THE UNIVERSITY OF NEWCASTLE New South Wales

Location Address: University Drive, Callaghan
Postal Address: The University of Newcastle NSW 2308
Telephone: (049) 21.5000
Telex: AAK194 - Library
AAK195 - Bursar
AAK1874 - TUNRA (The University of Newcastle Research Associates Limited)
Facsimile: (049) 21.5669

Hours of Business: Mondays to Fridays excepting public holidays 9 am to 5 pm

The University of Newcastle Calendar consists of the following volumes:

Volume 1 — Legislation
Volume 2 — University Bodies and Staff
Volume 3 — Faculty of Architecture Handbook
Volume 4 — Faculty of Art, Design and Communication Handbook
Volume 5 — Faculty of Arts Handbook
Volume 6 — Faculty of Economics and Commerce Handbook
Volume 7 — Faculty of Education Handbook
Volume 8 — Faculty of Engineering Handbook
Volume 9 — Faculty of Health Sciences Handbook
Volume 10 — Faculty of Law Handbook
Volume 11 — Faculty of Medicine Handbook
Volume 12 — Faculty of Music Handbook
Volume 13 — Faculty of Nursing Handbook
Volume 14 — Faculty of Science and Mathematics Handbook
Volume 15 — Faculty of Social Science Handbook

This volume is intended as a reference handbook for students enrolling in courses conducted by the Faculty of Medicine.

The colour band, Rhodochrosite BCC14, on the cover is the lining colour of the hood of Bachelors of Medicine of this University.

The information in this Handbook is correct as at 9th October 1992.

ISSN 0159 - 3471

Recommended Price: Five dollars and fifty cents plus postage.

Designed by: Marie-T Wisniowski
Typeset by: Jan Spurr, Secretariat Division, The University of Newcastle
Printed by: Newcastle Camera Print

CONTENTS

SECTION ONE
FACULTY STAFF

SECTION TWO
FACULTY INFORMATION
The Faculty
Awards
Board of Studies in Clinical Epidemiology and Biostatistics
Board of Studies in Occupational Health and Safety
Facilities - Academic and Clinical
Buildings
Teaching Hospitals
Other Facilities
Centre for Clinical Epidemiology and Biostatistics

SECTION THREE
RULES
Rules Governing Academic Awards
Associate Diploma in Occupational Health and Safety
Bachelor of Medicine
Bachelor of Medical Science
Bachelor of Occupational Health and Safety
Diploma in Occupational Health and Safety
Graduate Diploma in Epidemiology
Graduate Diploma in Health Social Science
Graduate Diploma in Medical Statistics
Graduate Diploma in Occupational Health and Safety
Rules Governing Master Degrees
Master of Medical Science
Master of Medical Statistics
Rules Governing Doctoral Degrees
Doctor of Philosophy
Doctor of Medicine
Rules Governing Admission to the Bachelor of Medicine Course

SECTION FOUR
OCCUPATIONAL HEALTH AND SAFETY PROGRAMS
Course Descriptions
Associate Diploma in Occupational Health and Safety
Bachelor of Occupational Health and Safety
Graduate Diploma in Occupational Health and Safety
Subject Descriptions
Associate Diploma in Occupational Health and Safety
Bachelor of Occupational Health and Safety
Graduate Diploma in Occupational Health and Safety

SECTION FIVE
BACHELOR OF MEDICINE PROGRAM
Program of Study
Policy with Respect to Part-time Enrolment
Policy with Respect to Leave of Absence
Policy with Respect to Re-enrolment
Student Dress and Appearance
Undergraduate Program Objectives
Learning Methods
Course and Subject Descriptions
Assessment
Text and Reference Books
Prizes
The Dean's Foreword

Welcome to the Faculty of Medicine. The Faculty provides an increasing range of courses and this welcome is extended to everybody who will be studying with us.

For those entering undergraduate medicine, you are the sixteenth class so to do. I shall look forward to welcoming you on your first day and will tell you something about the history of the Medical School, its different approach to curriculum and how that has now indeed provided a substantial leadership to many medical schools within Australia. Many of our graduates are now in practice and we hear good reports of the care that they are providing for their patients.

We have a particular responsibility to relate to our local community in Newcastle and much of your undergraduate experience will take that into account. It will include contact with patients right from the first term and considerable experience in general practice and other community settings. We have the support of many practitioners and other health professionals, altogether some 1,000. This is a great strength of the School and it is put in you and the courtesy they are paying you in allowing you to see them. None is obliged to do so. Most positively enjoy meeting you to see them. None is obliged to do so. Most positively enjoy meeting

We would be unable to provide a medical training if the patients and population generally were not willing to contribute their time, and insights into their troubles, to you as students. Make sure that you respect the trust they have put in you and the courtesy they are paying you in allowing you to see them. None is obliged to be seen, but almost never do we have a refusal. Most positively enjoy meeting students and you will have contact with some over a long period to get to know the impact of illness upon their life and family.

Over the last several years we have had an increasing enrolment of students in the programs run by the Centre for Clinical Epidemiology and Biostatistics. Some of you come from overseas and others from local areas or at distance through the newly introduced Distance Learning Program. This education and education for research is an important development in the new approach to public health and many of you will extend your own careers as a result. We welcome the interaction that this provides for us with the health service in particular.

Following the amalgamation of the previous University and the Hunter Institute of Higher Education, the Faculty took over responsibility for training in Occupational Health and Safety. This is a most welcome addition and we are pleased to have a wide range of students already well established in their careers. We particularly value the close link that this permits us to industry.

Many others of you will be enrolling in Masters or PhD degrees making your way into a career in research. Some of you will be studying basic mechanisms of the biology of disease and others studying epidemiology and the application of behavioural science and clinical disciplines to public health or the care of patients. Those of you enrolled in the Centre for Clinical Epidemiology and Biostatistics will be developing protocols for your later research in your own working setting and concentrating especially upon issues in the care of a population’s health, a theme very prominent in the Faculty’s activities. Through your own research activities you will be advancing knowledge and also contributing to the increasingly robust research of the Faculty.

The Dean's Foreword
So far I have spoken only about the Faculty but of course this is not in isolation from the rest of the University. Because of our hospital and health services associations, it is very easy to be drawn away from the University but this would be a great pity. Many of you will in your time here experience the benefit of interaction with other faculties and I encourage all of you to play some part in the life of the University as a whole.

From time to time during your studies you might be in need of some extra help, either personal or academic. Please do not hesitate to seek out that help. I am very happy always to see students and so are other members of Faculty. They may be busy but they are not too busy to help. Above all, do not sit on a problem that you cannot solve.

Welcome to the Faculty. I hope you enjoy your time here. We are certainly delighted to have you with us.

JOHN HAMILTON
Dean
DISCIPLINE OF BEHAVIOURAL SCIENCE IN RELATION TO MEDICINE

Professor R. Sanson-Phillip, MPsych, PhD(WAust), ABPsS, MAPPs

Senior Lecturers
K.R. Mitchell, MSc, PhD(NSW)
S. Redman, BA, PhD(Well)

Clinical Senior Lecturer G.J.IE. Stuart, J.A. Bowman

Lecturer R.A. Walsh, BA, DipEd(Macq)

Clinical Lecturers
J.A. Bowman, BSc, PhD
G.J. Egger, BA, MPH(Syd), PhD(WA)
A. Gergis, BSc, PhD

Professional Officer J. Wiggers, BA

Discipline Office Staff T. Alder

DISCIPLINE OF CLINICAL PHARMACOLOGY

Professor A.J. Smith, MA, DM, BCHir(Oxf), FRCP
Associate Professor L.A. Chahl, MSc, PhD(Q’d)
Senior Lecturer D.A. Henry, MB, CHB(Glas), FRCP

Clinical Lecturers
A.H. Dawson, MB, BS(NSW), MRCP, FRACP
I.M. Whyte, MB, BS(Q’ld), FRACP

Professional Officer P. Brent, BSc, PhD

Discipline Office Staff M. Bond

DISCIPLINE OF COMMUNITY MEDICINE

This discipline also includes the Centre for Clinical Epidemiology and Biostatistics

Professor R.P. Heller, MB, BS, MD(Lond), FRCP, FRACP, FAPPHM, FFFHM
Associate Professors
M.I. Heralesy, MB, BS(Dyd), FRACP (Clinical Epidemiology)
A.L.A. Reid, MB, BS(Lond), FRACGP (General Practice)

Senior Lecturers
H.N. Higgsbootham, BA(U.S. International), MA, PhD(Hawaii) (Health Social Science)
E.M. Lau, MB, BS, MD(HK), MSc(Lond), MFPHM (joint appointment Clinical Epidemiology - Surgical Science (Orthopaedics))
L. Lim, BSc(Hons)(WA), MSc(Oxf), PhD(Reading) (Biostatistics)
D.L. O’Connell, BMath, PhD (Biostatistics)
J.E. Stuart, MB, BS(WAust), DCH(Lond), DipEPid, FRACP (joint appointment Community Medicine — Paediatrics)

Clinical Senior Lecturer B.W. Raffan, MB, BS(Syd), FRACGP (General Practice)

Lecturer
R.J. Kemp, BA(Creighton), PhD(Registration)(Health Economics)

Clinical Lecturers
S.G. Bayley, BA(Q’d), BMed, DipClinPsych(Q’d)
H.N. Rose, MB, BS(Syd), MRACGP, DObst RACOG (General Practice)

Tutors
B. Pekarsky, BSc(Hons)(Flinders) (Health Economics)
A. Sprogis, MB, BS, DRCOG, MRACGP (Clinical Epidemiology)

Professional Officer L. Petrovic, BA(Flinders)

DISCIPLINE OF ENVIRONMENTAL AND OCCUPATIONAL HEALTH

Professor D.G.S. Christie, MB, BS(Q’d), MD(Lond), FRACP, FFCM, FACOM
Senior Lecturers
A.M. Brown, MB, BS(Melb), MPH(Monash), FACOM
R. Coulton, BA, MLitt(NB), MA, Grad Dip Data Proc(NSWIT), MACE

Clinical Senior Lecturer J.S. Stephenson, MB, BS(Q’d), DPH(Lond), DPH(Otago)
Lecturer V.M. Nie, BSc(Lond), CertEd(Lond), MBiol

Clinical Lecturer K.B. Brasier, MB, BS(Syd), AACCm

Occupational Hygienist P. Devey, BSc, DipOHSM(NCAE), MAIOH

Discipline Office Staff M. Lange

DISCIPLINE OF HUMAN PHYSIOLOGY

Professor S.W. White, MB, BS(Syd), MD(NSW), FRACS
Associate Professor D.A. Powis, BSc, PhD(Lond)
Senior Lecturer A.W. Quall, MB, BS(Syd), MD, FFARACS

Senior Lecturer/Senior Research Fellow D. Van Helden, BE, PhD(NSW)

Discipline Office Staff R. Barrett

DISCIPLINE OF MEDICAL BIOCHEMISTRY

Professor G.M. Keilman, AO, MB, BS, MSc(Syd), FAACB, FRACP, FRACPA
Associate Professors
P.R. Dunkley, BSc, PhD(Melb)
J.A.P. Rostas, BSc, PhD(Monash)

Senior Lecturer/Senior Research Fellow B. Walmsley, BE, PhD(Monash)(Neuroscience)

Lecturer R. Warden, BSc(Syd), MPH(Ed(Syd))(joint appointment Medical Biochemistry - Paediatrics [Nutrition])

