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The University of New South Wales

# Medicine

1989 Faculty Handbook





# The University of New South Wales

# Medicine



# 1989 Faculty Handbook

### ISSN 0312-6137

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Subjects, courses and any arrangements for courses including staff allocated, as stated in the Calendar or any Handbook or any other publication, announcement or advice of the University, are an expression of intent only and are not to be taken as a firm offer or undertaking. The University reserves the right to discontinue or vary such subjects, courses, arrangements or staff allocations at any time without notice.

Information In this Handbook has been brought up to date as at 12 September 1988, but may be amended without notice by the University Council

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### **Calendar of Dates**

	1989	1990
Session 1 (67 teaching	g days)	
•	27 February to 23 March	26 February to 12 April
Recess	24 March to 2 April	13 April to 22 April
	3 April to 8 June	23 April to 7 June
Study Recess	9 June to 14 June	8 June to 13 June
Midyear Recess	1 July to 23 July	30 June to 22 July
Examinations	15 June to 30 June	14 June to 29 June
Session 2 (67 teaching	g days)	
	24 July to 22 September	23 July to 21 September
Recess	23 September to 2 October	22 September to 1 October
	3 October to 1 November	2 October to 31 October
Study Recess	2 November to 7 November	1 November to 6 November
Examinations	8 November to 24 November	7 November to 23 November
Vacation Weeks	27 March to 2 April	16 April to 22 April
Common to Australian	3 July to 9 July	2 July to 8 July
Universities	25 September to 1 October	24 September to 30 Septembe

### **Important Dates for 1989**

Jan	uary	
М	2	New year's Day - Public Holiday
F	6	Last day for acceptance of applications by the Admissions Section for transfer to another undergraduate course within the University.
W	18	Last day for applications for review of results of assessment.
Th	26	Australia Day - Public Holiday
T	31	Enrolment period begins for new undergraduate students and undergraduate students repeating first year.
Feb	ruary	
M	6	Re-enrolment period begins for second and later year undergraduate and graduate students enrolled in formal courses.
F	24	Students should consult the 1989 Re-enrolment Procedures booklet for details.  Last day for students to discontinue 1989 enrolment.
М	27	Last day for acceptance of enrolment by new and re-enrolling students. Late fee payable thereafter if enrolment approved. Session 1 begins - all courses except Medicine III, IV and V.
Mar	ch	
F	10	Last day applications are accepted from students who enrol in additional Session 1 or whole year subjects.
F	24	Good Friday - Public Holiday
		Mid-Session Recess begins
М	27	Easter Monday - Public Holiday

April	l	
Su	2	Mid-Session Recess ends
F	21	Last day for students to discontinue without failure subjects which extend over Session 1 only
T	25	Anzac Day - Public Holiday
May	,	
T	2	Confirmation of Enrolment forms despatched to all students
T	9	Publication of Provisional Timetable for June examinations
Th	11	Last day for acceptance of corrected Confirmation of Enrolment forms
W	17	Last day for students to advise of examination clashes
T	30	Publication of timetable for June examinations
June	9	
Th	8	Session 1 ends
F	9-14	Study Recess
М	12	Queen's Birthday - Public Holiday
Th	15	Examinations begin
F	30	Examinations end
July		
M	10	Assessment results mailed to students
T	11	Assessment results displayed on University noticeboards
Su	23	Midyear Recess ends
M	24	Session 2 begins
М	31	Last day for applications for review of July assessment results
Aug	ust	
F	4	Last day applications are accepted from students to enrol in additional Session 2 subjects
		Last day for students to discontinue without failure subjects which extend over the whole academic year
Sep	tember	
•		Last day for students to discontinue without failure subjects which extend over Session 2 only
F	8	Last day for students to discortinue will lock failure subjects without extend over desired 2 or ny
*	8 19	Confirmation of Enrolment forms sent to all students
F		•
F T	19	Confirmation of Enrolment forms sent to all students
F T S	19 23	Confirmation of Enrolment forms sent to all students Mid-Session Recess begins
F T S Th	19 23 28	Confirmation of Enrolment forms sent to all students  Mid-Session Recess begins  Last day for acceptance of corrected Confirmation of Enrolment forms
F T S Th	19 23 28 29	Confirmation of Enrolment forms sent to all students  Mid-Session Recess begins  Last day for acceptance of corrected Confirmation of Enrolment forms
F T S Th F	19 23 28 29 ober	Confirmation of Enrolment forms sent to all students  Mid-Session Recess begins  Last day for acceptance of corrected Confirmation of Enrolment forms  Closing date for applications to the Universities and Colleges Admission Centre
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F T S Th F Octo	19 23 28 29 ober 2	Confirmation of Enrolment forms sent to all students Mid-Session Recess begins Last day for acceptance of corrected Confirmation of Enrolment forms Closing date for applications to the Universities and Colleges Admission Centre  Mid-Session Recess ends Eight Hour Day - Public Holiday
F T S Th F Octo	19 23 28 29 ober 2	Confirmation of Enrolment forms sent to all students Mid-Session Recess begins Last day for acceptance of corrected Confirmation of Enrolment forms Closing date for applications to the Universities and Colleges Admission Centre  Mid-Session Recess ends Eight Hour Day - Public Holiday Publication of provisional examination timetable for November examinations
F T S Th F Octo M T W T	19 23 28 29 ober 2 3 11	Confirmation of Enrolment forms sent to all students Mid-Session Recess begins Last day for acceptance of corrected Confirmation of Enrolment forms Closing date for applications to the Universities and Colleges Admission Centre  Mid-Session Recess ends Eight Hour Day - Public Holiday Publication of provisional examination timetable for November examinations Last day for students to advise of examination timetable clashes
F T S Th F Octo M T W T	19 23 28 29 ober 2 3 11 24	Confirmation of Enrolment forms sent to all students Mid-Session Recess begins Last day for acceptance of corrected Confirmation of Enrolment forms Closing date for applications to the Universities and Colleges Admission Centre  Mid-Session Recess ends Eight Hour Day - Public Holiday Publication of provisional examination timetable for November examinations Last day for students to advise of examination timetable clashes Publication of timetable for November examinations  Session 2 ends
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F T S Th F Octo	19 23 28 29 ober 2 3 11 24 rember 1 2-7	Confirmation of Enrolment forms sent to all students Mid-Session Recess begins Last day for acceptance of corrected Confirmation of Enrolment forms Closing date for applications to the Universities and Colleges Admission Centre  Mid-Session Recess ends Eight Hour Day - Public Holiday Publication of provisional examination timetable for November examinations Last day for students to advise of examination timetable clashes Publication of timetable for November examinations  Session 2 ends Study Recess
F T S Th F Octo M T W T Nov W Th W F	19 23 28 29 ober 2 3 11 24 rember 1 2-7 8	Confirmation of Enrolment forms sent to all students Mid-Session Recess begins Last day for acceptance of corrected Confirmation of Enrolment forms Closing date for applications to the Universities and Colleges Admission Centre  Mid-Session Recess ends Eight Hour Day - Public Holiday Publication of provisional examination timetable for November examinations Last day for students to advise of examination timetable clashes Publication of timetable for November examinations  Session 2 ends Study Recess Examinations begin Examinations end
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### Staff

Comprises Schools of Anatomy, Community Medicine, Medical Education, Medicine, Obstetrics and Gynaecology, Paediatrics, Pathology, Physiology and Pharmacology, Psychiatry, and Surgery.

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### Chairman

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§ Conjoint appointment with the Faculty of Engineering

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Professor of Anatomy and Head of School Frederick William Dickes Rost, BSc(Med) MB BS Syd., PhD DCP Lond., DipRMS

### Associate Professors

Istvan Joseph Törk, MD Bud. David James Tracey, BSc Syd., PhD Stan.

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Darrel Ananda Fernando, BVSc *Ceyl.*, PhD *Lond*.

Brian Warwick Freeman, BSc *Syd.*, PhD *N.S.W.*Saw Kin Loo, MB BS *Malaya*, PhD *Sing*.

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Damayanthi Hemamali Atapattu, BSc PhD Ceyl., MSc Ohio

#### Tutors

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Vacant

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\*Conjoint appointment with Prince Henry and Prince of Wales Hospitals

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\*Marcus Rex Vowels, MB BS Syd., FRACP

\*Leslie White, MB BS Syd., FRACP

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\*John William Tapsall, MB BS Qld., FRCPA \*Peter Charles Taylor, MB BS N.S.W., FRCPA \*Jimmy Leng Chai Yong, BSc(Med) MB BS PhD N.S.W., FRCPA

### Lecturer

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Honorary Associate Gordon Thomson Archer, MB BS DCP

### Carcinogenesis Research Unit

**Director and Associate Professor** Garry John Smith, BSc Syd., PhD W.Aust

#Conjoint appointment with Floyal Hospital for Women \*Conjoint appointment with Prince Henry and Prince of Wales Hospitals \*\*Conjoint appointment with St Vincents Hospital #Conjoint appointment with St George Hospital OConjoint appointment with Childrens Leukaemia and Cancer Research Unit

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Professor and Head of School

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Professors of Physiology

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#### Professor

‡David Brunton Gibb, BSc(Med) MB BS Syd., DObstRCOG Lond., FFARCS, FRCS, FFARACS

#### **Associate Professors**

\*\*Richard Osborne Day, MB BS Syd., MD N.S.W., FRACP Robert Alastair Beveridge Holland, MD BS Syd., FRACP Mark Joseph Rowe, BPharm MSc Syd., PhD N.S.W.

#### Senior Lecturers

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John Joseph Carmody, MB BS Qld.
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Gary George Graham, MSc PhD Syd.
Bruce Stanley Nail, BSc W.Aust, DPhil Oxf.
Ian Richard Neering, BSc PhD N.S.W., MSc Syd.
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Erica Kathleen Potter, BSc Syd., PhD N.S.W.

#### Lecturers

Gillian Phyllis Courtice, BSc PhD Syd.
\*Dennis Robert Kerr, MB BS N.S.W., FFARACS, DipABA

#### **Senior Tutors**

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#### **Tutors**

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### **Professional Officers**

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**Honorary Visiting Fellow** 

Robert Louis Meckler, BS PhD Mich.

### **Honorary Associate**

Mervyn John Cross, MB BS Syd., FRACS Bernard Joel Lake, MB BS Syd., MRCP, MRCPEd

### School of Psychiatry

#### Professor and Head of School

Gordon Barraclough Parker, MB BS Syd., MD PhD N.S.W., FRANZCP

#### **Professors**

\*John Ewart Cawte, MD BS Adel. DPM Melb., PhD N.S.W., FRANZCP, FRCPsych, FAPA \*Brent Geoffrey Herbert Waters, MB BS Monash, FRANZCP, FRCPS Can.

#### Associate Professors

John Gavin Andrews, ChB MD *Otago*, DPM *Melb.*, FRANZCP, MRCPsych Nathaniel McConaghy, MB BS *Qld.*, MD BSc DPM *Melb.*, FRANZCP

#### **Senior Lecturers**

\*Henry Brodaty, MB BS Syd., FRACP, FRANZCP
\*\*Neil Steven Buhrich, MB BS Syd., MD N.S.W., DPM Lond.,
MRCPsych
‡Karl Max Koller, MB BS Syd., MD N.S.W., FRANZCP,
FRCPsych
\*Florence Levy, MB BS Melb., MPh Yale, MD N.S.W.,
MRANZACP
\*Richard John Perkins, MB BS Lond., DPM(RCP&RCS),
MRCPsych
Derrick Michael Silove, MB ChB CapeT., FRANZCP
\*Noel Maurice Wilton, MB BS Syd., FRACP, FRANZCP

#### Lecturers

\*Brayanne Ethel Waldie Barnett, MB ChB Aberd., FRANZP Philip Manley Boyce, MB BS Lond., DipPsychother Adel., FRANZCP, MRCS, LRCP \*Charles Post Doutney, MB BS, FRANZCP \*James Graham Durham, MB BS Adel., DPM Melb., FRANZCP Philip Bowden Mitchell, MB BS Syd., MRCPSych, FRANZCP \*Carolyn Quadrio, MB BS DPM, FRANZCP \*Perminder Singh Sachdev, MB BS, MD, MRANCP

#### Tutor

Renate Wagner, PhD Austria

### **Honorary Visiting Fellows**

Alexander Blaszczynski, BA *N.S.W.*, MA DipPsych *Syd.*, MAPS Dusan Hadzi-Pavlovic, BSc MPsychol *N.S.W.* Brian Oldenberg, BSc MPsychol *N.S.W.* 

<sup>\*</sup>Conjoint appointment with Prince Henry and Prince of Wales Hospitals

<sup>\*\*</sup>Conjoint appointment with St Vincent's Hospital

‡Conjoint appointment with St George Hospital

### **School of Surgery**

Chair

Professor R.S.A. Lord

### The Prince Henry and The Prince of Wales Hospitals

Professor of Surgery and Head of Department Gerald Francis Murnaghan, MD ChM *Edin.*, FRCS, FRCSEd, FRACS

Associate Professor of Opthalmology Frederick Cossom Hollows, MD ChB N.Z., DO Lond., FRCS, FACO

### Associate Professors

John MacKenzie Ham, MD BS Syd., FRACS, FACS \*Kevin Mead, MB BS Syd., DMRT Lond., FRCR, FRACR

### Senior Lecturers

Graham Leonard Newstead, MB BS Syd., FRCS, FRACS, FACS
\*Philip Gregory Truskett, MB BS Syd., FRACS
Bryan Wheaton Yeo, MB BS Syd., FRCS, FRACS

Senior Project Scientist Margaret Anne Rose, BVSc Syd., PhD N.S.W.

### St George Hospital

Professor of Surgery Vacant

Associate Professor and Head of Department David Robert Hunt, MB BS Syd., FRACS

### **Associate Professor**

Christopher John Magarey, BSc(Med) MB MS Syd., FRCS, FRACS

### Lecturer

##William Monaghan, MB BS DipLabRelations&Law Syd., FRACGP

### St Vincent's Hospital

Professor and Head of Department Reginald Sidney Albert Lord, MD BS Syd., FRCS, FRACS

### **Senior Lecturers**

\*\*Ronald Ernest Benson, MB BS, FRACP, FFARACS
\*\*Derek Oliver Berg, MB BS Syd., FRCS, FRACS, MRACR
David Alexander Hill, MB BS Syd., MS N.S.W., FRCS,
FRACS, FRCSEd

#### Lecturers

Anthony Robert Graham, MB BS Syd., FRCS, FRACS \*\*Richard Priestly Lee, MB BS, FFARACS

\*\*Graeme William Morgan, BPharm, MB BS Syd., MRCP, PRACP

### Department of Anaesthetics and Resuscitation

### Head of Department Vacant

#### Professor

†David Brunton Gibb, BSc(Med) MB BS Syd., DObetRCOG Lond., FFARCS, FRCS, FFARACS

#### **Associate Professors**

\*\*Gordon Alfred Harrison, MB BS Syd., MHPEd N.S.W., FFARACS

\*Thomas Andrew Gabriel Torda, MB BS Syd., MD N.S.W., DA Lond.. DipABA. FFARCS, FFARACS

### Senior Lecturers

\*George Madgwik Davidson, MB BS DA Syd., FFARACS
\*\*Brian Francis Horan, MB BS Syd., FFARCS, FFARACS

#### Lecturer

±±Stephen Paul Gatt, MD Malta, FFARCS, MRCS, LRCP

\*Conjoint appointment with Prince Henry and Prince of Wales Hospitals
\*\*Conjoint appointment with St Vincent's Hospital
†\*Conjoint appointment with St George Hospital
†\*Conjoint appointment with Royal Hospital for Women

### Department of Traumatic and Orthopaedic Surgery

Hugh Smith Professor of Traumatic and Orthopaedic Surgery and Head of Department Ronald Lawrie Huckstep, CMG, MA MD Camb., FRCSEd, FRCS, FRACS, FTS

### **Biomedical Mass Spectrometry Unit**

#### Manager

Alan Malcolm Duffield, BSc PhD W.Aust., FRACI

### Professional Officer David John Bourne

### NH&MRC Special Unit in AIDS Epidemiology and Clinical Research

### Director

David Albert Cooper, BSc(Med) MB BS Syd., MD N.S.W., FRCPA, FRACP

### Research Scientist

Bruce MacGregor Whyte, MB BS Syd., DRCOG, DRACOG

**Advisory Committee** 

Professor W.E. Glover (Chair)
Professor B. Armstrong
Dr D.A. Cooper
Professor J.M. Dwyer
Dr J. Gold
Professor R. Heller
Professor S.R. Leader
Professor J. Matthews
Professor R. Penny
Dr M. Ross

Professor W.E. Glover Professor J.W. Lance Professor D.I. McCloskey Associate Professor M.J. Rowe Associate Professor D.J. Tracey

### Centre for Cardiovascular Research

Director

Dr B.M. Whyte

Professor J.B. Hickie

**Advisory Committee** 

Professor J.B. Hickie Professor W.E. Glover Professor D.I. McCloskey

Associate Professor D.E.L. Wilcken

# Centre for Continuing Medical Education

Honorary Director George Dimitri Repin, MB BS DPH Syd., DIH(RCP&S), FRACMA, FAIM

Executive Secretary
Charles Paul Moess, DJur E.L., BA Syd., MHPEd N.S.W.

Advisory Committee
Professor I.W. Webster (Chair)
Associate Professor J.C. Biggs
Dr D.G. Garlick
Professor W.E. Glover
Dr J. Hedberg
Mr C.P. Moess
Dr G.D. Repin

Associate Professor D. Wakefield Mr P.W. Cook

### **Centre for Experimental Neurology**

Director Professor J.W. Lance

Advisory Committee Professor D.J. Burke

# Illawarra Centre for Community Medicine

Director

Dr P. Mowbray

Dr H.W. Vickers

Advisory Committee
Professor I.W. Webster
Dr P.J. Brennan
Professor D. Calvert
Associate Professor C. Ewan
Professor W.E. Glover
Dr L. Goldman
Mr G. Sullivan

### **Centre for Immunology**

Director

Professor R. Penny

Advisory Committee
Professor W.E. Glover (Chair)
Professor A. Wicken
Professor R. Penny
Professor G.N. Cooper

### Centre for Public Health

**Director** Dr G.K. Rawson

Advisory Committee
Professor I.W. Webster (Chair)
Professor K.R. Cox
Professor W.E. Glover
Professor J.S. Lawson
Dr G.K. Rawson
Professor A. Vinson

### **National Drug and Alcohol Research** Centre

Director

Brian Bernard Heather, BA Lond., MSc Leeds, PhD Dundee

**Deputy Director** 

Wayne Denis Hall, BSc PhD N.S.W.

Senior Lecturer

Richard Phillip Mattick, BSc N.S.W.

Janet Darlene Greeley, BSc(Hons) Newfoundland, MA PhD **Toronto** 

Honorary Visiting Fellows

Gregory Bradford Chesher, MSc PhD Svd.

Emeritus Professor John Augustus Keats, MBC Adel., BA

Melb., PhD Prince

**Advisory Committee** 

Professor I.W. Webster (Chair)

Professor W.E. Glover

Mr R. Baldwin

Dr J. Donnovan

Professor C. Harper

Professor M. King

Professor S. Lovibond

Professor T. Vinson

Dr N.S. Waddy

### Children's Leukaemia & Cancer Research Unit - Prince of Wales Children's Hospital

Director

Darcy William O'Gorman Hughes, MB BS Syd., MD N.S.W., FRACP

Principal Research Fellow

Bernard William Stewart, MSc N.S.W., PhD Lond., ARACI

**Advisory Committee** 

Professor J. Beveridge

Professor A.P. Gilbert

Professor W.E. Glover

Dr B.A. Grunseit

Associate Professor D.W. O'Gorman Hughes

Mr D Reece

Associate Professor B.W. Stewart

Dr M.R. Vowels

### Skin and Cancer Foundation - St Vincent's Hospital

**Chief Executive Officer** Mr L.M. Lewis, AASA, CPA

### Garvan Institute of Medical Research - St Vincent's Hospital

**Executive Director** 

Leslie Lazarus, MB BS Syd., FRACP, FRCPA, FAACB

**Deputy Director** 

John Shine, BSc PhD A.N.U.

Principal Research Fellows

Donald John Chisholm, MB BS Syd., FRACP Edward William Kraegen, BSc PhD N.S.W., MACPSM

Robert Lyndsay Sutherland, MAgSc Cant., PhD A.N.U.

Senior Research Fellows

John Allan Eisman, BSc(Med) Syd., MB BS Syd., PhD

Melb., FRACP

George Albert Smythe, BSc PhD N.S.W.

Margaret Catherine Stuart, MSc Syd., PhD N.S.W.

### **Electron Microscope Unit**

Electron Microscopist

Melvyn Roderick Dickson, BSc N.Z., PhD A.N.U., DipRMS

Senior Technical Officer

Serge Kouprach

### **Medical Illustration Unit**

Officer-in-Charge

Kenneth Walter Deason, AIMBI, ARPS, AIAP

Senior Technical Officer

Michael John Oakey, ABIPP, AIMBI

### **Clinical Teaching Administration**

### The Prince Henry and Prince of Wales Hospitals

Warden of Clinical Studies
Maxwell Elmore Cochrane Thorpe, MB BS Syd., MD N.S.W.,
FRACP

Administrative Assistant Margaret Mary Coyle

### St George Hospital

Honorary Warden and Student Adviser Benedetto Haneman, MB BS Syd., FRACP

Administrative Assistant Dorina Verschoof

### St Vincent's Hospital

Administrative Assistant
Monica Mary Adams, DipPhysTher Syd.

### **Sutherland Hospital**

Clinical Supervisor Louis Eugene McGuigan, MD, FRACP

# Message to New Students from the Dean

It is a pleasure to welcome you to the University of New South Wales and to congratulate you on your entry to the medical course. In these days of student quotas competition for entry is intense and you have all demonstrated considerable academic achievement. You are well equipped to commence your undergraduate studies and I sincerely hope that your years as students in the Faculty will be happy, interesting and productive.

The Faculty of Medicine in this University was founded in 1959 and has developed into a strong and vigorous academic community. It offers opportunities for you to develop knowledge, skills and experience in a wide variety of fields ranging from the personal problems of patients to matters which are of a most complex technological and scientific nature. Over the past 28 years the medical undergraduate curriculum has evolved in accordance with changing concepts in medicine and the changing needs and expectations of the community. The curriculum is under constant review and it is probable that changes will occur during your undergraduate years. Indeed, 1988 saw the introduction of the first year of a new six year undergraduate curriculum. The new course came after considerable review of the former five year curriculum and it is intended to give students more time to reflect upon their studies in the pre-clinical years and an opportunity to gain increased clinical exposure during the clinical years of the course.

One of the objectives of the medical course, as listed in this Handbook, is to develop in our undergraduate students attitudes and skills as well as the imparting of knowledge. These are necessary for you to function adequately as medical graduates and to fulfil your responsibilities to the changing needs of society. We hope to inculcate a critical but flexible approach to scientific thought so that you will be able to draw on information derived from a variety of sources, analyse it critically and apply your synthesis to the decision-making process. We are also concerned to stress your ethical responsibilities to the patient, to society and to the profession.

The Faculty assumes that students entering the course are able and willing to direct and accept responsibility for their own learning. It is, therefore, essential that you develop, as soon as possible, an appropriate study pattern. There is a great deal of factual knowledge to be acquired in the basic scientific disciplines which will form the infra-structure upon which you build your medical skills in the later years of the course. Knowledge will be presented to you partly in lectures, tutorials and demonstrations. There is also a major requirement for private study. Although the course will place considerable demands on your time and energy I am sure you will appreciate the need to develop interests outside your studies and, where possible, participate in student affairs within the Faculty and the University. Clearly there is a great deal more to a University education than attending lectures and passing examinations. It is, therefore, desirable that you should participate in the corporate life of the University if you are to enjoy the full and diverse experience that distinguishes University graduates from those of other tertiary institutions. Students should also aim to read as widely as possible outside the confines of the medical curriculum. With this in mind, Faculty has prepared a Reading List and you are encouraged to read from this list during your years with the Faculty. The List is available from the Faculty Office.

This Handbook is available to all students in the medicine course and the combined Science and Medicine course at the time of enrolment and it is important that you read the contents of this and succeeding editions and to retain it for reference. Information about course content, assessment procedures and rules of progression for each year of the course are published in the Handbook and will not be made available to students in any other form. You are advised also to consult frequently the noticeboards in the various Schools and in the foyer of the Wallace Wurth Building, as well as the official noticeboards of the University.

Finally, may I wish you every success in the course and hope that you will enjoy your time with us. If you have any difficulties or any unanswered questions I hope that you will contact the Faculty Administration Office and other members of the Faculty for assistance.

W. E. Glover Dean Faculty of Medicine

### Faculty of Medicine

# **Calendar of Dates**

Session 1	27 February to 23 March 24 March to 2 April 3 April to 8 June	1989 First and Second Year (and Third Year in 1990)
Midyear Recess	1 July to 23 July	
Examinations: 15 June to 30 June		
Session 2	24 July to 22 September	
Recess	23 September to 2 October 3 October to 1 November	
Examinations: 8 November to 24 November		
Term 1 (10 weeks)	16 January to 26 March	Third Year
Term 2 (9 weeks)	3 April to 7 May	(1989 only) and Fourth Year
May Recess	8 May to 14 May	
	15 May to 11 June	
Term 3 (9 weeks)	19 June to 20 August	
August Recess	21 August to 27 August	
Term 4 (10 weeks)	28 August to 5 November	
Term 1 (8 weeks)	16 January to 12 March	Fifth Year
Term 2 (8 weeks)	20 March to 14 May	
Term 3 (8 weeks)	22 May to 16 July	
Term 4 (8 weeks)	24 July to 17 September	
Term 5 (8 weeks)	25 September to 19 November	

1990 First, Second and Third Year	Session 1	26 February to 12 April 13 April to 22 April 23 April to 7 June 30 June to 22 July
	Session 2	23 July to 21 September 22 September to 1 October 2 October to 31 November
	Examinations: 7 November to 23 November	
Fourth Year	Term 1 (10 weeks) Term 2 (9 weeks) May Recess Term 3 (9 weeks) August Recess	15 January to 25 March 2 April to 3 June 4 June to 10 June 11 June to 12 August 13 August to 19 August
	Term 4 (10 weeks)	20 August to 28 October
Fifth Year	Term 1 (8 weeks)  Term 2 (8 weeks)  Term 3 (8 weeks)  Term 4 (8 weeks)  Term 5 (8 weeks)	15 January to 11 March 22 March to 13 May 21 May to 15 July 23 July to 16 September 24 September to 18 November

# **Faculty Information**

### Some People Who Can Help You

If you require advice about enrolment, degree requirements, progression within courses or any other general Faculty matters contact one of the following people, located in the Faculty of Medicine Administration Building B28:

Gordon Rees, Administrative Officer, Faculty of Medicine. Telephone 697 2459.

Janet McLean, Administrative Assistant, Faculty of Medicine. Telephone 697 2457.

Moya Pedemont, Administrative Assistant, Faculty of Medicine. Telephone 697 2452.

Peter Cook, Executive Officer, Faculty of Medicine. Telephone 697 2450.

### The Faculty

The Faculty of Medicine was established when the New South Wales Government accepted a proposal of the Murray Committee of Inquiry Into the Future of Australian Universities and announced in December, 1957, that a second medical school inNew South Wales would be established within the re-named University of New South Wales.

The Faculty's first students enrolled in 1961 and 25 of these graduated from the six year course in 1966. A five year

undergraduate curriculum was introduced in 1974. Although this has been a highly successful curriculum to date, a number of changes in both the hospital and health systems indicated the need for the Faculty to extend the course to a six year curriculum in 1988.

The Faculty of Medicine consists of all members of the academic staff together with nominees from professional organizations, teaching hospitals and the student body. The Chairman is elected biennially from the Professors and Associate Professors of the Faculty.

The Dean is the principal channel of communication between the Faculty and the University on administrative matters. The Dean and the Faculty are supported by a number of committees (see below), some of which perform administrative tasks, while many assist in maintaining a constant review of the curriculum and the objectives of medical education.

Schools in the Faculty of Medicine are Anatomy, Community Medicine, Medical Education, Medicine, Obstetrics and Gynaecology, Paediatrics, Pathology, Physiology and Pharmacology, Psychiatry and Surgery. The Faculty is supported in its operations by the Centres for Continuing Medical Education, Cardiovascular Research, Immunology, National Alcohol and Drug Research, Experimental Neurology and Public Health, as well as a Mass Spectrometry Unit, an Electron Microscope Unit, a Medical Illustration Unit, a Carcinogenesis Research Unit and an NH and MRC Special Unit in Aids Epidemiology and Clinical Research. The Faculty is also affiliated with the Garvan Institute for Medical Research at St. Vincents Hospital, the Childrens Leukaemia and Cancer Research Unit at the Prince of Wales Hospital and the Skin and Cancer Foundation at St. Vincents Hospital.

Important: As changes may be made to information provided in this handbook, students should frequently consult the noticeboards of the schools and the official noticeboards of the University.

### **Committee Structure**

### **Faculty of Medicine**

**Executive Committee of Faculty** Admissions and Re-enrolment Committee Assessment Committees **Biomedical Library Advisory Committee BMedSc Course Committee** 

Centre for Cardiovascular Research Advisory Committee Centre for Continuing Medical Education Management

Committee

Centre for Immunology Advisory Committee Centre for Experimental Neurology Advisory Committee NH and MRC Special Unit in Aids Epidemiology and Clinical Research Advisory Committee Combined BSc/MB BS Course Committee Curriculum Committee Year Sub-Committees Higher Degree Committee

### **Advisory Committees to the Dean**

**Clinical Supervisors Committee** Dean's Advisory Committee Faculty Resources Allocation Advisory Committee Hospital Boards of Medical Studies **UNSW Oncology Advisory Committee** Faculty Professorial Meeting Commonwealth Postgraduate Awards Committee Faculty Academic Promotions Committee Faculty Research Advisory Committee

### Costs in Addition to Fees

Details of fees have been provided in the Guide to Students 1989 but in Medicine there are additional costs.

As students may not be aware when embarking on their degrees of the incidental costs which occur from time to time during the course, the following is an estimate, based on students' experience, of the expenditure which is likely to be incurred over the full length of the course. The amounts quoted are, of course, subject to some fluctuation and to some individual variation.

	\$ approx.
Textbooks	1500
Two coats (1 laboratory, 1 hospital)	60
Stethoscope	140
Opthalmoscope	180-250
Laboratory Manuals	150
Miscellaneous (papers, pens, kits, diagnostic equipment, laboratory manuals and aids, etc)	300

One long white coat is required for use in the Schools of Anatomy and Biochemistry and one short coat for use in the hospitals.

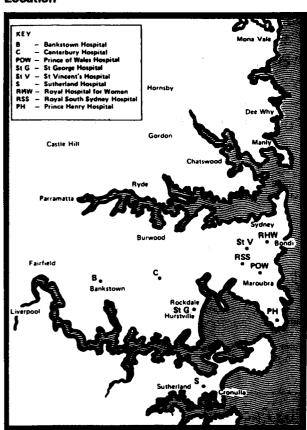
### Attendance at and Residence in Hospitals

From Year 2 students attend hospitals and must wear short white coats while at the hospitals.

There are sections in the later years of the course when students are either required or may elect to live in the hospitals for periods ranging from one night to a term. Accommodation charges at the prevailing rate must be paid directly to the hospitals for all periods of residence.

### The Teaching Hospitals

#### Location



### The Prince Henry/Prince of Wales Hospitals

Prince Henry Hospital, Anzac Parade, Little Bay 2036 Telephone 661 0111

Prince of Wales Hospital, High Street, Randwick 2031 Telephone 339 0111

The Hospital group, one of the facilities of the Eastern Sydney Area Health Service, is a Principal Teaching Hospital of the University of New South Wales. It comprises 1127 beds on three sites (Prince Henry 553, Prince of Wales Adult 393, Prince of Wales Children 145 and Eastern Suburbs 36).

All medical specialities other than Obstetrics are provided by the Hospital group. The group includes a specialist paediatric hospital, a service for the developmentally disabled and an extensive network of community health services in the Eastern Suburbs co-ordinated through three health centres (Randwick, Maroubra and Botany). Facilities include radiotherapy, spinal injuries, bone marrow transplant, lithotripsy, AIDS Special Care Unit and a 30 bed Geriatric Assessment Unit. The senior medical staff members number over 400 and junior medical staff 320 (including 100 on secondment to other centres).

The Hospital group has a history dating back to the late 19th century and has been an integral part of medical education at the University of New South Wales since 1959.

Limited student accommodation is available and other facilities include tennis courts, swimming pools and common rooms. A Medical Library is located at both Prince Henry and Prince of Wales Hospitals.

### The St. George Hospital

Belgrave Street, Kogarah 2217 Telephone 588 1111

The St. George Hospital, one of the facilities of the Southern Sydney Area Health Service, was founded in 1894. It has subsequently developed from a District Hospital into a Teaching Hospital; initially with the University of Sydney in 1963 and then as a Principal Teaching Hospital with the University of New South Wales from 1 January 1967.

The total number of beds is 573, which includes general medical and surgical accommodation, together with departments of orthopaedics, obstetrics and gynaecology, paediatrics, psychiatry, rehabilitation and geriatrics, plus a home for developmentally disabled children.

