for admission on overseas qualifications must lodge an application for enrolment prior to 31st October of the year preceding that, in which admission is sought.

Local and Interstate Residents

(a) Australian Residents including students transferring from one course to another or from another University who have undertaken qualifying examinations in 1969 must lodge an application for enrolment by 19th January, 1970.

(b) Australian Residents already qualified for admission and students wishing to resume University studies must apply for enrolment by the 31st October, 1969.

First Year Repeat Students

First year students who fail all subjects at the annual examinations and who are not granted any deferred examinations must apply for re-enrolment to the Admissions Office by 19th January, 1970.

Application forms for enrolment and details of the application procedures may be obtained on application to the Registrar, P.O. Box 1, Kensington 2033.

Students in the above categories whose applications for enrolment are accepted will be required to complete their enrolment at a specified appointment time before the start of first term. 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.

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

Students will be re-enrolled in *Unisearch House* as follows:
 All re-enrolling students Tuesday, 24th February,
 10.00 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 1, Western Grounds Area* for re-enrolment as follows:

All re-enrolling students Tuesday, 24th February,
 10.00 a.m. to 12 noon
 2.00 p.m. to 7.00 p.m.

Social Work Course (B.S.W.)

Before the end of third term, each student must obtain his or her personal enrolment form UE3 and form Social Work/70 and attached instruction sheet. After notification of the annual examination results, the student should set out a proposed programme for 1970 on the form Social Work/70 and forward or deliver this, together with form UE3 completed as far as possible to reach the Head of the School of Social Work not later than Monday, 19th January, 1970. Students who fail to lodge their enrolment forms and Social Work/70 before Monday, 19th January, 1970, will be required to attend one of the late enrolment sessions.

All students, except those classified as First Enrolments (as noted above), must collect their enrolment form, which will contain the authorized programme for 1970 from Hut 15, Western Campus, opposite High Street in accordance with the following timetable.

Year II

Students with surnames "A"-"H"	Tuesday, 24th February, 9.30 a.m. to 12.30 p.m.
Students with surnames "I"-"N"	Tuesday, 24th February, 2.00 p.m. to 5.00 p.m.
Students with surnames "O"-"Z"	Wednesday, 25th February, 9.30 a.m. to 12.30 p.m.

Year III

Students with surnames "A"-"H"	Wednesday, 25th February, 2.00 p.m. to 5.00 p.m.
Students with surnames "I"-"Z"	Thursday, 26th February, 9.30 a.m. to 12.30 p.m.

Year IV

Students with surnames "A"-"H"	Thursday, 26th February, 2.00 p.m. to 5.00 p.m.
Students with surnames "I"-"Z"	Friday, 27th February, 9.30 a.m. to 12.30 p.m.
New or transfer students with advanced standing and miscellaneous students	Friday, 27th February, 2.00 p.m. to 5.00 p.m.

Students who are unable to attend personally at the specified time should send a representative with a letter of authority to collect their form for them.

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

In exceptional cases, due to 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

In the case of students enrolling late in the Bachelor of Social Work Course, the enrolment session will be from 5.00 p.m. to 6.00 p.m. on Wednesdays, 4th and 11th March, 1970 in the Waiting Room of Hut 34, School of Social Work, Western Grounds Area.

POSTGRADUATE COURSES**Diploma in Education**

The School will advise students of the re-enrolment arrangements.

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 1, Western Grounds Area on Friday, 27th February, 2.00 p.m. to 5.00 p.m. and 6.00 p.m. to 8.00 p.m.

Master of Health Administration and Graduate Diploma in Health Administration

Students in this course enrol as follows:—

Room G36, The Chancellery

Friday, 27th February,
2.00 p.m. to 5.00 p.m.

Master of Social Work

Students wishing to register as a candidate for the degree of Master of Social Work should lodge the prescribed application form with the Registrar at least one full calendar month before commencement of the course.

Preliminary enquiries regarding registration should be made before 1st December of the year prior to registration.

Enrolments should be completed on Friday, 27th February, 5.00 p.m. to 6.00 p.m. in Hut 15, Western Grounds Area.

ENROLMENT IN MISCELLANEOUS SUBJECTS

Students may be accepted for enrolment in miscellaneous subjects provided the University considers that the subject/s will be of benefit to the student and there is accommodation available. Only in exceptional circumstances will subjects taken in this way count towards a degree or diploma.

Students seeking to enrol in miscellaneous subjects should obtain a letter of approval from the Head of the appropriate School or his representative permitting them to enrol in the subject concerned. The letter should be given to the enrolling officer at the time of enrolment. *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 in the space at the top righthand corner 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 by mail to their term address as soon as possible after fee payment. In the meantime, the fees receipt form should be carried during attendance at the University and shown on request. If the Union card is not received within three weeks of fee payment the University Union should be notified.

FEES

UNDERGRADUATE FEES

(a) Degree Courses in Industrial Arts, Sheep and Wool Technology (Education Option), and Bachelor of Science (Education) course.

For the purpose of fee determination assessment is on a term basis.

A full-time course fee will be charged for any term where more than 15 hours' per week instruction, etc., is involved.

- (i) Full-time Course Fee (more than 15 hours' attendance per week)—\$132 per term.

In courses in which the Third Term is limited to five weeks of formal studies the fee for this term is \$66.

- (ii) Part-time Course Fee—over 6 hours' and up to 15 hours' attendance per week—\$66 per term.
- (iii) Part-time Course Fee—6 hours' or less attendance per week—\$33 per term.
- (iv) Course Continuation Fee—A fee per annum of \$28 (no term payment) is payable by:

Category (a) students who have once been enrolled for a thesis and have only that requirement outstanding, or

Category (b) students given special permission to take annual examinations without attendance at the University. (Students in this category are not required to pay the subscriptions to the University Union, the Students' Union, the Sports Association and the Library fee.)

(b) Social Work Degree — Old Course

- (i) Pass—\$99 per annum per subject or \$33 per term per subject.
- (ii) Honours—an additional \$33 per annum per subject in which honours is taken in student's second and third years and \$132 per subject per annum in the fourth year.

Social Work Degree — New Course

- (i) Full-time Course Fee—\$396 per annum or \$132 per term for Years I, II and III; \$297 per annum or \$99 per term for Year IV; \$33 for honours.

- (ii) Part-time Course Fee—\$247.50 per annum or \$82.50 per term for Stages I, II, III and IV; \$198 per annum or \$66 per term for Stage V; \$297 per annum or \$99 per term for Stage VI; \$33 for honours.

(c) Degree or Diploma in Health Administration

The fees for this course are assessed under the following schedule according to the hours shown for the subject irrespective of whether the course is taken as an internal or external student. An external student in this course is exempt from the Student Activities Fees.

For the purpose of fee determination assessment is on a term basis.

A full-time course fee will be charged for any term where more than 11 hours' per week instruction, etc., is involved.

- (i) Full-time Course Fee (more than 11 hours' attendance per week)—\$110 per term.
- (ii) Part-time Course Fee—over 4 hours' and up to 11 hours' attendance per week—\$66 per term.
- (iii) Part-time Course Fee—4 hours' or less attendance per week—\$33 per term.
- (iv) Course Continuation Fee—A fee per annum of \$28 (no term payment) is payable by:

Category (a) students who have once been enrolled for a thesis and have only that requirement outstanding, or

Category (b) students given special permission to take annual examinations without attendance at the University. (Students in this category are not required to pay the subscriptions to the University Union, the Students' Union, the Sports Association and the Library fee.)

(d) Miscellaneous Subjects

- (i) Undergraduate subjects taken as "miscellaneous subjects" (i.e. not for a degree or diploma) or to qualify for registration as a candidate for a higher degree are assessed according to paragraph (a) above.
- (ii) Students given approval to enrol in a miscellaneous subject or subjects in addition to being enrolled in a course are assessed according to the total hours of attendance as if the additional subject formed part of the course.

POSTGRADUATE FEES

Basis of Fee Assessment

Where course fees are assessed on the basis of term hours of attendance, the hours for each subject for purposes of fee assessment shall be those prescribed in the Calendar. The granting of an exemption from portion of the requirements of a subject in which a student is enrolled does not carry with it any exemption from the payment of fees.

(a) Master of Health Administration, Master of Science and Master of Social Work

For details of course fees, students should consult the University Calendar.

(b) Graduate Diploma Course (Health Administration and Industrial Design)

(i) Registration Fee	\$6
(ii) Award of Diploma Fee	\$8
(iii) Course Fee—calculated on the basis of a term's attendance at the rate of \$7 per hour per week. Thus the fee for a programme requiring an attendance of 24 hours per week for the term is $24 \times \$7 = \168 per term.	

(c) Diploma in Education

(i) Registration Fee	\$6
(ii) Award of Diploma Fee	\$8
(iii) Course Fee—per annum \$330, or \$110 per term.	

OTHER FEES

In addition to the course fees set out above, all registered students will be required to pay:—

Matriculation Fee—payable at the beginning of first year	\$8
Library Fee—annual fee	\$14
University Union*—entrance fee	\$20
Student Activities Fees	
University Union*—annual subscription	\$20
Sports Association*—annual subscription	\$2
Students' Union*—annual subscription	\$5
Miscellaneous—annual fee	\$10
Total	\$37

* Life members of these bodies are exempt from the appropriate fee/s.

Graduation or Diploma Fee—\$8 payable at the completion of the course.

Depending on the course being taken, students may also be required to pay:—

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

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.

Excursion Fee—\$2 per subject (Botany, Zoology, Entomology).

SPECIAL EXAMINATION FEES

Deferred examination—\$6 for each subject.

Examinations conducted under special circumstances—\$8 for each subject.

Review of examination result—\$8 for each subject.

LATE FEES

First Enrolments

Fees paid on the late enrolment session and before commencement of term	\$7
Fees paid during the 1st and 2nd weeks of term	\$14
Fees paid after the commencement of the 3rd week of term with the express approval of the Registrar and Head of the School concerned	\$28

Re-Enrolments

First Term:

Failure to attend enrolment centre during enrolment week	\$7
Fees paid after the commencement of the 3rd week or term to 31st March	\$14
Fees paid after 31st March where accepted with the express approval of the Registrar	\$28

Second and Third Terms:

Fees paid in 3rd and 4th weeks of term	\$14
Fees paid thereafter	\$28
Late lodgment of corrected enrolment details forms (late applications will be accepted for three weeks only after the prescribed dates)	\$6

WITHDRAWAL FROM COURSE

Students withdrawing from a course are required to notify the Registrar in writing. Fees for the course accrue until a written notification is received.

Where notice of withdrawal from a course is received by the Registrar before the first day of First Term, a refund of all fees paid other than the matriculation fee will be made.

Where a student terminates for acceptable reasons a course of study before half a term has elapsed, one half of the term's fee may be refunded. Where a student terminates a course of study after half a term has elapsed, no refund may be made in respect of that term's fees.

The Library fee is an annual fee and is not refundable where notice of withdrawal is given after the commencement of First Term.

On notice of withdrawal a partial refund of the University Union Entrance Fee is 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 first term 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.

On notice of withdrawal, a partial refund of the Student Activities Fees is made on the following basis:—

University Union—\$3.33 in respect of each half term.

University of New South Wales Students' Union—where notice is given prior to the end of the fifth week of first term, \$2; thereafter no refund.

University of New South Wales Sports Association—where notice is given prior to 30th April, a full refund is made; thereafter no refund.

Miscellaneous—where notice is given prior to 30th April, \$5; thereafter no refund.

PAYMENT OF FEES

Completion of Enrolment

All students are required to attend the appropriate enrolment centre during the prescribed enrolment period* for authorization of course programme. Failure to do so will incur a late fee of \$7.

* The enrolment periods for Sydney students are prescribed annually in the leaflets "Enrolment Procedure for New Students" and "Enrolment Procedure for Students Re-enrolling".

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 fails to complete enrolment (including fee payment) 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 First Term. (For late fees see above.) No student is regarded as having completed an enrolment until fees have been paid. Fees will not be accepted (i.e. enrolment cannot be completed) from new students after the end of the second week of term (i.e. 13th March, 1970), 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.

Payment of Fees by Term

Students who are unable to pay their fees by the year may pay by the term, in which case they are required to pay First Term course fees and other fees for the year, within the first two weeks of First Term. Students paying under this arrangement will receive accounts from the University for Second and Third Term fees. These fees must be paid within the first two weeks of each term.

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 Registrar 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 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 until 31st March for fees due in First Term and for one month from the date on which a late fee becomes payable in Second and Third Terms.

Where an extension of time is granted to a First Year student in First Term, such student is not permitted to attend classes until fees are paid, and if seeking to enrol in a restricted Faculty may risk losing the place allocated.

Failure to Pay Fees

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 term, 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 course fees for the year is outstanding after the end of the fourth week of Third Term (25th September, 1970).

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.

RULES RELATING TO STUDENTS

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 term 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.

CHANGES IN COURSE PROGRAMMES

Students seeking approval to substitute one subject for another or add one or more subjects to their programme must make application to the Head of the School responsible for the course on a form available from School offices. In the case of students wishing to withdraw from subjects or terminate their enrolment the application must be lodged at the Examinations and Student Records Section. The Registrar will inform students of the decision. Approval of withdrawal from subjects is not automatic, each application being determined after considering the circumstances advanced as justifying withdrawal. It is emphasised that withdrawal from subjects after Term I or failure to sit for the examinations in any subjects for which the student has enrolled is regarded as failure to pass the subjects unless written approval to withdraw has been obtained from the Registrar.