Senior Technical Officer P. Jarvis, BSc

Research Officer J. Bunn, BSc(Surrey), PhD(Lond)

Discipline Office Staff E. Mawer

DISCIPLINE OF MEDICINE

Professor Vacant

Professor of Cardiovascular Medicine P.J. Fletcher, BSc(Med), MB BS(Syd), PhD(Monash), FRACP

Professor of Palliative Care P.J. Ravenscroft, MB, BS(Q’d), MSc(Q’d), FRACP

Clinical Professor J.W. Denham, MB, BS, MD(Lond), FRCP, FRACR

Associate Professors
S.L. Cane, MB, BS, PhD(Melb), FRACP
P.M. Finucane, MB, BCh, BAO(Cork), MSc(Cardiff), MRCP(Geriatrics and Gerontology)
R. Smith, MB, BS(Syd), PhD(Lond), FRACP

Clinical Associate Professors
R.G. Batey, BSc(Med), MB, BS(Syd), FRACP, FRCP
J.M. Duggan, MB, BS, MD(Syd), FRACP, FRCP
A.H.B. Gillies, MBChB(Otago), PhD, FRACP
### Faculty of Medicine Staff

#### Section One

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
<th>Faculty</th>
</tr>
</thead>
<tbody>
<tr>
<td>J.T. Holland</td>
<td>MB, BS(Syd), FRACP</td>
<td>Faculty of Medicine</td>
</tr>
<tr>
<td>P.S. Moffitt</td>
<td>MB, BS(Syd), MRCP(Ed)</td>
<td>Faculty of Medicine</td>
</tr>
<tr>
<td>R.S. Nara</td>
<td>MB, BS(Malaya), FRACP</td>
<td>Faculty of Medicine</td>
</tr>
<tr>
<td>T. Singham</td>
<td>MB, BS(Syd), MMed(Singapore), FRACP, FRCP, FACC</td>
<td>Faculty of Medicine</td>
</tr>
<tr>
<td>J.G. Radvan</td>
<td>MB, BS(Syd), FRACP</td>
<td>Faculty of Medicine</td>
</tr>
<tr>
<td>J.S. Glass</td>
<td>BSc(Oxford), MSc(Oxford), MRCP, FACC</td>
<td>Faculty of Medicine</td>
</tr>
<tr>
<td>W.H. Merrol</td>
<td>MB, BS(Syd), FRACP</td>
<td>Faculty of Medicine</td>
</tr>
<tr>
<td>M.R.P. Pollock</td>
<td>MB, BS(Syd), FACRM</td>
<td>Faculty of Medicine</td>
</tr>
<tr>
<td>G.H. Radovanski</td>
<td>MB, BS(Syd), FRACP</td>
<td>Faculty of Medicine</td>
</tr>
<tr>
<td>S. Ratnareja</td>
<td>MB, BS(Singapore), MRCP, FRACP</td>
<td>Faculty of Medicine</td>
</tr>
<tr>
<td>N Saltos</td>
<td>MB, BS(Syd), MRCP, FRACP, FACC</td>
<td>Faculty of Medicine</td>
</tr>
</tbody>
</table>

#### Section One

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
<th>Faculty</th>
</tr>
</thead>
<tbody>
<tr>
<td>M. Selkon</td>
<td>BSc(Med), MB, BS(Syd), FRACP, FRCPA</td>
<td>Faculty of Medicine</td>
</tr>
<tr>
<td>J.R.A. Sippe</td>
<td>MB BS(Syd), DDM, FACC</td>
<td>Faculty of Medicine</td>
</tr>
<tr>
<td>A.B. Tieni</td>
<td>MB, BS(NSW), MSc(Lond), MRCP, FRACP</td>
<td>Faculty of Medicine</td>
</tr>
<tr>
<td>P. Trevillion</td>
<td>MB, BS(Syd), FRACP</td>
<td>Faculty of Medicine</td>
</tr>
<tr>
<td>G.R. Tyler</td>
<td>BMed, FRACP</td>
<td>Faculty of Medicine</td>
</tr>
<tr>
<td>G. Warner</td>
<td>BSc(Med), MB, BS(NSW), FRACP</td>
<td>Faculty of Medicine</td>
</tr>
<tr>
<td>T.J. Woolard</td>
<td>MB, BS, DPH(Syd), FRACMA, FACRM, FACOM</td>
<td>Faculty of Medicine</td>
</tr>
<tr>
<td>Professional Officer</td>
<td>C.D. Ray, BSc(Monash), PhD</td>
<td>Faculty of Medicine</td>
</tr>
</tbody>
</table>

#### Discipline of Paediatrics

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
<th>Faculty</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professor Vacant</td>
<td></td>
<td>Faculty of Medicine</td>
</tr>
<tr>
<td>Professor of Community, Child and Family Health</td>
<td>G.V. Vimpani, MB BS(Adel), PhD(Ed), FRACP</td>
<td>Faculty of Medicine</td>
</tr>
<tr>
<td>Senior Lecturers</td>
<td></td>
<td>Faculty of Medicine</td>
</tr>
<tr>
<td>R.L. Henry</td>
<td>MB, BS(Syd), MD, DipChlgy, FRACP</td>
<td>Faculty of Medicine</td>
</tr>
<tr>
<td>J.B. Stuart</td>
<td>MB, BS(WAust), DCH(Lond), DipEpid, FRACP (joint appointment Community Medicine — Paediatrics)</td>
<td>Faculty of Medicine</td>
</tr>
<tr>
<td>Clinical Senior Lecturer</td>
<td>P.M. Davidson, MB Chl(Glasgow), MRCP, FRCS, FRACS (Paediatric Surgery)</td>
<td>Faculty of Medicine</td>
</tr>
<tr>
<td>Fellow D. Brevett</td>
<td>BA(Guelph), MD(McMaster), MPH(Syd), FRACP</td>
<td>Faculty of Medicine</td>
</tr>
<tr>
<td>Lecturer R. Warden</td>
<td>BSc(Syd), MPhEd(Sydn), DipMDSyd(joint appointment Medical Biochemistry - Paediatrics(Nutrition))</td>
<td>Faculty of Medicine</td>
</tr>
<tr>
<td>Clinical Lecturers</td>
<td></td>
<td>Faculty of Medicine</td>
</tr>
<tr>
<td>D. Anderson</td>
<td>MB, BS(Syd), FRACP</td>
<td>Faculty of Medicine</td>
</tr>
<tr>
<td>M.A. Baxter</td>
<td>MB, BS(Monash), FRACP</td>
<td>Faculty of Medicine</td>
</tr>
<tr>
<td>I.G. Casey</td>
<td>MB, BS(Syd), FRACS</td>
<td>Faculty of Medicine</td>
</tr>
<tr>
<td>P. Donald</td>
<td>MB, BS(Syd), FRACP</td>
<td>Faculty of Medicine</td>
</tr>
<tr>
<td>P.W. Ebingle</td>
<td>BSc(Med), MB, BS(NSW), FRACP</td>
<td>Faculty of Medicine</td>
</tr>
<tr>
<td>R.G. Nwans</td>
<td>MB, BS(Adel), FRACP</td>
<td>Faculty of Medicine</td>
</tr>
<tr>
<td>A.J. Gardner</td>
<td>MB, BS(Syd), FRACP</td>
<td>Faculty of Medicine</td>
</tr>
<tr>
<td>A.W. Gilt</td>
<td>BM(Southampton), FRACP</td>
<td>Faculty of Medicine</td>
</tr>
<tr>
<td>J.C.S. Hong</td>
<td>MB, BS(NSW), FRACP</td>
<td>Faculty of Medicine</td>
</tr>
<tr>
<td>C.S. Hosking</td>
<td>MB, BS, MD(Qld), FRACP, FRCPA</td>
<td>Faculty of Medicine</td>
</tr>
<tr>
<td>K. Howard</td>
<td>MB, BS(Lond), MRCP</td>
<td>Faculty of Medicine</td>
</tr>
<tr>
<td>D.T. McDonald</td>
<td>BSc, MB, BS(Qld), DCH, DTH&amp;M(Lond), DipRCOG, MRCP, FRACP</td>
<td>Faculty of Medicine</td>
</tr>
<tr>
<td>D.L. Malcolm</td>
<td>MB, BS(NSW), FRACP</td>
<td>Faculty of Medicine</td>
</tr>
<tr>
<td>A.P. Naidoo</td>
<td>MChB(Nacta), FRACP</td>
<td>Faculty of Medicine</td>
</tr>
<tr>
<td>E.V. O'Loughlin</td>
<td>MB, BS, MD(Syd), FRACP</td>
<td>Faculty of Medicine</td>
</tr>
<tr>
<td>L.G. Roddick</td>
<td>MB, BS(Monash), FRACP</td>
<td>Faculty of Medicine</td>
</tr>
<tr>
<td>M.P. Rowley</td>
<td>MB, BS(Adel), FRACP, FFARACS, FRACP</td>
<td>Faculty of Medicine</td>
</tr>
<tr>
<td>B.J. Springthorpe</td>
<td>MB, BS(Syd), FRACP</td>
<td>Faculty of Medicine</td>
</tr>
<tr>
<td>C.H. Wale</td>
<td>MChB(Ozaro), FRACP</td>
<td>Faculty of Medicine</td>
</tr>
<tr>
<td>I.A. Wilkinson</td>
<td>MB, BS(Qld), FRACP</td>
<td>Faculty of Medicine</td>
</tr>
<tr>
<td>J.B. Wright</td>
<td>BSc(Med), MB, BS(Syd), FRACS, FACS (Paediatric Surgery)</td>
<td>Faculty of Medicine</td>
</tr>
<tr>
<td>Professional Officer</td>
<td>J. Halliday, BSc, DipEd, DipMedStats</td>
<td>Faculty of Medicine</td>
</tr>
</tbody>
</table>

#### Discipline of Pathology

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
<th>Faculty</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professor R.L. Clancy</td>
<td>BSc(Med), MB, BS(Syd), PhD(Monash), FRACP, FRCPCan, FRCPA</td>
<td>Faculty of Medicine</td>
</tr>
<tr>
<td>Clinical Professor — Anatomical Pathology</td>
<td>S.B. Bhagwandin, MChB(Perth), FRACP, FRCP, FRCP</td>
<td>Faculty of Medicine</td>
</tr>
<tr>
<td>Professorial Fellow</td>
<td>M.W. Partington, MB, BS, PhD(Lond), FRCP(Edin), DCH(Lond), FRCP(Edin), FACC</td>
<td>Faculty of Medicine</td>
</tr>
</tbody>
</table>
# FACULTY OF MEDICINE STAFF

## SECTION ONE

### FACULTY OF MEDICINE STAFF

- **J.T. Holland**, MB, BS(Syd), FRACP
- **P.S. Moffat**, MB, BS(Syd), MRCP(Ed)
- **R.S. Nair**, MB, BS(Malaya), FRACP
- **T. Singh**, MB, BS(Malaya), MMed(Singapore), FRACP, FRCP, FACC

**Senior Lecturers**

- **V.J. McPherson**, MB, BS(Syd), FRCPA
- **L.G. Olson**, BSc(Med), MB, BS(Syd), PhD, FRACP
- **J.S. Silberberg**, MB, BCh(Witwatersrand), MSc(McGill), FRACP