Visiting and staff specialists number 107 and resident medical staff 140. The Clinical School includes teaching facilities, audiovisual equipment and library. Accommodation is available for students.

### The St. Vincent's Hospital

Victoria Street, Darlinghurst 2010 Telephone 339 1111

The St. Vincent's Hospital, one of the facilities of the Eastern Sydney Area Health Service, has been run by the Sisters of Charity since it was founded in 1857. It moved to its present site in 1870.

Students of medicine have attended the Hospital since 1891 and from 1923 to 1969 the Hospital was a Clinical School for the University of Sydney. Since then it has been a Principal Teaching Hospital of the University of New South Wales. The Clinical School and a student hostel were built in 1964. At present the Clinical School contains teaching facilities, audio-visual equipment, common rooms and library.

The St. Vincent's Hospital is a Principal Teaching Hospital of the University of New South Wales and has 510 available bads on a single campus. It is an acute general Hospital with highly developed specialist units in most areas of medicine and surgery. Special services developed at the Hospital include cardiac transplantation, bone marrow transplantation, a comprehensive AIDS unit and a Cancer Centre. Extensive services are also provided for patients suffering from alcoholism, drug addiction and those who require palliative care and geriatric services.

Research is undertaken in the Garvan Institute of Medical Research and Professorial Departments, the Department of Clinical Pharmacology and the Anxiety Disorders Unit. The visiting medical staff numbers 130, the salaried staff 55 and the resident medical officers 148.

### The Royal Hospital for Women

Oxford Street, Paddington 2021 Telephone 339 4111

The Royal Hospital for Women, a facility of the Eastern Sydney Area Health Service, is the University's Teaching Hospital in obstetrics and gynaecology. It is a specialist Hospital for obstetrics and gynaecology and includes a department of neonatal paediatrics. The visiting medical staff numbers 102, and the salaried and resident medical staff 20.

The Hospital of 181 available beds functions under the auspices of the Benevolent Society of NSW, which established Australia's first lying-in hospital in 1820. The first medical undergraduate students came to this hospital in 1888 and the present site was occupied in 1901.

The first baby clinic, the forerunner of today's Baby Health Centres, was established in 1906. The State's first Antenatal Clinic was started in 1912 and this was the third such clinic in the world. In 1931 the first Achheim Zondeck Pregnancy Test was performed in Australia at the Royal Hospital for Women, and Australia's first Cancer Detection Clinic was established in 1948.

Currently the Department of Ultrasound at this Hospital has an international reputation in research and development of this equipment for use in obstetrics.

### The Bankstown Hospital

Eldridge Road, Bankstown 2200 Telephone 70 0444

The Bankstown Hospital, now a facility of the South Western Sydney Area Health Service, is a general, maternity and psychiatric hospital, and is an Associated Teaching Hospital of the University. The Hospital is situated in the City of Bankstown, in the Western Suburbs 22km from the centre of Sydney. The Hospital was officially opened in 1957; since then, a constant program of growth and updating has kept the buildings modern. The latest addition is an intensive and

coronary care unit, opened by the Premier in August 1980. The Hospital provides basic medical care of a high standard, primarily to the City of Bankstown which is a thriving community of about 170,000 persons.

The Hospital has a total of 349 beds, which includes a 9-bed intensive care unit, 6-bed coronary care unit, 57-bed obstetrics unit, 26-bed paediatric unit with a neonatal paediatric intensive care nursery, and a modern 40-bed psychiatric unit. It employs 105 salaried and visiting medical staff and 37 resident medical staff.

The Hospital provides patient care in the areas of medicine, surgery, obstetrics and gynaecology, psychiatry, and paediatrics. It has one of the busiest casualty units in Sydney.

The Hospital is intimately involved in the development and coordination of community health services in the City of Bankstown. A "Day Hospital" is in operation as part of a hospital-based community health program.

### **The Canterbury Hospital**

Canterbury Road, Campsie 2194 Telephone 789 9111

The Canterbury Hospital, which was founded in 1928, has been an Associated Teaching Hospital of the University since 24 July 1963. It is a general medical, surgical and obstetric hospital of 166 approved beds and has a very busy accident and emergency department with over 30,000 attendances every year.

The Hospital is now part of the Southern Sydney Area Health Service. The area served is basically the Municipality of Canterbury and its immediate surrounds, the services provided being that of a district general hospital. The population served is approximately 135,000, which is made up partially of several predominant ethnic groups. This influences the type and level of services delivered to some extent.

Visiting medical staff totals 62, affiliates in obstetrics 7, salaried 5 and resident medical staff 30.

### The Royal South Sydney Hospital

Joynton Avenue, Zetland 2017 Telephone 697 8200

The Royal South Sydney Hospital, a facility of the Eastern Sydney Area Health Service, is an Associated Teaching Hospital of the University with 124 beds. It provides beds for general medicine and surgery and has developed a new role as a major rehabilitation centre.

The Hospital is situated in a heavily industrialized area, serving a resident population of 77,000 and a daily influx of 75,000 work...s. Management of casualties suffering from industrial injuries is one of the main features of the workload of the Casualty Department. It has recently accepted the role of establishing a Regional Rehabilitation Service for the Southern Metropolitan Region of the Department of Health and a super Regional Specialized Rehabilitation Service including rehabilitation engineering, to the State of New South Wales.

The honorary and visiting medical staff numbers 37, salaried specialists 3, and resident medical staff 10.

### The Sutherland Hospital (Caringbah)

The Kingsway, Caringbah 2229 Telephone 526 0311

The Sutherland Hospital (Caringbah), a facility of the Southern Sydney Area Health Service, is an Associated Teaching Hospital of the University. It is a general medical, surgical and obstetric hospital. There is also a gazetted psychiatric unit and a 22 bed paediatric ward.

The Hospital has 385 beds. There is a well equipped library. The Hospital is staffed by 100 visiting medical staff, 15 staff specialists and 40 resident medical staff.

### Sydney Hospital

Macquarie Street, Sydney 2000 Telephone 228 2111

Sydney Hospital, the first hospital in Australia, and now a facility of the Eastern Sydney Area Health Service, was established at Dawes Point shortly after the arrival of the First Fleet in 1788. It was transferred to the Sydney Hospital site in Macquarie Street in 1811 when Governor Macquarie built the "Rum" Hospital. The first Nurses Training School in the Florence Nightingale tradition was established at the Hospital in 1868.

The Hospital up until 1983/84 was a 496 bed full teaching Hospital of the University of Sydney, with all clinical specialties represented, and research institutes of world renown.

Sydney Hospital now has 102 beds, and provides inpatient and outpatient services in general medicine, general surgery, urology, Intensive Care Unit, psychiatry, gynaecology, orthopaedics, casualty, ENT and hand surgery. There are 80 visiting medical staff, 5 staff specialists, and 40 resident medical officers (including Sydney Eye Hospital).

Located on the Sydney Hospital site is the Sydney STD Centre and an Occupational Health and Safety Centre. The Hospital also operates the Sydney Eye Hospital, Sydney AIDS Clinic (Albion Street Clinic), and Health Screening and Heart Health Programs.

The Hospital has a medical library of full teaching hospital standard and a medical staff common room but provides no accommodation. The campus is undergoing major refurbishment including construction of a new ward block. When completed, in 1990, the Hospital will have a total of 120 beds.

### St Margaret's Hospital

435 Bourke Street, Darlinghurst 2010 Telephone 339 0466

St. Margaret's Hospital, a facility of the Eastern Sydney Area Health Service, commenced on 18 March 1894. The Hospital moved from its original site in Elizabeth and Cleveland Streets to its current site in 1911. In 1937 the Sisters of St. Joseph were asked to accept responsibility for administering the Hospital. It was the first maternity hospital staffed and controlled by a religious order. It is a specialist hospital in Obstetrics and Gynaecology and in 1964 was established as a teaching centre of the University of Sydney.

The present Hospital was built in 1951. The Hospital has 115 beds including 4 beds in the Special Care Nursery. It employs 110 salaried and visiting medical staff and 16 resident medical staff.

### Sacred Heart Hospice

170 Darlinghurst Road, Darlinghurst 2010 Telephone 361 9444

The Hospice, established in 1890, is owned and governed by the Sisters of Charity of Australia. It provides a comprehensive palliative care service incorporating medical, nursing, pastoral, therapy, welfare and educational services. These services are available to in-patients and home-care patients and exend to the support of the patients' families. Respite care is provided.

Conducted by the Hospice are formal educational programmes for Hospice staff, staff from other facilities and tertiary students.

The present purpose-built Hospice was opened on 6th November, 1988. It has 100 in-patient beds and four day-hospital beds.

### The Biomedical Library

The Biomedical Library provides library services for staff and students from the Faculties of Medicine and Biological and Behavioural Sciences and from the Schools of Food Science and Technology, Health Administration, and Wool and Animal Science. It maintains close liaison with libraries of teaching hospitals of the University and the Garvan Institute of Medical Research.

The Biomedical Library is located on levels 2, 3 and 4 of the Mathews Building Annex and is connected to the other Special Libraries via a link through the undergraduate collection.

Professional staff are available at the Reader Assistance Unit on Level 2 to provide reference services and to assist in the use of the online catalogue. Instructional classes in the use of the library and in specific subject material can be arranged.

Computerized literature searches as well as assistance in the use of databases on CD-ROM are also available.

Instructional classes in the use of the Library and in specific subject material can be arranged through the Reader Assistance Unit.

Biomedical Librarian

Monica Davis

### The University of New South Wales Medical Society

The University of New South Wales Medical Society (Medsoc) is the representative body of the medical students of the

University. Its primary function is to provide amenities and social stimulation for its members in order to promote a pride in and a sense of belonging to the Faculty. It also has the function of initiating and maintaining communication between medical students and medical educators and administrators both within the University and outside. Membership is free and automatic to all medical students.

Among the social functions held annually are various wine and cheese nights, harbour cruises, barbecues, hospital parties, the year dinners, the 'Med Ball' and the Anzac Day sports day. A monthly newsletter and an annual magazine are produced to which students and staff are encouraged to submit written articles.

The Society maintains communication with all levels of Faculty through the President, Vice-President and Year representatives, while other Medsoc supported students hold positions in University government. These officers together with the Secretary, Treasurer, Shop Directors and other representatives, constitute the Society Executive which is elected annually.

The Medsoc Shop is a major facility provided by the Society. Textbooks, white coats and diagnostic instruments may be bought cheaply. A Medsoc shop joining fee is payable. The shop is situated in Hut P at the Prince of Wales Hospital (telephone 399 2121). Hours of opening: Tues, Thurs 12-2pm, Wed 4-7pm.

All students are encouraged to participate in the Society's activities and to attend the Medsoc meetings which are held in the Bookshop on the last Tuesday of each month at 6:00 p.m.

All enquiries about the Society should be addressed to the Secretary of the Medical Society, c/- Medsoc Bookshop, Hut P, Prince of Wales Hospital, High Street, Randwick 2031.

# **Undergraduate Study**

### Selection into the Faculty of Medicine

Entry is competitive and applications are considered and assessed on academic merit. The annual intake is approximately 185 students. This includes students who were granted deferral of commencement, and eligible repeats from the previous year. There is no provision for 'mature age entry' to Medicine.

Preference is given to students who are resident in New South Wales and the majority are selected on the basis of the aggregate obtained in the best 10 units in approved subjects in the New South Wales Higher School Certificate. Those admitted usually rank within the top 3-4 of those who sat for the examination. School leavers from the Australian Capital Territory compete with local residents. The ACT Tertiary Entry Score is equated with the New South Wales HSC results to establish a ranking for selection into the medical course quota.

There is a small intake quota for applicants who have partially completed tertiary studies in New South Wales. Such applicants are assessed on the basis of their tertiary results taken in conjunction with their original matriculation results. Emphasis is placed upon the tertiary results. Again there is a small quota for applicants who have completed tertiary studies in New South Wales. Such applicants are assessed solely on the basis of their tertiary results. Competition is such that an outstanding level of academic achievement is required. Because of the integrated nature of the course it would be exceptional for admission to be granted to other than first year.

A penalty of 5% on the most recently obtained matriculation aggregate will be imposed on an applicant taking a matriculation examination for the third or subsequent time, or an applicant seeking entry on a matriculation result obtained after having been admitted to a tertiary institution (unless such studies were terminated prior to any results being recorded).

### Overseas and Interstate Qualifications

Applications will also be considered from those who have qualifications obtained interstate or overseas, provided they are bona fide residents of New South Wales or can provide evidence that they have an acceptable reason (such as family reunion) for coming to live in New South Wales. Such applicants are also normally required to provide evidence that their qualifications would have gained them admission to a medical course in the state or country in which the qualifications were obtained. Again, competition is such that an outstanding level of academic achievement is required. Because of the integrated nature of the course it would be exceptional for admission to be granted to other than the first year.

#### **Overseas Students**

The number of places allocated for overseas students may not exceed 10 of the annual intake. An overseas student is defined as a student who holds a temporary visa issued by the Australian Government for the purpose of engaging in studies or training in Australia.

### **Prerequisite Requirements**

The most suitable Higher School Certificate studies for those who wish to enter the Faculty would include 2 or more units of Mathematics, English and Chemistry. (The 2 Unit Mathematics subject, Mathematics in Society, is not suitable.)

To be eligible for selection into the Medicine Faculty, students must first obtain the required course prerequisite score inthe HSC Mathematics. There are also first year subject prerequisites of HSC English and Chemistry. The following prerequisite requirements were current at the time of publication.

### Medicine

Course prerequisites

Mathematics: 2U(60-100)

3U(1-50) 4U(1-100)

Subject prerequisites

English: 2U(General)(53-100)

2U(49-100) 3U(1-50

Science: 2U(Chemistry)(67-100)

3U(90-150) 4U(1-50))

For applicants seeking selection solely on the basis of their aggregate HSC score and who have the necessary aggregate mark, but do not meet the subject prerequisites an offer may be made conditional upon the student deferring acceptance for one year and undertaking prescribed studies to meet the prerequisites. All other applicants must meet both course and subject prerequisites before any offer can be made.

Prospective students are advised that while it is not an exclusive requirement, they should include Physics as well as Chemistry in their HSC program as a knowledge of these disciplines is useful in the first years of the medical course. There is also an assumed knowledge of basic organic chemistry. A knowledge of Biology is also desirable.

## Admission of Aboriginal Students and Refugee Medical Practitioners

The Faculty may admit suitably qualified persons of Aboriginal descent outside any quota restrictions. A special scheme also exists for the admission of refugee medical practitioners.

# Admission of Disadvantaged Students (ACCESS Scheme)

The Faculty may admit, within quota, a number of students of high academic potential whose education has been disadvantaged over a two year period by circumstances beyond their control. Applicants must matriculate to the University and meet all Faculty course and subject prerequisites. Further information may be obtained from the Access Scheme Co-ordinator at the University on (02) 697.3087.

### **Application Procedures**

Applications should be directed to the Universities and Colleges Admissions Centre, Locked Bag 500, Lidcome, 2141, Telephone 646-3033. The closing date for application is generally 30 September of each year or up to the end of October on payment of a late fee.

### Courses Offered by the Faculty

The Faculty of Medicine offers three courses, each of which is described in detail in the following pages. They are:

3800 Medicine course (MB BS)

3820 Combined Science and Medicine course (BScMBBS)

3830 Bachelor of Medical Science (BMedSc)

## 3800 Medicine Course (MB BS)

The Medicine Course leads to the award of the degrees of Bachelor of Medicine (MB) and Bachelor of Surgery (BS) which were originally recognized in 1975 by the General Medical Council of the UK. These degrees may be awarded in the following grades: Honours Class I: Honours Class II, Division I; Honours Class II, Division II; or Pass level.

The award of honours is determined on the basis of astudent's performance throughout the course, using the weighted average mark for each year which is obtained by weighting the subjects according to hours of teaching.

Commencing with first year studies in 1988, the Faculty implemented a new six year medical curriculum leading to the degrees of Bachelor of Medicine and Bachelor of Surgery (MBBS). In planning the new course the Faculty reaffirmed the objectives of the former five year curriculum (as detailed below).

The Faculty's purpose in introducing the new six year course, was both to increase the amount of untimetabled hours for medical students in pre-clinical years to allow more time for reflection and study and also to allow time for further supervised clinical teaching in medicine and surgery prior to graduation and the intern year.

### **Objectives of the Medicine Course**

The objectives of the Medicine Course are:

 To produce a graduate with a knowledge of medical and behavioural sciences sufficient to understand the scientific basis of medicine and to go forward with medicine as it develops further.

- 2. To provide a graduate with the flexibility of outlook and training necessary to progress to any field of endeavour in medicine or related disciplines.
- 3. To provide education in clinical methods and patient care in the main branches of medicine and surgery so that the graduate could undertake patient care under supervision at the level of an intern.
- 4. To help the graduate understand professional and ethical principles and to be at all times mindful of the individual's obligations to patients, colleagues and the community.

### Supplementary Assessment

Details of assessment requirements are contained in the sections on particular years and subjects in the course. The following regulations relate to supplementary assessment regulations which apply to all years of the Medicine Course.

Subject examiners may, in the time between the sitting of the November/December assessments and the meeting of the Assessment Committee, require students to present themselves for further assessment to resolve any doubts as to a student's performance.

In Year 5, subject examiners may, in the time between the sitting of term assessments and the meeting of the Assessment Committee (normally Thursday of the term recess), require students to undertake further assessment. Students are warned that they may be required to undertake such additional assessment and should take this into account when making travel arrangements for the elective term.

Further assessment may be given to allow the Assessment Committee to resolve a doubt. (In Years 1 to 3 such assessment is usually undertaken in the second week of the following January.)

Further assessment may be given when students, through illness or some other acceptable circumstances, have been prevented from taking one or more of the assessments or have been disadvantaged during the assessment.

Further assessment will not be granted when the composite mark accurately reflects failure to achieve the required standard of knowledge and understanding of, and skills in the subject.

### **Course Details**

1989 sees the second intake into the six year curriculum. Thus, the following year descriptions relate to Years 1 and 2 of the six year curriculum and Years 3, 4 and 5 of the previous five year curriculum.

### Year 1 (Six Year Curriculum)

This year is conducted in two academic sessions and consists of four subjects plus two General Education electives, as shown in the table below. The table also indicates the subject weightsfor these subjects (see Rules of Progression).

_		Hours per week		Subject	
				weight	
		S1	S2		
70.001	Anatomy 1	5	7	(3)	
80.010	Introductory Clinical				
	and Behavioural Studies	3	5	(2)	
73.001	Biology for Medical			` '	
	Students	4	0	(1)	
41.001	Biochemistry for			• •	
	Medical Students	6	6	(3)	
	General Education electives	4	_4	(2)	
		22	22	\-/	

### **Assessment**

Biology is only taught in Session 1 with a final assessment at the end of that session. The other three subjects extend over both sessions and incorporate a final assessment as the end of Session 2. Assessments also take place at the end of Session 1 but do not constitute a barrier to progression to Session 2.

Students who do particulary poorly in the mid-year assessments will be interviewed by the Dean of the Faculty of Medicine and the Head of the appropriate School before proceeding. Such students may discontinue without failure at that time, but are required to recompete for entry in the following year.

Students with poor performance in the Session 1 assessments and/or who suspect that they have performed poorly in the Session 2 assessments should contact the appropriate subject

authority as soon as possible after the examination period regarding possible further assessment.

### **Rules of Progression**

Students enrolled for the first time in the Medicine Course in the University shall be required to show cause why they should be allowed to continue the course if they fail more than half the program in which they are enrolled. In order that students may calculate half their program, the weighting of subjects is shown above.

Students who have passed all subjects in Year 1 may progress to Year 2. General Education subjects or their equivalent may be carried to Year 2.

Students repeating the year are required to enrol in all subjects in Year 1, except that students in this category are allowed to retain credit for any General Education subject(s) passed.

### **General Education Requirement**

The University requires that all undergraduate students undertake a structured program in General Education as an integral part of studies for their degree.

Among its objectives, the General Education program provides the opportunity for students to address some of the key questions they will face as persons, citizens and professionals.

The program requires students to undertake studies in three areas:

- (a) An introduction in non-specialist terms to an understanding of the environments in which humans function.
- (b) An introduction to, and a critical reflection upon, the cultural bases of knowledge, belief, language, identity and purpose.
- (c) An introduction to the development, design and responsible management of the systems over which human beings exercise some influence and control.

The exact form of category (c) is still being decided and should be clearly defined in 1989. This could involve, however, a slight subsequent change to the structure of the later years of degree programs.

There are differing requirements for students commencing before and from 1988:

## 1. Students who commenced their undergraduate program before 1988.

Students must complete a program of General Education in accordance with the requirements in effect when they commenced their degree program. Students yet to complete their General Education requirement may select subjects from any of the three categories of the new program.

## 2. Students who commenced their undergraduate program in 1988 or 1989.

Students must complete a program of subjects selected from each of three categories of study in accordance with the rules defined in the General Education Handbook and in sequences specified in the requirements for individual courses.

Further information may be obtained from the office of the Centre for Liberal and General Studies, Room G58, Morven Brown Building and the General Education Handbook.

# Photographs, Identification Badges, Tuberculin Tests

Each student is required to be photographed during the first session. These photographs are required for school and Faculty purposes and are used to produce identification badges which must be worn in the hospitals. During the year students will also be required to undergo a tuberculin test and if warranted a BCG vaccination and/or chest X-ray as a precaution for hospital attendance. Further details are issued during the year.

### Allocation to Hospitals in Year 2

At the end of Year 1, students are asked to list their preferences regarding assignment to teaching hospitals. This, together with the student's term address, and academic record, is taken into account in the final allocation which is made after the Year 1 examinations. Student representatives are involved in the allocation procedure.

### **Year 1 Subject Descriptions**

For further information regarding these subjects contact the subject authorities.

### 70.001 Anatomy 1

Objectives: to acquire sufficient knowledge of topographical, surface and radiological anatomy of the limbs, head, neck and back to form a basis for subsequent clinical studies; to understand how a knowledge of anatomy is applied in clinical practice; to know sufficient principles of embryology and tissue histology to be able to undertake successfully more detailed studies of embryology and histology in Year 2.

An introductory subject in human anatomy, embracing the disciplines of gross anatomy (topographical anatomy), histology, and embryology. Teaching hours include one 3-hour practical/tutorial class per week, with an additional 2-hour class per week in Session 2 only; together with 1-2 hours per week of lectures.

Gross anatomy of the musculoskeletal system; topographical and radiological anatomy of the upper and lower limbs, head and neck, and back; introduction to microscopy and cell science; morphological aspects of cell function; histology of basic tissues (epithelia, muscle, nerve and connective tissue); early embryology, from conception to the formation of germ layers and coelom.

Assessment: There is a mid-year assessment which contributes to the final assessment for the subject but does not constitute a barier.

#### 80.010 Introductory Clinical and Behavioural Studies

Objectives: to enable students to gain a better understanding of themselves and other people as a basis for their respect and considerate treatment of patients in the practice of medicine; to develop interviewing skills; to gain experience in and understanding of the group process; to investigate the role of doctors and medicine in the community; to provide an understanding of development from childhood through adolescence and adulthood to old age, and understand the problems of people from various age groups; to develop in the student an awareness of the different family, socio-economic and ethnic backgrounds of people in Australian society and of the relevance of these backgrounds to the physical and emotional states of their patients.

Students attend a three hour tutorial each week in Sessions 1 and 2 and a two hour lecture/demonstration in Session 2 only. The tutorials cover communication skills and group dynamics (taught by participatory exercises) and students take the initiative in preparing and presenting group projects. Session 2 lecture topics include: the meaning of health and illness; development throughout the life cycle (childhood, adolescence, adulthood and old age); the particular problems of disadvantaged cultural groups (such as Aborigines and recent migrants). The lectures are supported by relevant films and by community visits, activities and discussions within the tutorial groups.

Assessment: Two major assignments during the year and an examination at the end of Session 2. There is no mid-year assessment.

#### 73.001 Biology for Medical Students

Objectives: to provide an understanding of basic biological principles for the continuing study of human biology and medicine.

An introductory course consisting mainly of lectures which will be complemented by tutorial sessions and practical classes. Topics include: classification and diversity of invertebrates and vertebrates, leading to an understanding of man's relation to other animals; an introduction to parasites and their biology; principles of ecology and evolution; basic cell biology and introductory genetics.

#### 41.001 Biochemistry for Medical Students

Objectives: to obtain sufficient understanding of chemistry and biochemistry to recognize the essentially molecular basis of all living systems; to acquire a knowledge of chemistry and biochemistry essential for the study of physiology and pharmacology; to gain experience in laboratory skills and the use of the scientific method; to understand the structure, function and biosynthesis of the macromolecules that are indispensable to life; to gain insight into the ways in which the body uses metabolic fuels and the regulation of these metabolic processes so that growth and homeostasis are maintained; to understand the basis of practical biochemistry, including those procedures that are relevant to clinical diagnosis.

Classification of matter and theories of the structure of matter. Chemical bonding, molecular structure and chemical behaviour. Equilibrium and change in chemical systems. Introduction to colloidal systems. Structure and reactions of organic compounds relevant to biological systems.

Introduction to the biochemistry of macromolecules. Bioenergetics and enzyme catalysis. A survey of the principal metabolic pathways, their functions, interrelationships, and regulation. Introductory endocrinology and whole body metabolism.

Assessment: There is both a mid year and end of year assessment.

### Year 2 (Six Year Curriculum)

This year is conducted in two academic sessions: teaching in the subjects Anatomy 2, Medical Biochemistry and Genetics, and Physiology is integrated and aims to give students a broad

knowledge and understanding of human structure and function based on scientific principles, relevant to further study in medicine. In Clinical Studies 2, students make contact with patients and the physical aspects of disease, in order that they may apply their knowledge and understanding to the clinical situation. The strand dealing with human behaviour is continued.

		Hours per wee	
		S1	<b>S2</b>
41.002	Medical Biochemistry and		
	Genetics	4.5	4.5
70.002	Anatomy 2	7	7
73.002	Medical Physiology 1	8	8
80.012	Clinical Studies 2	2	2
80.212	Human Behaviour	_3_	3_
		24.5	24.5

#### Assessment

Major assessments take place in the November/December assessment period but progressive assessments may take place throughout the year. Details of progressive assessments are provided by the appropriate subject authority.

### **Rules of Progression**

A student enrolled in the second year of the Medicine Course who fails in any subject of that year, other than General Education subjects, shall be required to repeat the year, provided there is no conflict with the rules for re-enrolment. (A subject is one carrying a distinctive subject number.)

### **Year 2 Subject Descriptions**

For further information regarding these subjects contact the subject authorities.

### 41.002 Medical Biochemistry and Genetics

Objectives: To acquire knowledge of biochemical aspects of the functions and control mechanisms of the major body systems in humans; to understand the regulation of the adaptive responses of body function to different forms of stress; to understand those biochemical processes which are of particular relevance to clinical practice and a study of pharmacology; to gain experience in problem-solving approaches to the biochemical aspects of normal and disease states; to introduce students to those aspects of modern molecular biology relevant to humans: to provide a basis for the study of human genetics.

Lectures, audio-visual and clinical demonstrations deal with endocrine systems, lipid metabolism, connective tissue, neurochemistry; purine, pyrimidine and nucleic and metabolism recombinant DNA procedures, gene probes, pedigree analysis, inborn errors of metabolism, X- and Y-linked inheritance, human cytogenetics. Clinical material illustrates the principles being studied and underlines the relevance of the course to the study of medicine.

#### 70.002 Anatomy 2

Objectives: To gain a knowledge of visceral anatomy and neuroanatomy. To learn the histology and development of the body systems. The whole course provides a framework for the future study of morbid anatomy and histopathology as well as providing a background for understanding of the developmental basis of some of the commoner congential anomalies.

### 73.002 Medical Physiology 1

Objectives: To gain knowledge and understanding of the function of the cellular elements of the body and the function of the major body organ systems in humans, to gain experience in the use of medical instrumentation and in the measurement of variables in mammalian biological systems; to gain experience in problem-solving approaches in the study of the physiology of the normal person; to integrate knowledge of anatomy, biochemistry and physiology to provide an understanding of human structure and function.

Systematic lectures, tutorials, practicals and demonstrations deal with excitable tissues, blood, circulation, respiration, kidney and body fluids, gastro-intestinal tract and metabolism, endocrines, reproduction and development, skin, bone, fat and connective tissues and the nervous system. Attention is paid to the principles of physics necessary to understand the functioning of cells and organ systems. Clinical material illustrates the relevance of the course to the study of medicine

#### 80.012 Clinical Studies 2

Objectives: to extend knowledge and understanding of normal structure and function by demonstrating the disturbances which occur in disease; to demonstrate how symptoms and signs can be interpreted as disorders of structure and function and how this knowledge aids in the process of diagnosis; to provide an introduction to clinical medicine and medical terminology.

Closely integrated with Anatomy, Physiology and Biochemistry, illustrating the application of basic medical science to the clinical situation. Students are introduced to clinical medicine in the principal teaching hospitals and learn to understand the structure and function underlying certain clinical problems. Students begin to learn how to take medical histories, perform physical examinations, detect abnormalities and communicate with patients so that they can assess patients clinically and as individuals within society.

Assessment: Instead of an examination at the end of the year, students are required to submit two assignments to their tutor, one at the end of Session 1 and one during Session 2. These are marked by the tutor, and forwarded to the Chairman of the Course Committee. The final grade is determined on a pass/fail basis.

#### 80.212 Human Behavlour

Objectives: to provide students with information concerning the determinants of human behaviour and demonstrate the relevance of this information in medical practice; to provide students with an understanding of the interactive nature of the genetic and environmental determinants of human behaviour; to produce a student with sufficient knowledge of research methodology to critically evaluate data.

Taught in both sessions. Instruction is given in first session in the research techniques, theoretical concepts and basic findings of the behavioural sciences, especially as these relate to medicine. Special emphasis is placed on the development of skills for the critical evaluation of scientific data concerning human behaviour and the oral and written expression of such evaluations. In second session critical attention is given to ethical and social issues as they arise in medical practice.

Topics include: scientific methods in the behavioural sciences; psychological and medical models; biological substrates of

behaviour; the relevance of psychological functions to doctor-patient perception, compliance, pain perception and behaviour modification; the psychology and physiology of stress; relationship of stress to physical and psychological disorders; applications in behavioural medicine.

### Year 3 (Five Year Curriculum)

Year 3 is conducted over four terms totalling thirty-eight weeks. The principal subject is Paraclinical Science, integrating general pathology, microbiology, immunology and pharmacology. The strand dealing with human behaviour leads into the Year 3 subject Community Medicine. Clinical Studies 3 continues the program commenced in Year 1 and students build upon their experience of the physical aspects of disordered function in a systematic study of the signs and symptoms of disease. In addition, studies continue to reinforce the scientific basis of medicine. By the end of Year 3, students have spent sufficient time in the hospital environment to know how a hospital functions. They should be able to communicate with patients and understand their problems, take a clinical history, conduct a physical examination, and detect abnormalities.

The following table shows the subjects taken and approximate hours per subject per term.

		Hours per term			
		Term 1	Term 2	Term 3	Term 4
		(10 weeks)	(9 weeks)	(9 weeks)	(10 weeks)
79.112	Community				
	Medicine	20	18	36	16
80.013	Clinical				
	Studies 3	68	62	63	74
80.311	Paraclinical				
	Science	145	137	115	100
80.321	Medical				
	Science*	8	8	8	10

<sup>\*</sup> Contact hours subject to variation.

#### Assessment

In addition to end of year assessments, midyear progress assessments in teaching areas of the campus-based program are conducted in the last week of Term 2.

Students are required to pass in both the long and short case components of the clinical assessments of 80.013 Clinical Studies 3 and to reach the required level in the composite weighted mark in the subjects of that year other than General Education subjects.

#### Composite Mark

- The composite mark is determined on marks supplied by the examiners in assessments in 79.112 Community Medicine, 80.013 Clinical Studies 3, 80.311 Paraclinical Science and 80.321 Medical Science. The subjects are weighted, approximately according to the hours devoted to each of these four subjects.
- A mark of 50 in any subject indicates that a student has achieved the minimal acceptance level of performance in the subject.
- A student who achieves a mark of 50 or more in each of the subjects is deemed to have passed this segment of

- the year, and will not receive special consideration by the Assessment Committee.
- A student with a composite mark of 52 per cent of maximum or greater, but who has raw marks of less than 50 in one or more subjects is normally deemed to have passed this segment of the year, and will not receive special consideration by the Committee unless a request to do so is received from any of the members. Following any such consideration, the Committee will decide whether the candidate will pass or fail the year, or will be required to pass in one or more supplementary assessments.
- Special consideration is normally given to each student whose composite mark falls in the range of 48-52 per cent of maximum. The Assessment Committee will decide in each case whether the student passes or fails the year or is required to pass in one or more supplementary assessments.
- A student whose composite mark falls below 48 per cent is deemed to have falled the year, and will not receive special consideration by the Committee unless requested by any of the members of the Assessment Committee.

### **Rules of Progression**

Students enrolled in Year 3 of the Medicine Course who are deemed to have failed the year are required to repeat the year, provided such progression does not conflict with the rules for restriction upon students re-enrolling.

Students should note that, if they fail Year 3 in 1989 they will be required to enrol in all subjects in Year 3 of the new six year curriculum in 1990. Such students will be allowed to retain credit for any General Education subjects passed in the five year curriculum.

Students who have passed all subjects in Year 3 except a General Education subject(s) may progress to Year 4 and carry such General Education subject(s).