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 will be applied retrospectively from 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 annual 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.
- (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 part-time student shall, without showing cause, be permitted to continue a course unless all subjects of the first two stages of his course are completed by the end of his fourth year of attendance and all subjects of the third and fourth stages 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 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 Professorial Board 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 Board 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 Professorial Board 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) A student may appeal to an Appeals Committee constituted by Council for this purpose against his exclusion by the Professorial Board from any subject or course.

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 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.

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 Branch, and lodged with the Registrar.

ANNUAL EXAMINATIONS

The annual examinations take place in November-December for students in 30-week courses, and in September for students in 21 and 24-week courses. Timetables showing time and place at which individual examinations will be held are posted on the central notice boards in the Bio-Medical Building, Central Lecture Theatre Block, Chancellery, Dalton Building, Main Building and Western Grounds Area. Misreading of the timetable is not an acceptable excuse for failure to attend an examination. Examination results are posted to the term addresses of students. No results will be given by telephone.

All students will receive an enrolment details form by 30th June. It is not necessary to return this form, unless any information recorded there is incorrect. Amended forms must be returned to the Examinations Branch by 17th July. 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 \$6.00 will be payable. Amended forms returned to the Registrar will be acknowledged in writing within fourteen days.

STUDENT SERVICES

THE LIBRARY

The University Library is located on the Upper Campus adjacent to the Chancellery, the Commerce Building and the Arts Building.

The Library's undergraduate collection covers the teaching and research interests of the faculty, and students are expected to read widely and critically from this collection.

It is recommended that students attend the **Introduction to the Library** which is held at advertised times during Orientation Week and the first week of term.

The **Introduction** uses audio-visual aids to describe the physical layout of the undergraduate library and the services available to readers.

Copies of the booklet *Guide to the Library* are available on request.

Students who are interested in a subject approach to information may attend a course which outlines methods of searching for information in libraries. This course runs for eight hours over a period of one week.

Individual assistance for readers with specific library problems is provided by the **Reader Assistance Unit** which is located in the foyer. Students are welcome to ask for help.

THE UNIVERSITY UNION

The University Union is a common meeting ground for all students. Eating and general recreational facilities are available, as well as a shop for stationery and other student requisites, branches of several banks, a pharmacy, a branch of David Jones, and hairdressing facilities. Membership is compulsory for all registered students.

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 term basis, amount to \$20 per week. 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 100 students of whom half are Australian; the remaining half is made up of students from some 18 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 post-graduate students.

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 1, 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 \$20 per week.

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, is at present under construction. It is planned to open the eight-storey building, which will accommodate 200 students, in 1970.

Enquiries should be addressed to Mr. O. F. Hughes, School of Mechanical and Industrial Engineering, Box 1, Kensington, 2033.

OTHER ACCOMMODATION

Students requiring other than Residential College accommodation may make application to the Student Amenities Service where current lists are kept of accommodation available at recognised boarding houses, private homes, and in serviced and unserviced apartments.

STUDENT COUNSELLING AND RESEARCH UNIT

Prospective students seeking advice or guidance regarding the selection and planning of courses (particularly in relation to a career), or advice regarding their suitability for a particular course, are invited to consult the University Student Counselling and Research Unit. Appointments may be made by telephone (663-0351, extensions 2600 to 2605).

In addition to its counselling service, the Unit provides a variety of study skills programmes throughout the year, on a group or individual basis. Programmes offered in the past have included Reading Improvement, Study Methods, Written Expression, Note Taking, Studying Mathematics, Improving Listening, Preparing for Statistics.

STUDENT AMENITIES UNIT

This Service is closely associated with the Sports Association and also handles applications for student concession fares and provides a service for students requiring other than College accommodation.

STUDENT EMPLOYMENT UNIT

Assistance is offered in finding full-time employment for evening students, and permanent employment after graduation. The Service is located in the Chancellery, just near the main entrance.

STUDENT HEALTH UNIT

A student health and first aid centre, staffed by a qualified medical practitioner and a nursing sister, is provided by the University. Students are encouraged to attend the centre for advice on all matters pertaining to their health.

CHAPLAINCY SERVICE

This Service is provided for the benefit of students and staff by five Christian Churches (Anglican, Roman Catholic, Methodist, Baptist, Churches of Christ and Seventh Day Adventist) 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.

STUDENT LOAN FUND

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 forms of assistance are available. In the first, the University considers, in certain circumstances, deferment of the payment of fees; this scheme is not intended to replace the established procedure for granting deferment for short periods but rather to supplement it by making deferment over longer periods possible. Secondly, students in need may receive a cash loan not exceeding \$200 from the Student Loan Fund established from contributions made by the Students' Union and the University.

Thirdly, a Students' Union donation of \$1,000 has made possible urgent cash loans not exceeding \$50 for a period of one month.

In all cases assistance is limited to students with reasonable academic records and whose financial circumstances warrant loans. Students granted assistance of either kind are required to give an undertaking to repay the loan under the conditions agreed upon.

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

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.

STUDENT ACTIVITIES

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; The Wool and Pastoral Science Association.

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 the first term of 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

Commonwealth University Scholarships

There are three types: **OPEN ENTRANCE SCHOLARSHIPS**, which are awarded on the results of the Higher School Certificate Examination to students who are under thirty years of age on 1st January of the year in which they begin their course and who, with their parents, are permanent residents of Australia; **LATER YEAR SCHOLARSHIPS**, which are available to students who have completed at least one year of full-time or two years of a part-time course without failure (age and residential qualifications are the same as for Open Entrance); and **MATURE AGE SCHOLARSHIPS**, which are available to students who are over thirty on 1st January of the year for which the scholarship is desired, and who have been residents of Australia for at least two years immediately preceding the award of the scholarship. Benefits include payment of all tuition fees and other compulsory fees and living allowances (these latter being subject to a means test). The closing date for applications is 30th September in the year immediately preceding that for which the scholarship is desired. Full particulars and application forms may be obtained from the Officer-in-Charge, Sydney Branch Office, Department of Education and Science, La Salle Building, 70 Castlereagh Street, Sydney, N.S.W., 2000 (Telephone 2-0323).

University Scholarships

The University annually awards up to fifteen scholarships tenable in degree courses to students who have matriculated at the Higher School Certificate Examination; ten scholarships to students who have completed certificate courses (Department of Technical Education); ten scholarships to students who have completed Trade Courses (Department of Technical Education); and ten scholarships to part-time students who have taken the Diploma Entrance course of the Department of Technical Education. The scholarships are tenable in any faculty and exempt the holder from payment of course fees during the currency of the scholarship. Scholarships will be awarded in order of merit on the Higher School Certificate Examination results. Continued tenure of the scholarships requires satisfactory progress. They may be held only by persons who do not hold another award. Applications must be lodged with the Registrar within seven days of publication of the Higher School Certificate Examination results.

Cadetships and Traineeships

The Commonwealth Public Service offers cadetships each year in a number of fields including social work. 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 28-5701).

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. Applications will close in October, and early application to the Board is advisable.

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

Scholarships in Industrial Arts (B.Sc. Degree)

Two scholarships, valued at \$100 per annum, are offered each year by the Institute of Industrial Engineers to students entering the full-time course in Industrial Arts leading to the B.Sc. degree. The scholarships are tenable for four years, and may not be held concurrently with any award except one providing solely for the payment of compulsory University fees.

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 \$2,400 per annum for full-time study or \$1,200 per annum for part-time study, from which fees will be deducted. Students successfully completing the course will be eligible to apply for the P & O Orient Company's travelling scholarship for further study and experience abroad.

Scholarships in Health Administration

A number of scholarships and cadetships up to the value of \$2,800 plus fees and allowances 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

THE BACHELOR OF SCIENCE (EDUCATION) DEGREE COURSE

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

An essential feature of the course is the breadth of study over a range of science subjects, and the integration of education subjects, equivalent to the present Diploma in Education, within the course. The course also provides depth in that at least one of the science subjects must be taken to at least three stages. In addition, to provide balance, two stages of History and Philosophy of Science, have been included in the course structure.

Students must complete at least one stage of Physics, Chemistry, Mathematics, Biological Sciences and Geology, and in the first year must undertake a programme in chemistry, physics and mathematics and either biology or geology. The major areas of study in subsequent years are chemistry, physics, biological sciences and geology, and at least one of these must be taken to at least three stages.

THE BACHELOR OF SCIENCE (EDUCATION) DEGREE— FULL-TIME COURSE

FIRST YEAR

					Hours per week for 3 terms	
					Lec.	Lab./Tut.
*1.011	Higher Physics I <i>or</i>	..	..	..	3	— 3
1.001	Physics I <i>or</i>	..	..	..
1.041	Physics IC ..	..	..	..
2.011	Higher Chemistry I <i>or</i>	..	..	..	2	— 4
2.001	Chemistry I ..	..	..	..
10.001	Mathematics I <i>or</i> ..	..	..	..	4	— 2
10.011	Higher Mathematics I <i>or</i>	..	..	..
10.021	Mathematics II† ..	..	..	..	2	— 4
17.001	General and Human Biology <i>or</i>	..	..	..
25.001	Geology I ..	..	..	..
					11	— 13

*Higher Physics I covers the same syllabus as Physics I but at a higher level. Students intending to proceed to further studies of Physics in later years of the course should take 1.011 or 1.001. Students taking Physics IC, which is a terminating course, would only be able to proceed to further studies of Physics if their performance in 1.041 was above average.

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

SECOND YEAR

		Hours per week
Stage II of major subject ..	..	6
Two Science subjects selected from 17.001, 25.001 or	..	
Stage II subjects ..	..	12
62.001 History and Philosophy of Science I ..	..	3
		—
		21
		—

THIRD YEAR

		Hours per week
Stage III of major subject ..	..	9
58.501 Education ..	..	8
62.002 History and Philosophy of Science II ..	..	3
		—
		20
		—

FOURTH YEAR

	Hours per week
Stage IV of major subject or one Science subject selected from 17.001, 25.001 or Stage II subjects	6
58.502 Education	16
	<hr/> 22 <hr/>

The stages of Science subjects offered are:

STAGE II

Physics	1.102
Chemistry	2.102
Mathematics	10.911
Geology	25.502
Biology	two 90 hour units

STAGE III

Physics	1.103
Chemistry	2.103
Geology	25.503
Biology	three 90 hour units*

STAGE IV

Physics	1.104
Chemistry	2.104
Geology	25.504
Biology	two 90 hour units*

***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:

- 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
- 45.202B Entomology—Insect Physiology
- 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.

DIPLOMA IN EDUCATION

Since 1966 the Board of Vocational Studies in association with the School of Education and the Alexander Mackie Teachers'

College has offered a course leading to the award of the Diploma in Education (Dip.Ed.) to graduate students from this University or from other approved universities. The School of Education also offers a course leading to the award of Master of Education (M.Ed.). Details concerning this course may be found in Section C of the University of New South Wales Calendar. The Diploma is designed to give professional training in education to post-graduate students. It is initially a one-year full-time course of studies but it is anticipated that in the near future it will be possible for this course to be taken over two years on a part-time basis. The course is directed, but not exclusively, towards the preparation of teachers for secondary schools. It includes lectures, seminars, tutorials, individual assignments and group exercises, visits, demonstrations of teaching methods and practice teaching.

Course Outline

		Hours per week for 3 terms
Education		
58.011	Australian Education	1
58.012	Educational Practice	1
58.013	Educational Psychology	1
58.014	Education and Society	1
58.015	Philosophy and Theory of Education	1
	Seminars	2
Methods of Teaching*		
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	
58.030/1	Science Method (Double Teaching Subject)	
58.030/2	Science Method (Single Teaching Subject)	
58.031	Spanish Method	
	*Two method subjects, with demonstration lessons	8
Selected Topics		
58.041	Communication Skills	2
58.042	Elective Subject	1
58.043	Health and Health Education	1
58.044	Physical Education	1

Supervised Teaching Practice

Eight weeks' full-time teaching practice in term time.

Two weeks' experience in classroom practice will also be arranged before the beginning of the academic year.

SCHOOL OF HEALTH ADMINISTRATION

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.

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.

HEALTH ADMINISTRATION—PART-TIME COURSE (EXTERNAL STUDIES)

Bachelor of Health Administration

FIRST STAGE

				Hours per week for 3 terms	
				Lec.	Tut.
14.022	Hospital Fund Accounting	..	..	2	— 1
16.201	Law I	..	..	2	— 1
16.501	Community Health Planning	..	..	3½	— 1
				7½	— 3

SECOND STAGE

				Hours per week for 3 terms	
				Lec.	Tut.
14.023	Hospital Management Accounting	..	..	2	— 1
16.001	Management I	..	..	2	— 1
16.701	Statistics	..	..	2	— 2½
				6	— 4½

THIRD STAGE

				Hours per week for 3 terms	
				Lec.	Tut.
15.901	Economics (Health Administration)	..	..	2	— 1
16.002	Management II	..	..	2	— 1
16.401	Hospital Planning IA	..	..	2	— 1
				6	— 3

FOURTH STAGE

				Hours per week for 3 terms	
				Lec.	Tut.
16.003	Management III	..	..	2	— 1
16.202	Law II	..	..	2	— 1
16.402	Hospital Planning 1B	..	..	2½	— 1½
				6½	— 3½

FIFTH STAGE

				Hours per week for 3 terms	
				Lec.	Tut.
12.681	Human Relations in Administration	..	..	2	— 1
16.301	Public Administration IA	..	..	2	— 1
16.601	The Hospital as a Social System	..	..	2	— 1
				6	— 3

SIXTH STAGE

		Hours per week for 3 terms	
		Lec.	Tut.
16.101	Comparative Health Administration	1½	1½
16.302	Public Administration IB	2	1
		3½	2½

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 of full-time study over one year.