**Clinical Senior Lecturers**

- **G.R. Bellamy**, MB, BS(NSW), FRACP
- **J. Fowler**, MB, BS(Syd), FRACP

**Clinical Lecturers**

- **S. Achland**, MB, BS(Melb), FRACP
- **B. Bastian**, MB, BS(Syd), FRACP

**Junior Lecturers**

- **J.D. Black**, MB, BS(NSW), FRACP
- **G.C. Booth**, MB, BS(Syd), FRACP
- **K.M. Bowen**, MB, BS(Monash), PhD(ANU), FRACP
- **B. Chapman**, MB, BS(Syd), FRACP
- **P.G. curve**, MB, BS(Syd), FRACP
- **M. Deacon**, MB, BS(Syd), MRCP, FRACP
- **S.F. Devine**, BSc(Med), MB, BS(Syd), FRCPA, FRACP
- **T. Donnelly**, MBChB(Glas), MRCP, FRACP
- **G.W. Feather**, MB, BS(Syd), FRACP
- **A. Eino**, MB, BS(Syd), FRACP, FRCPA
- **M.T. Epstein**, MB, BS(NSW), MSc(Oxford), MRCP, FRACP
- **M. Filiprachuk**, MB, BS(Syd), FRACP
- **D.A. Floate**, MB, BS(Lond), MRCP(UK), FRACP
- **A. Foy**, BSc(Med), MB, BS(Syd), MSc(Monash), FRACP
- **J.S. Glasa**, MB, BS(Syd), FRACP
- **K. Graet**, BSc(Med), MB, BS(Syd), FRCP, FRACP
- **C.A. Heiler**, MB, BS(Lond), DMRD, FRCR
- **B.G. Hewson**, MB, BS(Syd), FRACP
- **A.J. Hickey**, MB ChB, BAO(Dublin), MD(NSW), DDU(Syd), MRCP, FRACP
- **A.A. Lewis**, MB, BS(Syd), FRACP
- **G.A.C. Major**, MB, BS(Syd), FRACP
- **W.H. Merrell**, MB, BS(NSW), FRACP
- **M.R.P. Pollack**, MB, BS(NSW), FACRM
- **G.H. Radvan**, MB, BS(Syd), FRACP
- **S. Ramachandh**, MB, BS(Singapore), MRCP, FRACP
- **N. Salinas**, MB, BS(Syd), MRCP, FRCP, FRACP, FCPO

**Senior Lecturers**

- **D.B. Williams**, MB, BS(Syd), FRACP
- **J.W. Leitch**, MB, BS(Syd), FRACP
- **B. Nair**, MB, BS(Kenitra), FRCP, FRACP
- **D.B. Williams**, MB, BS(Syd), FRACP

**Clinical Lecturers**

- **T. J.T. Holland**, MSc(Med), MH, FRACP
- **V.I. Ratnarajah**, MB, BS(Syd), FRACP
- **R.S. Saltos**, MB, BS(Syd), FRACP
- **L.G. Chapman**, MB, BS(Syd), FRACP
- **R.S. Silberberg**, MB, BS(Syd), FRACP
- **G.R. Bellamy**, MB, BS(Syd), FRACP
- **M.W. Bhagwan**, MB, BS(Syd), FRACP
- **P.G. Gibson**, MB, BS(Syd), FRACP

**Senior Lecturers**

- **Professor Vacant**: Professor of Community, Child and Family Health
- **J.G. Cassey**, MB, BS(Syd), FRACP
- **R.L. Henry**, MB, BS(Syd), FRACP
- **G. Warner**, MB, BS(Syd), FRACP
- **R.L. Henry**, MB, BS(Syd), FRACP
- **G.R. Tyler**, BMed, BS(Syd), FRACP

**Clinical Lecturers**

- **J.A. Welsh**, MB, BS(Lond), MRCP, FRACP
- **I.A. Wilkinson**, MB, BS(Lond), MRCP, FRACP
- **I.A. Wilkinson**, MB, BS(Lond), MRCP, FRACP
- **D. Brewster**, BA(Guelph), MD(McMaster), FRACP
- **C.S. Hosking**, MB, BS(Dublin), FRACP
- **M.W. Pattington**, MB, BS, FRCP(Edin), DCH(Lond), FRCP(Can), FCCM

**Discipline of Paediatrics**

**Professor of Community, Child and Family Health**: G.V. Vimpani, MB BS(Adel), PhD(Ed), FRACP

**Senior Lecturers**

- **R.L. Henry**, MB, BS(Syd), FRACP
- **I.A. Wilkinson**, MB, BS(Lond), MRCP, FRACP

**Clinical Lecturers**

- **I.A. Wilkinson**, MB, BS(Lond), MRCP, FRACP
- **I.A. Wilkinson**, MB, BS(Lond), MRCP, FRACP
- **M.W. Pattington**, MB, BS, FRCP(Edin), DCH(Lond), FRCP(Can), FCCM

**Discipline of Pathology**

**Professor R.L. Clancy**, BSc(Med), MB, BS(Syd), PhD(Monash), FRACP, FRCPGen, FRCPA

**Clinical Professor**: Anatomical Pathology

**Discipline of Pathology**: S.B. Bhagwan, MB ChB(Natal), FRCPA, FRCPPath

**Professorial Fellow**: M.W. Pattington, MB, BS, PhD(Lond), FRCP(Edin), DCH(Lond), FRCP(Can), FCCM
FACULTY OF MEDICINE STAFF

SECTION ONE

Associate Professors
R.D. Barry, BSc(VetSyd), PhD(ANU), MA, ScD(Camb) (Microbiology)
A.W. Cripps, BSc(NE), PhD(Syd)(Immunology)
G.A. Tannock, MSc(Waust), PhD(ANU) (Microbiology)

Senior Lecturers
A. Price, MB BS(Syd), FRCPA (Anatomical Pathology)
B. Young, BSc(Sci And), MB ChB(Camb), MRCP, FRCPA(Anatomical Pathology)

Clinical Lecturers
A.F. Colley, MB, BS(NSW), FRACP(Clinical Genetics)
M.J. Edwards, MB BS(NSW), FRACP(Clinical Genetics)
N. W. Ferguson, MB BS(Syd), MRCPath (Anatomical Pathology)
M. Gleson, BSc(Syd), PhD (Immunology)

Professional Officer G.T. Pang, MSc, PhD(Auck)

Senior Technical Officer C.S. Cardozo, BSc(Bom)

Discipline Office Staff
E. Cant
C. Dinneen
B. Rogers

DISCIPLINE OF PSYCHIATRY

Professor V.J. Carr, MB, BS, MD(Adel), FRCPCAn, FRANZCP
Senior Lecturer M. Williamson, BA(Melb), MB, BS, MM(Syd), FRANZCP
Clinical Senior Lecturer H. Johnson, MB BS, DPM(Syd), FRANZCP
Lecturer P.L. Hazell, BMedSc, MB ChB(Otago), FRANZCP

Clinical Lecturers
J.P. Bardon, MB, BS(Qld), FRANZCP
G.L. Carter, MB BS(Syd), FRANZCP
S. C. Robinson, MB, BS, DPM(Lond), MRCPsych, FRANZCP
G. P. Steele, MB, BS(Syd), FRANZCP
S. Toole, MB, BS(Syd), FRANZCP

Professional Officer T. Lewis, BCom(NSW)

Discipline Office Staff J. Bailey

DISCIPLINE OF REPRODUCTIVE MEDICINE

Professor W.A. Walters, MB, BS(Adel), PhD(Lond), FRCOG, FRACOG
Professorial Fellow A.-L.A. Bours, BSc, PhD, DSc(Lond), FRIBiol, FABiol
Associate Professor W.B. Giles, MB, BS(NSW), PhD, DDU(Syd), DObstRCOG, FRACOG

Clinical Associate Professor
M.W. Brittingham, MB, BS(Qld), PhD(Auck), MRCOG
K.H. Ng, MB, BS(Malaya), DObstRCOG, FRCOG, FRACOG

Clinical Senior Lecturer D. Plummer, MB, BS(Mana), FRCPA, FACVEn, MASM(Venerology)
Lecturer A. Bisits, MB, BS(NSW), FRACOG

Clinical Lecturers
L.W. Clark, MB, BS(Syd), MRCOG, FAOG, FRACOG
A.C. Coulthard, BSc, MB, BCh(Wea), FRCOG, FAOG, FRACOG
A.M. Hamilton, MB, BS, DCH, DipGUM(Lond), MRCOG, FRCS(Can), FRACOG
A.D. Hewson, MB, BS(Syd), FRCOG, FRACOG, FRCS(Ed), FRACS
G.L. Hicks, MB, BS(Syd), FRACOG, FRCOG

G.W. Lawson, MB, BS, M(DMelb), MRCOG, FRACOG
E.J. Schumack, MB BS(Syd), FRCS(Can), FRACOG
K. Thirunavukkarasu, MB, BS, MD(Ceylon), DCH, Dip Ven(Lond), FRCP, FACVEn

Professional Officer J. Falconer, BSc, PhD(Leeds)

Discipline Office Staff S. Cocking

DISCIPLINE OF SURGICAL SCIENCE

Professor R.C. Burton, BMedSc, MB, BS, PhD(Melb), FRACS, FRACP
Professor of Anaesthetics and Intensive Care R.B. Holland, MB BS(Syd), FFARACS
Professor of Orthopaedic Surgery W. Gilliespie, BSc, MB BCH(Edin), MCh(Otago), FRCS(Ed), FRACS
Professor of Surgical Oncology J.F. Forbes, MB, BS, BMedSc, MS(Melb), FRCS, FRACS

Clinical Professor - Oncology P. Hersey, MB, BS(Adel), PhD(Oxf), FRACP

Clinical Associate Professors
Y.A.E. Ghahrial, MB, BCh, DiplSurgery(Cairo), MCh(Orth)(Liv), FRCS(Ed), FRACS(Orthopaedics)
E.J. Henessey, MB, BS(Syd), FRACS
A.D. Hinniend, MB, BS, BMedSc(Melb), MD(Otago), FRACS
G. Kentigian, AM, MB, BS(Syd), FRCS(Ed), FRACS, FACS, FACS(Om) (Orthopaedics)

Senior Lecturers
M.V. Agras, MB, BS, MS(Aust), FRCS, FRACS, FACS, FACS(Om)(Orthopaedics)
E. Ho, MB, BS(Ke), FRCS, FRACS(Orthopaedics)
E.M.C. Lau, MB, BS, MD(Ke), MSc(Lond), MFM(H) (Joint appointment Surgical Science and Orthopaedics) - Clinical Epidemiology
Fellow D.W. Jackson, MB BS(Syd), FRCS, FRACS

Clinical Senior Lecturers
R.L. Bissett, MB, BS(Melb), FRACS, FRCS
A.J. Bookallil, MB, BS(Syd), FRCS, FRACS(Neurosurgery)
P Byth, MB, BS(Qld), FFARACS(AAnaesthetics & Intensive Care)
P.S. Dhammsa, MB, BS, DLO(Liv), FRCS, FRCS(Ed) (Ear Nose and Throat)
H. Foster, BSc, MB, BS(Melb), FRACS, FRCS, FACS
M.S. Murai, MBChB(Makore), DO(Syd), FRACS, FRACO, FCOpth, FACS(ophthalmology)
J.E. Sage, MB, BS(Syd), FRCS, FRACS(Orthopaedics)