#### Year 3 Subject Descriptions

For further information regarding these subjects contact the subject authorities.

### 79.112 Community Medicine

Objectives: to understand the factors within society that cause health problems and affect their outcome; to demonstrate the contribution of epidemiology to the study of disease; to demonstrate the assessment of a community's health needs; to demonstrate the provision of services to the community and special groups within the community, eg disabled and aged persons, migrants; to understand the ethical relationship between medicine and society; to experience the range of common clinical problems experienced in general practice; to understand the special interviewing skills and problem solving approach required in general practice.

This subject is the major formal teaching commitment in Community Medicine. Within the aims of the subject, students are encouraged to follow issues which are of greatest relevance to their own interests and development and are also encouraged to work in groups as much as possible.

Includes lectures and discussions, assignments, visits to organizations and a project in the community. Introduction to

community health centres and other aspects of community care commences at this stage.

#### 80.013 Clinical Studies 3

Objectives: to become acquainted with the principal symptoms and signs to common diseases; to be able to elicit this information from patients by history-taking and by clinical examination; to acquire a working knowledge of the pathophysiology and explanation of the clinical manifestations of common syndromes.

Representing two-fifths of the Year 3 Curriculum, Clinical Studies 3 is a major component of the course in medicine and surgery. Clinical Studies 3 forms a continuum with integrated Clinical Studies in Year 4 so that it is inappropriate to artificially separate the two courses. In Year 3, however, the emphasis is on interviewing, physical examination and interpretation of any abnormalities which are elicited. Students sitting the Clinical Studies 3 examinations are not asked questions in therapeutics. Nevertheless a general interest in therapeutics and management usually develops during Year 3, stimulated by the course in pharmacology.

Assessment: Each student's ability to take and record a patient's history and perform a physical examination is assessed during the year (details supplied on enrolment). The major clinical assessments take place in October.

#### 80.311 Paraclinical Science

Objectives: to understand the basic mechanisms of disease; to understand the aetiology, pathogenesis and complications of disease entities commonly encountered in medical practice; to know the causative agents of common microbial diseases and how they produce their effects; to understand the epidemiology of infectious diseases; to understand the basis of prevention and treatment of microbial diseases; to appreciate the role of pathologists in the diagnosis and management of disease; to know the mechanism of drug action with special reference to drugs of clinical importance; to be aware of the principles of drug and pharmacology; to understand the principles of disease prevention and management.

Includes components of microbiology, immunology, pathology and pharmacology, with integration between the various components, and relates, in turn, to concurrent clinical work in the hospital.

The component related to *microbiology* deals with the interactions between host and parasite. Basic structure, growth, physiological activity and genetic characteristics of bacteria, viruses and fungi are considered. Means by which these micro-organisms exist in association with humans and their environment, how they gain access to tissues and produce disease, and the nature of their responses to various physical, chemical and antibiotic agents which interrupt their normal function. Role of diagnostic bacteriology in clinical work.

A knowledge of *immunology* is central to the understanding of a wide range of diseases. A general background to cellular and antibody mediated immunity is provided with emphasis on the integration of such responses as defence against microbial disease. Abnormalities of the immune response occur in a variety of disorders from allergy, autoimmunity, malignancy and transplantation. Immunology is an interdisciplinary subject considered as well in Clinical Studies

and Medical Science and provides the basis for diagnostic and therapeutic approaches for clinical immunology in subsequent years.

Pathology deals with the effects of disease on the structure and function of tissues. Examination of the causation of disease and the evolution of its distinctive lesions - ie, the content of what is often referred to as 'general pathology'. This background is necessary for the subsequent study of the distinctive lesions of the various organs that characterize specific disease - ie, 'special pathology'. The course in third year concentrates on 'general pathology' - ie the effects of injury on cells, inflammation, healing and regeneration, immunopathology, thrombosis, embolism and infarction, abnormalities of growth, and neoplasia. Main disease processes will be illustrated by examples of appropriate diseases. The principles of forensic pathology are introduced. The content of pathology in third year prepares the way for the study in fourth year of special pathology, integrated with medicine and surgery.

The component of *pharmacology* also deals with basic principles, particular emphasis being placed on the mechanisms of drug action, with special reference to drugs of clinical importance. Principles of drug action in humans and animals. Where possible, the program in basic pharmacology is integrated with the hospital program during which some important drug effects in humans will be demonstrated.

The program in Paraclinical Science extends over all four terms, microbiology, immunology and pathology being presented by lectures, tutorials, demonstrations, laboratory classes and assignments. The program in basic pharmacology occupies the first three terms, with clinical pharmacology commencing in fourth term in the form of small group tutorials, and is continued during the later years of the Medicine Course.

### 80.321 Medical Science

Alms to reinforce and extends the student's knowledge and understanding of the structure and function of the human body, and to emphasize the importance of the scientific basis of medicine.

Members from all schools in the Faculty and some servicing schools will contribute to the course. Deals with selected areas in depth in order to show the basic principles underlying the application of science to the practice of medicine.

Most topics have an immediate relevance to clinical teaching in the year but emphasis is placed on new areas of scientific knowledge which may be important in the future.

### Year 4 (Five Year Curriculum)

Year 4 of the course is based in the teaching hospitals and comprises four terms totalling thirty-eight weeks. Each main teaching hospital is responsible for the implementation of its own program through a hospital committee appointed by the respective Boards of Medical Studies.

Year 4 consists of one subject taught over four terms: Term 1(10 weeks), Term 2 (9 weeks), Term 3 (9 weeks), Term 4 (10 weeks).

### **Rules of Progression**

Students are required to pass four separate segments of the assessments, namely: a pass in the written papers combined, a pass in the long case examination and a pass in each of the short case examinations. Any student who on the first attempt fails any two of the three clinical examinations (one long case and two short cases) will have failed Integrated Clinical Studies.

Students who have not completed the General Education components of the Medicine Course and who otherwise are eligible to progress to Year 5 are not allowed to progress until they have satisfied such requirements.

### Special Notes

Students who progress to Year 5 are placed in one of four groups for the rotating terms and Elective attachments. During Year 4 students are asked to arrange themselves into four provisional groups. Further details are issued by the Faculty Office during the year.

Arrangements for Elective attachments in Year 5 must be made by the students themselves. Many students may wish to commence these arrangements while in Year 4, especially those wishing to undertake attachments overseas. Information concerning acceptable proposals is issued on enrolment or may be obtained from the Faculty Office. See also the section for Year 5. Assessment and Rules of Progression, for information on restrictions applying to the Elective menu.

### Year 4 Subject Description

### 80.400 Integrated Clinical Studies

Objectives: to achieve a high level of competence in communication skills, history-taking and physical examination; to be able to list a patient's physical, emotional and socio-economic problems; to interpret symptoms and signs in terms of disorders of structure and function; to understand the pathological processes which result in symptoms and signs; to know the relevant special investigations and how to interpret the results to establish a diagnosis; to formulate a course of management based on a knowledge of clinical pharmacology and appropriate surgical intervention; to understand the preventive and social aspects of disease and to be able to counsel appropriately; to understand the importance of rehabilitation to enable patients to regain their place in the community.

The general aspects of clinical care, aiming to provide students with experience in the medical and surgical wards and in community practice where they participate in clinical attachments. Systematic pathology is also offered and, where possible, it is integrated with clinical studies. In the fields of general medicine and general surgery and the associated clinical specialities, emphasis is on total patient care incorporating aspects of continuing care in the community and in community practice.

In the presentation of interdisciplinary seminars, the Schools of Medicine, Surgery and Pathology receive assistance from all other appropriate schools.

Assessment: May comprise one multiple choice paper with 140 questions relating to medicine, surgery, pathology, clinical pharmacology and community medicine; one short answer paper of fourteen questions from the above areas in similar proportion to the multiple choice question paper;

clinical assessments which usually consist of one 'long case' in October and two 'short case' assessments in November. Full details are issued during the year.

### Year 5 (Five Year Curriculum)

Year 5 is comprised of five terms, each of eight weeks. In Terms 5.1 to 5.4 students rotate through blocks of teaching in obstetrics and gynaecology, paediatrics, psychiatry, geriatrics, general practice and emergency, rather than studying the subjects concomitantly. For this purpose students are allocated to a particular group – Group A, B,C or D – and follow the program of that group for the first four terms. Work is assessed during or towards the end of each term.

Term 5.5 is usually an Elective term but may be a prescribed program in the case of a student who has failed to satisfy the examiners in one of Terms 5.1 to 5.4.

All students in Year 5 are enrolled in subject 80.105 Final Clinical Examinations (Terminal Assessment) and are required to sit for an examination at the conclusion of Term 5.5 unless exempted on results obtained during Year 5 and on overall performance in the Medicine Course.

The subjects studied in Year 5 are:

75.101 Obstetrics and Gynaecology

76.101 Paediatrics

77.101 Psychiatry

80.105 Final Clinical Examinations

80.500 Elective

(B weeks)

80.501 Geriatrics/General Practice/Emergency

### Sequence of Blocks

Group	Α	В	С	D
Term 5.1 (8 weeks)	Geriatrics/ General Practice/ Emergency	Paedlatrics	Psychiatry	Obstetrics Gynaecology
Term 5.2 (8 weeks)	Paediatrics	Psychiatry	Obstetrics & Gynae- cology	Geriatrics/ General Practice/ Emergency
Term 5.3 (8 weeks)	Psychlatry	Obstetrics & Gynaecology		Paediatrics
Term 5.4 (8 weeks)	Obstetrics & Gynaecology		Paediatrics	Psychiatry
Term 5.5	Elective	Elective	Elective	Elective

### Assessment and Rules of Progression

The work of each rotating block is assessed during or towards the end of the block. Information concerning assessment in the Geriatrics/General Practice/Emergency block may be obtained from the Faculty Office.

Students who fail in any one of these assessments are required to repeat the subject in term 5.5, thereby foregoing the right to undertake an elective term. Students are required to obtain a satisfactory level of competence in the work of the repeat term. Students who fail more than one block are required to repeat the year.

Students who have obtained a credit level of performance in the clinical component of the 80.400 Integrated Clinical Studies assessments in Year 4 and who satisfy the assessors in each block from 5.1 to 5.4 are required to arrange a personal program of work for term 5.5 in any department or school within the Faculty, at any hospital or medical institution elsewhere, or with any medical practitioner, provided that details of the elective term are submitted in writing and approved by the Dean by the end of June.

Students who have not obtained a credit level of performance in the clinical component of the 80.400 Integrated Clinical Studies assessments must undertake an elective program in an approved area of Medicine and/or Surgery, and must submit details of the term in writing for approval by the Dean by the end of June. Details of the types of attachments which are approved are available from the Faculty Office.

For information about terminal assessment provisions affecting term 5.5 see below under the heading Remedial Term 5.5 and Final Clinical Examinations.

Before the commencement of Term 5.5 the Assessment Committee will review the performance of each student over the five years of the Medicine Course to ensure that the student prior to graduation has reached an acceptable level of competence. As a result of this review, and subject to a satisfactory assessment in the Elective Term, the Committee may exempt certain students from the requirement to undertake a terminal assessment at the end of Term 5.5.

### Terminal Assessment

The following students are required to undertake the terminal assessment:

- students who were given further assessment in the clinical component, 80.400 Integrated Clinical Studies;
- 2. students repeating the fifth year;
- 3. students who fail any one term during the fifth year;
- 4. students whose marks fall within the range 50-54 in 80.400 Integrated Clinical Studies in the Year 4 assessment and also in one rotating, term in Year 5;
- 5. students whose marks fall within the range 50-54 in any two of the four rotating terms;
- 6, students granted leave at the end of Year 4 (other than students undertaking the Bachelor of Medical Science course at the end of this year see BMedSc degree course outline) or who discontinue without failure in Year 5.

Students whose marks fall within the range 50-54 in 80.400 Integrated Clinical Studies in the Year 4 assessment will be considered for the terminal assessment. Such students may be exempted if they obtain a mark of 55 or more in each of the rotating terms.

Students who have obtained a mark of 55 or more in 80.400 Integrated Clinical Studies in the Year 4 assessment and whose marks fall within the range 50-54 in any one term in Year

5, but who are not required to repeat the term, will also be considered for the terminal assessment. Such students may be exempted subject to satisfactory performance in other subjects during the year.

The unofficial results for students in this category are released as 'PS: under consideration for the terminal assessment'.

#### Remedial Term 5.5 and Final Clinical Examinations

Students who are under consideration for the Terminal Assessment are required to undertake the Elective Term 5.5 in Medicine and Surgery under supervision in a hospital approved by the Schools of Medicine and Surgery, unless already required to repeat a term by virtue of having failed a term in Year 5.Any prior approval for an Elective Term will be withdrawn if a student is placed under consideration for the terminal assessment or is required to complete a remedial term.

### Eligibility for Elective Term 5.5

Students who have satisfied the Assessment Committee at the end of each block from Term 5.1 to 5.4 and who are not to undertake the terminal assessment (80.105 Final Clinical Examinations), are required to arrange a personal elective program of work for Term 5.5.

The following are not eligible to undertake the Elective Term:

- 1. Any student who has failed a term in Year 5.
- 2. Any student who was awarded supplementary clinical assessment in 80.400 integrated Clinical Studies.
- 3. Any student who is under consideration for the terminal assessment. (Students are notified at the end of each term if they are at that stage under consideration for the terminal assessment.)
- 4. All students who are required to undertake the terminal assessment.

The Dean's approval of the program must be obtained by the end of June. A proposal to undertake an Elective term overseas or interstate will not be approved after this time.

### Year 5 Subject Descriptions

#### 75.101 Obstetrics and Gynaecology

Objectives: to be able to take a history and perform a physical examination relevant to the female reproductive system; to recognize common disorders of the female reproductive system; to manage common medical gynaecological disorders likely to be primary care practice; to provide antenatal and postnatal care for a normal woman and to recognize deviations from normal; to be able to provide emergency care when indicated and to know the indications for referral.

A program of lectures in core subjects, clinical, physiological and pathological conferences and simulated patient management problem exercises. Students are taught in small tutorial groups. Supervized clinical experience is gained in outpatient clinics, in-patient services and the labour wards of The Royal Hospital for Women, St. George, Bankstown, St. Margarets, Sutherland and other selected hospitals. Neonatal paediatric experience is integrated with the teaching of

Obstetrics and Gynaecology. Full details are described in a booklet published by the school.

Assessment: Continuing evaluation of clinical work and in week eight, a final oral and written examination.

# 76.101 Paediatrics

Objectives: to understand the physical, emotional and intellectual development of normal children; to recognize the interactions between the child, the family and the community; to recognize when a child is acutely ill; to know how to provide acute primary care for a sick child; to recognize major medical problems in the newborn infants; to understand primary and secondary prevention.

The program in general paediatrics and paediatric surgery is taught at the Prince of Wales Children's Hospital and some associated hospitals. The main emphasis is on clinical clerking and this is supported by ward rounds, case conferences, discussion groups, seminars and lectures. Students are expected to spend one night in four in residence, and one or two weekends per term. Teaching in neonatal paediatrics is integrated with the teaching of obstetrics and gynaecology.

Assessment: A multiple choice question paper, a short answer paper and a clinical examination.

# 77.101 Psychiatry

Objectives: to be aware of the key symptoms, signs and syndromes of psychiatric disorder; to be able to take a psychiatric history and conduct a mental state examination; to have acquired those skills necessary for a doctor in general or non-psychiatric specialized practice to decide appropriate management strategies; to be aware of, and have some experience in, basic counselling skills; to be able to assess a patient's personality, psychological adjustment, coping repertoires, social function; to appreciate the importance of psychological factors in the diagnosis and treatment of illness; to be trained in interpersonal skills appropriate to clinical practice in any area of medicine; to be aware of the appropriate sections of the Mental Health Act; to have received basic knowledge in special areas of mental retardation, forensic psychiatry, child psychiatry, transcultural psychiatry and psychogeriatrics; to be competent in prescribing psychotrophic medications; and to be able to use simple behavioural techniques such as relaxation training.

Formal teaching seminars are held in the mornings of the first seven weeks. The afternoons are spent at Prince Henry, Prince of Wales, St. George, St. Vincent's and Sutherland Hospitals, where small group tutorials, case conferences and video analyses are carried out with academic and clinical staff, and clinical experience is obtained. Attachments to liaison psychiatry teams are organized so that students receive the appropriate teaching of skills related to general hospital patients. Visits to appropriate community facilities are organized.

Assessment: A written examination is conducted on the first day of the eighth week, and viva voce examinations are carried out on the remaining mornings of the week. A liaison psychiatry report is also part of the assessment.

# 80.105 Final Clinical Examinations (Terminal Assessment)

All students in Year 5 are enrolled in the subject 80.105 Final Clinical Examinations. In addition to those students

automatically required to sit for the terminal assessment, all other students will be considered by the Assessment Committee for a final assessment and their performance throughout the course may be taken into account. Normally a student who has obtained a mark of 55 or more in the Year 4 assessment and in each of the rotating terms of Year 5 is exempted from this assessment. A student may be required to undertake the terminal assessment or other form of assessment if the Term 5.5 Year 5 Assessment Committee considers that the report by the supervisor(s) in the Elective Term is unsatisfactory or if the student's report on that term is unsatisfactory.

Students who have obtained a mark of 55 or more in 80.400 integrated Clinical Studies in the Year 4 assessment and whose marks fall within the range 50-54 in any one term in Year 5, but who are not required to repeat the term, will also be considered for the terminal assessment. Such students may be exempted subject to satisfactory performance in other subjects during the year.

The unofficial results for students in this category are released as 'PS; under consideration for the terminal assessment'.

# Projected Format and Content of the Terminal Assessment

- There may be three assessments comprising one 30 minute short case clinical viva, one long case assessment consisting of one hour with a patient followed by 30 minutes with the assessors, and one 30 minute oral assessment.
- Each student is assessed by two assessors at each assessment. The assessing team is integrated, comprising members of the Schools of Community Medicine, Paediatrics, Psychiatry, Obstetrics and Gynaecology and Medicine and Surgery.
- 3. The 'long case' assessment is in an area of demonstrated weakness. At least one member of that assessing team will be concerned with the relevant subject.
- A student may be assessed in Medicine and Surgery and any of the areas taught in Year 5.

# Remedial Term 5.5 and Final Clinical Examinations

Students who are under consideration for the Terminal Assessment are required to undertake the Elective Term 5.5 in Medicine and Surgery under supervision in a hospital approved by the Schools of Medicine and Surgery, unless already required to repeat a term by virtue of having failed a term in Year 5. Any prior approval for an Elective Termwill be withdrawn if a student is placed under consideration for the terminal assessment or is required to complete a remedial term.

## 80.500 Final Year Elective Term 5.5

Objectives: These include one or more of the following: to develop basic knowledge and skills in Medicine and/or Surgery; to acquire preliminary training for a career in a specialty of medicine; to experience a different pattern of health care delivery from that practised in Australia; to obtain experience which may influence subsequent career orientation; to correct deficiencies perceived by students in their undergraduate program; to obtain a short introduction to research methods and philosophy.

All students undertaking the Elective Term must do so in an approved area of Medicine or Surgery or both, except for those who have attained a credit level of performance in the clinical component of the 80.400 Integrated Clinical Studies assessments. Information about attachments approved by the Schools of Medicine and Surgery is available from the Faculty office

Students who have attained a credit level of performance in the clinical component of the 80.400 Integrated Clinical Studies assessments may undertake work in one of the following areas (proposals which include work in more than one area are unlikely to be approved): in any school or department within the Faculty of Medicine; in a hospital or medical institution either in Australia or in another country; with a medical practitioner either in Australia or in another country.

Students should make individual arrangements for electives and are advised that some overseas governments, health authorities and/or hospitals require very early applications, accompanied by certification that the applicant is an enrolled medical student of the university who is eligible to undertake the specified term. When making the arrangements, students should specifically request that an appropriate person is willing to act as a supervisor. The supervisor is asked to submit a report to the Dean's Office by the end of the third week in November. Students who gain more than one acceptance for the elective term should communicate their refusals as soon as possible.

Students are encouraged to consult the files containing past student Elective reports, available in the School of Community Medicine. Students are also encouraged to discuss their Elective proposal(s) with a member of staff, perhaps their Warden of Clinical Studies.

#### Assessment of the Elective Term

Each student is required to produce a report which describes the nature of the work done during the Elective Term. This should be approximately 1000 words in length. The reports from the student and the supervisor must be submitted to the Faculty Office no later than the end of the sixth week of term. The reports are forwarded to the Heads of the relevant Schools for a decision as to whether the student has completed a satisfactoryterm, and thence to the Assessment Committee. It is the student's responsibility to ensure that both reports (including the supervisor's report) are received by the due date and in time for consideration by the Assessment Committee as late arrival may prejudice the allocation of an internship.

In general, students undertaking elective terms approved by the Dean are covered in respect of medico/legal claims made or actions instituted against them under the University's public liability and professional indemnity policy. However, this cover excludes claims made or actions instituted within the United States of America or Canada or territories under the jurisdiction of the courts of those countries. Students undertaking elective terms in the USA or Canada are therefore advised to ensure that they will be covered under the liability policies of the institutions at which they will be working, or that they arrange their own personal cover before commencing the term.

Further information is issued on enrolment or may be obtained from the Faculty Office.

## Attachment to a Hospital in the Solomon Islands

Applications must be lodged with the hospital by June of the year preceding that in which the term is to be taken. Each application must be accompanied by certification that the applicant is an enrolled medical student of the University and has been immunised against Hepatitis B.

## 80.501 Geriatrics/General Practice/Emergency

Term Design: Students rotate through attachments in Geriatrics (2 weeks), General Practice (2 weeks), and Emergency (4 weeks). Information about organization of attachments may be obtained from the Faculty Office.

#### **Geriatrics Unit**

Objectives: to gain an understanding of diagnosis and assessment in geriatric medicine; to address the management of certain specific disorders in the elderly such as dementia, falls, incontinence, stroke, mobility disorders, dying and terminal care; to gain information on appropriate drug therapy; to gain insight into the roles of workers involved in caring for the elderly including physiotherapists, occupational therapists, speech therapists, community nurses and nurses in nursing homes; to become familiar with the broad spectrum of geriatric services including the day hospital, the acute hospital, the rehabilitation centre, the nursing home, community nursing and hospice care; to stimulate thought concerning future directions for an ageing Australia.

The Geriatrics Unit can be undertaken in Canberra (based at Woden Valley Hospital) or in Sydney under geriatricians attached to the School of Community Medicine. The course consists of tutorials and practical experience in a range of health care facilities.

Assessment: Students are assessed on case report assignments.

#### **General Practice Unit**

Objectives: to understand the nature of general practice in terms of: the range and content of general practice as compared with the hospital practice; the management of patients outside a hospital setting; liaison and referral within community health services; the concept of prevention of disease and health maintenance; the problems of primary diagnosis and undifferentiated illness; the concept of continuing care; the special relationship between the general practitioner and the patient; the family setting and social context of the patient.

To recall the features of: a general practice interview; the process of general practice problem-solving; the techniques of keeping accurate medical records.

A two-week individual attachment to general practitioner preceptors either in Sydney or country New South Wales. Information about attachments may be obtained from Dr. D.Saltman in the School of Community Medicine.

The course is essentially experiential with a heavy emphasis on community-based teaching.

Assessment: Continuing evaluation of clinical work.

## **Emergency Unit**

Objectives: to recognize acute illness and life-threatening emergencies at presentation; to institute emergency

measures to save life where indicated; to assess rapidly acute medical and surgical problems; to list, in order of priority, necessary procedures or investigations which will affect management to evaluate the criteria for specialist referral; to know the appropriate management of acute illness; to perform simple casualty procedures.

The experience should include the emergency care of some life threatening medical and surgical conditions, evaluation of the criteria for referral for specialist advice and care and appropriate use of investigations in primary medical care.

Information about allocation to attachments may be obtained from the Faculty Office.

Assessment: Students are assessed on the basis of a report by the student's supervisor to the Faculty office, and a report by the student on an aspect of the attachment.

# The Six Year Curriculum - an Outline of Years 3 to 6

# Year 3

The principal subjects studied in third year are Pathology, Medical Physiology 2, Microbiology and Pharmacology. Clinical Studies continues the program commenced in Year 1 and students build upon their experience of the physical aspects of disordered function in a systematic study of the signs and symptoms of disease. In addition studies continue to reinforce the scientific basis of medicine. By the end of Year 3 students should be familiar with the hospital environment and be capable of communicating with patients, taking a clinical history, conducting a physical examination and detecting abnormalities.

# Year 4

Most of the fourth year (4 terms of 9 weeks each) of the course is spent in the teaching hospitals involved in clinical studies with an average of one day per week being spent on campus attending interdisciplinary seminars. By the end of Year 4 students will be expected to have achieved a high level of competence in communication skills, history taking, physical examination, diagnosis, patient management and rehabilitation. In the fields of general medicine and general surgery and the associated clinical specialities, emphasis is on total patient care incorporating aspects of continuing care in the community and in community practice.

#### Year 5

The fifth year (4 terms of 9 weeks each) is spent studying obstetrics and gynaecology, paediatrics, psychiatry, and GP/geriatrics. The GP/geriatrics term will incorporate teaching in the subspecialities of dermatology, opthalmology, and otolaryngology. Students must pass each term in order to progress to Year 6.

# Year 6

The first term of Year 6 (4 terms of 9 weeks each) is an elective term with the remaining three terms being dedicated to further clinical studies. By the time students enter Year 6 they have completed courses in the basic clinical sciences, history taking, physical examination, and therapeutics, and have had

exposure to medical and surgical subspecialities. The aim of Year 6 is to integrate and consolidate these separate experiences by enabling students to take partial responsibility for recognizing and treating medical complaints as they present to the doctor of first contact. The year will help to equip students for their intern year after graduation.

# **Intern Placement and Registration**

Each medical graduate seeking registration as a medical practitioner in New South Wales must complete a period of twelve months as an intern in a hospital or institution approved by the New South Wales Medical Board. Before taking up an intern appointment, a graduate must obtain a certificate of conditional registration from the Medical Board.

Information concerning intern placement and conditional registration is issued to each student by the Faculty Office during the final year. Information may also be obtained from: Intern Placement Sub-Committee: Department of Health,

NSW, McKell Building, Rawson Place, Telephone 217 6666.
Registration: The Secretary, Medical Board of New South Wales, Level 23, McKell Building, Rawson Place, Sydney, Telephone 217 6666, extension 5889.

# Ranking Students for the Award of Honours and Intern Placement

Students are ranked on the basis of their performance throughout the undergraduate course. An overall couse mark is calculated for each student using the following procedure:

- A weighted average mark for each year of the course is determined. This year mark is obtained by weighting each of the subjects in the year, mainly according to the hours of teaching. The subject weights for each of the years of the course are shown in Table 1.
- 2. The overall course mark is determined by applying the year weightings listed in Table 2 to the weighted year marks.
- If a student was required to sit for a supplementary assessment (for other than medical reasons or other exceptional circumstances) the subject mark used is that awarded for the original assessment.
- 4. If a student was required to repeat a year (for other than medical reasons or other exceptional circumstances) the weighted year mark used is that obtained at the first attempt.
- 5. In the calculation of the average weighted course mark for BSc MBBS students, the aggregate mark for the Science component is calculated as a weighted aggregate of all subjects counted towards the Science degree, except General Education subjects. The subject weights are as follows:
  - Level I subjects weighted by a factor equal to 0.0625 per unit, except Introductory Mathematics and Introductory Physics (0.05 per unit) and Higher Mathematics and Higher Physics (0.07 per unit).

- Level II subjects weighted by 0.1875 per unit.
- Level III subjects weighted by 0.25 per unit.
- Level II/III subjects to be counted as Level II or Level III according to whether the student passed the subject in Second or Third Year.
- Level IV subjects (Honours) not counted.

The three years of BSc component of the BSc MBBS course are treated as equivalent to the first two years of the MBBS course and therefore have a total year weight of 4 relative to the MBBS year weightings.

There is a limit set of 50 for the best possible score in the first year of the BSc component to put all students, whether or not they undertake Higher Mathematics or Physics, on the same footing. Only the best 24 units in the BSc component are considered in calculating the ranked score.

6. Provision is made for students admitted with advanced standing and/or exemptions in certain subjects not to be penalised in the calculation of rankings.

# **Award of Honours**

- 1. The Faculty Final Year Assessment Committee considers the ranked list of students and their marks and decides the cut-off marks for the award of honours at the various levels.
- 2. Neither the percentage of the students obtaining honours at the various levels nor the cut-off marks are predetermined. and the Committee makes its own assessment of the level of academic attainment indicated by the overall course mark.
- 3. As a guide, the distribution of the awards of honours in 1987 WAS

		Number	
	Course Mark	of Awards	% of graduands
Class I Honours	>69%	13	8
Class II Div. I	66-69%	17	11
Class II Div. II	64-66%	18	11

## Intern Placement

The ranked list of graduates is merged with the ranked list of Sydney University and Newcastle University medical graduates.

The Intern Placement Sub-Committee of the Resident Medical Staff Advisory Committee of the New South Wales Department of Health uses that list to allocate graduands to their highest available preference.

# Table 1. Subject Weightings within Years (Five Year Course)

#### Year 1

Anatomy 1 Introductory Clinical and Behavioural Studies Medical Biophysics	3 2 2
Chemistry and Biochemistry for medical students	4

#### Veer 2

rear 2	
Medical Biochemistry and Genetics Anatomy 2 Physiology Human Behaviour 2	3 5 6 2
Year 3	
Community Medicine Clinical Studies 3 Paraclinical Science Medical Science	2 6 13 2
Year 4	
Integrated Clinical Studies	1
Year 5	
Obstetrics & Gynaecology Paediatrics Psychiatry	1 1 1

# Table 2. Year Weights for Five Year Curriculum

16 L. 1601	regulator rive real culticulus
Year	Year Weighting
1	1
2	3
3	4
4	6
5	3

# Six Year Curriculum

Subject weights for years 3 to 6 of the six year curriculum have not yet been confirmed. Subject weights for years 1 and 2 of the six year curriculum are detailed in Table 3 below.

Additionally, year weights have not been confirmed however, the year weights for the five year curriculum may be taken as a guide.

# Table 3. Subject Weights Within Years 1 and 2, (6 Year Curriculum)

# Year 1 Anatomy

Introductory Clinical and Behavioural Studies Biology for Medical Students Biochemistry for Medical Students	2 1 3
Year 2	
Medical Biochemistry and Genetics Anatomy 2 Medical Physiology 1 Clinical Studies 2 Human Behaviour	2 3 3 1

3

**Undergraduate Study** 

# 3820 Combined Science and Medicine Course (BSc MB BS)

The Science/Medicine course is an alternative course of study, whereby, over a seven-year program (or a six-year program for those who entered the course prior to 1988), a student may complete the degree of Bachelor of Science, with the Bachelor degrees of Medicine and Surgery.

The Science/Medicine course is intended for those students with special interest and aptitude in science, who wish to obtain a firm grounding in basic sciences.

A limited number of places are available in this course, and these are open only to students who have been accepted for entry into the Faculty of Medicine.

Students who wish to undertake this program should contact the Faculty Office as soon as possible after receiving their offer of a place in the Faculty. Selection of students for the Science/Medicine course is made approximately two weeks before commencement of Session 1.

The students undertake a three-year approved course of study leading to the award of the degree of BSc, and on completion, enter Year 3 of the normal Medicine Course.

The conditions for the award of the BSc are those laid down by the Board of Studies in Science and Mathematics (see Combined Sciences Handbook). The student is offered a choice of a number of programs, leading to a major or double major in one or two of the subjects anatomy, biochemistry and physiology. A psychology major is also a possibility; however, this cannot be completed in the three-year minimum.

After the three years, students may apply to do honours in the subject of their major, before entering the medical program.

Students who have completed the combined Science/Medicine degree course are eligible for the award of honours in the MB BS degree course, based on weighted performance in subjects (excluding the BSc degree at honours level) throughout the combined course.

# **Course Details**

The Science course is divided up into subjects each of which is assigned a 'unit value'. For the Science degree, 23 units are required, together with three General Education electives. Students usually take 8 units in Year 1, 7 in Year 2, and 8 in Year 3. Students are strongly advised to complete the General Education requirements during the first three years, before entering the Medicine Course; otherwise there are timetabling difficulties.

#### Year 1

All students take two units each of physics, chemistry, mathematics and biology. There is a choice of level in mathematics and physics.

## Year 2

All students must take two units each of biochemistry, anatomy, and physiology, except that students majoring in biochemistry must take a unit of organic chemistry instead of one of the biochemistry units. One unit of human behaviour must be taken in either second or third year.

#### Year 3

Students are required to take a minimum of 4 Level III units in the subject of their major, which must be anatomy, biochemistry, physiology or psychology, together with a specified minimum number of units in anatomy, biochemistry, and physiology. The possible combinations are indicated in the following table.

## Subjects

Details of all subjects are given in the Combined Sciences Handbook; details of subjects taught by Schools in the Faculty of Medicine are also published in the Subject Descriptions section later in this book.