		30 Weeks Course		
		Term 1	Term 2	Term 3
16.801G	Health Services Administration	6	3	4½
16.802G	Health Care Facilities	6	3	6
16.803G	Biostatistics	3	3	—
16.804G	Health Services Law	—	3	3
16.805G	Health Services Accounting	—	3	3
16.806G	Behavioural Science for Health Services Administrators	1½	1½	—
		16½	16½	16½

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 below.

In the formal course the students' theoretical instruction is integrated with in-service experience and practical work-training in accordance with the view that administration is a practical art in which theory and practice are complementary and equally essential to the administrator's development.

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 at least one full calendar month before the commencement of 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 exceptional cases 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 Professorial Board on the recommendation of the Board of Vocational Studies (hereinafter referred to as "the Board").
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:—
 - (a) 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:—
 - (i) attendance at the University in a prescribed course of formal work;
 - (ii) attachments to hospitals and other organisations for in-service experience;
 - (iii) the preparation and submission of a report on a project demonstrating originality.

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

* Preliminary enquiries regarding registration should be made before 31st August of the year prior to registration.

† 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 (a) (ii);

OR

- (b) 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 (a) (iii) 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 six terms, and not later than nine terms, from the date of registration.
9. Candidates for the award under the conditions contained in paragraph 6 (b) shall not be considered for the award of the degree until the lapse of six complete terms 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 three terms.
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, 1968, the University may issue the report or thesis in whole or in part, in photostat or microfilm or other copying medium.

* See Section "C" of the University Calendar.

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 (a) 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.
14. Course Outline.

YEAR I

		Term 1 (hrs. per week)	Term 2 (weeks)	Term 3 (weeks)	Term 4 (weeks)
12.671G	Human and Industrial Relations ..	2	2	—	—
14.031G	Hospital Accounting ..	3	3	—	—
15.914G	Social and Economic Framework ..	3	3	—	—
15.944G	Statistics (Health Administration) ..	3	3	—	—
16.621G	Health Organisation and Manage- ment* ..	1	1	10	9
		<hr/> 12	<hr/> 12	<hr/> 10	<hr/> 9

YEAR II

		Term 1 (weeks)	Term 2 (hrs. per week)	Term 3
12.671G	Human and Industrial Relations ..	—	3	3
16.621G	Health Organisation and Management* ..	16	5	5
16.631G	Comparative Hospital and Health Admin- istration ..	—	4	4
		<hr/> 16	<hr/> 12	<hr/> 12

* This subject will extend over Year I and Year II. From the end of second term in Year I to the beginning of second term in Year II, students will have the following supervised attachments and review courses:—

	Weeks, (approx.)
First Administrative Teaching Hospital Attachment	9
Review Course	1
Second Hospital Attachment	8
Base Hospital Attachment	6
Country Hospital Attachment	4
Review Course	1
Attachments to Central Hospital Authorities and Other Organisations	5
	<hr/> 34

DEPARTMENT OF INDUSTRIAL ARTS

The Department of Industrial Arts offers a B.Sc. degree available through full-time study and a B.Sc. (Tech.) degree through part-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 Courses

The courses offered by the Department of Industrial Arts are 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 courses cover 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 either the product design or graphic (communication) design field.

In general, the Industrial Arts courses provide 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.

As part of the requirements for the degree of B.Sc. (Tech.) which is taken part-time, students will normally be asked to complete an approved programme of experience over a period of not less than three years, concurrently with attendance in the course. These conditions apply to all B.Sc. (Tech.) degree courses offered by the University of New South Wales.

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).

FIRST YEAR

(30 weeks' full-time course)

		Hours per week for 3 terms	
		Lec.	Lab./Tut.
1.011	Higher Physics I <i>or</i>	3	3
1.001	Physics I <i>or</i>		
1.041	Physics IC		
2.011	Higher Chemistry I <i>or</i>	2	4
2.001	Chemistry I		
5.001	Engineering I	3	3
12.001	Psychology I	3	2
21.901	Tutorial	0	1
		11	13

SECOND YEAR

(30 weeks' full-time course)

		Hours per week for 3 terms	
		Lec.	Lab./Tut.
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
	General Studies Elective	1	$\frac{1}{2}$
21.801	Educational Practice†	0	2
	Science Elective*	3	3
		9	16

THIRD YEAR

(30 weeks' full-time course)

		Hours per week for 3 terms	
		Lec.	Lab./Tut.
4.951	Materials Technology	2	2
21.012	Industrial Arts II	1	3
21.111	Education I	3	0
21.211	Drawing and Design	0	2
21.802	Educational Practice†	0	3
21.902	Seminar	0	1
	Science Elective II*	4	5
		10	16

* See footnotes to next page.

† See footnotes to next page.

FOURTH YEAR (30 weeks' full-time course)

		Hours per week for 3 terms	
		Lec.	Lab./Tut.
12.013	Psychology III*	4	— 5
	<i>or</i>		
	Science Elective III**	4 (max)	10 (max)
21.013	Industrial Arts III	2	— 3
21.112	Education II	3	— 0
21.803	Educational Practice†	0	— 3
21.903	Project	0	— 3
		9 (max)	19 (max)

* 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.

† Students will undertake their Educational Practice during term in an institution approved by the Board of Vocational Studies. In addition, a further period of four weeks' Educational Practice will be arranged during vacation.

** Following are typical sequences which may be followed (subject to time-tabling) for the elected science subjects mentioned in Year 2, Year 3, and Year 4.

Second Year	Third Year	Fourth Year
10.001 Mathematics I	An approved level II subject in Mathematics	Psychology III
17.001 General and Human Biology	An approved level II subject in Biological Sciences	<i>or</i> An approved level III subject in Mathematics or Geology
25.001 Geology I	An approved level II subject in Geology	

INDUSTRIAL ARTS—PART-TIME COURSE

Bachelor of Science (Technology)

A course of six years part-time study leading to the degree of Bachelor of Science (Technology).

FIRST STAGE

(30 weeks' part-time course)

		Hours per week for 3 terms	
		Lec. Lab./Tut.	
2.011	Higher Chemistry I <i>or</i> }	2	— 4
2.001	Chemistry I		
5.001	Engineering I	3	— 3
		5	— 7

SECOND STAGE

(30 weeks' part-time course)

		Hours per week for 3 terms	
		Lec. Lab./Tut.	
1.011	Higher Physics I <i>or</i> }	3	— 3
1.001	Physics I <i>or</i>		
1.041	Physics IC	3	— 2
12.001	Psychology I	0	— 1
21.901	Tutorial	6	— 6

THIRD STAGE

(30 weeks' part-time course)

		Hours per week for 3 terms	
		Lec. Lab./Tut.	
4.911	Materials Science	1	— $\frac{1}{2}$
21.201	Freehand Drawing	0	— 3
12.012	Psychology II <i>or</i>	3	— 5
	Science Elective I†	4	— 2
		4	— 8 $\frac{1}{2}$
		<i>or</i>	
		5	— 5 $\frac{1}{2}$

† Following are typical sequences which may be followed (subject to time-tabling) for the elected science subject mentioned in the Third Stage and the Fifth Stage of the course.

Third Stage

- 10.001 Mathematics I
17.001 General & Human
Biology
25.001 Geology I

Fifth Stage

- An approval level II subject in
Mathematics
An approval level II subject in
Biological Sciences
An approval level II subject in
Geology

FOURTH STAGE

(30 weeks' part-time course)

		Hours per week for 3 terms	
		Lec.	Lab./Tut.
4.951	Materials Technology	2	— 2
21.011	Industrial Arts I	1	— 2
21.111	Education I	3	— 0
21.211	Drawing and Design	0	— 2
		6	— 6

FIFTH STAGE

(30 weeks' part-time course)

		Hours per week for 3 terms	
		Lec.	Lab./Tut.
21.012	Industrial Arts II	1	— 3
12.013	Psychology III* or	4	— 5
	Science Elective II†	4	— 5
		5	— 8

* 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.

† See footnote on previous page.

SIXTH STAGE

(30 weeks' part-time course)

		Hours per week for 3 terms	
		Lec.	Lab./Tut.
21.013	Industrial Arts III	2	— 3
21.112	Education II	3	— 0
	General Studies Elective	1	— ½
		6	— 3½

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. Opportunities to specialise in either product design or communication design will be provided.

The course is offered on a part-time basis over two years.

PART-TIME COURSE

First Year

	Hours per week for 3 terms
21.501/1G Industrial Design	5
21.511/1G Design Projects	6
21.521/1G Seminar	1
21.531/1G Creative Art Elective	3
	<hr/> 15

Second Year

	Hours per week for 3 terms
21.501/2G Industrial Design	5
21.511/2G Design Projects	6
21.521/2G Seminar	1
21.531/2G Creative Art Elective	3
	<hr/> 15

SCHOOL OF SOCIAL WORK

The School of Social Work has offered a course leading to the degree of Bachelor of Social Work since 1965. In 1970 a Master's course in Social Work will be offered for the first time, also a completely revised undergraduate course. Undergraduate students who enrolled prior to 1970 should consult the 1969 Calendar.

BACHELOR OF SOCIAL WORK (B.S.W.)

The revised undergraduate course may be taken full-time over four years or part-time over six years. This course 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 and professionally accepted values. 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 Work

An important aspect of the course is the work in the field. This is primarily of an observational nature in Social Welfare Systems I, which occupies roughly forty days, two days a week from mid-First Term. In Social Work Practice IIB and Social Work Practice IIIB, a student is under the supervision of a field instructor, usually in a social work agency, while he learns to apply the principles of professional practice in an actual practice setting. In both of these subjects, this field work occupies a minimum of forty working days (280 hours), normally on a basis of two days a week extending from April to September. In addition, in Social Work Practice IIIB, there is a block placement of forty working days extending from the last week in October. A student's field work placements will be in more than one type of social work setting. Some of the settings used are: psychiatric, medical, family and child welfare, services to the aged, parole and aborigines' welfare. Voluntary 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, and that those part-time students admitted are expected to have time available beyond that required by formal class attendance.

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

Students wishing to graduate with honours must apply to the Head of the School at the end of the third year of the full-time course, or at the end of the fifth stage of the part-time course, for permission to enrol in the subject Social Work (Honours). Honours are awarded on the quality of work performed throughout the course, as well as in this subject. First Class, Second Class (Division 1), Second Class (Division 2), are the gradings used for the Honours Degree.

MASTER OF SOCIAL WORK (M.S.W.)

A Master of Social Work degree is available both to experienced social work practitioners, who meet certain requirements, and to students with an Honours degree of good standard.

SOCIAL WORK—FULL-TIME COURSE

Bachelor of Social Work

FIRST YEAR

		Hours per week for 3 terms	
		Lec.	Other
12.001	Psychology I	3	— 2
26.541	Political Science	1	— $\frac{1}{2}$
53.111	Sociology I	3	— 1
63.411	Introduction to Social Welfare	1	— 0*
		and one other subject approved as counting towards the B.A. degree.	

* First and Second Terms only

SECOND YEAR

		Hours per week for 3 terms	
		Lec.	Other
63.412	Social Philosophy and Policy	2	— 1
63.421	Social Welfare Systems I	1	— 5*
63.511	Human Behaviour I	3	— 1
63.611	Social Work Practice I	3	— 1
	General Studies Elective	1	— $\frac{1}{2}$

* From mid-First Term to mid-Third Term.

THIRD YEAR

		Hours per week for 3 terms	
		Lec.	Other
63.422	Social Welfare Systems II	3	— 1
63.512	Human Behaviour II	3	— 1
63.612A	Social Work Practice IIA	3	— 0
63.612B	Social Work Practice IIB		— 14*
	General Studies Elective	1	— $\frac{1}{2}$

* From April to September

FOURTH YEAR

Pass Course

	Hours per week for 3 terms	
	Lec.	Other
63.423 Social Welfare Systems III	3	1
63.613A Social Work Practice IIIA	3	0
63.613B Social Work Practice IIIB	—	14*

* From April to September. In addition, there is a field work placement plus seminars, for eight weeks at thirty-five hours a week, from the last week in October to the third week in December, plus two weeks of seminars in the following January.

FOURTH YEAR

Honours Course

	Hours per week for 3 terms	
	Lec.	Other
63.423 Social Welfare Systems III	3	1
63.613A Social Work Practice IIIA	3	0
63.613B Social Work Practice IIIB	—	14*
63.614 Social Work (Honours)	—	3

* From April to September. In addition, there is a field work placement plus seminars, for eight weeks at thirty-five hours a week, from the last week in October to the third week in December, plus two weeks of seminars in the following January.

SOCIAL WORK — PART-TIME COURSE

Bachelor of Social Work

FIRST STAGE

	Hours per week for 3 terms	
	Lec.	Other
12.001 Psychology I	3	2
53.111 Sociology I	3	1
63.411 Introduction to Social Welfare	1	0*

* First and Second Terms only.

SECOND STAGE

	Hours per week for 3 terms	
	Lec.	Other
26.541 Political Science	1	$\frac{1}{2}$
63.412 Social Philosophy and Policy	2	1

and one other subject approved as counting towards the B.A. degree.

THIRD STAGE

		Hours per week for 3 terms	
		Lec.	Other
63.421	Social Welfare Systems I	1	5*
63.511	Human Behaviour I	3	1
63.611	Social Work Practice I	3	1

* From mid-First Term to mid-Third Term.