Clinical Lecturers
P.E. Amelung, MB, BS(Syd), FRACS
J. Beckett-Wood, MB, BS(Syd), DA(Lond), FFARACS(AAnaesthetics)
C.J. Challinon, MB, BS(Syd), FRACS, FRACO(ophthalmology)
D.I. Chapman, MB, BS(Syd), FRCS, FRACS(Orthopaedics)
J.G. Christie, MB, BS(Syd), FRACS(Neurosurgery)
S.V. Darbar, BSc(Karnatack), MB, BS, MS(Bombay), FRCS, FRACS
C. Durup, BSc(Med), MB, BS(Syd), FRACO, FRACS(ophthalmology)
T.D. Farbrother, PhD, MB, BS(Syd), FRACS(Urolgoy)
S.V. Fernandez, BSc, MB, BS, FRCS, FRACS, FACS(Rar Nose & Throat)
C.E. Harrington, MB, BS(NSW), FRACS, FRACS(Orthopaedics)
J.C. Holley, MB, BS(Syd), FRACS
L. Klettman, MB, BS(Capetown), FRCS(Can), FACS, FRACS(Orthopaedics)
K. Owing, MB, BS(Syd), FRCS, FRACS (Orthopaedics)
W.T. Porter, MB, BS(Syd), DO(Lond), FRACO (Ophthalmology)
B.E. Reed, MB(Syd), FRACDS(Omar) & Max(inta)
S.E.G. Ruthner, BSc, MB, BS(Syd), FRACS(Urolgoy)
R.W. Still, MB, BS(Syd), FRCS, FRACS
### SECTION ONE

#### FACULTY OF MEDICINE STAFF

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. Simpson, MD, BS(Syd), FFARACS(Anaesthetics)</td>
<td>M.B. Simpson, MD, BS(NSW), FRACS, FRACO(Ophthalmology)</td>
</tr>
<tr>
<td>G.C. Slack, MB, BS(Syd), FRCS(Ear Nose &amp; Throat)</td>
<td>M.J. Tarrant, MB, BS(Syd), FRACS(Orthopaedics)</td>
</tr>
<tr>
<td>J.S. Taylor, MB, BS(Syd), FRCS(Ed), FRCS(Eng), FRACS(Urology)</td>
<td>D.G. Walker, MB, BS(Syd), FRCS, FRACS</td>
</tr>
<tr>
<td>I.R. Wilson, MDS(Syd), PRACDS(Oral &amp; Maxillofacial)</td>
<td>Professional Officer Y.C. Smart, BSc, MSc(WAust), PhD</td>
</tr>
<tr>
<td>G.C. Slack, MD, BS(Syd), PRCS(Ear Nose &amp; Throat)</td>
<td>Professional Officer J.C. Smart, BSc, MSc(WAust), PhD</td>
</tr>
<tr>
<td>M.J. Tanant, MD, BS(Syd), FRACS(Otthopaedics)</td>
<td>Professional Officer J.C. Smart, BSc, MSc(WAust), PhD</td>
</tr>
<tr>
<td>J.S. Taylor, MD, BS(Syd), FRCS(Ed), FRCS(Eng), FRACS(Urology)</td>
<td>Professional Officer J.C. Smart, BSc, MSc(WAust), PhD</td>
</tr>
<tr>
<td>D.G. Walker, MB, BS(Syd), FRCS, FRACS</td>
<td>Professional Officer J.C. Smart, BSc, MSc(WAust), PhD</td>
</tr>
<tr>
<td>I.R. Wilson, MDS(Syd), PRACDS(Oral &amp; Maxillofacial)</td>
<td>Professional Officer J.C. Smart, BSc, MSc(WAust), PhD</td>
</tr>
</tbody>
</table>

#### NBN TELETHON CANCER RESEARCH UNIT

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>NBN Professor of Cancer Research G.F. Burns, BSc(Heriot-Watt), PhD(Camb), DipBact(Manc), MRCPath</td>
<td>Lecturer J.L. Scott, BSc(Hons)(Flinders), PhD(Adel)</td>
</tr>
</tbody>
</table>

#### DEAN'S UNIT

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dean and Professor of Medicine J.D. Hamilton, MB, BS(Lond), FRCP, FRCPCan</td>
<td>Senior Lecturer — Health, Law &amp; Ethics C. Myser, BA(St Marys, Georgetown), MA(Georgetown)</td>
</tr>
<tr>
<td>Senior Lecturer — Medical Education L.B. Murphy, BA, MA(Sus), DipEd</td>
<td>Assistant Registrar B.J. Kelleher, BE BCom</td>
</tr>
<tr>
<td>School Accountant A. Rootsey</td>
<td>Senior Tutor Aboriginal Student Liaison Office R.E. Gibson, BSc(UNE), DipEd(HIHF)</td>
</tr>
</tbody>
</table>

#### UNDERGRADUATE EDUCATION UNIT

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dean's Unit Office StatT</td>
<td>Clerkal Staff L. Asper (Aboriginal Student Liaison Office)</td>
</tr>
<tr>
<td>M.P. Dick (Lab Manager's Office)</td>
<td>Clerical Staff L. Asper (Aboriginal Student Liaison Office)</td>
</tr>
<tr>
<td>C. Jenkins (School Accountant)</td>
<td>Services Staff B. Ferry</td>
</tr>
<tr>
<td>P. Nix</td>
<td>S. Sones</td>
</tr>
<tr>
<td>R. Caton</td>
<td>UNDERGRADUATE EDUCATION UNIT</td>
</tr>
</tbody>
</table>

#### MEDICAL COMMUNICATION UNIT

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>Director of Education Technology A.V. Daniel, FIMBI (Victoria)</td>
<td>Medical Photographers B. Turnbull, MIMDI(NZ)</td>
</tr>
<tr>
<td>S. McInally</td>
<td>Artist I. Single</td>
</tr>
<tr>
<td>P. Lloyd</td>
<td>Audio-Visual Officer P. Lloyd</td>
</tr>
</tbody>
</table>
Newcastle The awards which can be conferred as a result of studies undertaken within the Faculty of Medicine are listed below:

Awards

The responsibilities of Faculty Boards are set out in the Board. A Board is responsible.

The Faculty Board, Faculty of Medicine is charged with conducting the affairs of the Faculty. The membership of the Board is as follows:

- the Professor of Biostatistics of the Institute;
- the Dean, the University's appointed dean, rather than an elected dean, he is responsible for conducting the affairs of the Faculty; The membership of the Board is as follows:
- Members elected by the Academic Senate from the academic staff of the University other than the Faculty of Medicine; and Members elected by and from the part-time academic staff of the Faculty;
- The Professor of Biostatistics of the University;
- The University Librarian or nominee;
- A member nominated by the Dean Postgraduate Medical Institute;
- Representatives of the Hunter Area Health Service;
- Student members. The Dean Is Chairman and the executive officer of the Faculty Board. In addition the Dean of the Faculty of Medicine is an appointed dean, rather than an elected dean, he is responsible for the allocation of resources within the Faculty. The responsibilities of Faculty Boards are set out in the University's By-law and Rules made under that By-law. Awards The awards which can be conferred as a result of studies undertaken within the Faculty of Medicine are listed below:

- the Dean of the Faculty of Medicine;
- the Director of the Centre for Clinical Epidemiology and Biostatistics;
- the Professor of Biostatistics;
- one student member elected annually by and from the students enrolled in each degree and diploma for which the Board has responsibilities;
- up to six members of the full-time academic staff of the Faculty of Medicine involved in teaching subjects in the degrees or diplomas for which the Board has responsibilities, nominated by the Director of the Centre for Clinical Epidemiology and Biostatistics;
- three members of the full-time academic staff of the Department of Statistics or other full-time academic staff of the University involved in coursework or supervision in the degrees or diplomas for which the Board has responsibilities, nominated by the Professor of Biostatistics; and three members of the full-time academic staff of the Faculty of Medicine involved in coursework or supervision in the degrees or diplomas for which the Board has responsibilities, nominated by the Dean of the Faculty of Medicine.
- Up to two members of the full-time academic staff of the Department of Sociology involved in coursework or supervision in the degrees or diplomas for which the Board has responsibilities, nominated by the Head of that Department.
- The Head of the Department of Sociology. The responsibilities of the Board of Studies are set out in the regulations governing the diplomas and degrees for which the Board is responsible.

Board of Studies in Occupational Health and Safety

The University has established a Board of Studies in Occupational Health and Safety responsible to the Faculty Board, Faculty of Medicine for the conduct of matters pertaining to the Associate Diploma in Occupational Health and Safety Bachelor of Medicine Bachelor of Medical Science Bachelor of Occupational Health and Safety Diploma in Occupational Health and Safety Graduate Certificate in Applied Science (Occupational Health and Safety) Graduate Diploma in Epidemiology Graduate Diploma in Health Social Science Graduate Diploma in Medical Statistics Graduate Diploma in Occupational Health and Safety Master of Medical Science Master of Medical Statistics Doctor of Philosophy Doctor of Medicine

Board of Studies in Clinical Epidemiology and Biostatistics

The University has established a Board of Studies in Clinical Epidemiology and Biostatistics responsible to the Faculty Board, Faculty of Medicine for the academic administration of the Graduate Diploma in Epidemiology, the Graduate Diploma in Health Social Science, the Graduate Diploma in Social Studies, the Master of Medical Statistics Degree and the Master of Medical Science Degree in the following options: Clinical Epidemiology, Health Promotion, Medical Social Science, Occupational Epidemiology, Pharmacoepidemiology, and Psychiatric Epidemiology. The membership of the Board of Studies is set out in Schedule 4 of the Rules Governing Boards of Studies and is as follows:

- the Dean of the Faculty of Medicine;
- the Head of the Discipline of Environmental and Occupational Health;
- the Head of the Department of Applied Life Sciences;
- the Head of the Department of Management;
- up to three members of the full-time academic staff of the University involved in or associated with the teaching of subjects in the courses for which the Board has responsibility, and nominated by the Head of the Discipline of Environmental and Occupational Health;
- up to two members of the full-time academic staff of the University involved in or associated with the teaching of subjects in the courses for which the Board has responsibility, and nominated by the Head of the Department of Management;
- up to two members nominated by the Dean of the Faculty of Medicine;
- one student member nominated by the Dean of the Faculty of Nursing;
- one student member from each course for which the Board has responsibility, elected annually by and from the students enrolled in each course.

Facilities: Academic and Clinical

It was originally thought that a new hospital would not be built in Newcastle. Consequently, teaching and research facilities were built on the University campus at Callaghan and adjacent to the two main hospitals, the Royal Newcastle Hospital (RNH) and the Newcastle Mater Misericordiae Hospital (MMH). In recent years however, the physical deterioration of RNH has led to the building of a new teaching hospital, the John Hunter Hospital (JHH) at Rankin Park. This opened in 1991. The Faculty has been closely involved in the planning of this hospital and the State government has provided for academic facilities to be built into it in exchange for some facilities previously located at RNH. The main facilities are as follows:

Buildings

Medical Sciences Building (MSB). Located on the Callaghan campus, it houses the disciplines of Anatomy, General Practice, Human Physiology and Medical Biochemistry and has large animal research facilities, support staff for the undergraduate education program, the main bioengineering workshop, the Dean's Office and educational facilities.

David Maddison Clinical Sciences Building (DMC -- also called NEWMED I). Located adjacent to the Royal Newcastle Hospital it houses the Disciplines of Community Medicine, Pathology, Orthopaedics and the NBN Telethon Cancer Research Unit and also has extensive laboratory facilities, educational facilities, the Medical Communication Unit and a branch of the Gardiner Medical Library. Department of Health staff specialists and some service laboratories have also been accommodated in this building.