Subjects are listed in order of their assigned prefixed, viz:

1	Physics
2	Chemistry
10	Mathematics
17	Biological Sciences
41	Biochemistry
70	Anatomy

73 Physiology and Pharmacology

Elective units may be chosen from subjects listed in Table 1 and from Anatomy units listed in Table 2 of the Board of Studies in Science and Mathematics section of the Combined

Sciences Handbook. Year 1 Session 1 2.121 Chemistry 1A 17.031 Biology A Session 2 2.131 Chemistry 1B 17.041 Biology B (Students in percentile range 31-100 in HSC 4 unit Science with Biology or 2 unit Biology may be permitted instead to transfer to 45.201 Invertebrate Zoology, 45.301 Vertebrate Zoology, 45.601 Introductory Genetics.) Full Year 1.001 Physics 1 or 1.021 Introductory Physics 1 (For Health and Life Scientists) Mathematics 1 10.001 or 10.011 Higher Mathematics 1 or both

10.021B General Mathematics 1B (Session 1 only) and

10.021C General Mathematics 1C (Session 2 only)

1 General Education elective

# Year 2

Session 1

41.101 Biochemistry

Full Year

70.011A Histology 1

70.011C Introductory Anatomy

73.111 Physiology 1A

80.014 Human Behaviour (Science course)†

Session 1 and 2

1 General Education elective

\* Students majoring in biochemistry should take 2.102B Organic Chemistry instead of 41.111 Biochemical Control. For students majoring in biochemistry and physiology, 2.1028 will be accepted in lieu of 41.111 as a prerequisite for 73.012 Physiology 2. Students not majoring in anatomy commonly take an additional anatomy unit in - this may be either 70.011B Mammmalian Embryology or 70.012B †Visceral Anatomy. 80.014 Human Behaviour may be taken in Year 2 or 3.

# Year 3

# **Anatomy Major**

Core Units General Education elective 80.014\*\*, 4 Level III Anatomy units† together with

Single Major

73.012F, 3 Elective units

Double Major with Anatomy

3 Level III Anatomy units † (makes total of 7)

Double Major with Biochemistry

41.102, 41.112 and 41.122 or 41.132

Double Major with Physiology

73.012

# **Biochemistry Major**

Core Units

General Education elective 80.014\*\*,

41.102, 41.112 and 41.122 or 41.132

together with

Single Major

2 Level III Anatomy units †, 73.012F, 1 Elective unit

Double Major with Anatomy

4 Level III Anatomy units †

Double Major with Biochemistry

Not available

Double Major with Physiology

73.012

# Physiology Major

Core Units

General Eeucation elective 80.014\*\*, 73.012

together with

Single Major

2 Level III Anatomy units †, 2 Elective units

Double Major with Anatomy 4 Level III Anatomy units †

Double Major with Biochemistry

41.102, 41.121 and 41.122 or 41.132

Double Major with Physiology

Not available

\*\* 80.014 Human Behaviour may have been taken already in Year 2.

#### Year 4

Students usually join Year 3 of the Medicine Course. However, students may apply to take honours in the subject of their major before proceeding to the Medicine Course. The honours program is a one-year research project in the school. Details are given in the Combined Sciences Handbook (Table 3 in the Board of Studies in Science and Mathematics Section and Subject Descriptions). Enquiries should be directed to the head of the appropriate school.

Honours may also be awarded at the time of graduation with the degrees of MB BS, on the basis of a student's performance throughout the combined course (excepting any special studies for honours in Science). The award of honours shall be determined on the basis of a weighted aggregate mark, calculated as the sum of weighted aggregate marks obtained in the medical component of the course calculated in accordance with the rules applying to the Medicine Course 3800, together with an aggregate mark based on the Science component of the course.

**Undergraduate Study** 

# 3830 Bachelor of Medical Science (BMedSc)

A one-year program leading to the award of the degree of BMedSc is offered to students in the Medicine Course who have achieved a high standard in their studies. In general the aims of the year, normally spent in supervised research, are to enable the student to acquire an appreciation of the value of observation and experimentation in the development of medical science, and to learn how to determine the 'current state of knowledge' in a defined field. This year enables the student to gain experience in the written and spoken presentation of scientific information.

Information concerning the BMedSc course, is issued to medical students in mid-year. A list of available research projects may be obtained from the Faculty Office or the Clinical Schools.

(Students who, after completing the second year of the five year medicine curriculum in 1988, are accepted into the Bachelor of Medical Science program in 1989, should note that they will return to the third year of the new six year curriculum in 1990.)

# Rules for the Award of the Bachelor of Medical Science Degree

- 1. (a) Undergraduates who have successfully completed the first two years of the Medicine Course may enrol for the degree of BMedSc in one of the following subjects: anatomy, biochemistry, physiology, psychology or in any other subject approved by the BMedSc Committee, provided that the candidate's performance in the subject area shall have been of a high standard.
- b) Undergraduates who have successfully completed the first three years of the Medicine Course may enrol for the degree of

BMedSc in one of the following subjects: anatomy, biochemistry, microbiology, pathology, pharmacology, physiology, psychology, or in any other subject approved by the BMedSc Committee, provided that the candidate's performance in the subject area shall have been of a high standard.

- (c) A student may register as a candidate for the degree in any of the schools of the Faculty of Medicine, the School of Biochemistry, the School of Microbiology, or the School of Psychology, subject to the permission of the head of the school concerned and the BMedSc Committee.
- (d) A student electing to undertake the course at the end of fourth year is not automatically required to undertake terminal assessment at the end of fifth year, but will be counselled to maintain clinical competency and encouraged and assisted to arrange a short 3-4 week medical/surgical attachment before commencing Year 5.
- (a) Medical graduates may enrol for the degree of BMedSc in any subject approved by the BMedSc Committee provided that their performance in the subject area shall have been of a high standard.
- (b) A graduate may register as a candidate for the degree in any of the schools of the Faculty of Medicine, the School of Biochemistry, the School of Microbiology or the School of Psychology, subject to the permission of the head of school concerned and the BMedSc Committee.
- 3. The program for each candidate shall be designed to introduce the student to research in the appropriate discipline and shall consist of such formal and special work and such examinations as prescribed by the head of school concerned and approved by the BMedSc Committee.
- 4. The duration of the course shall be 2 sessions.
- 5. The award upon completion of the course shall be the pass degree of Bachelor of Medical Science; if the performance of the student has been unsatisfactory, no award shall be made.

## **Assessment Guidelines**

- 1. Schools make assessments on the advice of the supervisor and at least two assessors. Where the student performs his or her work in a clinical school, but is registered in a pre-clinical discipline, at least one of the assessors could be chosen from a relevant pre- or para-clinical school.
- 2. A thesis is compulsory and forms a major part of the assessment. The thesis must be typed and suitable for subsequent binding if required. The typescript of the thesis is normally no more than 20,000 words.
- 3. It is desirable that candidates participate in the activities of the school by participation in seminars, by presentation of essays and other prescribed activities.
- 4. Candidates are normally required to give an oral presentation during the year and this may be taken into account in the assessment.
- 5. A candidate's assessment is recorded in the following grades: High Distinction, Distinction, Credit, Pass, Pass Conceded and Fail (no award made).

Undergraduate Study

# **Subject Descriptions**

# Identification of Subjects by Number

A subject is defined by the Academic Board as 'a unit of instruction approved by the University as being a discrete part of the requirements for a course offered by the University'.

Each approved subject of the University is identifiable both by number and by name as this is a check against nomination of subject other than the one intended.

Subject numbers are allocated by the Academic Registrar and the system of allocation is based on the following guidelines:

- The authority offering the subject, normally a School of the University, is indicated by the number before the decimal point.
- 2. Each subject number is unique and is not used for more than one subject title.
- 3. Subject numbers may not be re-used with a new subject title within ten years of the prior use.
- 4. Graduate subjects are indicated by a suffix 'G' to a number with three digits after the decimal point. In other subjects three or four digits are used after the decimal point.

Subjects taught are listed in full in the handbook of the faculty or board of studies responsible for the particular course within which the subjects are taken. Subject descriptions are contained in the appropriate section in the handbooks.

The **identifying numerical prefixes** for each subject authority are set out on the following page.

Servicing Subjects are those taught by a school or department outside its own faculty. Their subject descriptions are published in the handbook of the faculty which originates the subject and are also published in the handbook of the Faculty in which the subject is taught.

The following pages contain descriptions for most of the subjects offered for the courses described in this book, the exception being the General Education subjects. For General Education subjects see the General Studies Handbook which is available free of charge.

# **HSC Exam Prerequisites**

Subjects which require prerequisites for enrolment in terms of the HSC Examination percentile range, refer to the 1978 and subsequent Examinations.

Candidates for enrolment who obtained the HSC in previous years or hold other high school matriculation should check with the appropriate school on what matriculation status is required for admission to a subject.

## Information Key

The following is the key to the information which may be supplied about each subject:

S1 Session 1, S2 Session 2

F Session 1 plus Session 2, le full year

S1 or S2 Session 1 or Session 2, ie choice of either session

SS single session, but which session taught is not known at time of publication

**CCH** class contact hours

L Lecture, followed by hours per week

T Laboratory/Tutorial, followed by hours per week

hpw hours per week

C Credit point value

**CR** Credit

**DN** Distinction

**HD** High Distinction

	School, Department etc *Subjects also offered for cour	Faculty ses in this handbook	Page		School, Department etc *Subjects also offered for cou	Faculty urses in this handbook	Page
	School of Physics*	Science	41	41	School of Blochemistry*	Biological and	
	School of Chemistry* School of Chemical	Science Applied Science	41	42	School of Applied	Behavioural Sciences Applied Science	43
	Engineering and Industrial Chemistry (New Course)			44	Bioscience (Biotechnology) School of Microbiology	Biological and	
4	School of Materials Science and Engineering	Applied Science			School of Biological	Behavioural Sciences Biological and	
5	School of Mechanical and	Engineering			Science	Behavioural Sciences	
6	Industrial Engineering School of Electrical	Engineering			Faculty of Applied Science Centre for Safety Science	Applied Science Engineering	
_	Engineering and	g			School of Chemical	Applied Science	
7	Computer Science School of Mines	Applied Science			Engineering and Industrial Chemistry (Old Course)		
	(Mineral Processing and Extractive Metallurgy and	• •		49	School of Applied Bioscience	Applied Science	
	Mining Engineering)			50	School of English	Arts	
8	School of Civil	Engineering			School of History	Arts	
_	Engineering	Annilled Colonos			School of Philosophy	Arts	
9	School of Fibre Science and Technology	Applied Science			School of Sociology* School of Political	Arts Arts	
	(Wool and Animal Science)			J#	Science	Alto	
-	School of Mathematics*	Science	42		School of Librarianship	Professional Studies	
	School of Architecture	Architecture			School of French	Arts	
12	School of Psychology*	Biological and Behavioural Sciences			School of Theatre Studies School of Education	Arts Professional Studies	
в	School of Fibre Science	Applied Science			Department of Russian	Arts	
	and Technology				Studies		
	(Textile Technology) School of Accounting	Commerce & Economica			Faculty of Arts	Arts	
	School of Economics	Commerce & Economics Commerce & Economics			Department of Music School of Science and	Arts Arts	
	School of Health	Professional Studies		02	Technology Studies	7110	
_	Administration	D. I. I. I. I.			School of Social Work	Professional Studies	
7	Faculty of Biological and Behavioural Sciences *	Biological and Behavioural Sciences	42	64	School of German	Arts	
18	School of Mechanical and	Engineering	42	65	Studies School of Spanish and	Arts	
	Industrial Engineering			•	Latin American Studies		
	(Industrial Engineering)	A		66	Subjects Available from		
9	School of Information Systems	Commerce & Economics		67	Other Universities Faculty of Science	Science	
20	Centre for Petroleum	Applied Science			Board of Studies in	Board of Studies in	
	Engineering Studies				Science and	Science and	
21	Department of Industrial Arts	Architecture			Mathematics	Mathematics	
25	School of Mines	Applied Science			School of Anatomy School of Medicine	Medicine Medicine	44 44
	(Applied Geology)	Applied colories			School of Pathology	Medicine Medicine	45
26	Centre for Liberal	Liberal and General			School of Physiology and	Medicine	
. 7	and General Studies School of Geography	Studies Applied Science			Pharmacology		45
	School of Marketing	Commerce & Economics			School of Surgery School of Obstetrics and	Medicine Medicine	
	School of Surveying	Engineering			Gynaecology		
30	School of Industrial	Commerce & Economics			School of Paedlatrics	Medicine	
	Relations and Organizational Behaviour				School of Psychiatry School of Medical	Medicine Medicine	
31	School of Optometry	Science		/0	Education	Medicine	
	Centre for Biomedical	Engineering		79	School of Community	Medicine	
	Engineering	Auto			Medicine		46
	Faculty of Arts School of Building	Arts Architecture			Faculty of Medicine Medicine/Science/	Medicine Medicine	46
	School of Town Planning	Architecture		0,	Biological	modicino	
37	School of Landscape Architecture	Architecture		95	Sciences Australian Graduate	AGSM	
38	School of Applied Bioscience	Applied Science		63	School of Management	AGOM	
,0	(Food Science and	r ppiled odierice			Faculty of Law*	Law	
	Technology)				Faculty of Engineering	Engineering	
39	Graduate School of the	Architecture		98	School of Banking and Finance	Commerce & Economics	
	Built Environment			99	Department of Legal	Commerce & Economics	
	Academic Board			- 0	Studies and Taxation		

# Faculty of Medicine - Summary of Undergraduate Study Descriptions

The following Subject Descriptions are presented only by subject number and title, together with the year in which each subject is to be taken in the Medicine Course. **Note:** Those subjects given as Yr 1 refer to the first year subjects of the six year curriculum.

For full details of subject content and assessment consult the subject descriptions listed in the Course Details under the relevant year listing in the Undergraduate Study section of this handbook.

41.001 Blochemistry for Medical Students	Yr 1
41.002 Medical Biochemistry and Genetics	Yr 2
70.001 Anatomy 1	Yr 1
70.002 Anatomy 2	Yr 2
73.001 Biology for Medical Students	Yr 1
73.002 Physiology	Yr 2
75.101 Obstetrics and Gynaecology	Yr 5
76.101 Paediatrics	Yr 5
77.101 Psychiatry	Yr 5
79.112 Community Medicine	Yr 3
80.010 Introductory Clinical & Behavioural Studies	Yr 1
80.012 Clinical Studies 2	Yr 2
80.013 Clinical Studies 3	Yr 3
80.105 Final Clinical Examinations	Yr 5
80.212 Human Behaviour 2	Yr 2
80.311 Paraclinical Science	Yr 3
80.321 Medical Science	Yr 3
80.400 Integrated Clinical Studies	Yr 4
80.500 Elective	Yr 5
80.501 Geriatrics/General Practice/Emergency	Yr 5

# **Physics**

# Physics Level I Subjects

# 1.001 Physics 1

F L3T3

HSC Exam Score Range

Prerequisites:

	Hequired
2 unit Mathematics or	67-100
3 unit Mathematics or	1-50
4 unit Mathematics	1-100 or
and	(for 1.001 only) 10.021B
2 unit Science (Physics) or	57-100
2 unit Science (Chemistry) or	60-100
3 unit Science or	90-150
4 unit Science or	1-150
1.021	

Co-requisite: 10.021C or 10.001.

Aims and nature of physics and the study of motion of particles under the influence of mechanical, electrical, magnetic and gravitational forces. Concepts of force, inertial mass, energy, momentum, charge, potential, fields. Application of the conservation principles to solution of problems involving charge, energy and momentum. Electrical circuit theory, application of Kirchoff's laws to AC and DC circuits. Uniform circular motion, Kepler's laws and rotational mechanics. Properties of matter: solids, liquids, gases. The wave theories of physics, transfer of energy by waves, properties of waves. Application of wave theories to optical and acoustical phenomena such as interference, diffraction and polarization.

# 1.021 Introductory Physics 1 (For Health and Life Scientists)

F L3T3

Prerequisites: Nil. Co-requisite: 10.021B and 10.021C, or 10.001.

Principally for students majoring in the life and health sciences disciplines. Topics at an introductory level.

The methods of physics, describing motion, the dynamics of a particle, conservation of energy, kinetic theory of gases, properties of liquids, vibrations and waves, electricity and conduction in solids, ions and ionic conduction, magnetism and electromagnetic induction, alternating current, atomic nature of matter, X-rays, the nucleus and radio-activity, geometrical optics, optical instruments, wave optics, microscopes and their uses.

# Chemistry

2.121 Chemistry 1A S1 or S2 L2T4

Prerequisites:

HSC Exam

Score Range
Required
2 unit Mathematics or 67-100
3 unit Mathematics or 1-50
4 unit Mathematics 1-100

<sup>\*</sup> This refers to the 2 Unit Mathematics subject which is related to the 3 Unit Mathematics subject. It does not refer to the subject 2 Unit Mathematics (Mathematics in Society).

and	
2 unit Science (Physics) or	53-100
2 unit Science (Chemistry) or	53-100
4 unit Science or	1-50
3 unit Science or	90-150
2.111	

\* This refers to the 2 Unit Mathematics subject which is related to the 3 Unit Mathematics subject. It does not refer to the subject 2 Unit Mathematics (Mathematics in Society).

Stoichiometry and solution stoichiometry. Properties of gases; kinetic molecular theory. Thermochemistry. Atomic structure, electro configurations and the periodic table. Types of chemical bonds, electronegativity, molecular geometry. Periodicity of physical and chemical properties of common representative elements and compounds. Liquids and solids, changes of state, phase diagrams. Types of solids. Solutions and their properties. Colloids. Facts and theories about reaction kinetics.

**Note:** Students who have passed 2.121 or 2.131 may not enrol in 2.111 or 2.141. Students meeting the 2.121 or 2.141 prerequisite are not permitted to enrol in 2.111 without the permission of the Head of the School of Chemistry. Students who enrol in 2.111 must pass 2.111 before they can proceed to 2.121 or 2.131 or 2.141.

## 2.131 Chemistry 1B

S1 or S2 L2T4

Prerequisite: 2.121.
Chemical equilib

Chemical equilibrium, equilibrium constants, quantitative calculations applied to acid-base and solubility equilibria; buffers, titrations, chemical analysis. Oxidation and reduction reactions, electrode potentials. Chemical thermodynamics, entropy, free energy. Chemistry of carbon compounds, stereoisomerism; alkanes, alkenes, alkynes, aromatic compounds, alcohols, ethers, aldehydes, ketones, carboxylic acids and derivatives amines.

**Note:** Students who have passed 2.111 may be permitted to enrol in 2.131 on application to the Head of the School of Chemistry.

# **Mathematics**

## 10.001 Mathematics 1

F L4T2

Prerequisite:	HSC Exam
·	Score Range
	Required
2 unit Mathematics or	67-100
3 unit Mathematics or	1-50
4 unit Mathematics or	1-100
10.021B	

Excluded: 10.011, 10.021B, 10.021C.

This refers to the 2 Unit Mathematics subject which is related to the 3 Unit Mathematics subject. It does not refer to the subject 2 Unit Mathematics (Mathematics in Society).

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

#### 10.021B

# General Mathematics 1B

Prerequisite:

2 unit Mathematics or

3 unit Mathematics or

HSC Exam Score Range Required 60-100 1-50

1-100

4 unit Mathematics Excluded: 10.011, 10.001.

Functions (and their inverses), limits, asymptotes, continuity; differentiation and applications; integration, the definite integral and applications; inverse trigonometric functions; the logarithmic and exponential functions and applications; sequences and series; mathematical induction; the binomial theorem and applications; introduction to probability theory; introduction to 3-dimensional geometry; introduction to linear algebra.

#### 10.021C

# General Mathematics 1C

HSC Exam

Prerequisite: 10.021B. Excluded: 10.001, 10.011.

Techniques for integration, improper integrals; Taylor's theorem; first order differential equations and applications; introduction to multivariable calculus; conics; finite sets; probability; vectors, matrices and linear equations.

# **Biological Science**

# **Plant Science**

# 17.031 Biology A

S1 L2T4

Prerequisite:

	Score Rang Required
2 unit Science (Physics) or	53-100
2 unit Science (Chemistry) or	53-100
2 unit Science (Geology) or	53-100
2 unit Science (Biology) or	53-100
3 unit Science or	90-150
4 unit Science	1-50

Basic cell structure; membranes, organelles, prokaryotic and eukaryotic cells; cellular locomotion; basic biological molecules; enzymes; structure and metabolic roles, cellular compartmentalization and enzyme function; diffusion, osmosis and active transport; theory of inheritance, linkage, mutation, informationt ransfer and protein synthesis.

# Requirements for Practical Work

Equipment required for practical work is set out in the Course Guide, available during enrolment time at the First Year Registration Centre (Physics Building). Students must purchase this prior to the first week of session.

#### 17.041 Biology B

S2 L2T4

Prerequisite: 17.031 (however, students without this prerequisite may seek the permission of the Director of First Year Biology to enrol). Excluded. 17.021.

The evolution, diversity and behaviour of living things and the ways in which they have adapted to varying environments.

Emphasis on the structure and function of flowering plants and vertebrate animals, and their roles in Australian ecosystems. The theory covered in lectures and tutorials is illustrated by observation and experiment in laboratory classes.

of enzymes. The intermediary metabolism of carbohydrates, lipids and nitrogenous compounds. The relationship between structure and function of enzymes, other proteins, hormones and biological membranes, metabolic networks and control mechanisms. The molecular mechanism of gene expression and protein synthesis. Photosynthesis. Practical work to complement the lectures. Regulation of gene expression. Recombinant DNA technology and protein engineering. Introduction to biotechnology.

# **Animal Science**

# 45.201 Biology of Invertebrates

**S2 L2T4** 

Prerequisites: 17.031, 17.041.

A comparative study of morphology, taxonomy and functional biology of invertebrate animals. Emphasis is placed on the major groups (Arthrpods and Milluscs) and on marine forms. Practical classes and a compulsory field camp illustrate the lecture material.

The morphology and systematics of the major Phyla of invertebrate animals will be considered on a group by group basis, beginning with relatively simple animals and moving to the more complex. Within this framework the following will be considered: 1. functional biology including physiology, feeding mechanisms, reproduction and mode of life (free-living, sessile and parasitic); 2. the effect of increasing body size and complexity on physiological function (internal transport systems, excretion, gas exchange and coordination); 3. detailed coverage of the invertebrate component of zooplankton; 4. evolutionary relationships between Phyla - the Phyla covered will include Porifera. Cnidaria and Ctenophora, Platyhelminthes, Nemertina, Nematoda, Annelida, Arthropoda, Onychophora, Sipuncula, Bryozoa, Mollusca, Echinodermata, Hemichordata, Chaetognatha and non-vertebrate Chordata.

# 45.301 Vertebrate Zoology

S1 L3T3

Prerequisites: 17.031, 17.041.

A comparative study of the Chordata, with particular reference to the vertebrates, including morphology, systematics, evolution and natural history, with reference to selected aspects of physiology and reproduction. Practical work to supplement the lecture course. Field excursions as arranged.

# **Biochemistry**

# 41.101 Principles of Biochemistry and Molecular Biology

F L2T3

Prerequisites: 18.031 and 17.041, 2.121 and 2.131, or 2.141.

Excluded 2.003J.

The chemical properties of amino acids, peptides and proteins, carbohydrates, nucleic acids and lipids and the biological roles of these compounds. The nature and function

# 41.102 Biochemistry of Macromolecules

S1 L3T9

Prerequisites: 41.101, and 2.102B or 2.102D.

Excluded: 41.102A

Complex carbohydrates. Chemistry and biology of polynucleotides. Methods of amino acid and nucleic acid sequence analysis. Protein structure and synthesis. Active centres of some proteins. Sub-unit organization of proteins. Enzyme kinetics and enzyme mechanisms. Spectroscopy of biopolymers. Practical work to illustrate the lectures and to provide experience in modern biochemical techniques.

# 41.112 Human Biochemistry

S2 L2T4

Prerequisite: 41.101.

Aspects of metabolism that are of particular relevance to the human: nutrition, exercise, neurochemistry, xenobiotics and genetic diseases.

The role of triglyceride, cholesterol and lipoprotein metabolism in human health, and other selected areas of human nutrition. Exercise, the metabolic fuels utilized and the use of in vivo NMR to monitor changes in energy metabolism. Specialized aspects of endocrinology and neurochemistry including prostaglandins, leukotrienes, enkephalins and endorphins. The interrelation of purines, pyrimidines, folate and cobalamin metabolism in humans. Xenobiotics: the metabolism of foreign compounds by humans. Biochemical aspects of genetic disease including the use of recombinant DNA techniques for prenatal diagnosis and carrier detection. Practical work to amplify the lectures.

# 41.122 Cellular Biochemistry and Control

S2 L2T4

Prerequisite: 41.101.

Excluded: 41.102B

Cell biology from a molecular physicochemical viewpoint. Biochemical aspects of cellular organization and how they are integrated and controlled. The arrangement of the component molecules of organelles, their function in integrated cellular metabolism to molecular interactions between the cells of multicellular organisms. The biochemistry of the cytoskeleton, carriers and intracellular transport systems. The regulation of cellular processes at the molecular endocrine level. Growth and differentiation. Aspects of cancer metabolism, the biochemistry of cell to cell communication and the structure and function of the extracellular matrix. This subject is complementary to 43, 192 Ultrastructure, and students with a special interest in cell biology are encouraged to take both subjects. Practical work to amplify the lectures.

# **Anatomy**

# Servicing Subjects

These are subjects taught within courses offered by other faculties. For further information regarding the following subjects see the Sciences Handbook.

# 70.011A Histology 1

F L1T2

Prerequisites: 17.031, 17.041. Co-requisite: 70.011C

Elementary theory of light and electron microscopy. Cell morphology and cell ultrastructure. Introduction to simple histological techniques. Basic histology, including the morphological and functional properties of epithelial, connective, muscle and nervous tissues. Systematic histology, including a histological examination of the major systems of the body; cardiovascular, respiratory, lymphatic, integumentary, digestive, endocrine, urinary, reproductive and nervous (including eye and ear) systems. Emphasis on the ability to interpret histological sections and selected electron micrographs of mammalian tissues and organs and to relate morphology to tissue and organ function. One lecture per week followed by a 2-hour practical-tutorial class.

# 70.011B Mammalian Embryology

F L1T2

Co-requisites: 70.011A, 70.011C

History of embryology and its development as a science. The mammalian reproductive system. Gametogenesis. Fertilization and cleavage. Development and implantation of blastocyst. Development of embryonic disc, embryonic membranes, placenta. Comparative mammalian placentation. Human embryogenesis. Development of human fetus. Characteristics of external form. Teratology. Human organogenesis. Comparative mammalian development. Biochemistry and embryogenesis.

# 70.011C Introductory Anatomy

S1 L2T4

Prerequisites: 17,031, 17,041.

Introduction to gross anatomy, based on a study of prosected specimens. Musculoskeletal, cardiovascular, respiratory, gastrointestinal, genitourinary and nervous systems. General topographical and surface anatomy.

# 70.012B Visceral Anatomy

S2 L2T4

Prerequisite: 70.011C.

A detailed study of the visceral system, including autonomic nervous system, head and neck regions and the cardiovascular, respiratory, gastrointestinal and genitourinary systems. In addition, tutorials include clinical cases and surface and radiological anatomy.

# 70.012C Neuroanatomy 1

S1 L2T4

Prerequisites: 70.011A, 70.011C.

Nerve cells and neuronal satellite cells, cytoarchitecture of brain and spinal cord, comparison of peripheral and central nervous systems. Functional anatomy of sensory and motor processing, and higher cerebral functions such as language and emotions. Blood supply of the central nervous system, cerebrospinal fluid and membranous coverings. Comparative anatomy of the brain.

#### 70.013 Anatomy 4

F

Prerequisite: Completion of the first three years of any Science program with a major in Anatomy (see Table 3 of Combined Sciences Handbook).

An honours program consisting of the preparation of an undergraduate thesis and participation in School seminars.

#### 70.304 Histology 2

S2 L2T4

Prerequisite: 70.011A. Excluded: 70.3041. (If 70.304 is taken after 70.3041, total counts only 1 unit.)

May not be offered in 1989.

Mammalian histology, with particular reference to the human. Practical histological procedures: fixation, section preparation, staining. Microscopy. Theoretical, practical and applied histochemistry.

# 70.305 Neuroanatomy 2

S2 L1T2

Prerequisite: 70.021C.

Topics of contemporary neuroanatomy and neuroscience. Includes: sensory, motor, and associational areas of the cerebral cortex, cerebral asymmetry, hippocampus, regulatory centres of the brainstem organization of cerebellum, sensory organs. Recent advances in chemical neuroanatomy and neuroendocrinology. Neuroanatomy of major neurological diseases, scientific basis of novel approaches to treatment. Recent work on the development of the brain. The course is organized in seminar format, and is based primarily on original publications. Students are required to undertake a substantial amount of private study.

# 70.306 Functional Anatomy 1

S1 L2T4

Prerequisite: 70.011C.

Introduction to fundamental issues in the morphology and dynamics of human movement systems. Includes: physical properties of bone, muscle and connective tissue; biomechanics, movement analysis and neuromuscular control. These basic principles are applied to a study of musculoskeletal components of head and neck and upper limb. Emphasis on modern analytical techniques and findings. Tutorials include limb and joint dissections plus study of surface and radiological anatomy.

# 70.307 Functional Anatomy 2

S2 L2T4

Prerequisite: 70.306.

A continuation of 70.306. Includes: a detailed study of the musculoskeletal components of trunk and lower limb, functional morphology of muscle, biomechanics and energetics of walking and running.

# Medicine

# Servicing Subject

This is a subject taught within a course offered by another faculty.

For further information regarding this subject see the Combined Sciences Handbook.

# 71.001 Principles of Medicine for Optometry Students

FL<sub>1</sub>

Prerequisite: None. Students normally take the subject in Year 4 of course 3950.

An overview of all aspects of current clinical medical practice. Included are historical, epidemiological, pathophysiological, diagnostic, therapeutic and public health aspects of disease in man and the various clinical categories of practice.

# **Pathology**

# Servicing Subject

This is a subject taught within a course offered by another faculty.

For further information regarding this subject see the Combined Sciences Handbook.

# 72.301 Basic and Applied Pathology

F L2T1

Prerequisites: 70.011A, 70.011C, 73.111 or equivalent.

Lectures and practical class demonstrations. Includes exposition of the basic classification of pathological processes, study of the processes of cell and tissue degeneration, acute and chronic inflammation, vascular disease, including thrombosis, embolism, ischaemia and infarction. Coverage of the processes of healing and regeneration with specific reference to healing of skin wounds and the healing of fractures. Aberrations of cell growth used to introduce the subject of neoplasia and carcinogenesis. Exposure to examples of specific disease entities of general practical importance exemptifying the basic or fundamental processes such as appendicitis, pneumonia, arthritis, pulmonary and myocardial infarction as well as lung, alimentary and cerebral tumours. Correlation of pathological processes with development of specific clinical syndromes.

# **Physiology and Pharmacology**

# Servicing Subjects

These are subjects taught within courses offered by other faculties.

For further information regarding the following subjects see the Combined Sciences Handbook. The subject 73.111 also appears in the Faculty of Engineering Handbook.

# 73.011 Principles of Physiology (Optometry) F L2T4

Prerequisites: As for Physiology 1 except that 2.131 may be accepted as a co-requisite. Excluded 73.111.

Covers the same general areas of physiology as Physiology 1 but in less detail and with less intensive practical courses. Principles of Physiology is taken only by students in the BOptom degree course.

# 73.012 Physiology 2

**F L4T8** 

Prerequisites: 73.111, 41.101, 41.111.

A major subject offered in third year, providing a more advanced course of study in Physiology. Students spend

considerable time performing laboratory experiments which illustrate various physiological principles and introduce them to the techniques used in physiological investigation. The course is orientated towards the areas of physiology constituting the major research interests of the School. It is divided into several sections which may be available in special circumstances as separate 1 and 2 unit Level III courses, including Membrane Biology, Neurophysiology and Organ Physiology, details of which are given below.

# 73.012A Membrane Biology

S1 L2T4

For entry consult Head of School of Physiology and Pharmacology.

The properties of cell membranes including permeation of ions, solutes and water across membranes, generation of electrical signals in nerve and muscle cells produced by ion movements, and transmission of information between cells. Stress on modern research techniques and on a critical examination of appropriate classical papers.

# 73.012B Neurophysiology

S1 L2T4

For entry consult Head of School of Physiology and Pharmacology.

A detailed study in two broad areas, neural mechanisms in sensation and the control of posture and movement, Includes the regulation of visceral and other autonomic effector structures and the neural substrates and correlates of certain higher functions such as speech, memory and consciousness. Directed towards the experimental analysis of nervous system function, to introduce the techniques and approaches used in neurophysiological research. Sensation: an integrated lecture and experimental course is given on somatic, visual and auditory sensory mechanisms. Laboratory work: students conduct psychophysical experiments to evaluate subjective sensory capabilities. Theneural mechanisms underlying these subjective abilities are examined in animals in electrophysiological experiments which involve recording the impulse patterns from individual neurones within the sensory systems. Students are required to analyze the mechanisms employed by the nervous system to code information about specific parameters of sensory

Lectures and experiments on motor function are directed towards an understanding of the various reflex and voluntary mechanisms controlling posture and movement. The section dealing with nervous control of visceral function is concerned mainly with regulation of cardiorespiratory activity.

## 73.012C Organ Physiology

S2 L4T8

Prerequisites: for 73.012A, B, C: normally as for 73.012. For entry consult Head of School of Physiology and Pharmacology.