FOURTH STAGE

		Hours per week for 3 terms	
		Lec.	Other
63.422	Social Welfare Systems II	3	1
63.512	Human Behaviour II	3	1
	General Studies Elective	1	$\frac{1}{2}$

FIFTH STAGE

		Hours per week for 3 terms	
		Lec.	Other
63.612A	Social Work Practice IIA	3	0
63.612B	Social Work Practice IIB		14*
	General Studies Elective	1	$\frac{1}{2}$

* From April to September.

SIXTH STAGE

		Hours per week for 3 terms	
		Lec.	Other
63.423	Social Welfare Systems III	3	1
63.613A	Social Work Practice IIIA	3	0
63.613B	Social Work Practice IIIB		14*

* From April to September. In addition, there is a field work placement plus seminars, for eight weeks at thirty-five hours a week, from the last week in October to the third week in December, plus two weeks of seminars in the following January.

SIXTH STAGE — HONOURS COURSE

		Hours per week for 3 terms	
		Lec.	Other
63.423	Social Welfare Systems III	3	1
63.613A	Social Work Practice IIIA	3	0
63.613B	Social Work Practice IIIB		14*
63.614	Social Work (Honours)		3

* From April to September. In addition there is a field work placement plus seminars, for eight weeks at thirty-five hours a week, from the last week in October to the third week in December, plus two weeks of seminars in the following January.

MASTER OF SOCIAL WORK

Conditions for the Award of the Degree of Master of Social Work:

1. An application to register as a candidate for the degree of Master of Social Work shall be made on the prescribed form which shall be lodged with the Registrar at least one full calendar month before commencement of the course.*
2. An applicant for registration shall—
 - (i) hold the degree of Bachelor of Social Work at an honours standard in the University of New South Wales, or its equivalent from another approved University, or
 - (ii) (a) hold a pass degree in social work of this, or other approved University, or equivalent qualifications accepted by the Board of Vocational Studies, and
(b) have had at least one year's professional experience acceptable to the Board of Vocational Studies, and
(c) have successfully completed qualifying work and an examination as approved by the Board of Vocational Studies.
3. In exceptional cases 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 Professorial Board on the recommendation of the Board of Vocational Studies.
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:—
 - (a) To carry out a programme of advanced study extending over one academic year;
 - (b) To prepare and submit a thesis embodying the results of an original investigation.
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.
8. The thesis referred to in paragraph 6 (b) shall be on a topic approved by the Board of Vocational Studies on the recommendation of the Head of School.

* Preliminary enquiries regarding registration should be made before December 1 of the year prior to registration.

9. Unless permission to the contrary has been granted a full-time candidate shall be required to submit his thesis not earlier than four terms, and not later than six terms, from the date of registration; a part-time candidate, not earlier than six terms, and not later than nine terms, from the date of registration.
10. Every candidate for the degree shall be required to submit three copies of the thesis. This 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 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.
12. For each candidate 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 shall depend upon:—
 - (i) the candidate's performance in the prescribed programme of advanced study; and
 - (ii) the quality of the candidate's thesis.

ADDITIONAL INFORMATION AND ENQUIRIES

Further information may be obtained from the Head of the School of Social Work at Western Grounds Area (Northern End opposite High Street). Telephone 663-0351, extensions 2105 or 2106.

SCHOOL OF WOOL AND PASTORAL SCIENCES

The School of Wool and Pastoral Sciences offers a special course, the purpose of which is to provide training at the tertiary level for teachers of sheep husbandry and wool science in the Department of Technical Education and in the Agricultural High Schools and Colleges. Students who complete the course successfully will be eligible to become certificated teachers.

It is also considered that the training offered in this course may suit students seeking careers in the sheep and wool extension services of State Departments of Agriculture. Outstanding graduates would be able to undertake certain types of research.

The course is a full-time one extending over four years, and leads to the degree of Bachelor of Science (pass or honours).

The Wool Use Promotion Act of 1945 and subsequent legislation has recognized the importance of wool in Australia's economy and the need to meet competition in the traditional wool markets of the world from artificial fibres. The strength of the wool industry is clearly limited by the knowledge and skill shown by its intake of young workers; and the need for high grade teachers has been underlined by recent criticisms of classing techniques as well as by the need for increased efficiency and lowered costs of production. The aim of the new Sheep and Wool Technology course (Education Option) is to provide a pool of teachers who will have a professional training in the philosophy and techniques of education, as well as a knowledge of science and of the technology of the sheep and wool industry.

This course represents a new combination of subjects already offered by the University in the existing courses in Wool Technology and Industrial Arts. First year gives a basic training in general science, and with Psychology I, introduces the educational emphasis which is continued throughout the course. In second, third and fourth years vocational subjects essential to all branches of the wool industry are covered, and time is allotted for professional practice.

Since the new course contains only incidental Mathematics it is expected to be attractive to those students who are interested in a University approach to the pastoral industry, but who do not feel able to cope with the mathematical content of the Wool Technology degree course.

SHEEP AND WOOL TECHNOLOGY (EDUCATION OPTION)

Bachelor of Science

FIRST YEAR

(30 week's day course)

Hours per week for 3 terms

		Lec.	Tut.	Lab.	Private Study
2.001	Higher Chemistry I or } ..	2	0	4	5
2.001	Chemistry I } ..				
12.001	Psychology I ..	3	0	2	3
17.001	General and Human Biology ..	2	0	4	4
27.001	Geography I ..	2	1	3	4
		9	1	13	16

SECOND YEAR

(30 week's day course)

Hours per week for 3 terms

		Lec.	Tut.	Lab.	Private Study
9.101	Livestock Production I ..	3	0	0	4½
9.221	Agronomy ..	2	0	2	4
9.531	Wool Technology I ..	2	0	6	4
41.111	Biochemistry ..	3	0	6	6
21.801	Educational Practice ..	0	0	2	0
	General Studies Elective ..	1	½	0	2
		11	½	16	20½

THIRD YEAR

(30 week's day course)

					Hours per week							
					Term 1				Term 2			
					Lec.	Tut.	Lab.	Private Study	Lec.	Tut.	Lab.	Private Study
9.122	Livestock Production II	..	..	..	3	0	0	4½	6	0	0	10½
9.311	Economics	..	..	..	2	0	0	4	2	0	0	4
9.411	Agricultural Chemistry	..	..	..	1	0	3	2	1	0	3	2
9.532	Wool Technology II	..	..	..	2	0	3	4	1	0	3	2
9.601	Animal Physiology I	..	..	..	2	0	3	3	1	0	3	1½
21.111	Education I	..	..	..	3	0	0	0	3	0	0	0
21.802	Educational Practice	..	..	..	0	0	3	0	0	0	3	0
	Two General Studies Electives	..	..	..	3	0	0	4	3	0	0	4
					16	0	12	21½	17	0	12	24
					15	0	11	22				

FOURTH YEAR
(30 week's day course)

		Term 1				Term 2				Term 3			
		Hours per week				Hours per week				Hours per week			
		Lec.	Tut.	Lab.	Private Study	Lec.	Tut.	Lab.	Private Study	Lec.	Tut.	Lab.	Private Study
9.001	Project	0	0	3*	0	0	0	3*	0	0	0	3*	0
9.123	Livestock Production III	1	1	0	2	1	1	0	2	2	0	0	4
9.231	Pastoral Agronomy	1	1	0	2	1	1	0	2	1	1	0	2
9.321	Pastoral Management	2	0	0	2	2	0	0	2	2	0	0	2
9.421	Animal Nutrition	2	0	0	4	2	0	0	4	0	0	0	0
9.533	Wool Technology III	0	0	1	0	0	0	1	0	0	0	1	0
9.821	Genetics	2	0	0	4	2	0	0	4	2	0	0	4
21.112	Education II	3	0	0	0	3	0	0	0	3	0	0	0
21.803	Educational Practice	0	0	3	0	0	0	3	0	0	0	3	0
	Seminar	0	0	1	0	0	0	1	0	0	0	1	0
	Advanced General Studies Elective	2	0	0	4	2	0	0	4	2	0	0	4
		13	2	8	18	13	2	8	18	12	1	8	16

Plus one of the following subjects, the choice to be approved by the Head of the School.

9.534	Wool Technology IV	2	0	2	4	2	0	2	4	2	0	2	4
9.901	Rural Extension	2	2	0	4	2	2	0	4	2	2	0	4
9.602	Animal Physiology II	2	0	2	4	2	0	2	4	2	0	2	4
41.102	Biochemistry	3	1	9*	6	3	1	9*	6	3	1	9*	6

* Students electing the Biochemistry option must undertake an approved project in a related field.

DESCRIPTION OF SUBJECTS

This handbook lists only textbooks. Students should apply to the Head of School for lists of reference books. For General Studies booklists and descriptions of subjects please consult General Studies handbook which is available free of charge.

SCHOOL OF PHYSICS

1.001 Physics I

Kinematics—Non-uniformly accelerated systems. Centripetal and coriolis acceleration. Laws of motion. Momentum. Impulse. Potential and kinetic energy. Power. Conditions of equilibrium. Elasticity. Young's, bulk and shear moduli. Poisson's ratio. Strain energy. Hydrodynamics. Bernoulli's equation. Motion in resistive medium. Moments of inertia. Rotational dynamics. Simple harmonic motion. Pendulums. Motion about free axis. Progressive and stationary waves. Energy current. Superposition of waves. Doppler effect. Resonance. Huygens' principle. Reflection, refraction, interference and diffraction of waves. Electromagnetic spectrum. Polarization.

Electrostatics—Gauss' theorem. Electric intensity and induction. Capacitance. Electromagnetism. Biot-Savart and Ampere's circuital laws. Force on moving charge and on conductor. Torque on coil. D.C. instruments. Electromagnetic induction. Faraday's and Lenz's laws. Self and mutual inductance. Magnetic materials. D.C. circuits. Kirchhoff's rules and Thevenin's theorem. Growth and decay of current. A.C. circuits. Resonance. Diode. Triode. Amplifiers and oscillators. Electronic measuring instruments.

1.011 Higher Physics I

Subject matter same as 1.001, but in greater depth.

TEXTBOOKS

- Dunlop, J. I. and Mann, K. *Introductory Electronics*. Clarendon Press.
Halliday, D. and Resnick, R. *Physics for Students of Science and Engineering*. Vols. I and II or combined volume. Wiley, 1960.
Russell, G. J. and Mann, K. *Alternating Current Circuit Theory*. N.S.W. Univ. Press.

1.041 Physics IC

Consists of Units 1-9. For students taking only one year of physics.

TEXTBOOKS

- Halliday, D. and Resnick, R. *Physics for Students of Science and Engineering*. Vols. I and II, or combined volume. Wiley, 1960.
Russell, G. J. and Mann, K. *Alternating Current Circuit Theory*. N.S.W. Univ. Press.

1.102 Physics

1.112A Electromagnetism and 1.112B Atomic and Nuclear Physics.

1.112A Electricity and Magnetism.

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

TEXTBOOK

Whitmer, R. M. *Electromagnetics*. 2nd ed. Prentice-Hall.

1.112B Atomic Physics.

Special theory of relativity, Lorentz transformation, relativistic mass, momentum and energy; quantum theory, photoelectric effect, Compton effect; wave-particle duality, Schrodinger wave equation, infinitely deep square well, H atom; spectra, magnetic moment, exclusion principle; Rutherford scattering, nuclear properties, mass spectrograph, binding energy, radioactivity, alpha, beta and gamma radiation, nuclear reactions.

TEXTBOOK

Beiser, A. *Concepts of Modern Physics*. Rev. ed. McGraw-Hill, 1967.

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.

2.011 Higher Chemistry I

Subject-matter same as 2.001, but treated in greater depth.

TEXTBOOKS

2.001 Chemistry I and 2.011 Higher Chemistry I.

Ander, P. and Sonnessa, A. J. *Principles of Chemistry*. Collier-Macmillan, 1966.

Aylward, G. A. and Findlay, T. J. V. *Chemical Data Book*. 2nd ed. John Wiley & Sons, Sydney, 1966.

Barrow, G. M., Kenney, M. E., Lassila, J. D., Litle, R. L. and Thompson, W. E. *Understanding Chemistry*. Vols. I-V. Benjamin, N.Y., 1967.

Chemistry I—Laboratory Manual. University of N.S.W., 1969.

Hart, H. and Schuetz, R. D. *Organic Chemistry*. Feffer & Simons, 1967.

Sorum, C. H. *General Chemistry Problems*. 4th ed. Prentice-Hall, N.J., 1969.

Turk, A., Meislich, H., Brescia, F. and Arents, J. *Introduction to Chemistry*. Academic Press, 1968.

2.102 Chemistry II (B.Sc. (Ed.))

Units 2.002A (Physical Chemistry) and 2.002B (Organic Chemistry).

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

Aylward, G. H. and Findlay, T. J. V. *Chemical Data Book*. 2nd ed. Wiley, 1966.

Barrow, G. M. *Physical Chemistry*. 2nd ed. McGraw-Hill, 1966.

Daniels, F. et al. *Experimental Physical Chemistry*. 6th or 7th ed. McGraw-Hill, 1962 or 1970.

Pohl, H. A. *Quantum Mechanics for Science and Engineering*. Prentice-Hall, 1967.

Shaw, D. J. *Introduction to Colloid and Surface Chemistry*. Butterworths, 1966.

2.002B Chemistry II (Organic Chemistry).