Clinical Sciences Building - Newcastle Mater Misericordiae Hospital (also called NEWMED II). The Faculty occupies one floor. Other floors are committed to the oncology unit and service laboratories for the hospital. It is the academic base for the Disciplines of Environmental and Occupational Health, Psychiatry and Clinical Pharmacology. The Chair in Surgical Oncology is also located in Newmed II.
In mid 1992 the discipline of Behavioural Science in Relation to Medicine moved to the former site of the Wallsend Hospital.

The remaining Disciplines have been integrated into the John Hunter Hospital with the Chairs of Anaesthesia and Intensive Care, Anatomical Pathology, Cardiovascular Medicine, Medicine, Paediatrics, Surgical Science and Reproductive Medicine located there.

Teaching Hospitals

Major Hospitals in Newcastle Area

John Hunter Hospital (JHH). This opened in 1991 and has 490 beds. It is the referral hospital for major medical and surgical specialties and the regional centre for obstetrics and paediatrics.

It is located at Rankin Park, approximately 5km from the Callaghan campus.

Royal Newcastle Hospital (RHH). With approximately 150 beds, this hospital has now changed its role to that of an orthopaedic hospital with some general medical and other surgical services being retained.

Newcastle Mater Misericordiae Hospital (MMH). This is operated by the religious order, the Sisters of Mercy as a general hospital and medical public hospital and is the centre for regional programs in oncology and environmental and occupational medicine. The oncology program at the Mater Hospital will become the centre of a regional network of services.

Belmont Hospital. Located in the southern suburb it provides general services as a district hospital. The Facility has no full-time staff there but our clinicians act as Visiting Medical Officers, and students are allocated to the hospital for clinical rotations.

Other Hospitals in the Newcastle Area

Rankin Park Hospital - rehabilitation and geriatrics

Private Hospitals

Country Hospitals

These hospitals are used for country attachments. A Clinical Supervisor oversees students at each hospital with the assistance of other members of staff who act as tutors.

Approximate Distance from Newcastle (kms)

<table>
<thead>
<tr>
<th>Location</th>
<th>Distance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maitland District Hospital</td>
<td>30</td>
</tr>
<tr>
<td>Gosford District Hospital</td>
<td>90</td>
</tr>
<tr>
<td>Manning Base Hospital, Taree</td>
<td>180</td>
</tr>
<tr>
<td>Tamworth Base Hospital</td>
<td>250</td>
</tr>
<tr>
<td>Orange Base Hospital</td>
<td>400</td>
</tr>
<tr>
<td>Dubbo Base Hospital</td>
<td>400</td>
</tr>
<tr>
<td>Lismore Base Hospital</td>
<td>600</td>
</tr>
</tbody>
</table>

Private Practices

Several hundred specialists and general practitioners regularly teach students in their private offices. This provides a valuable opportunity for students to see a wider range of patients, closer to where they live, and at an earlier stage of illness. It also provides a valuable insight into patients of practice not accessible within the teaching hospitals.

Other Facilities

Libraries. The University medical library is located in the Auchentib Library on the Callaghan campus. Together with the Royal Newcastle Hospital and the Department of Health, the University contributes to the Gardner Library located in DMB.

The role of the Gardner Library has been extended to that of a resource for the entire Hunter Area Health Service with branches located at Royal Newcastle Hospital, the Mater Hospital and the John Hunter Hospital.

Medical Communication Unit - graphic, video, film and audio-visual capability. Main facilities are in DMB with small units at MMH and some planned for the John Hunter Hospital.

Animal facilities. Large animals with long term surgical preparation are housed in MSB and a separate sheep husbandry facility. Surgical theatres and small animal housing are in MSB; a breeding colony for the University is on campus. Small animal facilities are in DMB and the John Hunter Hospital.

Centre for Clinical Epidemiology and Biostatistics

The Centre for Clinical Epidemiology and Biostatistics was established in 1987 to provide a focus for the development of postgraduate teaching in research in clinical epidemiology and biostatistics both within Australia and overseas. The objectives of the Centre are:

- to foster the pursuit of studies at the postgraduate level in the University of Newcastle in the subject areas of clinical epidemiology and biostatistics;
- to encourage the growth of clinical epidemiology locally, nationally and internationally by assisting clinical doctors in their practices to develop skills in critical evaluation of clinical measurement, diagnostic and therapeutic procedures and research methodology with emphasis on research into the evaluation of clinical practice and the understanding and prevention of health problems of high priority to the population;
- to encourage the growth of biostatistics locally, nationally and internationally in order to provide an underpinning for the standards of medical research;
- to encourage and develop in the medical profession a population perspective in health, including consideration of economic as well as medical issues, and the use of official statistics in the provision of health services and health prevention;
- to seek funding for local, national and international students to enable them to undertake studies in clinical epidemiology and biostatistics both at postgraduate coursework and research degree levels; and
- to seek funding to support teaching and research staff to assist in these developments.

The Centre is located in the David Maddison Clinical Sciences Building adjacent to the Royal Newcastle Hospital. It provides facilities for students enrolled in the Graduate Diploma in Epidemiology, the Graduate Diploma in Health Social Science, the Graduate Diploma in Medical Statistics, the Degree of Master of Medical Statistics and the Degree of Master of Medical Science in the following options: Clinical Epidemiology, Health Promotion, Health Social Science, Occupational Epidemiology and Pharmacopeiology.

Participants in the academic activities of the Centre include:

K. Boyle, Tutor in Biostatistics
A. M. Brown, Senior Lecturer in Environmental and Occupational Health
D. Christie, Professor of Environmental and Occupational Health
L. H. Connor, Senior Lecturer in Sociology
A. J. Dobson, Professor of Biostatistics and Deputy Director of the Centre
R. W. Gibbord, Associate Professor of Statistics
R. F. Heller, Professor of Community Medicine, Director of the Centre and Co-ordinator in Clinical Epidemiology
M. J. Hensley, Associate Professor in Clinical Epidemiology
D. Henry, Senior Lecturer in Clinical Pharmacology
H. N. Higginsbothom, Senior Lecturer in Health Social Sciences and Co-ordinator in Health Social Science
R. J. Kemp, Lecturer in Health Economics
E. M. C. Lau, Senior Lecturer in Clinical Epidemiology and Biostatistics
L. Lim, Senior Lecturer in Biostatistics
D. L. O’Connell, Senior Lecturer in Biostatistics and Co-ordinator in Medical Statistics
B. Petarski, Tutor in Health Economics
M. R. Phillips, Senior Lecturer in Clinical Epidemiology
S. Redman, Senior Lecturer in Behavioural Science in Relation to Medicine and Co-ordinator in Health Promotion
K. M. Robinson, Senior Lecturer in Sociology
C. Shaw, Tutor in Biostatistics
A. Sprogis, Tutor in Clinical Epidemiology
J. E. Stuart, Senior Lecturer in Community Medicine and Paediatrics
RULES GOVERNING ACADEMIC AWARDS

Rules Governing Academic Awards

Application of Rules
1. These Rules shall apply to all the academic awards of the University other than the degrees of Doctor and Master.

Interpretation
2. (1) In these Rules, unless the context or subject matter otherwise indicates or requires:

"award" means the degree, diploma (including graduate diploma and associate diploma) or graduate certificate for which a candidate is enrolled;

"course" means the total requirements of the program of study approved by the Academic Senate;

"department" means the Department for the purpose of these Rules.

"schedule" means the schedule to these Rules relevant to the award listed under the name of the Faculty;

"subject" means any part of a course for which a result may be recorded.

(2) A reference in these Rules to a Head of Department, shall be read not only as a reference to the person appointed to that office but also, where a subject is not offered by the department as such, to the person approved by the Academic Senate to undertake the responsibilities of a Head of Department for the purpose of these Rules.

Admission
3. An applicant for admission to candidature for an award shall satisfy the requirements of the University governing admission to and enrolment in a course and any other additional requirements as may be prescribed in the schedule for that award.

Subject
4. (1) For the purposes of a course, a subject may be classified at a level determined by the Faculty Board.

(2) Each subject shall be allotted a credit point value by the Faculty Board of the Faculty in which the department is located.

(3) The Academic Senate, after considering the advice of the Faculty Board, may determine that a subject be not offered during a particular academic year.

(4) The Faculty Board shall approve the subjects for the award. Any change in the list of approved subjects which is incompatible with the requirements of that course, the Faculty Board shall make all reasonable provision to permit students already enrolled in the course to progress normally.

Enrolment
5. (1) A candidate may not enrol in any year in a combination of subjects which is incompatible with the requirements of the timetable for that year.

(2) Except with the permission of the Dean and subject to any contrary provision in the schedule:
(a) a candidate may not enrol in subjects totalling more than the equivalent of 40 credit points in any semester;
(b) a candidate shall not enrol in a subject which does not count towards the award; and
(c) a candidate shall not be permitted to enrol in any subject which is substantially equivalent to one which the candidate has previously counted towards a degree or diploma.

(3) A candidate for an award shall not enrol in a course or part of a course for another award in this University unless consent has first been obtained from the Dean and, if another Faculty is responsible for the course leading to that other award, the Dean of that Faculty, provided that a student may enrol in a combined course approved by the Academic Senate leading to two awards.

Pre-requisites and Co-requisites
6. (1) The Faculty Board on the recommendation of the Head of the Department may prescribe pre-requisites and/or co-requisites for any subject offered by that Department.

(2) Except with the permission of the Dean granted after considering any recommendation made by the Head of the Department, no candidate may enrol in a subject unless that candidate has passed any subjects prescribed as its pre-requisites at any grade which may be specified and has already passed or concurrently enrols in or is already enrolled in any subjects prescribed as its co-requisites.

(3) Except with the permission of the Dean, a candidate will not have satisfied a pre-requisite if the pre-requisite subject has not been completed in the preceding eight calendar years.

(4) A candidate attaining a Terminating Grade in a subject shall not be permitted to enrol in a subject which is substantially equivalent to one in or is substantially equivalent to one in or is substantially different from the subject so as to constitute a non-co-requisite.

Credit
7. (1) A Faculty Board may grant credit to a candidate in specified and unspecified subjects, on such conditions as it may determine, in recognition of work completed in the University or another institution approved by the Faculty Board for this purpose or additionally as may be provided in the schedule.

(2) Except as may be otherwise provided in the schedule, a candidate shall not be given credit for more than sixty-five per cent of the total number of credit points required to complete the course.

Subject Requirements
8. (1) The subjects which may be completed in the course for the Award shall be those approved by the Faculty Board and published annually as the Approved Subjects section of the schedule.

(2) A candidate enrolled in a subject shall comply with such academic and practical requirements and submit such written or other work as the Department shall specify.

(3) Except as otherwise permitted by the Head of Department, any material presented by a candidate for assessment must be the work of the candidate and not have been previously submitted for assessment.

(4) To complete the subject a candidate shall satisfy published departmental requirements and gain a satisfactory result in such assessments and examinations as the Faculty Board shall require.

Withdrawal
9. (1) A candidate may withdraw from a subject or the course only by informing the Academic Registrar in writing and the withdrawal shall take effect from the date of receipt of a written notice.