An advanced study dealing with major physiological systems ofthe body and usually includes detailed segments from: the cardiovascular and respiratory systems; endocrines, kidney, fetalphysiology, gastrointestinal physiology and exercise physiology. Emphasis on the functions of individual organs as well as the overall operations of particular body systems including their neural control mechanisms. Emphasis on the approaches and techniques involved in physiological research. Students are therefore required to carry out an extensive series of experiments which usually employ mammalian (including human) preparations.

# 73.012F Clinical Physiology

FT3

Excluded: 73.012

Prerequisites: 73.111; 41.101; 41.111 or 2.002B; 70.011A; 70.011C;

80.014.

This Level III subject is only available in course 3820, and only to those students not undertaking Physiology 2. The subject is intended to supplement the Level II, Physiology 1A course in order to provide an adequate grounding for double degree students in applied or clinical aspects of physiology before they enter Year 3 of the Medical Course.

Covers aspects of normal and disordered physiology in the following areas: cardiovascular and cardiorespiratory mechanisms; body fluid balance and kidney function; the endocrine system; central nervous system; gastrointestinal physiology.

# 73.022 Pharmacology

F L2T4

Prerequisite: 73.111 or 73.121. Co-requisites: 73.012 or 41.102A 41.102B or two Level III Chemistry units.

Includes a study of the absorption, distribution and metabolism of drugs, as well as a study of the pharmacology of the autonomic nervous system, the cardiovascular system, the central nervous system, the kidney, the endocrine system and also a study of pharmacokinetics. A practical class program complements the lecture program by demonstrating a variety of basic pharmacological techniques.

# 73.111 Physiology 1

F L2T4

Prerequisites: 17.031 17.041; 2.121 2.131, or 2.141; 10.001 or 10.011 or 10.021 B C. Excluded: 73.121, 73.011. Co-requisite: 41.101.

Introduction to fundamental physiological principles, dealing first with basic cellular function in terms of chemical and physical principles, and, second, with the operation of the various specialized systems in the body, for example, the cardiovascular system, whose function it is to transport materials to and from the tissues of the body; the respiratory system which must maintain the exchange of oxygen and carbon dioxide betweenthe atmosphere and the blood; the gastrointestinal system which enables food materials to be modified by digestion and absorbed into the circulation; the kidney which is involved in the regulation of body fluid and electrolyte balance and with the excretion of the waste products of metabolism; the endocrine system which releases chemical messengers, called hormones, that are carried in the blood stream to regulate a great variety of body functions, eg metabolism and reproductive activity; the nervous system which by means of very rapidly propagated electrical impulses is responsible for all our movements, sensations, memories, emotions and consciousness itself. A substantialseries of practical class experiments on these different areas of physiology is included in the course. This subject is taken by students enrolled in any of the Physiology program.

# **Community Medicine**

# Servicing Subjects

These are subjects taught within courses offered by other faculties.

For further information regarding the following subjects see the Combined Sciences Handbook.

# 79.201 Population Genetics

S1 L2T3

Prerequisite: one unit of statistical methods, or theory, as approved by the Head of School.

The genetic structure of populations: demographic structure, genetic relationships, mating systems (random and assortative mating, inbreeding, sexual selection), finite populations, systematic forces (selection, mutation, migration), genetic distance between populations, genetic load, stable populations, molecular population genetics, evolutionary trees; observed human population structures; computer methods.

# 79.202 Human Genetic Analysis

**S2 L2T3** 

Prerequisites: one unit of genetics and one unit of statistical methods, ortheory, as approved by the Head of School.

Principles and methods of human genetics: design of surveys, including twin and family studies; estimation and applications of genic and genotypic frequencies, selective values, mutation and migration rates, coefficients of kinship, inbreeding and assortative mating, effective population sizes, recombination fractions and heritabilities; segregation analysis; risks of recurrence of disease; genetical consequences of human intervention; computer methods.

# 79.302 Biochemical Genetics of Man

S1 L2T4

Prerequisites: 41.101, 43.101.

Inherited variation of blood group antigens, serum proteins and red-cell enzymes, their possible selective roles, and their application to the study of differences between and within populations. Application of statistical techniques to analyzing populationd ata.

# **Faculty of Medicine**

# Servicing Subject

This is a subject taught within courses offered by other faculties.

For further information regarding the following subject see the Combined Sciences Handbook.

#### 80.014 Human Behaviour

FL3

Prerequisites: No formal prerequisites. Students may take the subject in Year 2 or Year 3 of Course 3820.

As for 80.212. See Undergraduate Study: 3800 Medicine Course, earlier in this handbook.

# **Graduate Study**

# Faculty of Medicine Graduate Enrolment Procedures

All students enrolling in graduate courses should obtain a copy of the free booklet *Enrolment Procedures 1989* available from the School Offices and the Admissions Office. This booklet provides detailed information on enrolment procedures and fees, enrolment timetables by faculty and course, enrolment in miscellaneous subjects, locations and hours of cashiers and late enrolments.

Students interested in undertaking a graduate course should consult the Postgraduate Section (through the Admissions Office in the Chancellery, and/or the appropriate head of school).

# **Graduate Courses**

At the graduate level, study for the award of the degrees of Doctor of Medicine (MD), Master of Community Health (MCH), Master of Health Personnel Education (MHPEd), Master of Paediatrics (MPaed), Master of Psychotherapy (MPsychotherapy), Master of Public Health (MPH) and Master of Surgery (MS) may be undertaken; in addition the degrees of Doctor of Philosophy (PhD), Master of Science (MSc) and Diploma of Paediatrics (DipPaed), are also offered.

Full details of the conditions of the award of these degrees are shown in this handbook under Conditions for the Award of Higher Degrees.

# **School of Community Medicine**

The School offers programs of study leading to the awards of the degrees of Master of Community Health and Master of Public Health either by research or by formal course work.

# 2855 Master of Community Health By Research

## MCH

This course is designed for health personnel engaged in various areas of community health services and professions who wish to develop their research skills by undertaking studies leading to the award of the degree of Master of Community Health, either as full-time or part-time internal students, or as students external to the University. External candidates are required to spend a minimum of 14 weeks in the School.

An original investigation under the direction of a supervisor for a minimum period of three academic sessions in the case of a full-time candidate, or a minimum of four academic sessions in the case of a part-time or external candidate is required.

Appropriate areas for research include prevention and health promotion; primary health care; health of particular population groups; occupational and environmental health; epidemiology; health of the elderly; disability and rehabilitation; alcohol, smoking and drug dependence; health services and evaluation; community mental health; community genetics; or a field approved by the head of the school.

The candidate is required to submit a thesis embodying the results of the original investigation.

# 9020 Master of Community Health By Formal Course Work

# **MCH**

The course is designed to further the competence and skills of health personnel in problem-solving and practice in community health and health services, and to enhance practical skills and provide experience in epidemiological and preventive techniques, health education and promotion. A major emphasis in the course is on student activity, both individually and in small groups.

The masters degree program is a part-time course of two and a half years. Candidates are required to complete a program totalling 24 credits over four sessions, made up of 3 nominated subjects (14 credits) and 5 academic electives (10 credits). Candidates must also undertake a research project during a further session.

# **Nominated Subjects**

Sessions 1 and 11	Hours per week
79.511G Epidemiology I (Methodology)	3
79.512G Epidemiology II (Practice)	<u>3</u>
	6

# **Academic Electives**

Students are required to obtain 10 credit points through elective subjects. With the approval of the Higher Degree Committee and upon recommendation of the head of the school, students may undertake relevant elective subjects offered by other Schools within the University or by other Universities or tertiary institutions. Each elective subject has two credit points. The elective subjects offered by the School of Community Medicine are listed in the following:

		Credits
79.600G	Disability	2
79.601G	Health of the Elderly	2
79.602G	Health and Illness Behaviour	2
79.603G	Communication and Writing in Health	2
79.604G	Alcohol and Drug Related Problems	2
79.605G	Health in Developing Countries	2
79.606G	Women and Health	2

# 79.504G Project

The research project may be undertaken in the following areas: prevention and health promotion; primary health care; health of particular population groups; occupational and environmental health; epidemiology; health of the elderly; disability and rehabilitation; alcohol, smoking and drug dependence; health services and evaluation; community mental health; or in a field approved by the head of the school.

# 2845 Master of Public Health (By Research)

# Master of Public Health MPH

The Master of Public Health course has been developed in response to changing health needs in the community. The

program combines studies in management, development and education, in addition to the necessary knowledge of epidemiology, quantitative methods and health issues. The course integrates development of health programs with development of the people who run the programs. It embraces the skills necessary for successful change through planning, inter-personal communication and persuasion, leadership and management, as well as political and cultural sensitivity to the effects of change.

The course is a conjoint undertaking by the Schools of Community Medicine and Medical Education within the Faculty of Medicine, and the School of Health Administration within the Faculty of Professional Studies.

Facilities are available in the Schools for students to undertake research studies leading to the degree of Master of Public Health, as either full-time internal students, part-time internal students, or part-time students external to the University. Students are required to have a suitable first degree and are normally expected to have considerable experience in their proposed field of study within the health or hospital services. Enquiries should be directed to the Course Director.

# 9045 Master of Public Health (By Formal Course Work)

# Master of Public Health MPH

The course is generally needs/and problem oriented. The program for each student can, within limits, be tailor-made in terms of their disciplinary and workforce backgrounds, and their interests. It is a conjoint undertaking by the Schools of Community Medicine and Medicial Education within the Faculty of Medicine, and the School of Health Administration within the Faculty of Professional Studies. Elective subjects may also be taken in other relevant schools within the University. The provision of independent studies within there Schools also allows for the provision of highly specific subjects or small projects, given the appropriate teaching or supervisory resources.

Some areas of knowledge, skills, theoretical and conceptual bases are, however, considered necessary as a foundation for public health planning, program implementation and operation, and evaluation. These are nominated for all students unless previous formal education at an acceptable level can be demonstrated.

The course may be taken either full-time (3 academic sessions, 2 of which must be spent in formal course work within the University), or part-time (a minimum of 4 academic sessions of formal work, although the normal expectation would be 5-6 sessions).

#### Outline

Students are to undertake 12 two credit point subjects, which may include independent studies, and a major project to a total of 30 credit points. (Each credit point is equivalent to one class contact hour per week.)

- (i) Of these 12 subjects:
- 2 must be chosen from Population and Methodological Studies
- 2 must be chosen from Health Issues Studies

1 must be chosen from Management Studies

- 1 must be chosen from Educational, Social and **Developmental Studies**
- (ii) The remaining six subjects will normally be chosen from those listed as being relevant and available in the Schools of Community Medicine, Medical Education and Health Administration, Two of the six subjects may be Independent Studies in any of the three Schools (79,100G, 78,00G, 16,922G).
- (iii) The total program of each student must be approved by the Master of Public Health Degree Committee which will be the final arbiter of course content. There are some constraints upon the choice available. For example, unless the students can demonstrate adequate background in the nominated areas, they must complete courses in epidemiology, quantitative methods and management.

A major project of contemporary public health significance is to be started, by the latest, on completion of six subjects and finished by the end of the course.

The following subjects are currently offered by the School of Community Medicine (79.), School of Medical Education (78.) and. School of Health Administration (16.). All subjects are assumed to be of equal credit value that is, two credit points.

# Population and Methodological Studies

16.901G Quantitative Methods and Statistics 1

16.902G Quantitative Methods and Statistics 2

16.937G Research and Evaluation Methods

16.941G Epidemiology

16.942G Public Health

116.950GComputing Techniques for Health Services Research

79.511G Epidemiology 1

79.512G Epidemiology 2

78.127G Research in Education for the Health Professions 1

## **Health Issues Studies**

16.922G Project (equivalent to Independent Studies)

78.000G Independent Studies

78.012G Current Approaches to Health Promotion

78.013G Influencing Health Beliefs and Health Behaviour

78.122G Primary Health Care

79.100G Independent Studies

79.600G Disability

79.601G Health of the Elderly

79.602G Health and Illness Behaviour

79.604G Alcohol and Drug Related Problems

79.605G Health in Developing Countries

## Management Studies

16.904G Health Care Systems

16.907G Accounting and Financial Management

16.930G Health Service Planning 1

16.933G Health Services Law 1

16.935G Health Economics 1

16.970G Management A

16.971G Management B

78.104G Organization and Management for Health Personnel Education

78.111G Consultation Process

78.112G Managment of Human Resources in Health

# Educational, Social and Developmental Studies

16,981G Sociology, Ethics and Health

78.010G Understanding and Working in Communities

78.011G Practice in Developing Community Programs

78.102G Educational Process in Small Groups

78.108G Program Evaluation and Planned Change

78.125G Planning, Conducting and Evaluating Educational Workshops

79.603GCommunications and Writing in Health

# School of Medical Education

The School offers programs of study leading to the awards of the degrees of Master of Health Personnel Education and Master of Public Health - either by research or by formal course work.

# 2885

# Master of Health Personnel Education **By Research**

#### MHPEd

This course is designed for teachers and/or educational administrators in the health professions who wish to develop their research skills by undertaking studies leading to the award of the degree of Master of Health Personnel Education. either as full-time or part-time internal students or as students external to the University. (The latter are required to spend a minimum of 14 weeks in the School.)

An original investigation under the direction of a supervisor for a minimum period of three academic sessions in the case of a full-time candidate, or a minimum of four academic sessions in the case of a part-time or external candidate is required.

The candidate is required to submit a thesis embodying the results of the original investigation.

#### 9000

# **Master of Health Personnel Education** By Formal Course Work

# **MHPEd**

The course is designed to further the competence of health personnel educators with particular regard to the health care needs of their respective countries. A major emphasis in the course is on student activity, individually and in small groups.

The Masters Degree Course requires either one year of full-time course work plus a six-month field project or two years of part-time course work plus a six-month field project. Students are required to undertake at least four of the nominated subjects listed below, plus additional academic electives and/or independent studies to give a total of 24 credit points. (Each credit point is equivalent to one class contact hour per week.)

# **Nominated Subjects**

s per weel
2
2
2
2
<u>2</u> 10
10
2
2
2
<u>2</u> 6

#### **Academic Electives**

Electives are designed to enable candidates to pursue their own interests or specialties by taking subjects, normally at a graduate level, at the University of New South Wales. They are chosen by the student in consultation with the head of school. Elective subjects offered by the School of Medical Education are listed below. Electives may also be chosen from graduate subjects offered by other schools of the University, in which case the approval of the head of the school concerned must be obtained.

Session 1	Hours	per week
78.115G	Educational Selection	·1
78.116G	Trends in Health Sciences Curricula	1
78.118G	Clinical Problem-solving	1
	Production of Audio Visual Materials	2
78.124G	Clinical Teaching	1
78.125G	Planning, Conducting and Evaluating	
	Educational Workshops	2
78.127G	Research in Education for the Health	
	Professions 1	2
0		
Session 2		
	The Consultation Process	2
78.112G	The Management of Human Resources	: 2
78.113G	Evaluation of Instructors	2
78.117G	Explorations in Personal Learning	2
78.119G	Clinical Decision-making	1
78.121G	Large Group Teaching	2
78.122G	Primary Health Care	2
78.126G	Self-directed Learning	
	and Self-Instruction	2
78.128G	Research in Education for the Health	
	Professions 2	2

# 78.109G Project

Candidates are required, in addition to formal course work, to complete a six-month field project and report. The project is planned during the period of formal course work and carried out in the student's home institution. It should focus on an area of health personnel education relevant to the candidate's professional interests and development and to the furthering of health personnel education.

# **Master of Public Health**

Course details for 2845 Master of Public Health (By Research) and 9045 Master of Public Health (By Formal Course Work) are given on page 48.

The conditions for the award of the degree of Master of Public Health are set out under Conditions for the Award of Higher Degrees later in this handbook.

# **School of Paediatrics**

# 5500 Diploma in Paediatrics

# **DipPaed**

The course is normally taken over 1 year on a full-time basis. Candidates are required to have an appointment in an approved children's hospital and should rotate through various paediatric specialities including neonatal paediatrics. However, candidates who have already had experience in clinical paediatrics under supervisors acceptable to the University may be exempted from the clinical experience and enrol as part-time students.

Studies in medicine including undergraduate studies do not readily conform to a sessional basis and the hours allocation listed below is approximate because of this and because of the necessity to maintain a flexible arrangement.

		S1	S2
76.201G	General Paediatrics 1		
	Lectures	50	50
	Seminars	10	10
76.202G	Prenatal and Perinatal Paediat	rics	
	Lectures	10	10
	Seminars	5	5
76.203G	Child and Family Psychiatry		
	Lectures and Seminars	10	10
76.204G	Clinical and Technical Skills		
	Seminars	20	20
	Practical	40	40
76.205G	Clinical Paediatric Experience	1	

# 9010 Master of Paediatrics

#### **MPaed**

The course is designed for candidates aiming for a career in community paediatrics or paediatric general practice. Candidates are required to hold the Diploma of Paediatrics (refer to the entry earlier in this Handbook) or equivalent degree or diploma prior to enrolment in the course. The course requires 2 years professional experience in paediatrics, and at least 1 of these 2 years must be in professional activities of a community nature outside the hospital. Candidates with professional experience in paediatrics under supervisors acceptable to the University may be exempted from part or all of the professional experience required and may elect to enrol

for the course while undertaking other professional duties. A feature of the course is the wide range of activities and studies available in the second year permitting the development of a large number of special skills for future paediatric practice.

All of the following subjects are compulsory. The hours allocation is approximate:

01

20

#### Year 1

		31	32
76.002G	General Paediatrics 2		
	Seminars	20	20
			_
		S1	S2
	Practical	32	32
76.006G	Organization of Health Services 1	10	10
	Medical Statistics and		
	Epidemiology		
	Lectures and Practical	0	26
76.020G	Clinical Paediatric Experience 2		
V			
Year 2			
76.009G	Community Pediatrics		
	Seminars and Practical	60	60
	Project/Elective	40	40
76.0300	Clinical Paediatric Experience 3		
, 5.5000	Cili ilicai i acaialio Experierice c		

# **School of Psychiatry**

# **Master of Psychotherapy**

# **MPsychotherapy**

The course is designed to develop skills in the practice and evaluation of the range of psychotherapies, their theoretical underpinnings, their clinical applications and their researched effectiveness. The course is also designed to examine the ethical, socio-cultural, socio-political and economic issues relevant to the practice of psychotherapy. Supervised case work and experiential learning are major components of the course and are aimed at promoting an advanced level of clinical expertise in the area of specialization.

The masters degree program is a three year part-time course requiring the completion of 420 hours of course work over six sessions. Students are required to pass seven nominated subjects as well as complete academic electives. Additionally, in the final year, an elective project must be passed.

# **Nominated Subjects**

77.001G Psychotherapy – Theoretical bases, developmental theories and basic techniques

77.002G Psychotherapy - Methodology and outcome

77.003G Psychodynamic Psychotherapies 1

77.004G Behavioural Psychotherapies

77.005G Family and Marital Psychotherapies

77.006G Cognitive and Other Psychotherapies

77.007G Advanced and Integrated Psychotherapy

# **Academic Electives**

Students are required to undertake elective subjects in the third year of the course.

77.011G Psychodynamic Theories 2

77.012G Behavioural and Cognitive Psychotherapies

77.013G Family and Marital Psychotherapies 2

# 77.111G Elective Projects

The elective project, undertaken in third year, may be a research project, a major dissertation, or advanced case work. Each elective project must be approved by the Course Committee and the nominated supervisor.

**Graduate Study** 

# **Subject Descriptions**

# Identification of Subjects by Number

A subject is defined by the Academic Board as 'a unit of instruction approved by the University as being a discrete part of the requirements for a course offered by the University'.

Each approved subject of the University is identifiable both by number and by name as this is a check against nomination of subject other than the one intended.

Subject numbers are allocated by the Academic Registrar and the system of allocation is based on the following guidelines:

- The authority offering the subject, normally a School of the University, is indicated by the number before the decimal point.
- 2. Each subject number is unique and is not used for more than one subject title.
- 3. Subject numbers may not be re-used with a new subject title within ten years of the prior use.
- 4. Graduate subjects are indicated by a suffix 'G' to a number with three digits after the decimal point. In other subjects three or four digits are used after the decimal point.

Subjects taught are listed in full in the handbook of the faculty or board of studies responsible for the particular course within which the subjects are taken. Subject descriptions are contained in the appropriate section in the handbooks.

The **identifying numerical prefixes** for each subject authority are set out on the following page.

Servicing Subjects are those taught by a school or department outside its own faculty. Their subject descriptions are published in the handbook of the faculty which originates the subject and are also published in the handbook of the Faculty in which the subject is taught.

The following pages contain descriptions for most of the subjects offered for the courses described in this book, the exception being the General Education subjects. For General Education subjects see the **General Studies Handbook** which is available free of charge.

#### **HSC Exam Prerequisites**

Subjects which require prerequisites for enrolment in terms of the HSC Examination percentile range, refer to the 1978 and subsequent Examinations.

Candidates for enrolment who obtained the HSC in previous years or hold other high school matriculation should check with the appropriate school on what matriculation status is required for admission to a subject.

# Information Key

The following is the key to the information which may be supplied about each subject:

S1 Session 1, S2 Session 2

F Session 1 plus Session 2, le full year

S1 or S2 Session 1 or Session 2, ie choice of either session

SS single session, but which session taught is not known at time of publication

**CCH** class contact hours

L Lecture, followed by hours per week

T Laboratory/Tutorial, followed by hours per week

hpw hours per week

C Credit point value

**CR** Credit

**DN** Distinction

**HD** High Distinction

	School, Department etc *Subjects also offered for cour	Faculty rses in this handbook	Page		School, Department etc *Subjects also offered for cou	Faculty urses in this handbook	Page
	School of Physics	Science Science		11	School of Biochemistry	Biological and	
	School of Chemistry School of Chemical Engineering and Industrial	Applied Science	4	12	School of Applied Bioscience (Blotechnology)	Behavioural Sciences Applied Science	
4	Chemistry (New Course) School of Materials	Applied Science	4	14	School of Microbiology	Biological and Behavioural Sciences	
5	Science and Engineering School of Mechanical and	Engineering	4	15	School of Biological Science	Biological and Behavioural Sciences	
6	Industrial Engineering School of Electrical	Engineering			Faculty of Applied Science Centre for Safety Science	Applied Science Engineering	
_	Engineering and Computer Science		4	18	School of Chemical Engineering and Industrial	Applied Science	
7	School of Mines (Mineral Processing and Extractive Metallurgy and	Applied Science	4	19	Chemistry (Old Course) School of Applied Bioscience	Applied Science	
8	Mining Engineering) School of CMI	Engineering			School of English School of History	Arts Arts	
•	Engineering				School of Philosophy	Arts	
9	School of Fibre Science and Technology	Applied Science	5	53	School of Sociology <sup>6</sup> School of Political	Arts Arts	
10	(Wool and Animal Science) School of Mathematics	Science			Science	Dents anional Shadios	
	School of Architecture	Architecture			School of Librarianship School of French	Professional Studies Arts	
	School of Psychology*	Biological and			School of Theatre Studies	Arts	
13	School of Fibre Science and Technology	Behavioural Sciences Applied Science			School of Education Department of Russian Studies	Professional Studies Arts	
	(Textile Technology)		•	30	Faculty of Arts	Arta	
14	School of Accounting	Commerce & Economics			Department of Music	Arts	
	School of Economics School of Health	Commerce & Economics Professional Studies			School of Science and Technology Studies	Arts	
17	Administration Faculty of Biological and	Biological and			School of Social Work	Professional Studies	
17	Behavioural Sciences	Behavioural Sciences	•	94	School of German Studies	Arts	
18	School of Mechanical and Industrial Engineering	Engineering	•	35	School of Spanish and Latin American Studies	Arts	
19	(Industrial Engineering) School of Information	Commerce & Economics			Subjects Available from Other Universities		
20	Systems Centre for Petroleum	Applied Science			Faculty of Science	Science	
20	Engineering Studies	Applied ocietice		98	Board of Studies in Science and	Board of Studies in Science and	
21	Department of Industrial	Architecture			Mathematics	Mathematics	
	Arts				School of Anatomy	Medicine	55
25	School of Mines (Applied Geology)	Applied Science			School of Medicine	Medicine Medicine	55
26	Centre for Liberal and General Studies	Liberal and General Studies			School of Pathology School of Physiology and Pharmacology	Medicine	99
	School of Geography	Applied Science	7	74	School of Surgery	Medicine	
	School of Marketing	Commerce & Economics	7	75	School of Obstetrics and	Medicine	
	School of Surveying School of Industrial	Engineering Commerce & Economics	-	, a	Gynaecology School of Paediatrics	Medicine	
50	Relations and	Commerce a Localomica			School of Psychiatry	Medicine	55
31	Organizational Behaviour School of Optometry	Science			School of Medical Education	Medicine	57
	Centre for Biomedical Engineering	Engineering	7	79	School of Community  Medicine	Medicine	59
34	Faculty of Arts	Arts	8	30	Faculty of Medicine	Medicine	60
	School of Building	Architecture	8	31	Medicine/Science/	Medicine	
	School of Town Planning	Architecture			Biological		
37	School of Landscape Architecture	Architecture		.=	Sciences Australian Graduate	ACC14	
		Ameliad Calamaa	•	50	School of Management	AGSM	
38	School of Applied Bioscience (Food Science and	Uhhiled ocietica	g	ю	Faculty of Law*	Law	
	Technology)		9	97	Faculty of Engineering	Engineering	
39	Graduate School of the Built Environment	Architecture			School of Banking and Finance	Commerce & Economics	
40	Academic Board		ç	99	Department of Legal Studies and Taxation	Commerce & Economics	

# **Anatomy**

# Servicing Subject

This is a subject taught within a course offered by another faculty. For further information regarding the following subject see the Engineering Handbook.

# 70.201G Introductory Functional Anatomy

An overview of basic human anatomy and physiology with an emphasis on structures and systems such as the eye, ear and skin, which are most vulnerable to chemical and physical trauma under industrial conditions. Other systems studied include the musculo skeletal system, central and peripheral nervous systems, circulatory, respiratory, gastrointestinal, endocrine and urogenital systems

# **Pathology**

# Servicing Subject

This is a subject taught within a course offered by another faculty.

For further information regarding this subject see the Faculty of Engineering Handbook and the Combined Sciences Handbook.

# 72.402G Principles of Disease Processes S1 L3 C3

Prerequisites: 73.111 or equivalent, 70.011C or equivalent.

The reaction of cells to injury, the inflammatory reaction; necrosis-vascular changes and infarction; reparative processes; fracture healing; neoplasia; reaction to implants; specific processes requiring prosthetic assistance.

# **Paediatrics**

# 76.201G General Paediatrics 1

Growth and development. Systemic diseases in childhood. Prevention and early detection. Community services available for the care of children with various disorders. Emphasis is placed on the understanding of principles, especially physiological principles.

# 76.202 Prenatal and Perinatal Paediatrics

Prenatal development and prenatal and perinatal experiences, which affect the growing foetus and infant. Necessary professional supervized experience is obtained by clinical attachment to appropriate hospitals. Candidates are given increasing professional responsibility. There are lectures, seminars, discussion groups and demonstrations on manikins.

# 76.203 Child and Family Psychiatry

Family dynamics and family interactions in the causation of developmental, behavioural and emotional problems in children. Students without adequate clinical experience have a clinical

attachment in paediatric psychiatry during the first two years of training. There are lectures, seminars, case conferences and assignments.

## 76.204G Clinical and Technical Skills

Taking of medical histories, physical examination and technical procedures. Supervized professional attachments provide opportunities for learning these skills. Candidates obtain experience in diagnostic thinking and planning management. Some of the teaching is on an individual basis and some in groups.

# 76.205G Clinical Paediatric Experience 1

Candidates are required to gain twelve months clinical experience in an approved childrens' hospital rotating through various specialties including neo-natal. (Exemptions may be granted if supported by appropriate references.)

## 76.002G General Paediatrics 2

Includes medical emergencies, chronic diseases and teamwork, especially work with health professionals other than medical graduates. As well as lectures, seminars, demonstrations and discussion groups there are supervized professional experiences involving increasing professional responsibility.

# 76,006G Organization of Health Services 1

Candidates study the resources available in the community to help children with a variety of disabilities.

#### 76.008G Medical Statistics

Learning in the undergraduate course is consolidated and candidates analyse material presented to them, particularly material encountered in journal reading.

# 76.020G Clinical Paediatric Experience 2

As for 76.205G and 76.030G

#### 76.009G Community Paediatrics

Evaluation and care of children in the community especially children with physical and mental handicaps. Intends to embrace problems not frequently encountered in hospitals. May include attachments to centres outside the metropolitan area of Sydney.

#### 76.030G Clinical Paediatric Experience 3

Candidates are required to gain professional experience of a community nature outside of the general hospital environment. Because of the wide variety of appropriate appointments, candidates are advised to discuss proposed activities with the course co-ordinator.

# **Psychiatry**

# 77.001G Pyschotherapy – Theoretical Bases, Developmental Theories and Basic Techniques

Psychotherapy will be presented as the treatment of psychological, psychiatric or behavioural distrubance by

methods which rely chiefly upon the interaction of therapist and patient. Generally these procedures rely upon the thoughts, feelings and/or behaviour patterns of an individual or of a group or family members. Very often the relationship between the therapist and patient is crucial to the therapy, or the patient's behaviour is viewed in an interpersonal context.

Students will trace the historical value of the various psychotherapies, focussing on four major strands identified in this course: psychodynamic, behavioural, family and marital, cognitive and other psychotherapies.

Psychotherapy as a multidisciplinary and multimodal procedure with the emphasis on clinical experience and application, as well as outcome research. Basic psychotherapeutic techniques will be studied and practised. Students will also examine the various theoretical underpinnings of psychotherapy, its socio-political and socio-cultural contexts, its relationship to medicine and other disciplines and issues of cost effectivess.

Developmental theories will be reviewed as they pertain to the understanding and the practice of psychotherapies including the psychological development of the individual and the family. Various models of human development will be considered, the behavioural, social learning and family systems models. The emphasis will be upon data derived from developmental studies of individuals and of families.

# 77.002G Psychotherapy - Methodology and Outcome

Students will review historical developments in psychotherapy research and the extent to which current research methods may provide data on the efficacy of separate treatments. Confounding issues (e.g. natural remission), non-specific therapy ingredients (e.g. characteristics of the therapist) and contextual issues will be examined, both as issues affecting the course of outcome and as to how they may be evaluated and analysed in outcome research.

Broad outcome data examining the overall effectiveness of psychotherapy will be reviewed, both in the short-term and in the long-term, and the extent to which it may provide symptom relief and behavioural/personality change, as well as the effectiveness of the particular psychotherapies for particular conditions.

# 77.003G Psychodynamic Psychotherapies 1

The psychodynamic psychotherapies are those derived from Freudian or psychoanalytic theory. Three major streams will be studied:

Freudian metapsychology and its derivatives; Object-Relations theory and its derivatives; Self-Psychology school and its derivatives.

Emphasis will be upon clinical application and upon practical psychodynamic approaches to psychotherapy and particularly the brief therapies.

# 77.004G Behavioural Psychotherapies

The emphasis will be upon the selection and application of the various behavioural therapies for specific conditions. Information will be included on the use of desensitization techniques; exposure and anxiety management in anxiety disorders; response prevention in obsessive-compulsive neurosis; treatment of sexual dysfunction and the use of aversive techniques; the behavioural/cognitive treatment of depression; the place of behavioural treatments in the management of

schizophrenia, substance abuse, marital difficulties, eating disorders and in interpersonal skills training.

# 77.005G Family and Marital Psychotheraples 1

Students will focus upon psychological or psychiatrtic disturbance in the context of intrafamilial or interpersonal relationships, and address symptomatic dysfunction directly alming at briefer, more active treatment programs. The theories behind these therapies will be studied and an overview of the several theoretical orientations (e.g. systemic, structural and strategic) will be given. An emphasis will be upon the acquisition of practical skills.

# 77.006G Cognitive and other Psychotherapies

Students will develop an overview of several other streams of psychotherapy which do not fit easily into the three major streams. These include: Cognitive and Interpersonal Therapies, Jungian Analytical Psychology, Existentialism, and the various psychotherapies which have been subsumed under the title of The Humanist Therapies'. The theoretical issues and the interrelationships of these modalities will be studied with an emphasis upon clinical applications and practical skills.

# 77.007G Advanced and Integrated Psychotherapy

In the final weeks of the third year, after working on their elective subjects, students will attend joint seminars and critically compare their work. This subject will offer an integrated approach to psychotherapy by examining each of the major psychiatric syndromes and delineating the treatment or the combination of treatment approaches which have been shown to be most of multimodal. multidisciplinary effective. The use psychotherapies will be illustrated (e.g. as in the management of Anorexia Nervosa which may require a behavioural in-patient program, family therapy, and ongoing individual psychotherapy). Students will have an opportunity to share their expertise and to plan cooperative treatment regimes.

## 77.011G Psychodynamic Psychotherapies 2

Students will focus in Year 3 upon the refinement of technical skills in the practice of these psychotherapies: making contracts, forging therapeutic alliance, utilizing transference and counter-transference phenomena, dealing with negative therapeutic reactions and with termination of therapy. The emphasis will be upon clinical effectiveness and upon the most practical and cost-effective therapies and the brief psychotherapies.