1. Roberts, J. D. and Caserio, M.C. *Modern Organic Chemistry*. Benjamin, 1967.

Students intending to study Organic Chemistry in later years may consider either of the following which are suitable alternatives and are the recommended textbooks for third year:

Morrison, R. T. and Boyd, R. N. *Organic Chemistry*. 2nd ed. Allyn & Bacon, 1966.

Roberts, J. D. and Caserio, M. C. *Basic Principles of Organic Chemistry*. Benjamin, 1964.

2. One of the following:

Cheronis, N. D. and Entrikin, J. B. *Identification of Organic Compounds*. Wiley International Edition.

Shriner, R. L., Fuson, R. C. and Curtin, D. Y. *Systematic Identification of Organic Compounds*. 5th ed. Wiley, 1964.

Vogel, A. I. *Elementary Practical Organic Chemistry*. Pt. II. Qualitative Organic Analysis. Longmans, 1957.

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.

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

5.001 Engineering I

A. Introduction to Engineering

- (i) *Engineering Technology: Materials.* Classification of materials in common use, occurrence of raw materials, processing of raw materials, refinements and properties of materials. *Manufacture.* 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 illustration of their use.
- (ii) *Computers—Introduction and Concepts:* Introduction to computers to follow the computer work in Mathematics I. To develop: (a) familiarity with algorithms; (b) the use of procedure oriented languages; and (c) an introduction to computing equipment.
- (iii) *Introduction to Engineering Design:* Engineering method, problem identification, creative thinking, mathematical modelling, materials and processes, communication of ideas, the place of engineering in society, or
Systems—Introduction and Concepts: Concepts and introduction to systems. To give students an appreciation of some of the concepts used in engineering, to relate the concepts to phenomena within their experience, and to illustrate them by case histories and engineering examples. Quantities. Concepts. Components. Systems.

B.1. Engineering Mechanics: Two and three dimensional force systems, composition and resolution of forces, laws of equilibrium. Statics of rigid bars, pinjointed 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.

C. Engineering Drawing: Fundamental concepts of descriptive geometry, including reference systems, representation of point, line and plane; fundamental problems of position and of 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.

TEXTBOOKS

Strand A (i) Engineering Technology

De Garmo, E. P. *Materials and Processes in Manufacturing.* Macmillan.

Strand A (ii) Computers Introduction and Concepts

Textbooks will be prescribed.

Strand A (iii) Introduction to Engineering Design Option

Harrisberger, L. *Engineeringmanship.* Wadsworth.

Strand A (iii) Systems, Introduction and Concepts Option

Karbowiak, A. and Huey, R.M. *Information, Computers, Machines and Humans.* N.S.W. University Press.

Strand B1 Engineering Mechanics

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

Strand C Engineering Drawing

Robertson, R. G. *Descriptive Geometry*. Pitman.

Thomson, R. *Reading Exercises in Engineering Drawing*. Nelson.

SCHOOL OF WOOL AND PASTORAL SCIENCES

9.101 Livestock Production I

Anatomy, histology and introduction to the physiology of the domestic animals. Mammalian evolution and embryology.

The livestock industry and its place in the economic life of Australia. Production of livestock products and trends. The inter-relationships of the various classes of stock and the natural, economic and artificial conditions determining the stratification of types. Breeds of livestock of importance to the pastoral industry and aids to judging. Breeds of sheep, their uses and economic relationships. Sheep management and calendar of operations. Flock composition; principal sources of loss and their control.

9.122 Livestock Production II

The more important breeds of beef cattle, dairy cattle, pigs, working dogs, and their management. Production of beef, veal, pigments, milk and milk products, and quality concepts. Handling hides and skins. Stud breeding—record keeping.

Livestock husbandry in relation to diseases. The Stock Diseases Act. Types of disease, immunity. Bacteriology and pathology, Parasitology—external and internal parasites. Diseases of the fleece, deficiency diseases. Poison plants. Specific diseases. Commoner diseases of cattle, horses, pigs and dogs. Veterinary first-aid. Common drugs.

9.123 Livestock Production III

Principles of livestock production and their application in animal industry; reproduction and fertility; milk secretion; growth and development; nutrition and breeding. Crossbreeding. Prime lamb production. Factors affecting livestock production, e.g. pasture improvement.

TEXTBOOKS (9.101, 9.122, 9.123)

Belschner, H. G. *Sheep Management and Diseases*. 8th ed. Angus & Robertson, 1965.

Cole, V. G. *Sheep Management for Wool Production*. Grazcos, 1963.

9.221 Agronomy

Agricultural climatology, soil science, and soil conservation. Pastures in land use and land development. Principles of tillage, crop rotation, irrigation and fertilizer use. Weeds and weed control. Practical work in the systematics of plant families.

9.231 Pastoral Agronomy

Pasture ecology. Establishment, management and utilization of pastures. Fodder and field crops associated with the sheep industry. Fodder conservation. Insect pests of pastures.

TEXTBOOKS (9.221, 9.231)

- Barnard, C. *Grasses and Grassland*. Macmillan.
Black, J. W. *Flora of South Australia*. Pt. I. Govt. Printer.
Burbridge, Nancy T. *Australian Grasses*. Vols. I and II. A. & R. C.S.I.R.O. *The Australian Environment*. A. & R.
Donahue, R. L. *Soils*. Prentice-Hall.
Leeper, C. W. *Introduction to Soil Science*. M.U.P.
Molnar, I. ed. *Manual of Australian Agriculture*. 2nd ed. Heinemann.
Whittet, J. N. *Weeds*. N.S.W. Dept. of Agriculture.
Wilson, B. *Pasture Improvement in Australia*. Murray.

9.311 Economics

The nature of economic studies. Theory and practical applications of production economics principles and the analysis of production functions. Relationships between costs and production functions. Interpretation of cost curves. Firm size and economies of size.

Introduction to price theory. The nature and derivation of supply and demand relationships, and factors which change these relationships. Problems in empirical use of supply and demand relationships. Use of price theory in the examination of problems and policies such as the modification of marketing systems; effects of subsidies and taxation; implications of economic development and population growth; and problems of declining industries.

The theory of international trade and the international monetary mechanism, with special reference to the relationship between trade policy and agricultural policy.

National income accounting, public finance and other related fields are reviewed briefly.

The final section of the course is a short survey of the subject matter of 9.312 Farm Management.

9.312 Farm Management

Economic aspects of technical agricultural research, with emphasis on the evaluation and interpretation of research results at the farm management level. Estimation and interpretation of response relationships amongst farm resources and products.

Farm management planning methods: linear programming, budgeting techniques and gross margins analysis. Application of farm management analysis to a range of problems in farm planning, agri-businesses and agricultural policy are reviewed. Areas covered include budgeting for property development, effects on farm planning of taxation and probate provisions, and analysis of structural changes in farm organization.

Analysis and comparison of alternative methods of farm and resource valuation.

Financial and production records and accounts, with emphasis on co-ordination of analysis of accounts for management purposes with accounts required for other purposes, such as taxation. Use of farm records as indicators of economic efficiency, and as sources of information for formal farm planning methods.

A review of institutional factors which affect agriculture: rural credit facilities, land tenure arrangements, commodity marketing systems.

Throughout the course, extensive time is devoted to exercises, which range from seminars and essays to the practical application of farm management techniques, including the use of manual methods, desk calculators, and electronic computers.

9.411 Agricultural Chemistry

The chemistry of feeding stuffs. Proximate analysis. Growth changes. Isolation, examination and estimation of constituents. Vitamins and assessment of nutritional value. Chemistry of silage. Correlations of structure and properties. Animal milks, factors affecting composition.

Poisonous plants. Agricultural chemicals. Water supplies (stability, activities of enzymes, substrate requirements).

General principles of analytical methods. Trace metal analysis. Colorimetry and instrumental techniques.

Concurrent extensions in chemistry as necessary.

9.421 Animal Nutrition

Composition and classification of foodstuffs and pastures. Physiology of ruminant digestion. Digestion, absorption and metabolism of carbohydrates, proteins, fats, minerals and vitamins. Digestibility of foodstuffs. Nutrient and energy balances and requirements of livestock. Feeding standards and the quantitative application of nutritional data with particular reference to Australian conditions. Utilization of forage by grazing ruminants. Supplementary and drought feeding. Consideration of disorders due to nutrition.

While particular emphasis will be given to nutritional requirements of sheep, those of other farm livestock will be dealt with in this section.

TEXTBOOKS

Dougherty, R. W. et al. *Physiology of Digestion in the Ruminant*. Butterworth.

Maynard, L. A. *Animal Nutrition*. McGraw-Hill.

Crampton, E. W. *Applied Animal Nutrition*. Freeman & Co.

9.531 Wool Technology I

Wool Biology—Structure and function of skin. Aspects of fibril formation. Structure of follicles. The hair growth cycle. Development of fibre population in sheep. Comparative fleece biology.

Wool Metrology—All common measurement techniques, yield, length, diameter, damage, fleece components, their estimation and analysis of results.

Raw Materials—Taught by the School of Textile Technology. A course on origin, chemical composition, structure and properties of natural and synthetic fibres, with particular emphasis on comparative properties.

Wool—Fleece characteristics—fibre fineness, crimp and quality number, staple length, soundness, colour and yield. Component parts of the fleece. The wool product of Merino, British and Australian breeds. Wool defects and discolorations. Vegetable fault in relation to district, price and processing. Theory of wool classing, shearing shed procedure, practical wool sorting, classing and typing.

9.532 Wool Technology II

Wool Textile Manufacture—Taught by the School of Textile Technology.

Detailed instruction on function of machines involved in woollen and worsted processing from scouring to (and including) finishing. The function and general mechanism of each stage of processing are studied and comparisons are made with other types of manufacture where possible.

Wool—Carbonizing and fellmongering. Central classing and repacking. Preparation of the wool selling brokers' catalogue. Wool buying techniques, wool shipment and finance. Composition and functions of the Australian Wool Board and International Wool Secretariat, A.W.B. Table of Types and Descriptions, history and application. Carpet wool. Wool top appraisal. Wool production and marketing in overseas countries. Wool futures. Practical wool sorting, classing and typing.

The following trade visits will be undertaken during Wool Technology I and II at times coincident with relevant theory and practice: worsted manufacture, woollen manufacture, scouring and carbonizing, fellmongering, carpet manufacture, repacking houses, wool brokers' stores, wool saleroom.

9.533 Wool Technology III

Wool types, appraisal of wool samples in terms of Australian Wool Board type, quality and yield.

TEXTBOOKS (9.531, 9.532, 9.533, 9.534)

Henderson, A. E. *Growing Better Wool*. A. H. & A. W. Reed.
Onions, W. J. *Wool*. Benn & Co.

9.601 Animal Physiology I

Physiological system of mammalia are treated with special attention to homeostasis and to ruminants. Cell membranes; blood and body fluids, the immune reaction. Cardiac control, functions and hæmodynamics. Respiration. The endocrine system with particular emphasis upon growth reproduction, lactation and stress. The nerve impulse, its excitation and transmission. Physiology of digestion, the gastro-intestinal tract and of the kidney. Heat tolerance and climatic adaptation.

9.602 Animal Physiology II

Mammalian physiology directed towards domestic livestock production and homeostatic mechanics. Emphasis will be placed upon techniques.

Active transport and allied membrane phenomena. Co-ordinator systems (neural, humoral), reproduction and lactation. Development physiology. General metabolism and its regulation—the physiology and metabolism of specific organs—heart, muscle, liver, kidney. The physiology of the mammalian digestive tract. Environmental physiology—adaptive mechanisms—especially in the newborn, and in heat tolerance; the immune reaction. Electrolyte physiology—acid-base equilibrium of the organism; use of clearance values in measuring renal and liver activity—respiration—techniques of gas analysis and respirometry. Circulation, cardiac output and distribution (experimental techniques), special vascular circuits (pulmonary, cerebral, hepatic, splenic, renal, testicular). Physiology of the skin.

TEXTBOOK (9.601, 9.602)

Wright, S. *Applied Physiology*. O.U.P.

9.821 Genetics

Applied genetics in relation to sheep improvement. Mendelian theory. Chromosomes and the physical basis of heredity. Crossing over, sex differentiation, multi-factor inheritance in selection. Inbreeding. Introduction to population genetics. Heritability and correlation. Heterosis.

TEXTBOOKS

Falconer, D.S. *Introduction to Quantitative Genetics*. Oliver & Boyd, 1960.
Fraser, A. S. *Heredity, Genes and Chromosomes*. McGraw-Hill.

SCHOOL OF MATHEMATICS**10.001 Mathematics I**

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

TEXTBOOKS

Platt, J. M. *Introduction to Fortran IV Programming*. Prentice-Hall.
Purcell, E. J. *Calculus with Analytic Geometry*. Appleton-Century-Crofts.
It is expected that *Professor G. M. Kelly's* textbook will be available in its preliminary edition.

10.011 Higher Mathematics I

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

TEXTBOOKS

Blatt, J. M. *Introduction to Fortran IV Programming*. Prentice-Hall.
Fagg, S. V. *Differential Equations*. English Universities Press.
Spivak, M. *Calculus*. Benjamin.
It is expected that *Professor G. M. Kelly's* textbook will be available in its preliminary edition.

10.021 Mathematics II

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

TEXTBOOKS

Blatt, J. M. *Introduction to Fortran IV Programming*. Prentice-Hall.
Purcell, E. J. *Calculus with Analytic Geometry*. Appleton-Century-Crofts.