(2) A student shall be deemed not to have enrolled in a subject if that student withdraws from the subject:
(a) in the case of a semester length subject, before the Higher Education Contribution Scheme census date for that semester; or
(b) in the case of a full year subject, before the first Higher Education Contribution Scheme census date for that academic year.

(3) Except with the permission of the Dean:
(a) a candidate shall not be permitted to withdraw from a subject after the relevant date which shall be:
(i) in the case of a semester length subject, the last day of that semester; or
(ii) in the case of a full year subject, the last day of the second semester;
(b) a candidate shall not be permitted to withdraw from a subject on more than two occasions.

Leave of Absence
10. (1) Subject to any provision in the schedule, a candidate in good academic standing in the course:
(a) may take leave of absence of one year from the course; or
(b) with the permission of the Dean, may take leave of absence of two consecutive years from the course without prejudice to any right of the candidate to re-enrol in the course following such absence and with full credit in all subjects successfully completed prior to the period of leave.

(2) For the purposes of sub-rule (1), unless otherwise specified in the schedule, a candidate eligible to re-enrol shall be deemed to be in good academic standing.

Qualification for the Award
11. (1) To qualify for the award a candidate shall satisfactorily complete the requirements governing the course prescribed in the schedule.

(2) A subject which has been counted towards a completed award may not be counted towards another award, except to such extent as the Faculty Board may approve.
Combined Degree Programs

12. (1) Where as prescribed for a particular course, a candidate may complete the requirements for one Bachelor degree in conjunction with another Bachelor degree by completing a combined degree program approved by the Academic Senate on the advice of the Faculty Board and, where the other Bachelor degree is offered in another Faculty, the Faculty Board of that Faculty.

(2) Admission to a combined degree program shall be restricted to candidates who have achieved a standard of performance deemed satisfactory for the purposes of admission to the specific combined degree course by the Faculty Board(s).

(3) The work undertaken by a candidate in a combined degree program shall be no less in quantity and quality than if the two courses were taken separately.

(4) To qualify for admission to the two degrees a candidate shall satisfy the requirements for both degrees, except as may be otherwise provided.

Relaxing Provision

13. In order to provide for exceptional circumstances arising in a particular case, the Academic Senate on the recommendation of the Faculty Board, may relax any provision of these Rules.

SCHEDULE — ASSOCIATE DIPLOMA IN OCCUPATIONAL HEALTH AND SAFETY

Interpretation

1. In this Schedule unless the context or subject matter otherwise indicates or requires: "Board" means "Board of Studies in Occupational Health and Safety".

Admission

2. Applications for admission to candidature will not be accepted in any year a candidate will enrol in at least 80 credit points unless granted the permission of the Faculty Board to enrol in fewer.

Qualification for Admission to the Degree

3. To qualify for admission to the degree a candidate shall pass the program of study approved by the Faculty Board totaling 400 credit points.

Grading of Degree

4. The degree shall be conferred as an ordinary degree except that in cases where a candidate's performance has reached a standard determined by the Faculty Board, the degree may be conferred with Honours.

Credit

5. Credit will not be granted to candidates in any subject for work completed in other faculties of the University or elsewhere.

Absence

6. (1) Upon a candidate's successful completion of an academic year the Faculty Board may grant the candidate leave of absence from the course under such conditions as it shall determine.

(2) Such leave shall only be granted to any one candidate once and will not normally be granted for a period of more than one year.

Resumption of Studies

7. A candidate who enrols in the Bachelor of Medical Science degree shall not be deemed to be absent from the course and shall be permitted to re-enrol in the year immediately following with full credit for all subjects successfully completed prior to undertaking the Bachelor of Medical Science degree.

8. A candidate who withdraws from the course or who is absent from the course without leave and who subsequently wishes to resume studies in the course:

(a) if the withdrawal or absence without leave occurred before the successful completion of the first year of the course, may be required by the Faculty Board to re-apply for admission to candidature under the Rules Governing Admission to the Bachelor of Medical Course; or

(b) if the withdrawal or absence without leave occurred after the successful completion of the first year of the course, will be permitted to re-enrol in the course only if such conditions and at such time as the Faculty Board may determine.

1 New students will not be admitted to this course after 1992.
SECTION THREE
RULES GOVERNING ACADEMIC AWARDS

(2) To be eligible for admission to candidature an applicant shall:
(a) have satisfied the requirements for admission to the degree of Bachelor of Medicine in the University or an equivalent degree in another university recognised for this purpose by the Board; or
(b) have satisfied the requirements for admission to the degree of Bachelor of Pharmacy in a university recognised for this purpose by the Board; or
(c) have satisfied the requirements for admission to the degree of Bachelor of Science in the University or another university recognised for this purpose by the Board; or
(d) have satisfied the requirements for admission to the degree of Bachelor of Applied Science in the University in a health related discipline in a tertiary institution recognised for this purpose by the Board; or
(e) have other qualifications approved for this purpose by the Board.

(3) Notwithstanding sub-clause (2) the Board shall consider each application and if it is of the opinion that the applicant’s academic background is not of a sufficient standard to enable the satisfactory completion of the course in the nominated specialisation may:
(a) on the recommendation of the co-ordinator require the applicant to complete such prerequisite and/or corequisite studies as it may prescribe; or
(b) reject the application.

Qualification for the Diploma

5. To qualify for the award of the Diploma a candidate shall complete the program of studies for the specialisation concerned approved by the Board totalling 80 credit points.

Time Requirements

6. The course shall be completed in not less than one year and not more than five years of study.

Transfer of Candidacy from Related Master Degree Program

7. (1) A student enrolled as a candidate for the Master of Medical Science degree in one of the following specialisations:

(a) Clinical Epidemiology,
(b) Occupational Epidemiology,
(c) Pharmacoepidemiology,
(d) Psychiatric Epidemiology

who is permitted to withdraw from the degree course under Rule 13 of the Rules Governing Master Degrees or whose candidature is terminated under Rule 11 of those Rules may be permitted by the Board to enrol as a candidate for the Diploma in the specialisation concerned.

(2) A student who wishes to enrol as a candidate for the Diploma under sub-clause (1) shall apply in writing, addressed to the Academic Registrar for permission to do so.

SECTION THREE
RULES GOVERNING ACADEMIC AWARDS

(a) on the recommendation of the co-ordinator require the applicant to complete such prerequisite and/or corequisite studies as it may prescribe; or
(b) reject the application.

Qualification for the Diploma

5. To qualify for the award of the Diploma a candidate shall complete the program of studies for the specialisation concerned approved by the Board totalling 80 credit points.

Time Requirements

6. The course shall be completed in not less than one year and not more than five years of study.

Transfer of Candidacy from Related Master Degree Program

7. (1) A student enrolled as a candidate for the Master of Medical Science degree in one of the following specialisations:

(a) Clinical Epidemiology,
(b) Occupational Epidemiology,
(c) Pharmacoepidemiology,
(d) Psychiatric Epidemiology

who is permitted to withdraw from the degree course under Rule 13 of the Rules Governing Master Degrees or whose candidature is terminated under Rule 11 of those Rules may be permitted by the Board to enrol as a candidate for the Diploma in the specialisation concerned.

(2) A student who wishes to enrol as a candidate for the Diploma under sub-clause (1) shall apply in writing, addressed to the Academic Registrar for permission to do so.

(3) A student permitted to enrol as a candidate for the Diploma under the provisions of sub-clause (1) may count any subjects passed while enrolled as a candidate for the Master Degree towards the Diploma.

(4) The period of time spent by the student enrolled as a candidate for the Master Degree shall be counted towards meeting the time requirements for the Diploma.

SECTION THREE
RULES GOVERNING ACADEMIC AWARDS

(a) on the recommendation of the co-ordinator require the applicant to complete such prerequisite and/or corequisite studies as it may prescribe; or
(b) reject the application.

Qualification for the Diploma

5. To qualify for the award of the Diploma a candidate shall complete the program of studies for the specialisation concerned approved by the Board totalling 80 credit points.

Time Requirements

6. The course shall be completed in not less than one year and not more than five years of study.

Transfer of Candidacy from Related Master Degree Program

7. (1) A student enrolled as a candidate for the Master of Medical Science degree in one of the following specialisations:

(a) Clinical Epidemiology,
(b) Occupational Epidemiology,
(c) Pharmacoepidemiology,
(d) Psychiatric Epidemiology

who is permitted to withdraw from the degree course under Rule 13 of the Rules Governing Master Degrees or whose candidature is terminated under Rule 11 of those Rules may be permitted by the Board to enrol as a candidate for the Diploma in the specialisation concerned.

(2) A student who wishes to enrol as a candidate for the Diploma under sub-clause (1) shall apply in writing, addressed to the Academic Registrar for permission to do so.

(3) A student permitted to enrol as a candidate for the Diploma under the provisions of sub-clause (1) may count any subjects passed while enrolled as a candidate for the Master Degree towards the Diploma.

(4) The period of time spent by the student enrolled as a candidate for the Master Degree shall be counted towards meeting the time requirements for the Diploma.

SECTION THREE
RULES GOVERNING ACADEMIC AWARDS

(a) on the recommendation of the co-ordinator require the applicant to complete such prerequisite and/or corequisite studies as it may prescribe; or
(b) reject the application.

Qualification for the Diploma

5. To qualify for the award of the Diploma a candidate shall complete the program of studies for the specialisation concerned approved by the Board totalling 80 credit points.

Time Requirements

6. The course shall be completed in not less than one year and not more than five years of study.

Transfer of Candidacy from Related Master Degree Program

7. (1) A student enrolled as a candidate for the Master of Medical Science degree in one of the following specialisations:

(a) Clinical Epidemiology,
(b) Occupational Epidemiology,
(c) Pharmacoepidemiology,
(d) Psychiatric Epidemiology

who is permitted to withdraw from the degree course under Rule 13 of the Rules Governing Master Degrees or whose candidature is terminated under Rule 11 of those Rules may be permitted by the Board to enrol as a candidate for the Diploma in the specialisation concerned.

(2) A student who wishes to enrol as a candidate for the Diploma under sub-clause (1) shall apply in writing, addressed to the Academic Registrar for permission to do so.

(3) A student permitted to enrol as a candidate for the Diploma under the provisions of sub-clause (1) may count any subjects passed while enrolled as a candidate for the Master Degree towards the Diploma.

(4) The period of time spent by the student enrolled as a candidate for the Master Degree shall be counted towards meeting the time requirements for the Diploma.
(a) have satisfied the requirements for admission to a Bachelor degree in the University or another university recognized for this purpose by the Board; or
(b) have other qualifications approved for this purpose by the Board on the recommendation of the co-ordinator.

(2) Notwithstanding section 3(1) the Board shall consider each application and if it is of the opinion that the applicant's academic background is not of sufficient standard to enable the satisfactory completion of the course may:-
(a) on the recommendation of the co-ordinator require the applicant to complete such prequisite and/or corequisite studies as it may prescribe; or
(b) reject the application.

Qualification for Graduate Diploma
4. To qualify for the Graduate Diploma a candidate shall pass the program of subjects approved by the Board totalling 80 credit points.

Credit
5. The credit granted to candidates shall not exceed 40 credit points.

Time Requirement
6. The course shall be completed in not more than four years of study.

Rules Governing Master Degrees
The Rules Governing Master Degrees are currently being redrafted. Further information about the Rules relating to the Master of Medical Science and Master of Medical Statistics degrees may be obtained from the Faculty Office.