## 77.012G Behavioural and Cognitive Psychotherapies

The cognitive and behavioural therapies will be studied in greater depth and students will refine their clinical skills in the application of these therapies to specific conditions, emphasizing critical evaluation of outcomes and examining evidence concerning mode of action. Methodological and therapeutic limitations will be identified and possibilities for overcoming them. The nature of assessment and the value of techniques of assessment will be studied as well as the variables influencing response to therapy and how these variables can be conceptualized, assessed and modified

## 77.013G Family and Marital Psychotherapies II

Students will focus upon acquiring technical skills in the practice of these therapies. There will be an emphasis upon

experiential learning with live interviews, video-taped interviews and role-plays. Students will aim at achieving proficiency in these methods of treatment.

# **Medical Education**

## **Health Personnel Education**

# 78.000G Independent Studies

Independent studies are designed to provide opportunities for candidates to pursue interests and areas not adequately addressed in existing subjects. They are recommended particularly for candidates who wish to explore solutions to specific educational problems within their own institutions or disciplines.

# 78.101G Learning and Teaching

S1 I

Focuses on the conditions which are necessary for learning and the responsibilities these imply for teaching. Stages of the process are outlined and the important factors in learning are developed within this framework. Problem-based, involving participation in workshops organized around common problems in teaching and learning. Integrates with 78, 103G.

# 78.102G Educational Process in Small Groups

S1 L2

How people operate as members and leaders of groups; conditions underlying effective group work in educational planning, teaching and learning, and the provision of health care; basic concepts of group structure. Stress on experiential learning, observation of group process, improving skills in facilitating group learning and designing appropriate learning activities.

# 78.103G Instructional Design

S1 L2

Application of skills and knowledge gained in 78.10.1G and the development of the ability to design instruction which is optimal for various learning objectives and conditions. Critical variables in instruction are identified and discussed in relation to their implications for design of instruction. A series of workshops dealing with the design of commonly used teaching methods.

# 78.104G Organization and Management for Health Personnel Education

S1 L

Students critically examine existing organizational patterns relevant to health personnel education. Emphasis is placed on the participants' experiences as members of organizations and the effect of organizations on their individual performance. Description and analysis of participants' own organizations to identify strengths, operational problems and developmental possibilities with emphasis on managerial roles.

# 78.105G Curriculum Planning

S2 L2

Builds on the competency based model of instructional development introduced in 78.103G but looks at alternative approaches to curriculum planning; considers the factors leading to developments in curricula for the health

professions, and the methods by which changes have been introduced. Emphasis on a number of institutional case studies from different health professions; the processes used in making decisions between curriculum options for new courses and in introducing changes into existing courses.

# 78.106G Teaching Skills

S112

The practical aspects of teaching methods. Problems experienced by the candidates in their own situations. Certain theories and principles of learning as they apply to the various teaching methods studied. Emphasis is on microteaching (reinforcement, questioning, explaining).

# 78.107G Assessment of Students

S2 L2

The process, scope and purpose of educational evaluation. The place of student assessment within the curriculum and the concept of measurement and its requisites, leading to a review of the different types of assessment commonly used by participants to assess student learning in all its domains. The practical aspects of the designing, administration and scoring of such assessments, and attempts to identify ways of improving such procedures. The assessment of clinical performance on prescribed tasks, on tasks involving judgement, and in clinical practice involving priorities, management and responsibility. The utilization of test scores and other assessment data in educational decision-making.

# 78.108G Program Evaluation and Planned Change

S2 L2

Designed to help participants develop skills in planning, conduct and evaluation of educational programs. Includes: preparation of a detailed proposal for evaluation of a program; various decisions and activities undertaken in program evaluation; processes of innovation and change.

## 78.109G Project

Provides an opportunity for the candidate to focus on an area of health personnel education relevant to the candidate's professional interests and development and to the furthering of health personnel education.

# 78.110G Workshop in Culture, Subculture and Communication

S1 L2

An Academic Elective. How culture controls thinking and behaviour and the meaning attached to the behaviour of others in professional/client and teacher/learner situations. The multicultural group of health professionals dealing with education uses its own intercultural experiences to reveal difficulties in communication and learning related to different teaching formats and styles, and studies the relationship between subculture and health beliefs, including the subculture of the health professions, and the relationship of health, illness and solutions to culture and subculture.

# 78.111G The Consultation Process

S2 L2

Recommended Prerequisite: 78.104G or equivalent. Co-requisites: 78.108G, 78.113G, 78.112G

The subject is designed to introduce concepts and practical approaches used by consultants in the development of organisations, programs, teams and individuals. The subject will focus on the internal process of change as well as on 'third party' interventions.

# 78.112G The Management of Human Resources S2 L2

Recommended Prerequisite: 78.104G or equivalent, Recommended Co-requisite: 78.108G

The subject is designed to introduce concepts and practices pertaining to the management of human resources. Particular attention will be given to the integration of human and other resources in management and planning. The influence of social values and beliefs on the way that human resources are managed will also be considered.

#### 78.113G Evaluation of instructors S2 L2

An Academic Elective. This seminar pertains to concepts, research and development in the evaluation of instructors. Emphasis on the methods by which evaluative feedback could be provided and used for the purpose of improvement of instruction. It is expected that candidates would acquire skills in the design and use of evaluation instruments which are effective in improving instruction.

# 78.115G Educational Selection S1 L1

An Academic Elective. Aims to introduce participants to problems in selection of students into educational institutions. Includes definition of criteria, measurement of factors other than high school performance and establishing relationships between selection measures and performance criteria. Reviews attempts elsewhere to expand selection methods. Includes: formal selection procedures (job analysis and definition of competencies, predictor and criteria developments, methods of validation); common instruments used for selection in the medical and health fields; development and use of attitude measurements; problems of cross-cultural transfer of selection measures; and innovations in selection for medical education.

## 78.116G Trends in Health Sciences Curricula S1 L1

An Academic Elective. Supplements 78.105G Curriculum Planning. Trends in health sciences curricula such as integrated curricula, emphasis on community medicine, introduction of social and behavioural sciences, elective programs, early patient contact, nutrition education, problem-solving approaches and accelerated programs. Particular trends studied depend on interests of participants. Literature review in a circumscribed area, dealing with the nature of the trend, factors which determine it, its advantages and disadvantages, and pitfalls in implementation. Discussion of specific case studies and personal experience.

## 78.117G Explorations in Personal Learning S2 L2

An Academic Elective. Theoretical and practical aspects of adult learning with the aim of relating research findings to the practicalities of teaching undergraduates. Stress on the exploration of the group's own prior learning experiences and individual responses to classroom events. Aims mainly to increase each participant's understanding of the major factors involved in adult learning and to apply this to their own teaching activities, with some stress on the nature of the connections between teaching and learning and the skills required to monitor teaching activities. Topics include: learning environments, the role of the emotions, motivation, the influence of assessment, the effects of different teaching styles, teacher and course characteristics.

# 78.118G Clinical Problem-solving

S1 L1

An Academic Elective. How clinicians sort out illness situations, explore problems, interpret unreliable data and classify an illness as a disease diagnosis. The structure of clinical problems and of clinical memory, diagnostic strategies, effectiveness and efficiency, investigation and the value of information, Bayesian calculation, and the nature of clinical judgement. Clinical, educational and research implications of empirical studies of professional/client interaction.

#### 78.119G Clinical Decision-making

S2 L1

An Academic Elective. Rational choice in investigation and management of clinical problems. Calculation of value of tests, assessing their effectiveness and efficiency, choosing 'next best test', calculating likelihoods of diagnoses, confidence, risk-taking, estimating likely outcomes and their importance, decision analysis, expected utility, subjective and objective probabilities, threshold influences, optimizing or satisficing, minimax and maximax approaches, judgement.

# 78.121G Large Group Teaching

S2 | 2

An Academic Elective. The process of explaining considered central to large group teaching; analysis of this process, dealing with the qualities and components of effective explaining. The types of lectures ranging from didactic to inductive, and the various ways in which lectures are structured, leading to an examination of the relationship between lecturing and learning. Strategies for improvement of lectures, and alternatives to lectures.

# 78.122G Primary Health Care

S2 L2

An Academic Elective. The concept of primary health care and its emergence as the priority health care approach in developing countries. Emphasis on the training implications of primary health care programs together with different definitions of the concept including the role of primary health care in social and economic development, and its relationship to existing health care systems.

#### 78.123G Production of Audio Visual Materials S1 L2

An Academic Elective. The use of audio visual materials and equipment; production of software (charts, transparencies, slides, film, videotape and audiotape); principles guiding the selection of teaching aids for self-paced learning, teaching in small groups and large group presentation. A major requirement for assessment is the selection and preparation of instructional media appropriate to a specific teaching situation in the participant's base institution.

# 78.124G Clinical Teaching

S1 L1

An Academic Elective. Drawing upon real life clinical practice and observing teaching sessions of their own, their peers and others, participants have the opportunity to explore the nature of clinical teaching and learning in selected programs, and to identify ways of improving teaching skills and maximizing students' learning. Research in clinical teaching and its relation both to educational theory and to current practice.

# 78.125G Planning, Conducting and Evaluating Educational Workshops S1 L2

An Academic Elective. In an attempt to develop their skills in all aspects of conducting workshops, participants are guided

to formulate a plan for a workshop for their colleagues in an important educational area, with opportunity to practise various techniques for enhancing active participation, and subsequently to conduct the workshop, evaluate its process and outcomes, and report on it.

# 78.126G Self-directed Learning and Self-instruction

S2 L2

An Academic Elective. Options which are available for the teacher to assist students to develop skills in self-education. Requires students to undertake self-directed study and to negotiate a learning contract with the instructor. Topics may include: adapting instruction to individual differences, principles and practices of self-instruction, applying self-directed learning in traditional courses, and contexts for non-formal learning such as continuing education, in-service training and distance education.

# 78.127G Research in Education for the Health Professions 1

S1 L2

An Academic Elective. Enables participants to become aware of evaluating research papers exemplifying the different methods.

'ways of knowing', in general, and of the scientific method in particular. Different methods of educational research examined in depth so that the method(s) most appropriate to given research problems can be selected. Participants develop skills in

78.128G Research in Education for the Health **Professions 2** 

S2 L2

Prerequisite: 78.127G or equivalent.

An Academic Elective. Raises awareness of current research interests in education for each of the health professions from which participants come and of the problems encountered in conducting an educational research project. Participants are expected to plan, conduct and report a pilot project in education.

# **Community Medicine**

# 79.100G Independent Studies

Independent studies are designed to provide opportunities for candidates to pursue interests and areas not adequately addressed in existing subjects. They are recommended particularly for candidates who wish to explore specific community health problems within their own communities or areas.

# 79.511G Epidemiology 1 (Methodology)

Sampling and sample size determination, common sources of bias, statistical and data distributions, data display, life tables, standardisation methods, testing means and proportions, contingency tables and goodness of fit tests, simple regression and correlation, multiple regression and discriminative analysis, analysis of variances, interpretation of data and concepts of casuality.

# 79.512G Epidemiology 2 (Practice)

Critical evaluation of research, literature and practical research skills. Research methods, survey, retrospective and prospective

studies, randomised controlled trials, research and analysis. Collecting, coding and analysing data, and applying computer methods in research. Prepares students for subsequent work on their selected research topic for their project. Application of methods to health programs, such as preparing objectives, planning a data base, data collection and analysis, criteria for evaluation, education and training of personnel.

# 79.503G Research Planning

Using the knowledge and techniques acquired in Epidemiology, students prepare and present for their research project. Students critically evaluate model research plans and the projects proposed by other students in the course.

#### **Electives**

# 79.600G Disability

Epidemiology of disabling physical and mental conditions; the nature of disability and handicap (including developmental disability); perceptions of handicap; disabled persons' consumer movement and organisation; sociology of disability; social inequality and disability; rehabilitation; community and specialist rehabilitation services; relevant legislation, government services, special needs of disabled persons - health accommodation and the physical environment, transport, work, income support, legal rights and public policy.

# 79.601G Health of the Elderly

Demography of ageing; epidemiology of health, illness and disability in an ageing population; 'aged persons' perspectives; gerontology - biological, sociological and psychological perspectives; problems and special needs of an ageing population; health maintenance; health policy for an ageing population; health services; institutional care; community and domiciliary services; non-government organisations; poverty; community attitudes; accommodation; income support; social and ethical issues.

## 79.602G Health and Illness Behaviour

Self-care, personal health action and help-seeking behaviour; attitudes and beliefs about health and illness; media influences and sources of health advice; the media and public health; coping with illness, stress, anxiety, loss or bereavement; the sick role; expectations of health care; counselling techniques; doctor-patient communication; psychological, social and ethnic factors influencing health behaviour; health education and promotion; community mental health; rehabilitation; concepts and strategies.

#### 79.603G Communications and Writing in Health

Writing and preparation for the media; preparation of material for health education and promotion, including audiovisual material; preparation of scientific papers, reports and theses; practical skills in planning and writing articles: logical organisation, clear and concise scientific prose; presentation of data and overall layout.

## 79.604G Alcohol and Drug Related Problems

Concepts of drug dependence, including pharmacological aspects; management of these problems in primary care; rehabilitation programmes, smoking cessation; weight

control; social and psychological factors and their impact on the family; drug problems and their impact on the community; public health aspects; population indices and surveillance; control programmes; legislation; law enforcement; medical and legal aspects of drug dependence.

# 79.605G Health in Developing Countries

Economic, demographic and epidemiological aspects; communicable diseases, for example, diarrhoea and parasitism, chronic diseases including mental health in the Third World context; maternal and child health; family planning; nutrition, and food and nutrition policy; breast feeding promotion; immunisation; water supply and environmental sanitation; organisation of health services; primary health care; health personnel training; health education; pharmaceutical problems; role of international and non-governmental agencies; self-reliance.

# 79.606G Women and Health

Current issues relevant to the health of women, both consumer and provider perspectives. Common health risks facing women. Special needs in health and health care for particular populations of women. Traditional role of women as health carers, and the impact this has on health and health services. Short lectures, group discussions and student presentations. Assessment is a combination of marks given in written tutorial papers, end of session essay and group facilitation and class participation.

# 79.616G Occupational Epidemiology

S1 L3 C3

Prerequisite: 16,901 G or equivalent. Prerequisite or co-requisite: 80,701 G or equivalent.

Epidemiology - the narrow sense, historical development. Genes and environment in human variation. Basic demography. Perceptions of 'disease' - professional and lay. Sources of data in occupational epidemiology. Survey design and applications. Screening. Recording of data - graphical, tabular, parametric, Registers. Computer hardware and software in occupational epidemiology. Bias and its control. Confounding factors. Morbidity, mortality, life tables. Analysis of epidemiological data. Interpretation of results. Quantification of risk. Investigation of observed associations. Causation.

# 79.617G Occupational Medicine Practice

F C6

Prerequisite: Approved medical degree, 80.702G and 79.616G or equivalent

Provides experiential learning for those medical graduates undertaking the MSafetySc course who intend to join the College of Occupational Medicine. Students visit industrial sites and centres for occupational health control. A comprehensive series of reports on investigations at these visits is required. It is expected that this subject will be taken towards the end of the MSafetySc course.

# **Faculty of Medicine**

# Servicing Subjects

These are subjects taught within courses offered by other faculties. For further information regarding the following subjects see the Faculty of Engineering Handbook.

# 80.701G Occupational Disease

S2L3 C3

Prerequisite:70.201G or equivalent.

Physical environment and disease: Musculoskeletal system, physical trauma; heat and cold, burns, electric shock; radiation; pressure, vibration, noise, hearing. Chemical environment and disease: Metallic poisons, toxic compounds, gaseous poisons, carcinogens, allergens. Microbial environment and disease. Systems approach: Gastrointestinal tract; renal system; central and peripheral nervous systems; visual system, respiratory system, airbone particulates; skin.

# 80.702G Occupational Health Control

S1L3 C3

Prerequisite: 80.701G or equivalent.

Introduction; dose response; risk, codes of safe practice; protection of the worker; design of safe workplace; protective equipment; occupational health surveillance; epidemiology; occupational safety program; emergency arrangements; environmental health; non-occupational safety; safety services.

# **Graduate Study Conditions for the Award** of Higher Degrees

Rules, regulations and conditions for the award of first degrees are set out in the appropriate Faculty Handbooks.

For the list of undergraduate courses and degrees offered see Faculty (Undergraduate Study) in the Calendar.

**Higher Degrees** 

**First Degrees** 

The following is the list of higher degrees and graduate diplomas of the University, together with Higher Degrees the publication in which the conditions for the award appear.

For the list of graduate degrees by research and course work, arranged in faculty order, see Table of Courses (by faculty): Graduate Study in the Calendar.

For the statements Preparation and Submission of Project Reports and Theses for Higher Degrees and Policy with respect to the Use of Higher Degree Theses see later in this section.

Title	Abbreviation	Calendar/Handbook	
Doctor of Science	DSc	Calendar	Higher Degrees
Doctor of Letters	DLitt	Calendar	
Doctor of Laws	LLD	Calendar	
Doctor of Medicine	MD	Calendar <b>Medicine</b>	
Doctor of Philosophy	PhD	Calendar and all handbooks	
Master of Applied Science	MAppSc	Applied Science	
Master of Architectural Design	MArchDes	<ul><li>Architecture</li></ul>	
Master of Architecture	MArch	Architecture	
Master of Archives Administration	MArchivAdmin	Professional Studies	
Master of Arts	MA	Arts University College	
Master of Biomedical Engineering	MBiomedE	Engineering	
Master of Building	MBuild	Architecture	
Master of the Built Environment	MBEnv	Architecture	

# Higher Degrees (continued)

Title	Abbreviation	Calender/Handbook
Master of the Built Environment (Building Conservation)	MBEnv	Architecture
Master of Business Administration	MBA	AGSM
Master of Chemistry	MChem	Sciences*
Master of Cognitive Science	MCogSc	Arts
Master of Commerce (Honours)	MCom(Hons)	Commerce
Master of Commerce	MCom	Commerce
Master of Community Health	MCH	Medicine
Master of Construction Management	MConstMgt	Architecture
Master of Education	MEd	Professional Studies
Master of Educational Administration	MEdAdmin	Professional Studies
Master of Engineering	ME	Applied Science Engineering University College
Master of Engineering without supervision	ME	Applied Science Engineering
Master of Engineering Science	MEngSc	Engineering Applied Science University College
Master of Environmental Studies	MEnvStudies	Applied Science
Master of Health Administration	MHA	Professional Studies
Master of Health Personnel Education	MHPEd	Medicine
Master of Health Planning	MHP	Professional Studies
Master of Industrial Design	MID	Architecture
Master of Landscape Architecture	MLArch	Architecture
Master of Landscape Planning	MLP	Architecture
Master of Laws	LLM	Law
Master of Librarianship	MLib	Professional Studies
Master of Mathematics	MMath	Sciences*
Master of Management Economics	MMgtEc	University College
Master of Music	MMus	Arts
Master of Nursing Administration	MNA	Professional Studies
Master of Optometry	MOptom	Sciences*
Master of Paediatrics	MPaed	Medicine
Master of Physics	MPhysics	Sciences*
Master of Project Management	MPM	Architecture
Master of Psychology (Clinical)y	MPsychol	Science§
Master of Psychology (Applied)	MPsychol	Sciences§
Master of Psychotherapy	<b>MPsychotherapy</b>	Medicine
Master of Public Health	MPH	Medicine
•		Professional Studies
Master of Safety Science	MSafetySc	Engineering
Master of Science	MSc	Applied Science Architecture Engineering Medicine Sciences*§ University College
Master of Science without supervision	MSc	Applied Science Architecture

Title	Abbreviation	Calender/Handbook
Master of Science without supervision (	cont.)	Engineering Medicine Sciences*§ University College
Master of Science (Acoustics)	MSc(Acoustics)	Architecture
Master of Science (Industrial Design)	MSc(IndDes)	Architecture
Master of Science and Society	MScSoc	Arts
Master of Social Work	MSW	Professional Studies
Master of Statistics	MStats	Sciences*
Master of Surgery	MS	Medicine
Master of Surveying	MSurv	Engineering
Master of Surveying without supervision	MSurv	Engineering
Master of Surveying Science	MSurvSc	Engineering
Master of Town Planning	MTP	Architecture
Master of Welfare Policy	MWP	Professional Studies
Graduate Diploma	GradDip  DipPaed DipEd DipIM-ArchivAdmin DipIM-Lib	Applied Science Architecture Engineering Sciences*§ <b>Medicine</b> Professional Studies
	DipFDA	Sciences*

**Graduate Diplomas** 

\*Faculty of Science. §Faculty of Biological and Behavioural Sciences.

- 1. The degree of Doctor of Philosophy may be awarded by the Council on the recommendation of the Higher Degree Committee of the appropriate faculty or board (hereinafter referred to as the Committee) to a candidate who has made an original and significant contribution to knowledge.
- 2. (1) A candidate for the degree shall have been awarded an appropriate degree of Bachelor with Honours from the University of New South Wales or a qualification considered equivalent from another university or tertiary institution at a level acceptable to the Committee
- (2) In exceptional cases an applicant who submits evidence of such other academic and professional qualifications as may be approved by the Committee may be permitted to enrol for the degree.
- (3) If the Committee is not satisfied with the qualifications submitted by an applicant the Committee may require the applicant to undergo such assessment or carry out such work as the Committee may prescribe, before permitting enrolment as a candidate for the degree.
- 3. (1) An application to enrol as a candidate for the degree shall be made on the prescribed and form which shall be lodged with the Academic Registrar at least one calendar month before the commencement of the session in which enrolment is to begin.
- (2) In every case, before permitting a candidate to enrol, the head of the school in which the candidate intends to enrol shall be satisfied that adequate supervision and facilities are available.
- (3) An approved candidate shall be enrolled in one of the following categories:
- (a) full-time attendance at the University:
- (b) part-time attendance at the University.
- (4) A full-time candidate shall be fully engaged in advanced study and research except that the candidate may undertake not more than five hours per week or a total of 240 hours per year on work which is not related to the advanced study and research.
- (5) Before permitting a part-time candidate to enrol, the Committee shall be satisfied that the candidate can devote at least 20 hours each week to advanced study and research for the

**Higher Degrees** 

Doctor of Philosophy (PhD)

Qualifications

Enrolment and Progression

<sup>\*</sup> Or department where a department is not within a school or schools or departments where the research is being undertaken in more than on e school or department.

- degree which (subject to (8)) shall include regular attendance at the school\* on an average of at least one day per week for 48 weeks each year.
- (6) A candidate shall be required to undertake an original investigation on an approved topic. The candidate may also be required to undergo such assessment and perform such other work as may be prescribed by the Committee.
- (7) The work shall be carried out under the direction of a supervisor appointed from the full-time academic members of the University staff
- (8) The work, other than field work, shall be carried out in a school of the University except that the Committee:.
- (a) may permit a candidate to spend not more than one calendar year of the program in advanced study and research at another institution provided the work can be supervised in a manner satisfactory to the Committee;
- (b) may permit a candidate to conduct the work at other places where special facilities not possessed by the University may be available provided the direction of the work remains wholly under the control of the supervisor:
- (c) may permit a full-time candidate, who has been enrolled as a full-time candidate for at least six academic sessions, who has completed the research work and who is writing the thesis, to transfer to part-time candidature provided the candidate devotes at least 20 hours each week to work for the degree and maintains adequate contact with the supervisor.
- (9) The progress of a candidate shall be reviewed annually by the Committee following a report by the candidate, the supervisor and the head of the school\* in which the candidate is enrolled and as a result of such review the Committee may cancel enrolment or take such other action as it considers appropriate.
- (10) No candidate shall be awarded the degree until the lapse of six academic sessions from the date of enrolment in the case of a full-time candidate or eight academic sessions in the case of a part-time candidate. In the case of a candidate who has had previous research experience the committee may approve remission of up to two sessions for a full-time candidate and four sessions for a part-time candidate.
- (11) A full-time candidate for the degree shall present for examination not later than ten academic sessions from the date of enrolment. A part-time candidate for the degree shall present for examination not later than twelve academic sessions from the date of enrolment. In special cases an extension of these times may be granted by the Committee.

# **Thesis**

- 4. (1) On completing the program of study a candidate shall submit a thesis embodying the results of the investigation.
- (2) The candidate shall give in writing to the Academic Registrar two months notice of intention to submit the thesis.
- (3) The thesis shall comply with the following requirements.:
- (a) it must be an original and significant contribution to knowledge of the subject;
- (b) the greater proportion of the work described must have been completed subsequent to enrolment for the degree;
- (c) it must be written in English except that a candidate in the Faculty of Arts may be required by the Committee to write a thesis in an appropriate foreign language;
- (d) it must reach a satisfactory standard of expression and presentation;
- (e) it must consist of an account of the candidate's own research but in special cases work done conjointly with other persons may be accepted provided the Committee is satisfied about the extent of the candidate's part in the joint research.
- (4) The candidate may not submit as the main content of the thesis any work or material which has previously been submitted for a university degree or other similar award but may submit any work previously published whether or not such work is related to the thesis.
- (5) Four copies of the thesis shall be presented in a form which complies with the requirements of the University for the preparation and submission of theses for higher degrees.
- (6) It shall be understood that the University retains the four 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.

## **Examination**

- 5. (1) There shall be not fewer than three examiners of the thesis, appointed by the Academic Board on the recommendation of the Committee, at least two of whom shall be external to the University.
- \* Or department where a department is not within a school or schools or departments where the research is being undertaken in more than one school or department.

- (2) At the conclusion of the examination each examiner shall submit to the Committee a concise report on the thesis and shall recommend to the Committee that:
- (a) the candidate be awarded the degree without further examination; or
- (b) the candidate be awarded the degree without further examination subject to minor corrections as listed being made to the satisfaction of the head of the school\*: or
- (c) the candidate be awarded the degree subject to a further examination on questions posed in the report, performance in this further examination being to the satisfaction of the Committee; or
- (d) the candidate be not awarded the degree but be permitted to resubmit the thesis in a revised form after a further period of study and/or research; or
- (e) the candidate be not awarded the degree and be not permitted to resubmit the thesis.
- (3) If the performance at the further examination recommended under (2)(c) above is not to the satisfaction of the Committee, the Committee may permit the candidate to re-present the same thesis and submit to futher examination as determined by the Committee within a period specified by it but not exceeding eighteen months.
- (4) The Committee shall, after consideration of the examiners' reports and the results of any further examination, recommend whether or not the candidate may be awarded the degree. If it is decided that the candidate be not awarded the degree the Committee shall determine whether or not the candidate be permitted to resubmit the thesis after a further period of study and/or research.
- 6. A candidate shall pay such fees as may be determined from time to time by the Council.
- 1. The degree of Doctor of Medicine by published work\*\* may be awarded by the Council on the recommendation of the Higher Degree Committee of the Faculty of Medicine (hereinafter referred to as the Committee) to a candidate who has made an original and meritorious contribution to some branch of medicine.
- 2. A candidate for the degree shall:
- (1) hold the degrees of Bachelor of Medicine and Bachelor of Surgery from the University of New South Wales of at least five years standing; or
- (2) hold the degrees of Bachelor of Medicine and Bachelor of Surgery or a qualification considered equivalent from a university other than the University of New South Wales with at least five years' standing and have been associated with the University of New South Wales or one of its teaching hospitals for a period of at least four years.
- 3. A candidate for the degree on the basis of published work shall lodge with the Academic Registrar an application together with:
- (1) four copies (if possible) of the published work;
- (2) any additional work, published or unpublished, that a candidate may wish to submit in support of the application;
- (3) a declaration indicating those sections of the work, if any, that have been submitted previously for a university degree or other similar award.
- 4. Every candidate in submitting published work and such unpublished work as is deemed appropriate shall submit a short discourse describing the research activities embodied in the submission. The discourse shall make clear the extent of the originality of the work and the candidate's part in any collaborative effort.
- There shall normally be three examiners of the work, appointed by the Academic Board on the recommendation of the Committee, at least two of whom shall be external to the University.
- 6. Before the work referred to in 3. (1), (2) above is submitted to the examiners the head of the appropriate school\* shall certify that it is prima facie worthy of examination.
- 7. At the conclusion of the examination each examiner shall submit a concise report to the Committee on the merits of the published work and a recommendation as to whether the degree should be awarded. The examiners may require the candidate to answer orally or in writing any questions concerning the work.
- 8. A candidate shall be required to pay such fees as may be determined from time to time by the Council.

Fees

Doctor of Medicine (MD) by published work

<sup>\*</sup> Or department where a department is not within a school or schools or departments where the research is being undertaken in more than one school or department.

<sup>&</sup>quot;In these rules, the term 'published work' shall mean printed as a book or in a periodical or as a pamphlet readily available to the public. The purpose of requiring publication is to ensure that the work submitted has been available for criticism. The examiners may disregard any of the work submitted if, in their opinion, it has not been available for criticism.

# Doctor of Medicine (MD) by thesis

# Qualifications

- The degree of Doctor of Medicine by thesis may be awarded by the Council on the recommendation of the Higher Degree Committee of the Faculty of Medicine (hereinafter referred to as the Committee) to a candidate who has made an original and meritorious contribution to some branch of medicine.
  - 2. (1) A candidate for the degree shall:
- (a) hold the degrees of Bachelor of Medicine and Bachelor of Surgery from the University of New South Wales at a level acceptable to the Committee; or
- (b) hold the degrees of Bachelor of Medicine and Bachelor of Surgery or a qualification considered equivalent from a university other than the University of New South Wales at a level acceptable to the Committee; or
- (c) in exceptional cases, submit such evidence of academic and professional attainments in support of the candidature as may be approved by the Committee.
- (2) If the Committee is not satisfied with the qualifications submitted by an applicant the Committee may require the applicant to undergo such examination or carry out such work as the Committee may prescribe, before permitting enrolment.
- (3) A candidate enrolled under 2. (1)(a) or (b) above shall not submit a thesis for the degree until the lapse of five years from the date of the award of the degrees mentioned therein.
- (4) A candidate enrolled under 2. (1)(c) above shall not submit a thesis for the degree until such period of time has elapsed since enrolment as the Committee shall decide at the time of approving enrolment.

# Enrolment and Progression

- 3. (1) An application to enrol as a candidate for the degree by thesis shall be made on the prescribed form which shall be lodged with the Academic Registrar at least one calendar month before the commencement of the session in which enrolment is to begin.
- (2) In every case, before permitting a candidate to enrol, the Committee shall be satisfied that adequate supervision and facilities are available.
- (3) An approved applicant shall be enrolled in one of the following categories:
- (a) full-time candidature: a candidate who is fully engaged in advanced study and research at the University or at one of its teaching hospitals;
- (b) part-time candidature: a candidate whose occupation leaves the candidate substantially free to pursue a program of advanced study and research at the University or at one of its teaching hospitals;
- (c) external candidature: a candidate who is engaged in advanced study and research away from the University or one of its teaching hospitals.
- (4) A candidate shall be required to undertake an original investigation on a topic approved by the Committee. The candidate may also be required to undergo such examination and perform such other work as may be prescribed by the Committee.
- (5) The work shall be carried out under the direction of a supervisor appointed by the Committee from the full-time academic members of the University staff.
- (6) The progress of a candidate shall be reviewed annually by the Committee following a report by the candidate, the supervisor and the head of the school\* in which the candidate is enrolled and as a result of such review the Committee may cancel enrolment or take such other action as it considers appropriate.
- (7) No candidate shall be awarded the degree until the lapse of six academic sessions in the case of a full-time candidate or eight academic sessions in the case of a part-time or external candidate from the date of enrolment. In the case of a candidate who has been awarded the degrees of Bachelor of Medicine and Bachelor of Surgery with honours or who has had previous research experience the Committee may approve remission of up to two sessions for a full-time candidate and four sessions for a part-time or external candidate.
- (8) A full-time candidate for the degree shall present for examination not later than ten academic sessions from the date of enrolment. A part-time or external candidate shall present for examination not later than twelve academic sessions from the date of enrolment. In special cases an extension of these times may be granted by the Committee.

# Thesis

- 4. (1) A candidate shall submit a thesis embodying the results of the investigation.
- (2) If a candidate for the degree is not a graduate of the University of New South Wales the greater proportion of the work described must have been carried out in the University or in one of its teaching hospitals, save that in special cases the Committee may permit a candidate to conduct the work at other places where special facilities not possessed by the University may be available or where the subject of the research is uniquely located but only if the candidate

<sup>\*</sup> Or department where a department is not within a school, or schools or departments where the research is being undertaken in more than one school or department..

spends such period of time within the University, and under such supervision, as may be determined by the Committee.