10.911 Mathematics II

This subject is available only to Arts, Commerce and Engineering students and consists of 10.111 Pure Mathematics II, Units A and B, and 10.211 Applied Mathematics II, Unit A.

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

Gass, H. *Linear Programming*. I.S.E. McGraw-Hill.

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

10.111B Pure Mathematics II—Analysis**TEXTBOOKS**

Betz, H., Burcham, P. B. and Ewing, G. M. *Differential Equations with Applications*. I.S.R. Harper.

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

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

Bowman, F. *Introduction to Bessel Functions*. Dover.

Hilton, P. J. *Partial Derivatives*. Dover.

Sneddon, I. N. *Fourier Series*. Dover.

Spiegel, M. R. *Theory and Problems of Vector Analysis*. Schaum.

SCHOOL OF APPLIED PSYCHOLOGY**12.001 Psychology I**

An introduction to the nature, content and methods of psychology: the determinants of behaviour, with special emphasis on the study of motivation, the dynamics of adjustment, and individual differences; methods of psychological observation or data-gathering, and elementary statistical procedures appropriate to the organization and description of the data of observation.

TEXTBOOKS*Part A—Theory*

Birney, R. C. and Tecvan, R. C. eds. *Measuring Human Motivation*. Van Nostrand, 1962.

Hilgard, E. R. and Atkinson, R. C. *Introduction to Psychology*. 4th ed. Harcourt, N.Y., 1967.

Savage, R. D. *Psychometric Assessment of the Individual Child*. Penguin, 1968.

Part B—Practical

Llewellyn, K. *Statistics for Psychology I*. Univ. N.S.W. Press. 1968.

12.012 Psychology II

The development and structure of personality and the evolution of behaviour through learning, together with associated practical work. In the

theory lectures attention is given to the effects of interpersonal relationships at the successive stages of development; the influence of heredity and socio-economic factors upon personality variables; approaches to the description of personality structure; the changing emphasis upon learning rather than instinctive behaviour, and the developments within learning itself, from simple mechanisms such as habituation to complex processes such as insight and concept learning. The practical course on research methods will attempt to develop a critical approach; illustrate various areas covered in the theory course; provide information about fundamental research procedures and the statistical techniques appropriate to them.

TEXTBOOKS

Part A—Personality

Reference Books only.

Part B—Learning

Kimble, G. A. *Hilgard and Marquis' Conditioning and Learning*. Appleton, 1961.

Part C—Research Methods I

Armour, S. J. *Introduction to Statistical Analysis and Inference*. Wiley, Sydney, 1966.

12.013 Psychology III

Psychological statistics and two selected areas are developed and studied intensively at an advanced level. Candidates should plan their reading requirements and their selection of areas for special study from the following groups in consultation with the Head of the School of Applied Psychology.

The areas of special study will include the following, although not all may be available in any one year: Abnormal Psychology, Differential Psychology, Psychometrics, Child Psychology, Social Psychology, Learning, Perception, Motivation.

Part A—Psychological Statistics III

TEXTBOOK

McNemar, O. *Psychological Statistics*. 4th ed. Wiley, N.Y., 1969.

Part B—Electives

TEXTBOOKS

Consult with School.

12.671G Human and Industrial Relations

An introduction to psychological analysis of individual behaviour—the processes of learning, motivation and adjustment. A study of group processes—attitude formation and change, leadership-group dynamics. Applications of psychological principles to aspects of management and industrial relations. History and structure of relevant Australian trade unions. Arbitration and conciliation.

TEXTBOOKS

Brown, J. A. C. *Social Psychology of Industry*. Penguin, 1954.

Brown, W. B. *Explorations in Management*. Heinemann, 1960.

Karn, H. W. and Weitz, J. *An Introduction to Psychology*. Wiley, 1955.

12.681 Human Relations in Administration

The content and methods of psychology and determinants of behaviour. Some contemporary theories of social behaviour will be examined and

social organization analysed. Findings in the field of group dynamics, with emphasis on leadership behaviour, will also form part of the subject matter and there will be further studies in communication.

TEXTBOOKS

Bredemeier, H. C. and Stephenson, R. M. *The Analysis of Social Systems*. Holt, 1962.

Munn, N. L. *Psychology: The Fundamentals of Human Adjustment*. Houghton Mifflin, 1966.

SCHOOL OF ACCOUNTANCY

14.022 Hospital Fund Accounting

Introduction to the fund theory of accounting and to generally accepted accounting principles. The recording of hospital transactions in the various funds and the preparation, analysis and interpretation of historical accounting reports.

PRELIMINARY READING

Yorston, R. K., Smyth, E. B. and Brown, S. R. *Elementary Accounting*. 4th ed. Law Book Co., 1965.

Yorston, R. K., Smyth, E. B. and Brown, S. R. *Accounting Fundamentals*. 6th ed. Law Book Co., 1966 (Chapters 1, 2 and 3).

TEXTBOOK

Seawell, L. V. *Principles of Hospital Accounting*. Physicians' Record Co., 1960.

14.023 Hospital Management Accounting

Introduction to the various management accounting techniques which may be used by the hospital administrator as an aid to planning, control and decision-making. The emphasis will be on internal control, budgeting and cost analysis.

TEXTBOOKS

American Hospital Association. *Budgeting Procedures for Hospitals*. A.H.A., 1961.

Hay, L. E. *Budgeting and Cost Analysis for Hospital Management*. 2nd ed. Pressler Publications, 1963.

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

14.031G Hospital Accounting

An introduction to generally accepted accounting principles and the fund theory of accounting. The provision and administrative utilization of accounting and statistical data, internal control, budgeting and cost analysis.

PRELIMINARY READING

American Hospital Association. *Bookkeeping Procedures and Business Practices for Small Hospitals*. A.H.A., 1956.

TEXTBOOKS

American Hospital Association. *Budgeting Procedures for Hospitals*. A.H.A., 1961.

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

Seawell, L. V. *Principles of Hospital Accounting*. Physicians' Record Co., 1960.

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

Robinson, M. A., Morton, H. C., Calderwood, J. D. and Lamberton, D. M. *An Introduction to Economic Reasoning*. Tudor Press, 1965.

Samuelson, P. A. *Economics: An Introductory Analysis*. 6th ed. McGraw-Hill, 1964.

15.914G Social and Economic Framework (Health Administration)

Concerned with the working of the Australian economic system. Deals with the concept and measurement of national income and the determination of the level of national income. This will include consideration of the determinants of aggregate demand, the role of money, banking and the capital markets and Australia's international trade and balance of payments. Particular attention will be given to the role of the Government in the economy, not only in relation to its overall control of the economic system, including the problem of inflation, but especially in relation to policies affecting the distribution of income. In this connection, important aspects of the labour market, including the process of wage determination will be considered. Finally the history and scope of social services will be examined from the point of view of the economic welfare of the community and the private and public provision of these services.

TEXTBOOKS

Kewley, T. H. *Social Security in Australia*. S.U.P. 1965.

Samuelson, P. A., Hancock, K. J. and Wallace, R. H. *Economics: An Introductory Analysis*. Australian ed. McGraw-Hill, 1969.

15.944G Statistics (Health Administration)

Consists of two parts. The first part covers an introduction to statistical methods and theory, including the following topics:

Frequency distributions and their description; an introduction to proba-

bility; principles of sampling; estimation and hypothesis testing; quality control; linear regression; index numbers; time series analysis.

The second part covers the application of statistical methods to problems of management and problems of direct relevance to the health care field. The following topics are included:

The nature of model building, including deterministic and probabilistic models, 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).

TEXTBOOKS

Ackoff, R. L. and Sasieni, M. W. *Fundamentals of Operations Research*. Wiley, 1968.

Benjamin, B. *Health and Vital Statistics*. Allen & Unwin, 1968.

Bierman, H., Bonini, C. P., Fouraker, L. E. and Jaedicke, R. K. *Quantitative Analysis for Business Decisions*. Irwin, 1965.

Pollard, A. H. *Demography: An Introduction*. Pergamon, 1968.

Spiegel, M. R. *Theory and Problems of Statistics*. Schaum, 1961.

Yamane, T. *Statistics: An Introductory Analysis*. 2nd ed. Harper and Row, 1965.

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

Brown, J. A. C. *Social Psychology of Industry*. Pelican, 1962.

Dubin, R. *The World of Work*. Prentice-Hall, 1958.

Newman, W. H. *Administrative Action*. Pitman, 1963.

16.002 Management II

The management uses of operations research; an introduction to principles of computing and data processing; management considerations in data processing—systems analysis, feasibility studies, implementation; the use of O. and M. techniques by management. The management audit and clinical audit.

TEXTBOOKS

Ackoff, R. L. and Rivett, P. *A Manager's Guide to Operations Research*. Wiley, 1963.

Cambridge Consultants (Training) Ltd. *A Programmed Introduction to Critical Path Methods*. Pergamon, 1967.

Donald, A. G. *Management, Information and Systems*. Pergamon, 1967.

Gillam, R. *General Considerations of Computers in Australian Hospitals*. School of Health Administration, U.N.S.W., 1967.

- Smalley, H. E. and Freeman, J. R. *Hospital Industrial Engineering*, Reinhold, 1966.
- Solomon, I. J. and Weingart, L. O. *Management Uses of the Computer*. Mentor, 1966.

16.003 Management III

Extends the principles introduced in Management I and Management II; the distinctions between management and administration, operations and policies; examines policy making, departmental organization and methods of integration; relates the hospital as an organization to administrative bodies exercising restraints on its functions.

TEXTBOOK

- Robinson, G. A. *Hospital Administration*. 2nd ed. Butterworth, 1966.

16.101 Comparative Health Administration

Applies the concepts derived from the study of Public Administration I, Hospital Planning I and Management II to a comparative study of health services in Australia, U.S.A. and the U.K. e.g. methods of organizing health care, principal agents for delivering health care to consumer, restraints on purchase of health care, authority and responsibility of relevant administrative bodies.

TEXTBOOKS

- Deeble, J. S. and Scotton, R. B. *Health Care Under Voluntary Insurance*. Technical Paper No. 1, Institute of Applied Economic Research. M.U.P., 1968.
- Forsyth, G. *Doctors and State Medicine*. Pitman Medical, 1966.
- Lawson, J. S. *Australian Hospital Services—A Critical Review*. Gardner, 1968.
- Lindsey, A. *Socialised Medicine in England and Wales*. Chapel Hill, 1963.
- Somers, H. and Somers, A. *Doctors, Patients and Health Insurance*. The Brookings Institution, 1961.

16.201 Law I

Introduction to the Australian legal system; the formal sources of law, the judicial process; the nature of federalism, the division of legislative power between the Commonwealth and the States; the relationship between Commonwealth and State laws; principles of the law of contract, the sale of goods; agency, insurance, bailments and negotiable instruments; the disposition of property by will, the concept of the trust.

TEXTBOOKS

- Derham, D. P., Maher, F. K. H. and Waller, P. L. *An Introduction to Law*. Law Book Co., 1966.
- Sawer, G. *The Australian and the Law*. Pelican, 1968.
- Yorston, R. K. and Fortescue, E. E. *Australian Mercantile Law*. 13th ed. Law Book Co., 1965.

16.202 Law II

General principles of the law of torts; for example, principles governing liability for negligence, including vicarious liability for the acts and defaults of servants, independent contractors and others; nuisance, trespass to the person, occupier's liability, liability for breach of statutory duty and employer's liability; available defences; a general survey of Commonwealth and State industrial law; other legislation of particular significance to hospital administration.

TEXTBOOKS

Baalman, J. *Outline of Law in Australia*. 3rd ed. Law Book Co., 1969.

Fleming, J. G. *The Law of Torts*, 3rd ed. Law Book Co., 1965.

Glass, H. H. and McHugh, M. M. *The Liability of Employers*. Law Book Co., 1966.

16.301 Public Administration IA

The development of the Commonwealth and States' systems of government; distribution of powers between the Commonwealth and States; functions of departments and ministers and statutory bodies such as commissions; responsibilities of the Public Service; staffing structure of the Public Service; its methods of recruitment and training; some reference to systems of public administration in other countries.

TEXTBOOKS

Caiden, G. F. *Commonwealth Bureaucracy*. M.U.P., 1967.

Schaffer, B. B. and Corbett, D. C. *Decisions: Case Studies in Australian Administration*. Cheshire, 1965.

16.302 Public Administration IB

A systematic review of the development and present status of selected social policy issues in Australia presented in their social, political and historic context; attitudes to government and personal responsibility in selected fields, e.g. financing health care, welfare provision, social services, provision of medical services; roles of central and local governments; the private sector in health care; comparative material from U.S.A. and Europe.

TEXTBOOKS

Greenwood, G. ed. *Australia: a Social and Political History*. A. & R., 1955.

Kewley, T. H. *Social Security in Australia: The Development of Social Security and Health Benefits from 1900 to the Present*. S.U.P., 1965.

16.401 Hospital Planning IA

Cultural and social influences determining the provisions, nature and use of hospital services in a developed community; the interpretation and implementation of such influences, e.g. area wide planning; methods of determining bed requirements; stages in planning and construction; preparing the architect's brief; architectural limits on hospital planning.

TEXTBOOK

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

16.402 Hospital Planning IB

Relates provision to availability of resources; function and building design; design considerations of specific areas; treatment facilities and clinical services; supply systems and mechanical services; administrative and communication facilities; specifications, estimates, contracts and cost control; site procedure and relations of client with architect, engineer and builder; variations procedures, commissioning and maintenance; planning for adaptations and additions.

TEXTBOOKS

American Hospital Association. *Manual of Hospital Planning Procedures*. The Association, 1959.