Rules Governing Doctoral Degrees
The Rules Governing Doctoral Degrees are currently being redrafted. Further information about the Rules relating to the Doctor of Philosophy and Doctor of Medicine degrees maybe obtained from the Faculty Office.

Rules Governing Admission to the Bachelor of Medicine Course
The Rules Governing Admission to the Bachelor of Medicine Course are currently being redrafted. Further information about these Rules may be obtained from the Faculty Office.

---

SECTION THREE

RULES GOVERNING ACADEMIC AWARDS

SECTION FOUR

---

OCCUPATIONAL HEALTH AND SAFETY PROGRAMS

Since the introduction of courses in Occupational Health and Safety at Newcastle in 1988, the field has undergone rapid expansion with subsequent changes in the professional, technical, legal and educational requirements of practitioners. In recognition of these changes, the University will introduce a full Bachelor degree course in 1993. At the same time the Associate Diploma course will gradually be phased out with the last intake of new students in 1992. In the future there will be the opportunity for Associate Diploma recipients to upgrade their qualification to the degree.

Thus, the Faculty of Medicine currently offers three courses approved by the Board of Studies in Occupational Health and Safety leading to the award of:

- the Associate Diploma in Occupational Health and Safety*
- the Bachelor of Occupational Health and Safety
- the Diploma in Occupational Health and Safety

* New students will not be admitted to this course after 1992.

Course Descriptions
Associate Diploma in Occupational Health and Safety

This program of study is normally completed part time over 3 years and is designed to meet the demand for trained professionals against a background of increasing concern for occupational safety in the workplace. It is intended that students will gain the necessary understanding of technology, science and behavioural sciences in order to meet the needs of employers, unions and government agencies in the development and implementation of sound occupational health and safety practices.

Specific aims of the course are:
- to provide a body of knowledge which is of theoretical and practical importance in occupational health and safety;
- to integrate basic disciplines, for example technology (design, manufacturing, transport) and human sciences (anatomy, physiology, psychology, ergonomics) with social sciences (law, economics, sociology, education) in the field of occupational health and safety;
- to promote understanding of the principles of health and safety, and to develop skills in the application of these principles to human and social problems arising from risk and danger in the workplace (both in the present and in the future);
- to develop a problem solving approach to occupational health and safety issues;
- to increase the desire and ability to promote the health, safety and well-being of workers.

Generally, holders of the award of Associate Diploma in Occupational Health and Safety will be working in co-operation with management, safety committees, employees and other health and safety personnel. They will prepare and implement training programs for employees, disseminate information concerning safety problems and solutions, make employees aware of how they can minimise hazards, and promote safety consciousness within their organisations.

The approved program of study for the Associate Diploma is:

<table>
<thead>
<tr>
<th>Subject</th>
<th>Year 1</th>
<th>Year 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>OSS10S</td>
<td>12</td>
<td>12</td>
</tr>
<tr>
<td>OSS102S</td>
<td>Occupational Safety Technology</td>
<td>Occupational Safety Technology</td>
</tr>
<tr>
<td>OSS10SS</td>
<td>Ergonomics and Environmental Systems</td>
<td>Ergonomics and Environmental Systems</td>
</tr>
</tbody>
</table>

---
The approved program of study for the Bachelor course is:

**Year 1**

- **OH5131** Occupational Health and Safety I 
- **OH5132** Occupational Health and Safety II 
- **OH5133** Safety Science I 
- **OH5134** Human Factors and Safety Science I 

**Year 2**

- **OS2101** Safety Science II 
- **OH5135** Human Factors and Safety Science II 
- **OH5136** OH&S Management I 
- **OH5137** OH&S Management II 

**Year 3**

- **OH5138** Occupational Hygiene I 
- **OH5139** Occupational Health and Safety Principles I 
- **OH5140** OH&S Management III 
- **OH5141** OH&S Management IV 

**Year 4**

- **OH5130** Occupational Health and Safety Principles II 
- **OH5131** OH&S Management V 
- **OH5132** OH&S Management VI 

**Subject Descriptions Associate Diploma in Occupational Health and Safety**

**OS101** OCCUPATIONAL HEALTH AND SAFETY 12cp

This subject is broken into two parts, the first being an introduction to occupational health and safety and the second part concerning environmental issues.

The first part is designed to introduce the major areas of study encompassed by occupational health and safety and will form a basis for the proper integration of occupational health and safety into the general sphere of occupational health and safety.

The second part is designed to provide a practical training in the use of sampling equipment for the measuring of noise, dust, mist, gases and vapours to provide demonstrations of the use and limitations of a range of analytical instruments and to provide practical experience in methods of medical monitoring.

**OS102** OCCUPATIONAL SAFETY 12cp

This subject is broken into two parts, the first part being an introduction to occupational safety technology and the second part concerning safety measures.

Objectives of the first part are for students to be able to:

- describe the basic nature safety factors, associated with given situations;
- comprehend literature describing potentially hazardous situations and use the information to make safety recommendations in safety procedure; accurately describe and report risk situations; and communicate in appropriate technical terms, with workers, management and technical personnel.

The second part is designed to develop the students' understanding of safety measures which can be taken to minimise the risk of injury.
The project includes:
(a) a thorough investigation into the area selected, including methodology;
(b) drawing appropriate conclusions or clarification of the issues based on the findings;
(c) application of the findings to the improvement of knowledge in the area, or in related areas of concern;
(d) description and discussion of a range of possible alternative solutions to the problem;
(e) a comprehensive bibliography.

The project is to be submitted in a standardised format, and will be retained by the University.

Bachelor of Occupational Health and Safety

OHS111 OCCUPATIONAL HEALTH I 10cp
Prerequisites Nil
Hours Full-year; 2 hours per week
Assessment To be advised

Content
This subject introduces the student to the basic components of biological systems and provides a background knowledge of human physiology and anatomy as it relates to occupational health. Systematic coverage of topics ranging from animal cell structures to the nervous system and the immune system will enable students to describe the basic structures and functions of living cells; distinguish between different types of microorganisms; describe the basic anatomical and physiological features of the human body as they relate to the entry, transport and distribution, metabolism and elimination of harmful agents; explain how the body responds to the environment and defends itself against harm, particularly in the occupational environment; and describe in outline the anatomical and physiological features of human reproduction.

Test To be advised

OHS121 SAFETY SCIENCE I 10cp
Prerequisites Nil
Hours Full-year; 2 hours per week
Assessment To be advised

Content
This subject consists of two concurrent parts of equal weightage which introduce students to concepts in Chemistry and Physics relevant to Occupational Health and Safety.

Chemistry Topics
- Atomic structure, atoms, molecules and ions. The Periodic Table
- States of matter - solids, liquids and gases. Phase changes
- Properties of gases, vapour pressure, saturated vapour pressure, Dalton's Law
- Chemical change - reaction patterns. Stoichiometry
- Chemical bonding - ionic and molecular, properties of representative compounds. Hydrogen bonding and Van der Waals forces, metallic bonding
- Solutions - properties
- expressions of concentration, the mole concept
- Chemical equilibria - acid/base and buffer solutions
- Thermochemistry and an introduction to thermodynamic concepts (enthalpy, entropy and Gibb's free energy)
- Organic chemistry - overview of functional groups

Physics Topics
- Basic mechanics - kinematics, dynamics (linear and rotational).
- Statics - equilibrium
- Energy and energy changes
- Heat, calometry, heat transfer, cryogenics
- Optics - properties of light
- Sound

Test To be advised

OHS131 OCCUPATIONAL HEALTH AND SAFETY MANAGEMENT I 10cp
Prerequisites Nil
Hours Full-year; 2 hours per week
Assessment To be advised

Content
The study of some of the basic psychological and sociological aspects of the effects of work on the individual forms the basis of this subject. These are considered in two parts of equal weightage.

The main aims of the subject are to enable students to:
(a) identify and analyse the range of individual differences amongst workers relative to occupational health and safety;
(b) analyse the structure of the group and the factors which affect group behaviour;
(c) identify the roles of the formal leader and those of the informal leader;
(d) predict what changes of behaviour can be achieved by changes in the attitudinal climate;
(e) understand the relationship between work, technology and social organisation;
(f) understand the development of the division of labour and its place in the production process;
(g) explore the changing nature of the workforce and its implications for OH&S;
(h) critically evaluate contemporary theories.

In Individual Behaviour, topics of study include individual differences, socialisation process, perception, group dynamics, leadership, life stages, motivation, stress and stress management (role conflict), attitude formation and maintenance, emotion, frustration and conflict, personality, abnormal behaviour and counselling.

SECTION FOUR

In Work and Sociology, topics of study include:
- The Production Process and Division of Labour
- Work and Social Integration - class, status and power
- Technology and changing work practices
- Conflict and co-operation in the workplace - contemporary theories.

Test To be advised
SECTION FOUR

OCCUPATIONAL HEALTH AND SAFETY PROGRAMS

OHS211 OCCUPATIONAL HYGIENE AND TOXICOLOGY I 10cp
This subject develops a conceptual framework for toxicology as well as knowledge and skills in methods of assessment and control of the workplace environment. Emphasis is placed on the role of the occupational hygienist in assessment and control of the work environment and the factors which determine hygiene standards. Australian hygiene standards are studied in terms of type and applicability.

Consideration is also given to the principles and methods of use of a range of instruments for monitoring environmental pollutants. Students will gain an understanding of the factors influencing toxicity and an understanding of the relevance to hygiene standards and setting of dose-effect and dose-response relations and toxicological interactions. The toxicity of specific groups of industrial chemicals is also studied.

OHS212 EPIDEMIOLOGY FOR OCCUPATIONAL HEALTH AND SAFETY 10cp
In this subject students are encouraged to appreciate their time so as to spend approximately 46 hours on Epidemiology and 10 hours on Biostatistics (students will already have studied statistics in Year 1).

Epidemiology
This part of the subject introduces students to epidemiology as a way in which new knowledge in occupational hygiene and health is gained, and equips them with the tools necessary for critical evaluation of OHS literature. Topics include research and hypothesis testing, health indicators, the survey, relative and attributable risk, longitudinal studies, case-control studies and epidemic investigation.

Biostatistics
Topics covered include statistical inference, statistical tests (t-test and chi square), correlation, linear regression, multivariate analysis and logistic regression.

OHS311 OCCUPATIONAL HYGIENE AND TOXICOLOGY II 10cp
This subject enhances the knowledge and skills acquired in Occupational Hygiene and Toxicology I and relates them to the practice of occupational hygiene in the field, to the toxicological evaluation of chemicals and to risk assessment. By the end of the subject, students will be able to: (a) devise a strategy for conducting a hygiene survey and use correctly a range of sampling and analytical instrumentation for the assessment of the occupational environment; (b) make recommendations for appropriate control strategies for environmental pollutants; (c) discuss the purposes and limitations of the full range of toxicological test methods; (d) give an account of the toxicology of specific physiological systems; and (e) evaluate toxicological data for the assessment of risk and the establishment of appropriate hygiene standards.

OHS312 RESEARCH METHODS 10cp
This subject enhances the knowledge and skills acquired in Epidemiology for Occupational Health and Safety and relates them to the conduct of real research in the workplace. By the end of the subject students will be able to devise a practical research protocol for a study that could be carried out in the workplace. Data will be collected in a pilot study to facilitate sample size calculations and test the operation of the protocol.

The basic aspects of research study design are considered in relation to the student’s own research topic. These include defining the research question, the outcome variable, the study factor, the population, biases and confounders, pilot study and sample size.