- (3) A candidate shall give in writing to the Academic Registrar two months notice of intention to submit the thesis.
- (4) The thesis shall comply with the following requirements.
- (a) it must be an original and meritorious contribution to knowledge of the subject;
- (b) it must be written in English and reach a satisfactory standard of expression and presentation:
- (c) it must consist of the candidate's own account of the research; in special cases work done conjointly with other persons may be accepted provided the Committee is satisfied about the extent of the candidate's part in the joint research.
- (5) A candidate may not submit as the main content of the thesis any work or material which has previously been submitted for a university degree or other similar award but may submit any work otherwise previously published, whether or not it is related to the thesis.
- (6) The thesis shall contain a certificate signed by the candidate indicating specifically the extent to which the work embodied in the thesis is directly attributable to the candidate's own research and the extent to which the thesis has benefitted from collaboration with persons other than the supervisor.
- (7) Four copies of 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.
- (8) It shall be understood that the University retains the four copies of the thesis submitted for examination and is free to allow the thesis to be consulted or borrowed. Subject to the provisions of the Copyright Act, 1968, the University may issue the thesis, in whole or in part, in photostat or microfilm or other copying medium.
- 5. (1) There shall be not fewer than three examiners of the thesis, appointed by the Academic Board on the recommendation of the Committee, at least two of whom shall be external to the University.
- (2) At the conclusion of the examination each examiner shall submit to the Committee a concise report on the thesis and shall recommend to the Committee that;
- (a) the candidate be awarded the degree without further examination; or
- (b) the candidate be awarded the degree without further examination subject to minor corrections as listed being made to the satisfaction of the head of school\*; or
- (c) the candidate be awarded the degree subject to a further examination on questions posed in the report, performance in this further examination being to the satisfaction of the Committee; or
- (d) the candidate be not awarded the degree but be permitted to resubmit the thesis in a revised form after a further period of study and/or research; or
- (e) the candidate be not awarded the degree and be not permitted to resubmit the thesis.
- (3) if the performance at the further examination recommended under (2)(c) above is not to the satisfaction of the Committee it may permit the candidate to re-present the same thesis and submit to further examination as determined by the Committee within a period specified by it but not exceeding eighteen months.
- (4) The Committee shall, after consideration of the examiners' reports and the results of any further examination, recommend whether or not the candidate may be awarded the degree.
- 6. A candidate shall pay such fees as may be determined from time to time by the Council.
- 1. The degree of Doctor of Medicine by thesis without supervision may be awarded by the Council on the recommendation of the Higher Degree Committee of the Faculty of Medicine (hereinafter referred to as the Committee) to a candidate who has made an original and meritorious contrisupervision bution to some branch of medicine.
- 2. A candidate for the degree shall hold the degrees of Bachelor of Medicine and Bachelor of Surgery from the University of New South Wales with at least five years standing at a level acceptable to the Committee.
- 3. An application to enrol as a candidate for the degree by thesis without supervision shall be made on the prescribed form which shall be lodged with the Academic Registrar not less than six months before the intended date of submission of the thesis. A graduate who intends to apply in this way should, in his or her own interest, at an early stage seek the advice of the appropriate school\* with regard to the adequacy of the subject matter and its presentation for the degree. A synopsis of the work should be available.

\* Or department where a department is not within a school, or schools or departments where the research is being undertaken in more than one school or department..

Examination

Fees

Doctor of Medicine (MD) by thesis without supervision

Qualifications

Enrolment and Progression

- 4. (1) A candidate shall submit a thesis embodying the results of the investigation.
- (2) A candidate shall give in writing to the Academic Registrar two months notice of intention to submit the thesis.
- (3) The thesis shall comply with the following requirements:(
- a) it must be an original and meritorious contribution to knowledge of the subject;
- (b) it must be written in English and reach a satisfactory standard of expression and presentation:
- (c) it must consist of the candidate's own account of the research; in special cases work done conjointly with other persons may be accepted provided the Committee is satisfied with the candidate's part in the joint research.
- (4) A candidate may not submit as the main content of the thesis any work or material which has previously been submitted for a university degree or other similar award but may submit any work otherwise previously published, whether or not related to the thesis.
- (5) The thesis shall contain a certificate signed by the candidate indicating specifically the extent to which the work embodied in the thesis is directly attributable to the candidate's own research and the extent to which the thesis has benefited from the collaboration with other persons.
- (6) Four copies of 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. The candidate may also submit any work previously published whether or not such work is related to the thesis.
- (7) It shall be understood that the University retains the four 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.

#### Examination

- 5. (1) There shall normally be three examiners of the thesis, appointed by the Academic Board on the recommendation of the Committee, at least two of whom shall be external to the University.
- (2) Before the thesis is submitted to the examiners the head of the school\* in which the candidate is enrolled shall certify that it is prima facie worthy of examination.
- (3) After examining the thesis each examiner shall submit to the Committee a concise report on the thesis and shall recommend to the Committee that:
- (a) the candidate be awarded the degree without further examination; or
- (b) the candidate be awarded the degree without further examination subject to minor corrections as listed being made to the satisfaction of the head of school\*; or
- (c) the candidate be awarded the degree subject to a further examination on questions posed in the report, performance in this further examination being to the satisfaction of the Committee; or
- d) the candidate be not awarded the degree but be permitted to resubmit the thesis in a revised form after a further period of study and/or research; or
- (e) the candidate be not awarded the degree and be not permitted to resubmit the thesis.
- (4) If the performance at the further examination recommended under (3)(c) above is not to the satisfaction of the Committee it may permit the candidate to re-present the same thesis and submit to further examination as determined by the Committee within a period specified by it but not exceeding eighteen months.
- (5) The Committee shall, after consideration of the examiners' reports and the results of any further examination, recommend whether or not the candidate may be awarded the degree.

#### Fees

6. A candidate shall be required to pay such fees as may be determined from time to time by the Council.

#### Master of Community Health (MCH) by Research

#### Qualifications

- 1. The degree of Master of Community Health by research may be awarded by the Council on the recommendation of the Higher Degree Committee of the Faculty of Medicine (hereinafter referred to as the Committee) to a candidate who has demonstrated ability to undertake research by the submission of a thesis embodying the results of an original investigation.
- 2. (1) A candidate for the degree shall:
- (a) have been awarded the degrees of Bachelor of Medicine and Bachelor of Surgery from the University of New South Wales or a qualification considered equivalent from another university or tertiary institution at a level acceptable to the Committee, or
- (b) have been awarded an appropriate degree of Bachelor of at least four full-time years duration (or the part-time equivalent) from the University of New South Wales or a qualification considered equivalent from another university or tertiary institution at a level acceptable to the Committee.
- \* Or department where a department is not within the school or schools or departments where the research is being undertaken in more than one school or department e supervision and facilities are available.

- (2) In exceptional cases an applicant who submits evidence of such other academic and professional qualifications as may be approved by the Committee may be permitted to enrol for the degree.
- (3) If the Committee ius not satisfied with the qualifications submitted bby an applicant the Committee may require the applicant to undergo such assessment or carry out such work as the Committee may prescribe, before permitting enrolment.
- 3. (1) An application to enrol as a candidate for the degree shall be made on the prescribed form which shall be lodged with the Academic Registrar at least one calendar month before the commencement of the session in which enrolment is to begin.
- (2) In every case, before permitting a candidate to enrol, the Head of the School of Community Medicine (hereinafter referred to as the head of the school) shall be satisfied that adequate supervision and facilities are available.
- (3) An approved candidate shall be enrolled in one of the following categories:
- (a) full-time attendance at the University;
- (b) part-time attendance at the University;
- (c) external not in regular attendance at the University and using research facilities external to the University.
- (4) A candidate shall be required to undertake an original investigation on an approved topic. The candidate may also be required to undergo such assessment and perform such other work as may be prescribed by the Committee.
- (5) The work shall be carried out under the direction of a supervisor appointed from the full-time academic members of the University staff.
- (6) The progress of a candidate shall be reviewed annually by the Committee following a report by the candidate, the supervisor and the head of the school and as a result of such review the Committee may cancel enrolment or take such other action as it considers appropriate.
- (7) No candidate shall be awarded the degree until the lapse of three academic sessions from the date of enrolment in the case of a full-time candidate or four academic sessions in the case of a part-time or external candidate. In the case of a candidate who has been awarded the degree of Bachelor with Honours or who has had previous research experience the Committee may approve remission of up to one session for a full-time candidate and two sessions for a part-time or external candidate.
- (8) A full-time candidate for the degree shall present for examination not later than four academic sessions from the date of enrolment. A part-time or external candidate for the degree shall present for examination not later than eight academic sessions from the date of enrolment. In special cases an extension of these times may be granted by the Committee.
- 4. (1) On completing the program of study a candidate shall submit a thesis embodying the results of the investigation.
- (2) The candidate shall give in writing to the Academic Registrar two months notice of intention to submit the thesis.
- (3) The thesis shall present an account of the candidate's own research. In special cases work done conjointly with other persons may be accepted, provided the Committee is satisfied about the extent of the candidate's part in the joint research.
- (4) The candidate may also submit any work previously published whether or not such work is related to the thesis.
- (5) Three copies of the thesis shall be presented in a form which compiles with the requirements of the University for the preparation and submission of theses for higher degrees.
- (6) It shall be understood that the University retains the three copies of the thesis submitted for examination and is free to allow the thesis to be consulted or borrowed. Subject to the provisions of the Copyright Act, 1968, the University may issue the thesis in whole or in part, in photostat or microfilm or other copying medium.
- 5. (1) There shall be not fewer than two examiners of the thesis, appointed by the Academic Board on the recommendation of the Committee, at least one of whom shall be external to the University unless the Committee is satisfied that this is not practicable.
- (2) At the conclusion of the examination each examiner shall submit to the Committee a concise report on the thesis and shall recommend to the Committee that:
- (a) the candidate be awarded the degree without further examination; or
- (b) the candidate be awarded the degree without further examination subject to minor corrections as listed being made to the satisfaction of the head of the school\*; or

Enrolment and Progression

Thesis

Examination

<sup>\*</sup> Or department where a department is not within a school,, or schools or departments where the research is being undertaken in more than one school or department.

- (c) the candidate be awarded the degree subject to a further examination on questions posed in the report, performance in this further examination being to the satisfaction of the Committee; or
- d) the candidate be not awarded the degree but be permitted to resubmit the thesis in a revised form after a further period of study and/or research; or
- (e) the candidate be not awarded the degree and be not permitted to resubmit the thesis.
- (3) If the performance at the further examination recommended under (2)(c) above is not to the satisfaction of the Committee, the Committee may permit the candidate to re-present the same thesis and submit to further examination as determined by the Committee within a period specified by it but not exceeding eighteen months.
- (4) The Committee shall, after consideration of the examiners' reports and the results of any further examination, recommend whether or not the candidate may be awarded the degree. If it is decided that the candidate be not awarded the degree the Committee shall determine whether or not the candidate may resubmit the thesis after a further period of study and/or research.

Fees

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

#### Master of Community Health (MCH) by Formal Course Work

1. The degree of Master of Community Health by formal course work may be awarded by the Council to a candidate who has satisfactorily completed a program of advanced study.

#### Qualifications

- 2. (1) A candidate for the degree shall:
- (a) have been awarded the degrees of Bachelor of Medicine and Bachelor of Surgery from the University of New South Wales or a qualification considered equivalent from another university or tertiary institution at a level acceptable to the Higher Degree Committee of the Faculty of Medicine (hereinafter referred to as the Committee), or
- (b) have been awarded an appropriate degree of Bachelor of at least four full-time years duration (or the part-time equivalent) from the University of New South Wales or a qualification considered equivalent from another university or tertiary institution at a level acceptable to the Committee.
- (2) In exceptional cases an applicant who submits evidence of such other academic and professional qualifications as may be approved by the Committee may be permitted to enrol for the degree.
- (3) If the Committee is not satisfied with the qualifications submitted by an applicant the Committee may require the applicant to undergo such assessment or carry out such work as the Committee may prescribe, before permitting enrolment.

#### Enrolment and Progression

- 3. (1) An application to enrol as a candidate for the degree shall be made on the prescribed form which shall be lodged with the Academic Registrar two calendar months before the commencement of the session in which enrolment is to begin.
- (2) A candidate for the degree shall be required to undertake such formal subjects and pass such assessment as prescribed.
- (3) The progress of a candidate shall be reviewed at least once annually by the Committee and as a result of its review the Committee may cancel enrolment or take such other action as it considers appropriate.
- (4) No candidate shall be awarded the degree until the lapse of two academic sessions from the date of enrolment in the case of a full-time candidate or four sessions in the case of a part-time candidate. The maximum period of candidature shall be four academic sessions from the date of enrolment for a full-time candidate and eight sessions for a part-time candidate. In special cases an extension of these times may be granted by the Committee.

Fees

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

#### Master of Health Personnel Education (MHPEd) by Research

1. The degree of Master of Health Personnel Education by research may be awarded by the Council on the recommendation of the Higher Degree Committee of the Faculty of Medicine (hereinafter referred to as the Committee) to a candidate who has demonstrated ability to undertake research by the submission of a thesis embodying the results of an original investigation.

#### Qualifications

- 2. (1) A candidate for the degree shall:
- (a) have been awarded an appropriate degree of Bachelor of four full-time years duration (or the part-time equivalent) from the University of New South Wales or a qualification considered equivalent from another university or tertiary institution at a level acceptable to the Committee, and

\*Or department where a department is not within a school, or schools or departments where the research is being undertaken in more than one school or department.

- (b) have had the equivalent of at least two years full-time teaching and/or administrative experience of a kind acceptable to the Committee.
- (2) In exceptional cases an applicant who submits evidence of such other academic and professional qualifications as may be approved by the Committee may be permitted to enrol for the degree.
- (3) If the Committee is not satisfied with the qualifications submitted by an applicant the Committee may require the applicant to undergo such assessment or carry out such work as the Committee may prescribe, before permitting enrolment.
- 3. (1) An application to enrol as a candidate for the degree shall be made on the prescribed form which shall be lodged with the Academic Registrar at least one calendar month before the commencement of the session in which enrolment is to begin.
- (2) In every case, before permitting a candidate to enrol, the Head of the School of Medical Education (hereinafter referred to as the head of the school) shall be satisfied that adequate supervision and facilities are available.
- (3) An approved candidate shall be enrolled in one of the following categories:
- (a) full-time attendance at the University;
- (b) part-time attendance at the University;
- (c) external not in regular attendance at the University and using research facilities external to the University.
- (4) A candidate shall be required to undertake an original investigation on an approved topic. The candidate may also be required to undergo such assessment and perform such other work as may be prescribed by the Committee.
- (5) The work shall be carried out under the direction of a supervisor appointed from the full-time academic members of the University staff.
- (6) The progress of a candidate shall be reviewed annually by the Committee following a report by the candidate, the supervisor and the head of the school and as a result of such review the Committee may cancel enrolment or take such other action as it considers appropriate.
- (7) No candidate shall be awarded the degree until the lapse of three academic sessions from the date of enrolment in the case of a full-time candidate or four academic sessions in the case of a part-time or external candidate. In the case of a candidate who has been awarded the degree of Bachelor with Honours or who has had previous research experience the Committee may approve remission of up to one session for a full-time candidate and two sessions for a part-time or external candidate.
- (8) A full-time candidate for the degree shall present for examination not later than six academic sessions from the date of enrolment. A part-time or external candidate for the degree shall present for examination not later than eight academic sessions from the date of enrolment. In special cases an extension of these times may be granted by the Committee.
- 4. (1) On completing the program of study a candidate shall submit a thesis embodying the results of the investigation.
- (2) The candidate shall give in writing to the Academic Registrar two months notice of intention to submit the thesis.
- (3) The thesis shall present an account of the candidate's own research. In special cases work done conjointly with other persons may be accepted, provided the Committee is satisfied about the extent of the candidate's part in the joint research.
- (4) The candidate may also submit any work previously published whether or not such work is related to the thesis.
- (5) Three copies of the thesis shall be presented in a form which complies with the requirements of the University for the preparation and submission of theses for higher degrees.
- (6) It shall be understood that the University retains the three copies of the thesis submitted for examination and is free to allow the thesis to be consulted or borrowed. Subject to the provisions of the Copyright Act, 1968, the University may issue the thesis in whole or in part, in photostat or microfilm or other copying medium.
- 5. (1) There shall be not fewer than two examiners of the thesis, appointed by the Academic Board on the recommendation of the Committee, at least one of whom shall be external to the University unless the Committee is satisfied that this is not practicable.
- (2) At the conclusion of the examination each examiner shall submit to the Committee a concise report on the thesis and shall recommend to the Committee that:
- (a) the candidate be awarded the degree without further examination; or

Enrolment and Progression

Thesis

Examination

- (b) the candidate be awarded the degree without further examination subject to minor corrections as listed being made to the satisfaction of the head of the school; or
- (c) the candidate be awarded the degree subject to a further examination on questions posed in the report, performance in this further examination being to the satisfaction of the Committee; or
- (d) the candidate be not awarded the degree but be permitted to resubmit the thesis in a revised form after a further period of study and/or research; or
- (e) the candidate be not awarded the degree and be not permitted to resubmit the thesis.
- (3) If the performance at the further examination recommended under (2)(c) above is not to the satisfaction of the Committee, the Committee may permit the candidate to re-present the same thesis and submit to further examination as determined by the Committee within a period specified by it but not exceeding eighteen months.
- (4) The Committee shall, after consideration of the examiners' reports and the results of any further examination, recommend whether or not the candidate may be awarded the degree. If is decided that the candidate be not awarded the degree the Committee shall determine whether or not the candidate may resubmit the thesis after a further period of study and/or research.

**Fees** 

- 6. A candidate shall pay such fees as may be determined from time to time by the Council.
- \*Or department where a department is not within a school or schools or departments where the research is being undertaken in more than one school or department.

#### Master of Health Personnel Education (MHPEd) by Formal Course Work

1. The degree of Master of Health Personnel Education by formal course work may be awarded by the Council to a candidate who has satisfactorily completed a program of advanced study.

#### Qualifications

- 2. (1) A candidate for the degree shall:
- (a) have been awarded the degrees of Bachelor of Medicine and Bachelor of Surgery from the University of New South Wales or a qualification considered equivalent from another university or tertiary Institution at a level acceptable to the Higher Degree Committee of the Faculty of Medicine (hereinafter referred to as the Committee), or
- (b) have been awarded an appropriate degree of Bachelor of at least four full-time years duration (or the part-time equivalent) from the University of New South Wales or a qualification considered equivalent from another university or tertiary institution at a level acceptable to the Committee.
- (2) In exceptional cases an applicant who submits evidence of such other academic and professional qualifications as may be approved by the Committee may be permitted to enrol for the degree.
- (3) If the Committee is not satisfied with the qualifications submitted by an applicant the Committee may require the applicant to undergo such assessment or carry out such work as the Committee may prescribe, before permitting enrolment.

#### Enrolment and Progression

- 3. (1) An application to enrol as a candidate for the degree shall be made on the prescribed form which shall be lodged with the Academic Registrar two calendar months before the commencement of the session in which enrolment is to begin.
- (2) A candidate for the degree shall be required to undertake such formal subjects and pass such assessment as prescribed.
- (3) The progress of a candidate shall be reviewed at least once annually by the Committee and as a result of its review the Committee may cancel enrolment or take such other action as it considers appropriate.
- (4) No candidate shall be awarded the degree until the lapse of two academic sessions from the date of enrolment in the case of a full-time candidate or four sessions in the case of a part-time candidate. The maximum period of candidature shall be four academic sessions from the date of enrolment for a full-time candidate and eight sessions for a part-time candidate. In special cases an extension of these times may be granted by the Committee.

Fees

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

## Master of Paediatrics (MPaed)

The degree of Master of Paediatrics by formal course work may be awarded by the Council
to a candidate who has satisfactorily completed a program of advanced study.

- 2. (1) A candidate for the degree shall:
- (a) have been awarded the degrees of Bachelor of Medicine and Bachelor of Surgery from the University of New South Wales or a qualification considered equivalent from another university or tertiary institution at a level acceptable to the Higher Degree Committee of the Faculty of Medicine (hereinafter referred to as the Committee), and
- (b) have had at least one year's hospital experience subsequent to graduation of a kind acceptable to the Committee.
- (2) In exceptional cases an applicant who submits evidence of such other academic and professional qualifications as may be approved by the Committee may be permitted to enrol for the degree.
- (3) If the Committee is not satisfied with the qualifications submitted by an applicant the Committee may require the applicant to undergo such assessment or carry out such work as the Committee may prescribe, before permitting enrolment.
- 3. (1) An application to enrol as a candidate for the degree shall be made on the prescribed form which shall be lodged with the Academic Registrar at least two calendar months before the commencement of the session in which enrolment is to begin.
- (2) A candidate for the degree shall be required to undertake such formal subjects and pass such assessment as prescribed.
- (3) The progress of a candidate shall be reviewd at least once annually by the Committee and as a result of its review the Committee may cancel enrolment or take such other action as it considers appropriate.
- (4) No candidate shall be awarded the degree until the lapse of six academic sessions from the date of enrolment. The maximum period of candidature shall be eight academic sessions from the date of enrolment. In special cases an extension of time may be granted by the Committee.
- 4. A candidate shall pay such fees as may be determined from time to time by the Council.

#### Qualifications

Enrolment and Progression

Fees

- 1. The degree of Master of Psychotherapy by formal course work may be awarded by the Council to a candidate who has satisfactorily completed a program of advanced study.
- 2. (1) A candidate for the degree shall:
- (a) have been awarded the degrees of Bachelor of Medicine and Bachelor of Surgery from the University of New South Wales or a qualification considered equivalent from another university or tertiary institution at a level acceptable to the Higher Degree Committee of the Faculty of Medicine (hereinafter referred to as the Committee), and
- b) have had at least three years full-time experience in a formal program of postgraduate study and practice of psychiatry or experience of a kind acceptable to the Committee.
- (2) In exceptional cases an applicant who submits evidence of such other academic and professional qualifications as may be approved by the Committee may be permitted to enrol for the degree.
- (3) If the Committee is not satisfied with the qualifications submitted by an applicant the Committee may require the applicant to undergo such assessment or carry out such work as the Committee may prescribe, before permitting enrolment.
- **3.** (1) An application to enrol as a candidate for the degree shall be made on the prescribed form which shall be lodged with the Academic Registrar at least two calendar months before the commencement of the session in which enrolment is to begin.
- (2) A candidate for the degree shall be required to undertake such formal subjects and pass such assessment as prescribed.
- (3) The progress of a candidate shall be reviewd at least once annually by the Committee and as a result of its review the Committee may cancel enrolment or take such other action as it considers appropriate.
- (4) No candidate shall be awarded the degree until the lapse of six academic sessions from the date of enrolment. The maximum period of candidature shall be eight academic sessions from the date of enrolment. In special cases an extension of time may be granted by the Committee.
- 4. A candidate shall pay such fees as may be determined from time to time by the Council.

Master of Psychotherapy (MPsychotherapy)

Qualifications

Enrolment and Progression

Fees

# Master of Public Health (MHP) by Research

# Qualifications

- 1. The degree of Master of Public Health by Research may be awarded by the Council on the recommendation of the Higher Degree Committee of the appropriate faculty (hereinafter referred to as the Committee) to a candidate who has demonstrated ability to undertake research by the submission of a thesis embodying the results of an original investigation or design.
- 2. (1) A candidate for the degree shall:
- (a) have been awarded an appropriate degree of Bachelor of four full-time years duration (or the part-time equivalent) from the University of New South Wales or a qualification considered equivalent from another university or tertiary institution at a level acceptable to the Committee, or
- b)(i) have been awarded an appropriate degree of Bachelor of three full-time years duration (or the part-time equivalent) from the University of New South Wales or qualifications considered equivalent from another university or tertiary institutin at a level acceptable to the Committee and
- (ii) have had the equivalent of at least three years experience in the health services of a kind acceptable to the committee
- (2) In exceptional cases an applicant who submits evidence of such other academic and professional qualifications as may be approved by the Committee may be permitted to enrol for the degree.
- (3) If the Committee is not satisfied with the qualifications submitted by an applicant the Committee may require the applicant to undergo such examination or carry out such work as the Committee may prescribe, before permitting enrolment.

# Enrolment and Progression

- 3. (1) An application to enrol as a candidate for the degree shall be made on the prescribed form which shall be lodged with the Academic Registrar at least one calendar month before the commencement of the session in which enrolment is to begin.
- (2) In every case, before permitting a candidate to enrol, the Head of the School in which the candidate intends to enrol shall be satisfied that adequate supervision and facilities are available.
- (3) An approved candidate shall be enrolled in one of the following categories:
- (a) full-time attendance at the University;
- (b) part-time attendance at the University;
- (c) external not in regular attendance at the University and using research facilities external to the University.
- (4) A candidate shall be required to undertake an original investigation or design on an approved topic. The candidate may also be required to undergo such examination and perform such other work as may be prescribed by the Committee.
- (5) The work shall be carried out under the direction of a supervisor appointed from the full-time academic members of the University staff.
- (6) The progress of a candidate shall be reviewed annually by the Committee following a report by the candidate, the supervisor and the head of the school and as a result of such review the Committee may cancel enrolment or take such other action as it considers appropriate.
- (7) No candidate shall be awarded the degree until the lapse of three academic sessions from the date of enrolment in the case of a full-time candidate or four academic sessions in the case of a part-time or external candidate. In the case of a candidate who has been awarded the degree of Bachelor with honours or who has had previous research experience the Committees may approve remission of up to one session for a full-time candidate and two sessions for a part-time or external candidate.
- (8) A full-time candidate for the degree shall present for examination not later than six academic sessions from the date of enrolment. A part-time or external candidate for the degree shall present for examination not later than ten academic sessions from the date of enrolment. In special cases an extension of these times may be granted by the Committee.

#### **Thesis**

- 4. (1) On completing the program of study a candidate shall submit a thesis embodying the results of the investigation or design.
- (2) The candidate shall give in writing to the Academic Registrar two months notice of intention to submit the thesis.
- (3) The thesis shall present an account of the candidate's own research. In special cases work done conjointly with other persons may be accepted, provided the Committee is satisfied about the extent of the candidate's part in the joint research.
- (4) The candidate may also submit any work previously published whether or not such work is related to the thesis.
- (5) Three copies of the thesis shall be presented in a form which complies with the requirements of the University for the preparation and submission of theses for higher degrees.

- (6) It shall be understood that the University retains the three copies of the thesis submitted for examination and is free to allow the thesis to be consulted or borrowed. Subject to the provisions of the Copyright Act, 1968, the University may issue the thesis in whole or in part, in photostat or microfilm or other copying medium.
- 5. (1) There shall be not fewer than two examiners of the thesis, appointed by the Academic Board on the recommendation of the Committee, at least one of whom shall be external to the University unless the Committee is satisfied that this is not practicable.
- (2) At the conclusion of the examination each examiner shall submit to the Committee a concise report on the merits of the thesis and shall recommend to the Committee that:
- (a) the candidate be awarded the degree without further examination; or
- b) the candidate be awarded the degree without further examination subject to minor corrections as listed being made to the satisfaction of the head of the school; or
- (c) the candidate be awarded the degree subject to a further examination on questions posed in the report, performance in this further examination being to the satisfaction of the Committee; or
- (d) the candidate be not awarded the degree but be permitted to resubmit the thesis in a revised form after a further period of study and/or research; or
- (e) the candidate be not awarded the degree and be not permitted to resubmit the thesis.
- (3) If the performance at the further examination recommended under (2)(c) above is not to the satisfaction of the Committee, the Committee may permit the candidate to re-present the same thesis and submit to further examination as determined by the Committee within a period specified by it but not exceeding eighteen months.
- (4) The Committee shall, after consideration of the examiners' reports and the results of any further examination, recommend whether or not the candidate may be awarded the degree. If is decided that the candidate be not awarded the degree the Committee shall determine whether or not the candidate may resubmit the thesis after a further period of study and/or research.
- 6. A candidate shall pay such fees as may be determined from time to time by the Council.
- 1. The degree of Master of Public Health by formal course work may be awarded by the Council to a candidate who has satisfactorily completed a program of advanced study.
- 2. (1) A candidate for the degree shall:
- (a) have been awarded the degree of Bachelor from the University of New South Wales or a qualification considered equivalent from another university or tertiary institution at a level acceptable to the Higher Degree Committee of the appropriate faculty (hereinafter referred to as the Committee), or
- (b) have had the equivalent of at least three years experience in the health services of a kind acceptable to the Committee.
- (2) In exceptional cases an applicant who submits evidence of such other academic and professional qualifications as may be approved by the Committee may be permitted to enrol for the degree.
- (3) If the Committee is not satisfied with the qualifications submitted by an applicant the Committee may require the applicant to undergo such assessment or carry out such work as the Committee may prescribe, before permitting enrolment.
- 3. (1) An application to enrol as a candidate for the degree shall be made on the prescribed form which shall be lodged with the Academic Registrar on or before a date to be fixed by the Committee, that date being at least we calendar months before the commencement of the session in which enrolment is to begin.
- (2) A candidate for the degree shall be required to undertake such formal subjects and pass such assessment as prescribed.
- (3) The progress of a candidate shall be reviewed at least once annually by the Committee and as a result of its review the Committee may cancel enrolment or take such other action as it considers appropriate.
- (4) No candidate shall be awarded the degree until the lapse of three academic sessions from the date of enrolment in the case of a full-time candidate or six sessions in the case of a part-time candidate. The maximum period of candidature shall be six academic sessions from the date of enrolment for a full-time candidate and ten sessions for a part-time candidate. In special cases an extension of these times may be granted by the Committee.
- 4. A candidate shall pay such fees as may be determined from time to time by the Council.

Examination

Fees

Master of Public Health by Formal Course Work

Qualifications

Enrolment and Progression

Fees

#### Master of Engineering (ME) and Master of Science (MSc)

1. The degree of Master of Engineering or Master of Science by research may be awarded by the Council on the recommendation of the Higher Degree Committee of the appropriate faculty (hereinafter referred to as the Committee) to a candidate who has demonstrated ability to undertake research by the submission of a thesis embodying the results of an original investigation.

#### Qualifications

- 2. (1) A candidate for the degree shall have been awarded an appropriate degree of Bachelor from the University of New South Wales or a qualification considered equivalent from another university or tertiary institution at a level acceptable to the Committee.
- (2) An applicant who submits evidence of such other academic or professional attainments as may be approved by the Committee may be permitted to enrol for the degree.
- (3) When the Committee is not satisfied with the qualifications submitted by an applicant the Committee may require the applicant, before being permitted to enrol, to undergo such examination or carry out such work as the Committee may prescribe.

#### Enrolment and Progression

- 3. (1) An application to enrol as a candidate for the degree shall be made on the prescribed form which shall be lodged with the Academic Registrar at least one calendar month before the commencement of the session in which enrolment is to begin.
- (2) In every case, before permitting a candidate to enrol, the head of the school\* in which the candidate intents to enrol shall be satisfied that adequate supervision and facilities are available.
- (3) An approved candidate shall be enrolled in one of the following categories:
- (a) full-time attendance at the University;
- (b) part-time attendance at the University:
- (c) external not in regular attendance at the University and using research facilities external to the University.
- (4) A candidate shall be required to undertake an original investigation on an approved topic. The candidate may also be required to undergo such examination and perform such other work as may be prescribed by the Committee.
- (5) The work shall be carried out under the direction of a supervisor appointed from the full-time members of the University staff.
- (6) The progress of a candidate shall be reviewed annually by the Committee following a report by the candidate, the supervisor and the head of the school\* in which the candidate is enrolled and as a result of such review the Committee may cancel enrolment or take such other action as it considers appropriate.
- (7) No candidate shall be granted the degree until the lapse of three academic sessions in the case of a full-time candidate or four academic sessions in the case of a part-time or external candidate from the date of enrolment. In the case of a candidate who has been awarded the degree of Bachelor with Honours or who has had previous research experience the Committee may approve remission of up to one session for a full-time candidate and two sessions for a part-time or external candidate
- (8) A full-time candidate for the degree shall present for examination not later than six academic sessions from the date of enrolment. A part-time or external candidate for the degree shall present for examination not later than ten academic sessions from the date of enrolment. In special cases an extension of these times may be granted by the Committee

#### **Thesis**

- 4. (1) On completing the program of study a candidate shall submit a thesis embodying the results of the original investigation.
- .(2) The candidate shall give in writing two months notice of intention to submit the thesis.
- (3) The thesis shall present an account of the candidate's own research. In special cases work done conjointly with other persons may be accepted, provided the Committee is satisfied about the extent of the candidate's part in the joint research.
- (4) The candidate may also submit any work previously published whether or not such work is related to the thesis.
- (5) Three copies of 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.
- (6) 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.

#### Examination

5. (1) There shall be not fewer than two examiners of the thesis, appointed by the Academic Board on the recommendation of the Committee, at least one of whom shall be external to the University unless the Committee is satisfied that this is not practicable.

<sup>\*</sup> Or department where a department is not within a school or schools or departments where the research is being undertaken in more than one school or department.

- (2) At the conclusion of the examination each examiner shall submit to the Committee a concise report on the merits of the thesis and shall recommend to the Committee that:
- (a) the candidate be awarded the degree without further examination; or
- (b) the candidate be awarded the degree without further examination subject to minor corrections as listed being made to the satisfaction of the head of the school\*; or
- (c) the candidate be awarded the degree subject to a further examination on questions posed in the report, performance in this further examination being to the satisfaction of the Committee; or
- (d) the candidate be not awarded the degree but be permitted to resubmit the thesis in a revised form after a further period of study and/or research; or
- (e) the candidate be not awarded the degree and be not permitted to resubmit the thesis.
- (3) If the performance at the further examination recommended under (2)(c) above is not to the satisfaction of the Committee, the Committee may permit the candidate to re-present the same thesis and submit to a further oral, practical or written examination within a period specified by it but not exceeding eighteen months.
- (4) The Committee shall, after consideration of the examiners' reports and the reports of any oral or written or practical examination, recommend whether or not the candidate may be awarded the degree. If it is decided that the candidate be not awarded the degree the Committee shall determine whether or not the candidate may resubmit the thesis after a further period of study and/or research.
- 6. A candidate shall pay such fees as may be determined from time to time by the Council.