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

U.S. Public Health Service. *Where is Hospital Use Headed?* U.S.P.H.S., 1966.

16.501 Community Health Planning

The expression of social policy in the organization, administration and integration of the following services with those of the hospital: environmental health services; provision for maternal and child care; rehabilitation services; mental health and geriatric services; non-institutional health care and facilities.

TEXTBOOK

Hanlon, J. J. *Principles of Public Health Administration*. Mosby, 1968.

16.601 The Hospital as a Social System

The hospital as a social system; goals and values of the hospital; groups within the system; their goals and values; interaction between such groups; relation of foregoing to nature and quality of patient care; interaction between groups within the hospital and groups outside; patients' attitudes to the hospital and to health care; social, ethnic and regional differences in such attitudes; informal patterns of health care in relation to the hospital.

TEXTBOOKS

Cotgrove, S. *The Science of Society*. Allen & Unwin, 1967.

Davies, A. F. and Encel, S. *Australian Society*. Cheshire, 1965.

Freeman, H. E., Levine, S. and Reeder, L. G. *Handbook of Medical Sociology*. Prentice-Hall, 1963.

Mumford, E. and Skipper, J. K. *Sociology in Hospital Care*. Harper & Row, 1967.

Scott, W. R. and Volkart, E. H. *Medical Care: Readings in the Sociology of Medical Institutions*. 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, London, 1968.
Pollard, A. H. *Demography: An Introduction*. Pergamon, Sydney, 1968.
Yamane, T. *Statistics: An Introductory Analysis*. Harper & Row, N.Y., 1964.

16.621G Health Organization and Management

Theories of management, the administrative structure of hospitals, the nature of and inter-relationships within their departmental organization; principles of planning, organization, control and techniques of investigation; forecasting, co-ordination, direction and command; authority and responsibility; criteria of communication; effects of different organization forms on communication; barriers to communication.

(Includes thirty-four weeks' in-service experience involving hospital attachments and review courses.)

TEXTBOOKS

- Hancy, W. V. *Communication and Organizational Behaviour*. Rev. ed., Irwin, 1967.
Katz, D. and Kahn, R. L. *The Social Psychology of Organizations*. Wiley, 1966.
Koontz, H. and O'Donnell, C. *Principles of Management*. 4th ed. McGraw-Hill, 1968.
Koontz, H. and O'Donnell, C. *Readings in Management*. 2nd ed. McGraw-Hill, 1968.
Lawson, J. S. *Australian Hospital Services*. Gardner, 1968.
Owen, J. K. ed. *Modern Concepts of Hospital Administration*. Saunders, 1962.
Robinson, G. A. *Hospital Administration*. 2nd ed. Butterworth, 1966.

16.631G Comparative Hospital and Health Service Administration

A comparative study of the system of hospital and health service administration in Australia, the United Kingdom, the United States of America and the Union of Soviet Socialist Republics; their sources of finance; the media through which it is disbursed; the authority and responsibilities of administrative bodies concerned; the planning of their services; methods of staffing with particular reference to medical staffing.

TEXTBOOKS

- Forsyth, G. *Doctors and State Medicine*. Pitman Medical, 1966.
Griffith, J. ed. *The Australian and New Zealand Hospitals and Health Services Yearbook*. School of Health Administration and Hospital Administration Journal, Annual.
Lindsey, A. *Socialised Medicine in England and Wales*. Chapel Hill, 1963.
Somers, H. and Somers, A. *Doctors, Patients and Health Insurance*. Brookings, 1961.

16.801G Health Services Administration

Part A: The essential elements of administration and the tools of management are examined and related to the particular problems of health service administration. The following main areas will be covered: planning; organization; staffing; direction; control; decision-making and communication. Particular attention will be directed towards the administrative roles and relationships of the medical, nursing and other health service personnel, departmental organization, systems analysis and operational research; data processing and information systems.

Part B: 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.

16.802G Health Care Facilities

Part A: Non-institutional Provision for Health Care

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.

Part B: Institutional Provision for Health Care

The principles of planning and design are applied to general and special hospitals and to facilities for extended care. Attention is given to the conduct of pre-planning surveys; preparation of the architect's brief; principles of design relating to special facilities; relationship of client to architect, engineer and builder; specifications, estimates, contracts and cost control; planning for adaptations and additions; commissioning; institutional maintenance.

Part C: Comparative Studies

The Australian Health Scheme; the role of the Commonwealth, State 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. The study of the Australian scene provides a basis for the comparative study of the health services of other advanced and developing countries; major differences in policy and administration are examined in relation to medical, social, political and economic patterns.

16.803G Biostatistics

This course is designed to enable students to apply basic statistical concepts to the problems of public health, and to develop a critical approach to the use of numerical data. Topics include collection and presentation of statistics, vital statistics rates, life tables, measures of central tendency and variation, probability theory, tests of significance, measures of association, and the application of automatic data processing methods to health service statistics.

16.804G 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.

16.805G 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.

16.806G Behavioural Science for Health Services Administrators

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.

BIOLOGICAL SCIENCES

17.001 General and Human Biology

Characteristics of living organisms. Properties of living matter. Cell structure and function. Life cycles. An introduction to biochemistry, ultra-structure, genetics and cytology. Plant structure and function. Physiology of vertebrate animals, human biology and variation. The biology of micro-organisms. Evolution. Anatomy and histology of selected animals. Practical work to illustrate the lecture course.

TEXTBOOKS

Abercrombie, M., Hickman, C. J. and Johnson, M. L. *A Dictionary of Biology*. Penguin, 1967.

Keeton, W. T. *Biological Sciences*. Norton, N.Y., 1967.

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.

de Sausmarez, M. *Basic Design—The Dynamics of Visual Form*. Studio Vista, 1964.

Lindbeck, J. R. *Design Textbook*. McKnight & McKnight, 1963.

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.

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

Edel, D. H. *Introduction to Creative Design*. Prentice-Hall, 1967.

Landes, D. S. *The Rise of Capitalism*. Macmillan, 1966.

Middleton, M. *Group Practice in Design*. Architectural Press, 1967.

Mumford, L. *Technics and Civilization*. Harbinger Paperback. Harcourt, Brace & World, 1934.

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 of 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

Jones, J. C. and Thornley, D. G. *Conference on Design Methods*. Pergamon, 1963.

Kazmier, L. J. *Principles of Management*. McGraw-Hill, 1964.

Middleton, M. *Group Practice in Design*. Architectural Press, 1967.

Mumford, L. *Technics and Civilization*. Harbinger Paperback. Harcourt, Brace & World, 1934.

Sorensen, C. E. *My Forty Years with Ford*. Collier, 1962.

21.111 Education I

Two strands: (a) Fundamental theories of education. (b) A social history of education from the nineteenth century.

The theory of education will be concerned with questions relating to the fundamental purposes of education with implications of certain distinctive and influential ideas; the development of these concepts will be traced by reference to the contributions of certain outstanding educational thinkers from Plato to the twentieth century. These ideas will be related to the function of education in an age of crisis. Topics covered will include classical idealism and Christian thought—Renaissance humanism—sense realism and the ideal of universal education—the disciplinary view of education—the rise of naturalism—the psychological trend—the scientific emphasis—contemporary theories of education (conservative theories, supernaturalist theories, progressive theories, education and the planned society, the ideal of individual development).

The social history of education from the nineteenth century to the present day will be centred on the development of education in Great Britain and the significance of this for the growth of educational ideas and systems in Australia and America.

TEXTBOOKS

- Armitage, W. H. G. *400 Years of English Education*. Cambridge U.P., 1964.
- Austin, A. G. *Australian Education, 1788-1900*. Pitman, 1961.
- Castle, E. G. *Ancient Education and Today*. Pelican, A511.
- Curtis, S. J. and Boultonwood, M. E. A. *A Short History of Educational Ideas*. U.T.P., 1961.
- Jarman, T. L. *Landmarks in the History of Education*. Murray, 1963.
- Lester-Smith, W. O. *Education*. Pelican, A380.
- O'Connor, D. J. *An Introduction to the Philosophy of Education*. Routledge & Kegan Paul, 1966.

21.112 Education II

Two strands: (a) Theories of the curriculum and curriculum development. (b) The sociology of education.

Theories of the curriculum will follow on from the fundamental theories of education discussed in Education I. The elements of this section of the course will include theories of the curriculum, the approach to curriculum construction, criteria for subject-matter selection, patterns of curriculum organizations, research and the curriculum.

The sociology of education—the nature of the field—theoretical orientation (ideological theory, role theory, basic sociological models)—the school as a social system (societal function—roles of teachers—social class and teaching—the pupil population—some general problems of teachers in society)—the family (structure, parent-child relationships—parental roles and behaviours—general stimulation of the Australian home)—the peer group—cultural objects.

Sociology of Education

TEXTBOOK

- Hodgkinson, H. L. *Education, Interaction and Social Change*. Prentice-Hall, 1967.

Curriculum Theory and Development

TEXTBOOKS

Taba, H. *Curriculum Development—Theory and Practice*. Harcourt, Brace & World, 1962.

Wyndham, H. S. et al. *Report on Secondary Education in N.S.W. (The Wyndham Report)*. N.S.W. Govt. Printer, 1957.

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.

TEXTBOOKS

Anderson, D. M. *Elements of Design*. Holt, Rinehart & Winston, 1961.

de Saumarez, M. *Basic Design—The Dynamics of Visual Form*. Studio Vista, 1964.

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.

TEXTBOOKS

Rule, J. T. and Coons, S. A. *Graphics*. McGraw-Hill, 1961.

Tweeddale, J. G. *Practical Mechanical Design*. Iliffe Books, 1963.

21.801, 21.802, 21.803 Educational Practice

Undertaken in an approved institution.

21.901 Tutorial. 21.902 Seminar. 21.903 Project.**21.501G Industrial Design**

Will emphasize the main functions, skills and responsibilities of the designer for industry, and give a broad view of design in an industrial society, an æsthetic conviction and sensibility and the skills and methods required for the practice of industrial design. Parts of the subjects will be taken jointly by students of product design and communication design; other sections will provide for specialization.

Historical, social and æsthetic bases of industrial design.

Design Methodology.

Signs, Symbols and Communication.

Colour Theory.

Professional, Commercial and Industrial Practice.

Design Media.

*Environmental Studies.**

Visual Communications.†

*To be taken by product design students only.

†To be taken by communication design students only.

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. The 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**

Britt, S. H. ed. *Consumer Behavior and the Behavioral Sciences*. Wiley, 1966.

Farr, M. *Design Management*. Hodder & Stoughton, 1966.

Middleton, M. *Group Practice in Design*. Architectural Press, 1967.

Additional textbooks for PRODUCT DESIGN OPTION

Buck, C. H. *Problems of Product Development and Design*. Pergamon, 1963.

Scott, J. P. D. *The Business of Product Design*. Business Publications, 1965.

Additional textbooks for COMMUNICATION DESIGN OPTION

Cataldo, J. W. *Graphic Design and Visual Communication*. International Textbook Co., 1966.

Kagy, F. D. *Graphic Arts*. 2nd ed. Goodheart-Willcox, 1965.

McLuhan, M. *Understanding Media*. Sphere Books, 1967.

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

25.001 Geology 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.

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

Bryan, J. H., McElroy, C. T. and Rose, G. *Explanatory Notes to Accompany the Sydney Four-mile Geological Map (with map)*. 3rd ed. Bureau of Mineral Resources, Canberra, 1966.

Hurlbut, C. S., Jr. *Dana's Minerals and How to Study Them*. 3rd Science ed. Wiley, 1963.

Longwell, C. R. and Flint, R. F. *Introduction to Physical Geology*. Wiley.

Rutley, F. *Rutley's Elements of Mineralogy*. Rev. by Read, H. H. Murby, London.

Tyrrell, G. W. *Principles of Petrology, an Introduction to the Science of Rocks*. Methuen, London.

25.502 Geology II (B.Sc. (Ed.) Course)

Stratigraphy—Sedimentary processes and products. Environments of deposition. Principles of Stratigraphy. The geological history of Australia and the stratigraphy of selected geological provinces in New South Wales.

Descriptive mineralogy—Introduction to crystallography; the stereographic projection and its use in crystallography. The use of X-ray methods in mineralogy. A study of rock-forming minerals and ore minerals.

Practical Work—Crystal forms and the stereographic projection; description and recognition of common minerals in hand specimen.

Invertebrate Palaeontology—Principles of palaeontology and its relationship with the other branches of geology. Systematic description and detailed morphological study of the invertebrate phyla and their subdivisions.

Practical Work—Detailed diagnostic and morphological description of common fossils with reference to their stratigraphic distribution.

Lithology—Principles of classification of rocks; a detailed study of igneous, sedimentary and metamorphic rocks in hand specimen.

Ore bodies—Elements on the origin of ore bodies. Magmatic and sedimentary ore deposits. Non-metallic ores.

TEXTBOOKS

Stratigraphy

Dunbar, C. O. and Rodgers, J. *Principles of Stratigraphy*. Wiley, 1957.

Descriptive Mineralogy

Hurlbut, C. S. ed. *Dana's Manual of Mineralogy*. Wiley.

Phillips, F. C. *An Introduction to Crystallography*. Longmans.

Invertebrate Palaeontology

Easton, W. H. *Invertebrate Palaeontology*. Harper & Bros., 1960.

or

Moore, R. C., Lalicker, C. G. and Fischer, A. G. *Invertebrate Fossils*. McGraw-Hill, 1952.

Beerbower, J. *Search for the Past*. 2nd ed. Prentice-Hall, 1968.

SCHOOL OF BIOCHEMISTRY

41.101A Chemistry of Biologically Important Molecules

An introduction to the study of the physico-chemical properties of biological systems. The chemical properties of amino acids, peptides and proteins, carbohydrates, nucleic acids, fatty acids, sterols and porphyrins, and the biological roles of these compounds. Practical work to illustrate the lecture course.

TEXTBOOK

Karlson, P. *Introduction to Modern Biochemistry*. 3rd ed. Academic Press, 1968.

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

Herskowitz, I. H. *Basic Principles of Molecular Genetics*. Nelson, 1968.

Goldstein, A. *Biostatistics*. Macmillan, 1964.

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. Field excursions, including a vacation camp are an integral part of the course.

TEXTBOOKS

Beadle, N. C. W., Carolin, R. C. and Evans, O. D. *Handbook of the Vascular Plants of the Sydney District and Blue Mountains*. 1962.

Eames, A. J. and McDaniels, L. H. *Introduction to Plant Anatomy*, 2nd ed. McGraw-Hill, 1947.

or

Esau, K. *Anatomy of Seed Plants*. Wiley, 1960.

Billings, W. D. *Plants and the Ecosystem*. Macmillan, 1964.

43.101C Plant Physiology

Photosynthesis and selected aspects of plant metabolism. Nitrogen fixation; translocation and uptake of inorganic ions; the physiology of growth and development in plants; plant growth hormones and herbicides.

TEXTBOOK

Leopold, A. C. *Plant Growth and Development*. McGraw-Hill, 1964.

SCHOOL OF ZOOLOGY

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.

TEXTBOOK

Barnes, R. D. *Invertebrate Zoology*. 2nd ed. Saunders, 1968.

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.

TEXTBOOK

Young, J. Z. *The Life of Vertebrates*. Clarendon Press, 1958.

SCHOOL OF SOCIOLOGY

53.111 Sociology I

There will be three sections of the course:

Part A: The Scope and Content of Sociology—An introduction to the subject matter of sociology. Concepts and methods of social analysis. Theories of society.

TEXTBOOKS

Berger, P. L. *Invitation to Sociology*. Penguin, 1963.

Cotgrove, S. *The Science of Society*. Allen & Unwin, 1967.

Green, B. S. R. and Johns, E. A. *An Introduction to Sociology*. Pergamon, 1966.

Part B: Introduction to Methodology and Research Methods—An examination of the main assumptions and basic concepts of empirical sociology, and an introduction to the research methods and techniques developed by social scientists.

TEXTBOOK

Madge, J. *The Tools of Social Science*. Longmans, 1953.

Part C: The Social Structure of Contemporary Australia—Social trends since 1939, in the light of economics, demographic, cultural and political changes. The study of major institutional trends and their relation to society as a whole, with reference to comparative material wherever possible.

TEXTBOOKS

Davies, A. F. and Encels, S. eds. *Australian Society*. Cheshire, 1965.

Encel, S. *Equality and Authority: A Study of Class, Status, and Power in Australia*. Cheshire, 1969.

McFarlane, B. *Economic Policy in Australia*. Cheshire, 1968.

Mayer, H. ed. *Australian Politics*. 3rd ed. Cheshire, 1969.

Shaw, A. G. L. *The Story of Australia*. Faber, 1962.

SCHOOL OF EDUCATION**58.011 Australian Education**

Examines some important problems of Australian education. Attention will also be given to the treatment of related problems in overseas countries.

TEXTBOOKS

Cowan, R. W. T. ed. *Education for Australians*. Cheshire, 1964.

Partridge, P. H. *Society, Schools and Progress in Australia*. Pergamon, 1968.

58.012 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.

58.013 Educational Psychology

Classroom learning is taken as the central issue, various aspects of the learning process are considered while emphasis is given to certain variables influencing learning.

TEXTBOOKS

Bartoshuk, A. K. *Motivation*.

Dolinsky, R. *Human Learning*.

Horowitz, L. M. *Measurement*.

Lundin, R. W. *Personality*.

Reese, E. P. *The Analysis of Human Operant Behaviour*.

Smith, C. *Child Development*.

Suedfeld, P. *Social Processes*.

Vernon, J. ed. *Introduction to Psychology: A Self-Selection Textbook*.
W. C. Brown Company, 1966.

58.014 Education and Society*

A study of education in its various social relationships with particular reference to Australian society.

58.015 Philosophy and Theory of Education

A discussion of current educational issues with relevance to contemporary advanced societies.

TEXTBOOK

Brown, L. M. *Aims of Education*. Teachers' College, Columbia, 1969.

Method Subjects

58.021 Commerce Method*

58.022 English Method*

58.023 French Method*

58.025 German Method*

58.031 Spanish Method*

58.024 Geography/Social Studies Method*

58.026 Guidance Method*

58.027 History Method*

58.028 Library Method*

58.029 Mathematics Method*

58.030/1 Science Method (Double Teaching Subject)*

58.030/2 Science Method (Single Teaching Subject)*

58.04 Selected Topics

Lectures and exercises in a number of fields including the following:—
(i) *Physical Education*: Achievement and maintenance of personal physical fitness at the individual level. Physical education as an aspect of the school programme and the part which may be played by teachers in the pro-

*A list of books required is available from the Head, School of Education.

gramme. (ii) *Health and Health Education*: Designed to develop in students (a) self-understanding and self-knowledge in respect to physical and mental health; and (b) knowledge and understanding of school pupils and community health problems and resources. (iii) *Communication Skills*: Development of knowledge and skill in relation to the effective use of the English language. General problems of communication. (iv) *Elective Subject*: The object of this section of the course is to give to students the opportunity of devoting some time and thought to an aspect of education of particular interest to them: research, Australian literature, philosophy, history, etc.

58.041 Communication Skills*

58.042 Elective Subject

58.043 Health and Health Education*

58.044 Physical Education

58.050 Supervised Teaching Practice

Eight weeks' full-time teaching practice in term time.

SCHOOL OF HISTORY AND PHILOSOPHY OF SCIENCE

62.001 History and Philosophy of Science I

The development, from ancient times to the Age of Enlightenment and the central traditions of the scientific movement. The evolution of theories of the system of the planets.

Detailed presentation of the empirical material underlying planetary theories. The philosophical background and cosmological implications and overtones of these matters, and the social relationships of this part of science.

The chief *dramatis personæ* will be Ptolemy, Copernicus, Brahe, Kepler, Galileo, Newton, Locke, and Descartes.

62.002 History and Philosophy of Science II

The reorientations in geology and biology of the 18th and 19th centuries—reorientations that culminated in the Darwinian revolution. Philosophy of science, the relations between science and other social agencies, and the internal organization of science.

SCHOOL OF SOCIAL WORK

†63.122 Social Work II (Honours)

Seminar discussions to gain an understanding of the historical development of the social work profession within the social welfare institution of three western industrial societies—the United Kingdom, the United States, and Australia.

*A list of the required books is available from the Head, School of Education.

†Offered for the last time in 1970.

***63.211 Public Health and Social Medicine**

Consists of two equal parts:

Part A: The study of physical health and disease with particular attention to diseases of social significance; principles of medicine; psychosomatic disorders and the role of the social worker in treatment.

Part B: Various types of maladjustment, including behaviour problems, psychosis, neurosis, epilepsy and mental deficiency. Mental disorders and their causes, genetic, organic and experimental. Positive mental health. Role of the family, with its changing pattern and structure; the problems involved in maintaining the stability and prestige of the family as a social unit. Other stresses such as economic hardship.

TEXTBOOK*Part B*

Mersky, H. and Tonge, L. *Psychiatric Illness*. Bailliere, Tindall & Cox, 1965.

63.411 Introduction to Social Welfare

A general orientation to the scope and nature of social problems and to social welfare activities in western industrial, and other societies—the social welfare problems, policies and provisions that are characteristic of societies at different stages of modernization. Students are introduced to the social welfare literature and each student begins the compilation of a handbook on social welfare which is added to throughout the length of the course.

TEXTBOOKS

U.N. Department of Economic and Social Affairs. *The Development of National Social Service Programmes*. United Nations, 1959.

Wickenden, E. *Social Welfare in a Changing World*. U.S. Govt. Printing Office, Washington D.C., 1965.

Wilensky, H. L. and Lebeaux, Charles N. *Industrial Society and Social Welfare*. Free Press, New York, 1965. Paperback.

63.412 Social Philosophy and Policy

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.

*Offered for the last time in 1970.

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.

63.421 Social Welfare Systems I

Through observation of selected Sydney agencies, and classroom lectures and discussions, students become familiar with social welfare systems that provide services for people at each of the major age stages—infancy, childhood, adolescence, adulthood, and ageing. An agency is viewed from the point of view of its clients, objectives, resources (financial and manpower), the services, and alternative strategies of assistance. Special emphasis is placed on a system as a whole rather than on the role of social workers in the system. This programme extends from mid-First Term to mid-Third Term, occupying 40 working days.

TEXTBOOKS

- Directory of Social Service Agencies*. Council of Social Service of New South Wales, Sydney, 1967.
- Social Services Act 1947-1968*.
- Repatriation Act 1920-1965*.
- National Health Act 1953-1965*.
- Child Welfare Act 1939-1966*.

63.422 Social Welfare Systems IICharacteristics and Size of the Social Welfare System and Sub-System:*

Social problems and the defining characteristics of social welfare systems; the size of the social welfare enterprise in Australia and other modern states; its distribution among social problem areas; the major historical determinants of its growth.

Organizational Analysis of Social Welfare Systems:

The relevance of organization theory for understanding social welfare systems. Four concepts of organizational level—societal, community, agency, and professional. Dimensions of the system—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.

(a) Defined by a common social goal—income security, health, housing, education, employment, recreation, family well-being. Each sub-system is studied in terms of its major organizational dimensions. Its efficiency and effectiveness.

* Applicable only from 1971.

63.423 Social Welfare Systems IIISocial 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:

(b) 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.

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

Brennan, T. and Parker, N. A. *Foundations of Social Casework*. Novak, Sydney, 1966.

Pikunas, J. *Human Development: A Science of Growth*. McGraw-Hill, New York, 1969.

* Applicable only from 1972.

***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.

63.611 Social Work Practice I

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, employment agencies, and professional associations. The size, characteristics, location, objectives, and values of the profession.

An introduction to each of the main problem-solving methods of professional social work practice—social casework, social group work, community work, administration, and research. The historical and present level of development of each method—the problems of social functioning it is concerned with, its knowledge-base, values, and principles of practice.

The organization of practice—by methods, by fields. Current challenges and growing points of the profession.

Modern approaches to the teaching of techniques relating to personal and group interaction are used—tape recordings, video-tapes, role playing.

TEXTBOOKS

Biestek, F. P. *The Casework Relationship*. Unwin University Books (1957), 1967.

Broader Horizons: An Analysis of the Scope of Social Work in Australia. Australian Association of Social Workers, Melbourne, 1967.

Hicks, H. G. *The Management of Organizations*. McGraw-Hill, 1967.

Konopka, G. *Social Group Work: A Helping Process*. Prentice-Hall, 1963.

Perlman, H. H. *Social Casework: A Problem Solving Process*. Chicago U.P., 1957.

Polansky, N. A. ed. *Social Work Research*. Chicago U.P. (1960), 1966.

Ross, M. G. with Lappin, B. W. *Community Organization: Theory, Principles and Practice*. Harper and Row, 1967.

63.612A Social Work Practice IIA* and**63.112 Social Work II**

Students develop their learning in the application of professionally relevant knowledge, values and skills, in the solution of problems of social functioning. Depending upon the nature of the problem and its possible solutions, the professional roles taught are those of the caseworker, the group-worker, the community worker, the administrator, and the researcher. At this stage, however, special attention is given to interpersonal helping, i.e. to social casework and social group work.

* Applicable only from 1971.

TEXTBOOKS

Hollis, F. *Casework: A Psychosocial Therapy*. Random House, 1964.

Vinter, R. D. ed. *Readings in Group Work Practice*. University of Michigan Campus Publishers, 1967.

63.612B Social Work Practice IIB* and**63.312 Social Work Practice II**

Under supervision of a field instructor, usually in a social work agency, a student learns to apply the principles of professional practice in an actual practice setting. This programme of learning occupies a minimum of 40 working days, normally extending from April to September.

63.613A Social Work Practice IIIA† and**63.113 Social Work III**

For most of the year, students concentrate upon learning initial professional competence in *one* of the following professional methods—social casework, social group work, community work, or administration. (The last two can be chosen only under certain conditions.)

Towards the end of the year, all students combine in a series of professional competence seminars. These examine the responsibilities of the individual social worker and the social work profession in present-day and future Australian society. These seminars occur during the latter stages of students' final field work placement and in two weeks in January.

63.613B Social Work Practice IIIB† and**63.313 Social Work Practice III**

Under supervision of a field instructor, usually in a social work agency, a student learns to apply the principles of the professional practice method of his choice, in an actual practice setting. This consists of two field work placements—one occupying a minimum of 40 working days, normally extending from April to September; the other a block placement of 40 working days extending from the last week in October to just before Christmas.

63.614 Social Work (Honours)† and**63.123 Social Work III (Honours)**

A seminar series dealing with (a) problems of research design and implementation in social work; and (b) a comparative study of the issues facing the social work profession in the U.S.A., Britain, and Australia. Throughout the year, students design and carry out a research assignment under staff supervision.

* Applicable only from 1971.

† Applicable only from 1972.