Fees

- 1. The degree of Master of Engineering or Master of Science or Master of Surveying without supervision may be awarded by the Council on the recommendation of the Higher Degree Committee of the appropriate faculty (hereinafter referred to as the Committee) to a candidate who of has demonstrated ability to undertake research by the submission of a thesis embodying the results of an original investigation.
- 2. A candidate for the degree shall have been awarded an appropriate degree of Bachelor from Qualifications the University of New South Wales with at least three years relevant standing in the case of Honours graduates and four years relevant standing in the case of Pass graduates, and at a level acceptable to the Committee.
- 3. An application to enrol as a candidate for the degree without supervision shall be made on the prescribed form which shall be lodged with the Academic Registrar not less than six months before the intended date of submission of the thesis. A graduate who intends to apply in this way should in his or her own interest, seek at an early stage the advice of the appropriate head of school with regard to the adequacy of the subject matter and its presentation for the degree. A synopsis of the work should be available.
- 4. (1) A candidate shall submit a thesis embodying the results of the investigation:
- (2) The candidate shall give in writing to the Academic Registrar two months notice of intention to submit the thesis.
- (3) The thesis shall present an account of the candidate's own research. In special cases work done conjointly with other persons may be accepted, provided the Committee is satisfied about the extend of the candidate's part in the joint research.
- (4) The candidate may also submit any work previously published whether or not such work is related to the thesis.
- (5) Three copies of the thesis shall be presented in a form which complies with the requirements of the University for the preparation and submission of theses for higher degrees.
- (6) It shall be understood that the University retains the three copies of the thesis submitted for examination and is free to allow the thesis to be consulted or borrowed. Subject to the provisions of the Copyright Act, 1968, the University may issue the thesis in whole or in part, in photostat or microfilm or other copying medium.
- 5. (1) There shall be not fewer than two examiners of the thesis, appointed by the Academic Board on the recommendation of the Committee, at least one of whom shall be external to the University unless the Committee is satisfied that this is not practicable.
- (2) Before the thesis is submitted to the examiners the head of the school\* in which the candidate is enrolled shall certify that it is prima facie worthy of examination.

Master of Engineering (ME), Master of Science (MSc) and Master of Surveying (MSurv) without supervision

Qualifications

Enrolment and Progression

Thesis

**Examination** 

<sup>\*</sup> Or department where a department is not within a school or schools or departments where the research is being undertaken in more than one school or department, the extent of the candidate's part in the joint research.

- (3) At the conclusion of the examination each examiner shall submit to the Committee a concise report on the thesis and shall recommend to the Committee that:
- (a) the candidate be awarded the degree without further examination; or
- (b) the candidate be awarded the degree without further examination subject to minor corrections as listed being made to the satisfaction of the head of the school\*; or
- (c) the candidate be awarded the degree subject to a further examination on questions posed in the report, performance in this further examination being to the satisfaction of the Committee; or
- (d) the candidate be not awarded the degree but be permitted to resubmit the thesis in a revised form after a further period of study and/or research; or
- (e) the candidate be not awarded the degree and be not permitted to resubmit the thesis.
- (4) If the performance at the further examination recommended under (3)(c) above is not to the satisfaction of the Committee, the Committee may permit the candidate to re-present the same thesis and submit to further examination as determined by the Committee within a period specified by it but not exceeding eighteen months.
- (5) The Committee shall, after consideration of the examiners' reports and the results of any further examination, recommend whether or not the candidate may be awarded the degree. If it is decided that the candidate be not awarded the degree the Committee shall determine whether or not the candidate may resubmit the thesis after a further period of study and/or research.

Fees

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

## Master of Surgery (MS)

1. The degree of Master of Surgery by research may be awarded by the Council on the recommendation of the Higher Degree Committee of the Faculty of Medicine (hereinafter referred to as the Committee) to a candidate who has made an original contribution to knowledge in some field related to surgery.

#### Qualifications

- 2. (1) A candidate for the degree shall have been awarded the degrees of Bachelor of Medicine and Bachelor of Surgery from the University of New South Wales or a qualification considered equivalent from another university or tertiary institution at a level acceptable to the Committee.
- (2) In exceptional cases an applicant who submits evidence of such other academic and professional qualifications as may be approved by the Committe may be permitted to enrol for the degree.
- (3) If the Committee is not satisfied with the qualifications submitted by an applicant the Committee may require the applicant to undergo such assessment or carry out such work as the Committee may prescribe, before permitting enrolment.
- (4) A candidate enrolled under (1) above shall not submit a thesis for the degree until the lapse of five years from the date of the award of the degrees mentioned therein.
- (5) A candidate enrolled under (2) above shall not submit a thesis for the degree until such period of time has elapsed since enrolment as the Committee shall decide at the time of approving enrolment.

#### Enrolment and Progression

- 3. (1) An application to enrol as a candidate for the degree shall be made on the prescribed form which shall be lodged with the Academic Registrar at least one calendar month before the commencement of the session in which enrolment is to begin.
- (2) In every case, before permitting a candidate to enrol, the head of the school in which the candidate intends to enrol shall be satisfied that adequate supervision and facilities are available
- (3) An approved candidate shall be enrolled in one of the following categories:
- (a) full-time candidature: a candidate who is fully engaged in advanced study and research at the University or at one of its teaching hospitals;
- (b) part-time candidature: a candidate whose occupation leaves the candidate substantially free to pursue a program of advanced study and research at the University or at one of its teaching hospitals;
- (c) external candidature: a candidate who is engaged in advanced study and research away from the University or one of its teaching hospitals.
- (4) A candidate shall undertake, or have undertaken prior to enrolment for the degree, a broad postgraduate training in the principles and practice of surgery over a period of at least three full-time years of a kind acceptable to the Committee.
- (5) A candidate shall be required to undertake an original investigation on an approved topic. The candidate may also be required to undergo such assessment and perform such other work as may be prescribed by the Committee.
- \* Or department where a department is not within a school or schools or departments where the research is being undertaken in more than one school or department..

- (6) The work shall be carried out under the direction of a supervisor appointed from the full-time academic members of the University staff.
- (7) Either the original work embodied in the thesis or the broad postgraduate training in the principles and practice of surgery shall have been undertaken at the University or at one of its teaching hospitals.
- (8) The progress of a candidate shall be reviewed annually by the Committee following a report by the candidate, the supervisor and the head of the school\* in which the candidate is enrolled and as a result of such review the Committee may cancel enrolment or take such other action as it considers appropriate.
- (9) No candidate shall be awarded the degree until the lapse of four academic sessions from the date of enrolment in the case of a full-time candidate or six academic sessions in the case of a part-time or external candidate. In the case of a candidate who has had previous research experience the Committee may approve remission of up to two sessions for a full-time candidate and three sessions for a part-time or external candidate.
- (10) A full-time candidate for the degree shall present for examination not later than eight academic sessions from the date of enrolment. A part-time or external candidate for the degree shall present for examination not later than ten academic sessions from the date of enrolment. In special cases an extension of these times may be granted by the Committee.
- 4. (1) On completing the program of study a candidate shall submit a thesis embodying the results of the investigation.
- (2) The candidate shall give in writing to the Academic Registrar two months notice of intention to submit the thesis.
- (3) The thesis shall present an account of the candidate's own research. In special cases work done conjointly with other persons may be accepted, provided the Committee is satisfied about the extent of the candidate's part in the joint research.
- (4) The candidate may also submit any work previously published whether or not such work is related to the thesis.
- (5) Four copies of the thesis shall be presented in a form which complies with the requirements of the University for the preparation and submission of theses for higher degrees.
- (6) It shall be understood that the University retains the four copies of the thesis submitted for examination and is free to allow the thesis to be consulted or borrowed. Subject to the provisions of the Copyright Act, 1968, the University may issue the thesis in whole or in part, in photostat or microfilm or other copying medium.
- 5. (1) There shall be not fewer than three examiners of the thesis, appointed by the Academic Board on the recommendation of the Committee, at least two of whom shall be external to the University.
- (2) At the conclusion of the examination each examiner shall submit to the Committee a concise report on the thesis and shall recommend to the Committee that:
- (a) the candidate be awarded the degree without further examination; or
- (b) the candidate be awarded the degree without further examination subject to minor corrections as listed being made to the satisfaction of the head of the school\*: or
- (c) the candidate be awarded the degree subject to a further examination on questions posed in the report, performance in this further examination being to the satisfaction of the Committee; or
- (d) the candidate be not awarded the degree but be permitted to resubmit the thesis in a revised form after the a further period of study and/or research; or
- (e) the candidate be not awarded the degree and be not permitted to resubmit the thesis.
- (3) If the performance at the further examination recommended under (2)(c) above is not to the satisfaction of the Committee, the Committee may permit the candidate to re-present the same thesis and submit to further examination as determined by the Committee within a period specified by it but not exceeding eighteen months.
- (4) The Committee shall, after consideration of the examiners' reports and the results of any further examination, recommend whether or not the candidate may be awarded the degree. If it is decided that the candidate be not awarded the degree the Committee shall determine whether or not the candidate may resubmit the thesis after a further period of study and/or research.
- 6. A candidate shall pay such fees as may be determined from time to time by the Council.

Thesis

Examination

Fees

<sup>\*</sup>Or department where a department is not within a school or schools or departments where the research is being undertaken in more than one school or department.

#### Graduate Diploma Graduate Diploma in Paediatrics (DipPaed)

1. The Graduate Diploma in Paediatrics may be awarded by the Council to a candidate who has satisfactorily completed a program of advanced study.

#### Qualifications

- 2. (1) A candidate for the degree shall:
- (a) have been awarded the degrees of Bachelor of Medicine and Bachelor of Surgery from the University of New South Wales or a qualification considered equivalent from another university or tertiary institution at a level acceptable to the Higher Degree Committee of the Faculty of Medicine (hereinafter referred to as the Committee), and
- (b) have had at least one year's hospital experience subsequent to graduation of a kind acceptable to the Committee.
- (2) An applicant who submits evidence of such other academic and professional qualifications as may be approved by the Committee may be permitted to enrol for the degree.
- (3) If the Committee is not satisfied with the qualifications submitted by an applicant the Committee may require the applicant to undergo such assessment or carry out such work as the Committee may prescribe, before permitting enrolment.

#### Enrolment and Progression

- 3. (1) An application to enrol as a candidate for the degree shall be made on the prescribed form which shall be lodged with the Academic Registrar at least two calendar months before the commencement of the session in which enrolment is to begin.
- (2) A candidate for the diploma shall be required to undertake such formal subjects and pass such assessment as prescribed.
- (3) The progress of a candidate shall be reviewed at least once annually by the Committee and as a result of its review the Committee may cancel enrolment or take such other action as it considers appropriate.
- (4) No candidate shall be awarded the diploma until the lapse of two academic sessions from the date of enrolment in the case of a full-time candidate or four sessions in the case of a parttime candidate. The maximum period of candidature shall be four academic sessions from the date of enrolment for a full-time candidate and six sessions for a part-time candidate. In special cases an extension of time may be granted by the Committee.

#### Fees

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

# **Scholarships and Prizes**

The scholarships and prizes listed below are available to students whose courses are listed in this handbook. Each faculty handbook contains in its Scholarships and Prizes section the scholarships and prizes available with that faculty. The General Information section of the Calendar contains a comprehensive list of scholarships and prizes offered throughout the University.

### **Scholarships**

### **Undergraduate Scholarships**

Listed below is an outline only of a number of scholarships available to students. Full information may be obtained from Room G20, located on the Ground Floor of the Chancellery.

Unless otherwise indicated in footnotes, applications for the following scholarships should be made to the Academic Registrar by 14 January each year. Please note that not all of these awards are available every year.

Donor	Value	Year/s of Tenure	Conditions
General			
Bursary Endowment Board*	\$200 pa	Minimum period of approved degree/ combined degree course	Merit in HSC and total family income not exceeding \$6000.
Sam Cracknell Memorial	Up to \$3000 pa payable in fortnightly instalments	1 year	Prior completion of at least 2 years of a degree or diploma course and enrolment in a full-time course during the year of application; academic merit; participation is sport both directly and administratively:

<sup>\*</sup> Apply to The Secretary, Bursary Endowment Board, PO Box 460, North Sydney 2060, immediately after sitting for HSC.

and financial need.

### **Undergraduate Scholarships (continued)**

Value	Year/s of Tenure	Conditions
		-
Up to \$1500 pa	year renewable for the duration of the course subject to satisfactory progress and continued demonstration of need	Available only to female students under 35 years of age who are permanent residents of Australia enrolling in any year of a full-time undergraduate course on the basis of academic merit and financial need.
Up to <b>\$</b> 4200 pa	1 year renewable for the duration of the course subject to satisfactory progress	Available only to students who have completed their schooling in Broken Hill or whose parents reside in Broken Hill; for a course related to the mining industry. Includes courses in mining engineering, geology, electrical and mechanical engineering, metallurgical process engineering chemical engineering and science.
\$500 pa	1 year with the possibility of renewal	Prior completion of at least 1 year of any undergraduate degree course. Eligibility limited to members of the Universities Credit Union Ltd of more than one year's standing or members of the family of such members.
	Up to \$1500 pa Up to \$4200 pa	Up to \$1500 pa  1 year renewable for the duration of the course subject to satisfactory progress and continued demonstration of need  Up to \$4200 pa  1 year renewable for the duration of the course subject to satisfactory progress  \$500 pa  1 year with the

### **Graduate Scholarships**

Application forms and further information are available from the Student Enquiry Counter, located on the Ground Floor of the Chancellery unless an alternative contact address is provided. Information is also available on additional scholarships which may become available from time to time, mainly from funds provided by organizations sponsoring research projects.

The following publications may also be of assistance: 1. Awards for Postgraduate Study in Australia and Awards for Postgraduate Study Overseas, published by the Graduate Careers Council of Australia, PO Box 28, Parkville, Victoria 3052\*; 2. Study Abroad, published by UNESCO;\* 3. Scholarships Guide for Commonwealth Postgraduate Students, published by the Association of Commonwealth Universities.\*

Details of overseas awards and exchanges administered by the Department of Employment, Education and Training can be obtained from: Awards and Exchanges Section, Department of Employment, Education and Training, PO Box 826, Woden, ACT 2606.

Where possible, the scholarships are listed in order of faculty.

<sup>\*</sup> Available for reference in the University Library.

Donor	Value	Year/s of Tenure	Conditions
General			
University	Living allowance		Applicants must be honours graduates (or
Postgraduate Research	of \$7600 pa.		equivalent). Applications to Dean of relevant
Scholarships	Other allowances	1-2 years for a	Faculty.
•	may also be paid.	Masters and 3-4 years	•
Commonwealth Postgraduate Research Awards		for a PhD degree	Applicants must be honours graduates (or equivalent) or scholars who will graduate with honours in current academic year, and who are domiciled in Australia. Applications to Academic Registrar by 31 October.

Donor	Value	Year/s of Tenure	Conditions
<b>General (continued)</b> Commonwealth Postgraduate Course Awards	Living allowance of \$8882 pa. Other allowances may also be paid.	1-2 years; minimum duration of course	Applicants must be graduates or scholars who will graduate in current academic year, and who have not previously held a Commonwealth Post-graduate Award. Applicants must be domiciled in Australia. Preference is given to applicants with employment experience. Applications to Academic Registrar by 30 September.
Australian American Educational Foundation Fulbright Award	Travel expenses and \$A2000 as establishment allowance.	1 year renewable	Applicants must be graduates who are domiciled in Australia and wish to undertake research or study for a higher degree in America. Applications close 30 September with The Secretary, DEET, AAEF Travel Grants, PO Box 826, Woden ACT 2606.
Australian Federation of University Women	Amount varies, depending on award	Up to 1 year	Applicants must be female graduates who are members of the Australian Federation of University Women.
Commonwealth Scholarship and Fellowship Plan	Varies for each country. Generally covers travel, living, tuition fees, books and equipment, approved medical expenses. Marriage allowance may be payable.	Usually 2 years, sometimes 3.	Applicants must be graduates who are Australian Citizens and who are not older than 35 years of age. Tenable in Commonwealth countries other than Australia. Applications close with Academic Registrar in September or October each year.
The English-Speaking Union (NSW Branch)	\$5000	1 year	Applicants must be residents of NSW or ACT. Awarded to young graduates to furthe their studies outside Australia.  Applications close mid-April with The Secretary, Ground Floor, Sydney School of Arts, 275C Pitt Street, Sydney NSW 2000.
Frank Knox Memorial Fellowships tenable at Harvard University	Stipend of US\$7000 pa plus tuition fees	1, sometimes 2 years	Applicants must be British subjects and Australian citizens, who are graduates or near graduates of an Australian university. Applications close with the Academic Registrar mid October.
Robert Gordon Menzies Scholarship to Harvard	Up to US\$15,000	1 year	Tenable at Harvard University. Applicants must be Australian citizens and graduates of an Australian tertiary institution. Applications close 31 December with the Registrar, A.N.U., GPO Box 4, Canberra ACT 2601.
Gowrie Scholarship Trust Fund	\$4000 pa. Under special circumstances this may be increased.	2 years	Applicants must be members of the Forces or children of members of the Forces who were on active service during the 1939-45 War. Applications close with Academic Registrar by 31 October

## **Graduate Scholarships (continued)**

Donor	Value	Year/s of Tenure	Conditions
General (continued) Harkness Fellowships of the Commonwealth Fund of New York	Living and travel allowances, tuition and research expenses, health insurance, book and equipment and other allowances for travel and study in the USA	12 to 21 months	Candidates must be Australian citizens and 1. Either members of the Commonwealth or a State Public Service or semi-government Authority. 2. Either staff or graduate students at an Australian university. 3. Individuals recommended for nomination by the Local Correspondents. The candidate will usually have an honours degree or equivalent, or an outstanding record of achievement, and be not more than 36 years of age. Applications close 29 August with the Academic Registrar. Forms available from Mr J Larkin, Bureau of Agriculture and Resource Economics, GPO Box 1563, Canberra ACT 2601.
The Packer, Shell and Barclays Scholarships to Cambridge University	Living and travel allowances, tuition expenses.	1-3 years	Applicants must be Australian citizens who are honours graduates or equivalent, and under 26 years of age. Applications close 15 October with The Secretary, Cambridge Commonwealth Trust, PO Box 252, Cambridge CB2 ITZ, England.
The Rhodes Scholarship to Oxford University	Approximately £4200 stg pa	2 years, may be extended for a third year	Unmarried Australian citizens aged between 19 and 25 who have an honours degree or equivalent. Applications close in August each year with The Secretary. University of Sydney, NSW 2006.
<b>Medicine</b> Oxford Nuffield Medical Fellowship	Living and travel allowande, tutiion fees	2-3 years	Clinical Assistantship at Oxford University. Applicants must be graduates of a university in a Commonwealth country. Applications close with the Academic Registrar 1 November.
Sir Robert Menzies Memorial Scholarships in Law and Medicine	Tuition fees and allowances for living, travel and equipment expenses	1-2 years	Applicants must be between 21 and 35 years of age and domiciled in Australia. Tenable at universities in the United Kingdom. Applications close 31 August with The Sir Robert Menzies Memorial Trust, 210 Clarendon Street, East Melbourne VIC 3002

undertake graduate study and research for higher degrees.

The Australian Kidney Foundation Foundation			To enable a suitable graduate to undertake Research related to kidney and urinary tract. Applications close 1 September with the Australian Kidney Foundation, PO Box 62, Garran ACT 2605.
Australian Tobacco Research Foundation	\$8126 - \$14036 pa plus allowance	1 year renewable	To enable a suitable graduate to undertake research in the relationship between tobacco

### **Graduate Scholarships (continued)**

Donor	Value	Year/s of Tenure	Conditions
Medicine (continued)	······································		
-			smoking and health and disease. Application close 30 June with the Australian Tobacco Research Foundation, PO Box 20, Rose Bay NSW 2029.
The National Health and Medical Research Council	\$8126-\$14036 pa 1 year renewable plus allowance	1.1000.000.000.00	Applications close 15 June with the Academic Registrar.
National Heart Foundation of Australia		Applications close 31 May with The Secretary NHF, PO Box 2, Woden ACT 2606.	
The Asthma Fouundation of New South Wales			Applications close 4 August with the Asthma Foundation 1-12 Angel Place, Sydney NSW 2000.

### **Prizes**

### **Undergraduate University Prizes**

The following table summarizes the undergraduate prizes awarded by the University. Prizes which are not specific to any School are listed under General. All other prizes are listed under the Faculty or Schools in which they are awarded.

Information regarding the establishment of new prizes may be obtained from the Examination Section located on the Ground Floor of the Chancellery.

Donor/Name of Prize	Value \$	Awarded for
General		
Sydney Technical College Union Award	300.00 and medal	Leadership in the development of student affairs, and academic proficiency throughout the course.
University of New South Wales Alumni Association	Statuette	Achievement for community benefit – students in their final or graduating year.
Faculty of Medicine		
Australian College of Occupational Medicine	200.00	Best essay, research project or assignment by a final year student or first year graduate of a course in Occupational Health, Preventative and Social Medicine Community Medicine or related courses.
Australian Medical Association	300.00	A report based on the student's period of attachment in general practice.
Foundation Year Graduates Medal	Silver Medal	Leadership and Fellowship by a graduating student in the Bachelor of Medicine and Bachelor of Surgery degree course

## **Undergraduate University Prizes (continued)**

Donor/Name of Prize	Value \$	Awarded for
Faculty of Medicine (continued)		
FRATDD	250.00	Essay on a clinical or scientific aspect of alcoholism or a drug of dependence (one prize available to undergraduates and graduates).
Combined Teaching Hospitals' Senior Staff	250.00	General proficiency by a graduating student in the clinical years.
Medical women's Society of New South Wales	150.00	Best performance by a female student throughout the medical course (including, where undertaken, the Bachelor of Science or the Bachelor of Medical Science degree course).
Prince of Wales Hospital Ladies Auxilliary	500.00	General proficiency in Years 1 and 2 of the medical course.
The Sugerman Prize for Experimental Pathology	1000.00	Most proficient research work done in basic or applied pathology in the Bachelor of Medical Science degree course.
Wallace Wurth	200.00	General proficiency throughout the medical course.
School of Anatomy		
Jane Skillen in Anatomy	250.00	Outstanding merit in all branches of Anatomy by a graduand in the Bachelor of Science with a major in Anatomy.
Maurice (Toby) Arnold The Gray's Point Prize in Anatomy	100.00 50.00	Best performance in Anatomy in Year 2 MBBS Highest aggregate mark in Year 1 of Anatomy.
The Prize in Practical Anatomy	100.00	Practical Anatomy (including Radiological Anatomy) – Year 2 of the medical course.
The Winifred Dickes Rost	50.00	Outstanding merit in Anatomy in the final year of the Bachelor of Science degree course.
School of Community Medicine		
2/5 Australian General Hospital Association	150.00	Proficiency in Community Medicine, final year.
Richard Kelman	100.00	Excellence in the Occupational Health option of 79.112 Community Medicine,
New South Wales Department of Health	500.00	790.112 Community Medicine
School of Medicine		
W.G. Tellesson Memorial	31.50	Best performance in 80.013 Clinical Studies 3 in Year 3 of the Medicine course
School of Obstetrics and Gynaecolo	ogy	·
Gordon Lowe Memorial	150.00	Clinical and oral examinations in Obstetrics and Gynaecology

Undergraduate Universit	y Prizes (	continued)
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Donor/Name of Prize	Value \$	Awarded for
School of Obstetrics and Gynaecolo	gy (continued	)
Royal Hospital for Women Senior Medical Staff	100.00	Final written and practical examinations in Obstetrics Gynaecology.
School of Paediatrics		
Paediatrics Staff	200.00	For graduand who excels in Paediatrics.
School of Pathology		
G.R. Cameron Memorial	50.00	Highest aggegate mark in the Pathology component of 80.311 Paraclinical Science.
The Macquarie in Diagnostic Pathology	500.00 and medal	Best performance in the Diagnostic Pathology component of 80.311 Paraclinical Science
The Sugerman in Clinical Pathology	1000.00	Most proficient student in a combination of the Pathology component of 80.311 Paraclinical Science and 80.400 Integrated Clinical Studies in Year 4 of the Medicine degree course and Year 5 of the combined Science and Medicine degree course.
School of Physiology and Pharmaco	logy	
F.C. Courtice – for Physiology	100.00 100.00	For the highest aggregate mark in 73.012 Physiology The student achieving the highest aggregate marks for Physiology in Year 2 of MBBS.
Doerenkamp-Zbinden Prize in Pharmacology	100.00	Highest aggregate for 73.022 Pharmacology in the degree course.
W.E. Glover Prize for Medical Pharmacology	100.00	Highest aggregate fpr the Pharmacology component of 80.311 Paraclinical Science.
School of Psychiatry		
David Jeremy Keen Memorial	50.00	80.212 Human Behaviour 2
John Kerridge Memorial	100.00	Psychiatry, Final Year.
School of Surgery		
The Graduation – in Surgery	100.00	80.400 Integrated Clinical Studies.
The Royal Australian College Opthamologists	250.00	Essay on Opthamological subject.

## **Graduate University Prizes**

The following table summarizes the graduate prizes awarded by the University.

Donor/Name of Prize	Value \$	Awarded for
Faculty of Medicine FRATDD	250.00	Essay on a clinical or scientific aspect of alcoholism or a drug of dependence (one prize available to undergraduates and graduates).

Time	Monda	y	Tuesda	ay .	Wedne	sday	Thurse	lay	Friday	
IIMO	Session 1	Session 2	Session 1	Session						
9-10										
10-11										
11-12										
12-1										
1-2										
2-3										
3-4										
4-5										
5-6			-							
6-7									· ·	
7-8										
8-9										



Time	Monday		Tuesda	ay	Wedne	sday	Thursd	lay	Friday	
	Session 1	Session 2	Session 1	Session						
9-10		:								
10-11										
11-12										
12-1										
1-2						-				
2-3							-			
3-4										
4-5										
5-6									<i>:</i>	
6-7										
7-8							,			
8-9										

# The University of New South Wales Kensington Campus

Theatres	Link B6	Bookshop G17	Lost Property C22
	Maintenance Workshop B13	Building H14	Marine Science D26
Biomedical Theatres E27	Materials Science and Engineering E8	Careers and Employment F15	Marketing F20
Central Lecture Block E19	Mathews F23	Cashier's Office C22	Materials Science and Engineering E8
Classroom Block (Western Grounds) H3	Mechanical and Industrial Engineering J17	Chaplains E15	Mathematics F23
Rex Vowels Theatre F17	Medicine (Administration) B27	Chemical Engineering and	Mechanical and Industrial Engineering J17
Keith Burrows Theatre J14	Menzies Library E21	Industrial Chemistry F10	Medical Education C27
Main Building (Physics) Theatrette K14	Morven Brown (Arts) C20	Chemistry E12	Medicine (Faculty Office) B27
Mathews Theatres D23	New College (Anglican) L6	Child Care Centres N8, O14	Microbiology D26
Parade Theatre E3	Newton J12	Civil Engineering H20	Mineral Processing and Extractive
Science Theatre F13	NIDA D2	Commerce and Economics (Faculty Office) F20	Metallurgy E8
Sir John Clancy Auditorium C24	Parking Station H25	Community Medicine D26	Mining Engineering K15
,	Philip Baxter College D14	Computing Services Department F21, D26	Music B11
	Robert Heffron (Chemistry) E12	Continuing Education Support Unit F23	National Institute of Dramatic Art D2
	Sam Cracknell Pavilion H8	Counselling and Careers Service F15	Off-campus Housing C22
	Shalom College (Jewish) N9	Economics F20	Optometry J12
Buildings	Sir Robert Webster (Textile Technology) G14	Education G2	Pathology C27
2235	Squash Courts B7	Education Testing Centre E15	Patrol and Cleaning Services C22
Affiliated Residential Colleges	Swimming Pool B4	Electrical Engineering and	Petroleum Engineering D12
New (Anglican) L6	Unisearch House L5	Computer Science G17	Philosophy C20
Shalom (Jewish) N9	University Regiment J2	Energy Research, Development and	Physics K15
Warrane M7	University Union (Roundhouse) - Stage   E6	Information Centre F10	Physiology and Pharmacology C27
Applied Science F10	University Union (Blockhouse) - Stage II G6	Engineering (Faculty Office) K17	Political Science C20
Architecture H14	University Union (Squarehouse) - Stage III E4	English C20	Printing Unit C22
Arts (Morven Brown) C20	Wallace Wurth School of Medicine C27	Ethics Committees Secretariat B8	Psychology F23
Banks F22	Warrane College M7	Examinations C22	Public Affairs Unit C22
Barker Street Gatehouse N11	•	Fees Office C22	Publications Section C22
Basser College C18		Food Science and Technology F10	Remote Sensing K17
Biological Sciences D26		French C20	Russian Studies C20
Central Store B13		General Staff Office C22	Safety Science J17
Chancellery C22	General	Geography K17	Science and Mathematics Course Office D26
Chemistry		German Studies C20	Science and Technology Studies C20
Dalton F12	Academic Staff Office C22	Graduate Office and Alumni Centre E4	Social Work G2
Robert Heffron E12	Accounting F20	Graduate School of the Built Environment H14	Sociology C20
Civil Engineering H20	Admissions C22	Groundwater Management and	Spanish and Latin American Studies C20
Commerce and Economics (John Goodsell) F20	Adviser for Prospective Students F15	Hydrogeology F10	Sport and Recreation Centre B6
Dalton (Chemistry) F12	Anatomy C27	Health Administration C22	Student Health E15
Electrical Engineering G17	Applied Economic Research G14	History C20	Student Records C22
Geography and Surveying K17	Applied Geology F10	Industrial Arts H14	Students' Union E4 and C21
Goldstein College D16	Applied Science (Faculty Office) F10	Industrial Relations and Organizational	Surveying K17
Golf House A27	Architecture (including Faculty Office) H14	Behaviour F20	Tertiary Education Research Centre E15
Gymnasium B5	Arts (Faculty Office) C20	Information Systems F20	Textile Technology G14
House at Pooh Corner N8	Audio Visual Unit F20	Kanga's House 014	Theatre Studies B10
International House C6	Australian Graduate School of Management G27		Town Planning K15
lo Myers Studio D9	Banking and Finance F20	Landscape Architecture K15	Union Shop (Upper Campus) D19
John Goodsell (Commerce and Economics) F20	Biochemistry D26	Law (Faculty Office) F21	University Archives E21
Kanga's House 014	Biological and Behavioural Sciences	Law Library F21	University Press A28
Kensington Colleges C17 (Office)	(Faculty Office) D26	Legal Studies and Taxation F20	University Union (Blockhouse) G6
Basser C18	Biomedical Engineering A28	Liberal and General Studies C20	Waste Management H20
Goldstein D16	Biomedical Library F23	Librarianship F23	WHO Regional Training Centre C27
Philip Baxter D14	Biotechnology D26	Library E21	Wool and Animal Science B8

## **ADDENDUM**

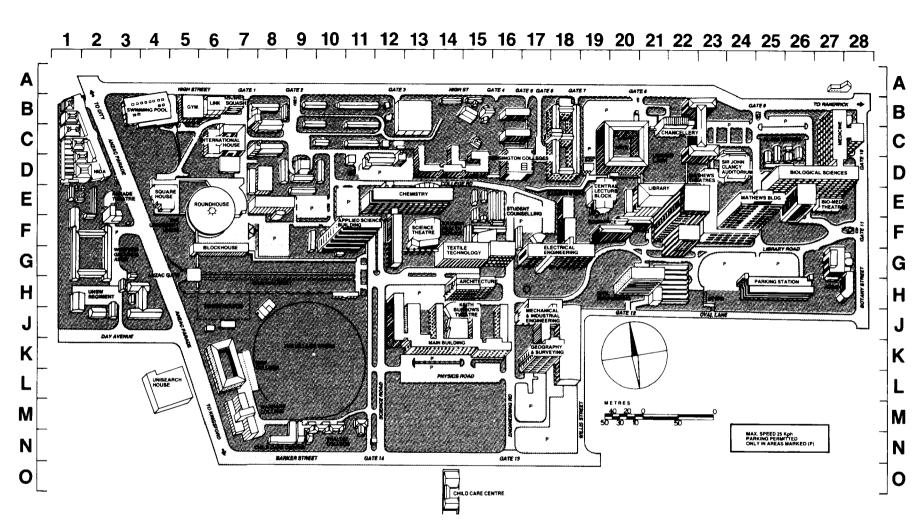
## Medicine Faculty Handbook 1991

The following reference symbols should appear on page 11, in the Conjoint Key which relates to conjoint appointments of University Staff:

■ Sacred Heart Hospice

Δ South Western Sydney Area Health Service

Please also note that the symbol beside Associate Professor Neville Hacker (School of Obstetrics and Gynaecology) is incorrect, a should appear relating his conjoint appointment with the Royal Hospital for Women.



This Handbook has been specifically designed as a source of reference for you and will prove useful for consultation throughout the year.

For fuller details about the University – its organization, staff membership, description of disciplines, scholarships, prizes, and so on, you should consult the Calendar.

The Calendar and Handbooks also contain a summary list of higher degrees as well as the conditions for their award applicable to each volume.

For detailed information about courses, subjects and requirements of a particular faculty you should consult the relevant Faculty Handbook.

Separate Handbooks.

Separate Handbooks are published for the Faculties of Applied Science, Architecture, Arts, Commerce and Economics, Engineering, Law, Medicine, Professional Studies, Science (including Biological and Behavioural Sciences and the Board of Studies in Science and Mathematics), and the Australian Graduate School of Management (AGSM).

The Calendar and Handbooks, which vary in cost, are available from the Cashier's Office.