OHS222 SAFETY TECHNOLOGY II 10cp
This subject consists of two concurrent parts of equal weight. The first of which introduces students to concepts in Chemistry, Physics and Material Science relevant to Occupational Health and Safety. The second part further develops these concepts in relation to the student’s own research topic. This includes the study of: (a) principles of electrochemistry; (b) polymer chemistry; (c) analytical methods relevant to occupational health and safety; (d) chemical health and safety information—accessing, interpreting, application.

Physics Topics
- Electricity: static, DC/AC. Basic electronics
- Principles of electrical safety
- Radioactivity and nuclear physics
- Ionising and non-ionising radiation
- Electromagnetic radiation
- Principles of radiation safety

OHS221 SAFETY TECHNOLOGY I 10cp
This subject looks at various means of optimising safety in the workplace in the context of technological developments and practices in relation to radiation safety, electrical safety and environmental control.

Chemical Process Safety Topics
- Overview of chemical engineering operations and their hazards, e.g., pumping, distillation, cleaning, especially degreasing, transfer of bulk quantities
- Labelling and handling hazardous materials including transport
- Flammable, cryogenic, toxic, radioactive, biochemical
- Fire and fire control

SECTION FOUR

OCCUPATIONAL HEALTH AND SAFETY PROGRAMS

- Explosion risks including dust and fire
- Principles of chemical storage
- Spillage and waste disposal
- Developing "housekeeping" plans for plant sites

OHS222 SAFETY TECHNOLOGY II 10cp
This subject looks at various means of optimising safety in the workplace in the context of technological developments and practices in relation to machinery and plant safety and construction safety.

Machinery and Plant Safety Topics
- Mechanical handling systems
- Hydraulic/pneumatic systems
- Causes of structural and component failure. Fracture mechanics
- Non-destructive test methods
- Machinery contact dangers
- Intrinsically safe and machinery guard design
- Anthropometric aspects of machine guarding
- Warning signs and systems

Construction Safety Topics
- Site hazards
- Types of accidents
- Statutory requirements
- On-site materials handling
- Safety in excavations
- Roofing
- Scaffolding
- Lift and crane mechanical plant and portable tool demolition

OHS221 SAFETY TECHNOLOGY III 10cp
This subject looks at various means of optimising safety in the workplace in the context of technological developments and practices in relation to fire and explosion safety, electrical safety and environmental control.

Fire and Explosion Safety Topics
- Classification of fires
- Statutory requirements
- Sources of ignition
- Combustibility—properties of building and construction materials
- Fire testing
- Building designs for fire protection
- Fire detectors, alarms and suppression
- Firefighting equipment and systems
- Explosion risk assessment
- Suppression of explosion risk including plant layout

- Personal training for fire and explosion safety
- Electrical Safety Topics
- Electrical dangers including static
- Statutory requirements
- Protective measures including earthing, insulation, fuses, circuit breakers and residual current devices, working precautions including permit-to-work systems
- Intrinsically safe electrical systems

Environmental Control Topics
- Noise control
- Techniques
- Design for noise isolation and insulation
- Machinery noise control for presses, machine tools, air compressors and ventilating systems, forging machines, electric motors, pumps, hoppers, chutes, gas furnaces

Safety Programmes
- Application of principles of airflow—openings, ducts, filters, fans
- Design techniques for general ventilation, dilution, extraction, local exhaust ventilation
- Testing of ventilation systems
- Incorporation of other safety considerations in Design (e.g., for noise, fire and explosion risk)

OHS322 SAFETY TECHNOLOGY IV 10cp
This subject looks at various means of optimising safety in the workplace in the context of technological developments and practices in relation to radiation safety, electrical safety and environmental control.

Radiation Safety Topics
- units of dose and exposure
- International Committee for Radiological Protection recommendations for exposure standards
- instrumentation for radiation measurement
- statutory requirements
- safe handling and disposal of radiation sources
- approach to radiation protection in the workplace

Maintenance Engineering Topics
- factors influencing maintenance procedures (types and speed of failure)
- assessment of reliability and durability of components
- preventive maintenance scheduling for safety
- Design of Safety Features in Plant and Machinery Topics
- requirement for reliability, precision operation, proof against use and abuse and fail to safety
- design of safety mechanisms incorporating mechanical, electrical, pneumatic and hydraulic components
- ergonomic design of consoles
In addition, students will be able to identify internal and external influences of organisational behaviour on the implementation of Health and Safety practices. There will be consideration given to the basic elements of Industrial Relations in Australia, and the relationship between Industrial Relations and Occupational Health and Safety. Current developments in Industrial Relations also feature in the curriculum.

**Organisational Behaviour Topics**
- The evolution of management theory
- Organisational structures and principles
- The effects of external factors on organisational behaviour
- The effects of internal factors on organisational behaviour
- Leadership, motivation, performance and satisfaction
- Planning and controlling for proper organisational effectiveness

**Industrial Relations Topics**
- The Employment Relationship
- The Industrial Relations Institutional Framework
- The Employer organisations
- The Trade Unions
- Conflict Resolution
- Industrial Relations and Occupational Health and Safety Committees
- Difficult Industrial Relations systems: theory and critical evaluation

**Rehabilitation Topics**
- Legal requirements and insurance methods
- the rehabilitation process
- key personnel: the co-ordinator function
- implications of early return to work
- cost benefit analyses - case studies of major industrial programs

**OB 232 ERGONOMICS FOR OCCUPATIONAL HEALTH AND SAFETY** 10cp

The aim of this subject is to enable students to identify various personal attributes which can influence proper safe working practice; recognise the physical factors involved in production processes and appreciate the mechanisms underlying the effects of the working environment on comfort, performance and well being.

**Topics**
- Environmental comfort and its measurement, including noise, temperature, humidity and light.
- Anthropometry - the human operator as a systems component possessing human variance. The measurement and application of these variations to occupational health and safety practice.
- Perception - looking at such factors as threshold perception, JND, vigilance, reaction, reaction time and the promotion of attention.
- The prevention of boredom and monotony by appropriate job design.

**OHS 332 OCCUPATIONAL HEALTH AND SAFETY MANAGEMENT**

The emphasis in this subject is on the role and promotion of the occupational health and safety program within an organisation. Students will gain an understanding necessary for them to be able to:
- (a) recognise commitment by top management in the occupational health and safety program;
- (b) identify the need to fit the occupational health and safety program to the organization's ongoing needs and those of the employees; (c) promote leadership in setting up and operating occupational health and safety programs; and (d) promote and file involvement in the occupational health and safety program.

**Topics**
- Occupational Health & Safety Promotion:
  - Marketing survey techniques, interpretation and evaluation of programs.
  - Gaining support through persuasion.
  - Publication of activities. Bulletin boards, newsletters, posters, accident statistics, including accident-free days.

**Strategic Planning**
- The concept of strategy.
- Strategic planning for the achievement of organisational goals in the short-term or long-term.
- The development of the correct strategy.
- Seven steps in the formal strategic-planning process.
- The advantages and disadvantages of strategic planning

**Budgeting**
- The budget as a planning and controlling tool.
- Proactive and reactive budgeting constraints.
- The cost vs. benefit approach in occupational health and safety budgeting.
- Fixed, variable and zero-based budgeting.
- Functional and dysfunctional aspects of budget systems.

**OHS 333 OCCUPATIONAL HEALTH AND SAFETY MANAGEMENT III** 10cp

- The emphasis in this subject is on the role and promotion of the occupational health and safety program within an organisation. Students will gain an understanding necessary for them to be able to:
  - (a) recognise commitment by top management in the occupational health and safety program;
  - (b) identify the need to fit the occupational health and safety program to the organization's ongoing needs and those of the employees; (c) promote leadership in setting up and operating occupational health and safety programs; and (d) promote and file involvement in the occupational health and safety program.

**Topics**
- Occupational Health & Safety Promotion:
  - Marketing survey techniques, interpretation and evaluation of programs.
  - Gaining support through persuasion.
  - Publication of activities. Bulletin boards, newsletters, posters, accident statistics, including accident-free days.

**Strategic Planning**
- The concept of strategy.
- Strategic planning for the achievement of organisational goals in the short-term or long-term.
- The development of the correct strategy.
- Seven steps in the formal strategic-planning process.
- The advantages and disadvantages of strategic planning

**Budgeting**
- The budget as a planning and controlling tool.
- Proactive and reactive budgeting constraints.
- The cost vs. benefit approach in occupational health and safety budgeting.
- Fixed, variable and zero-based budgeting.
- Functional and dysfunctional aspects of budget systems.

**OHS 334 OCCUPATIONAL HEALTH AND SAFETY MANAGEMENT IV** 10cp

The emphasis in this subject is on the role and promotion of the occupational health and safety program within an organisation. Students will gain an understanding necessary for them to be able to:
- (a) recognise commitment by top management in the occupational health and safety program;
- (b) identify the need to fit the occupational health and safety program to the organization's ongoing needs and those of the employees; (c) promote leadership in setting up and operating occupational health and safety programs; and (d) promote and file involvement in the occupational health and safety program.

**Topics**
- Occupational Health & Safety Promotion:
  - Marketing survey techniques, interpretation and evaluation of programs.
  - Gaining support through persuasion.
  - Publication of activities. Bulletin boards, newsletters, posters, accident statistics, including accident-free days.

**Strategic Planning**
- The concept of strategy.
- Strategic planning for the achievement of organisational goals in the short-term or long-term.
- The development of the correct strategy.
- Seven steps in the formal strategic-planning process.
- The advantages and disadvantages of strategic planning

**Budgeting**
- The budget as a planning and controlling tool.
- Proactive and reactive budgeting constraints.
- The cost vs. benefit approach in occupational health and safety budgeting.
- Fixed, variable and zero-based budgeting.
- Functional and dysfunctional aspects of budget systems.

**OHS 335 OCCUPATIONAL HEALTH AND SAFETY MANAGEMENT V** 10cp

The emphasis in this subject is on the role and promotion of the occupational health and safety program within an organisation. Students will gain an understanding necessary for them to be able to:
- (a) recognise commitment by top management in the occupational health and safety program;
- (b) identify the need to fit the occupational health and safety program to the organization's ongoing needs and those of the employees; (c) promote leadership in setting up and operating occupational health and safety programs; and (d) promote and file involvement in the occupational health and safety program.

**Topics**
- Occupational Health & Safety Promotion:
  - Marketing survey techniques, interpretation and evaluation of programs.
  - Gaining support through persuasion.
  - Publication of activities. Bulletin boards, newsletters, posters, accident statistics, including accident-free days.

**Strategic Planning**
- The concept of strategy.
- Strategic planning for the achievement of organisational goals in the short-term or long-term.
- The development of the correct strategy.
- Seven steps in the formal strategic-planning process.
- The advantages and disadvantages of strategic planning

**Budgeting**
- The budget as a planning and controlling tool.
- Proactive and reactive budgeting constraints.
- The cost vs. benefit approach in occupational health and safety budgeting.
- Fixed, variable and zero-based budgeting.
- Functional and dysfunctional aspects of budget systems.
OHS142 OCCUPATIONAL HEALTH AND SAFETY PRACTICE II 10cp
This subject gives the student a brief introduction to theory and practice of the teaching-learning process particularly as it applies to training procedures and practices in industry. Skills required in Business Communication are investigated. Problem based learning techniques are introduced in this subject to enhance the student's comprehension of OH&S incidents. The workplace visits program continues. The purpose of the subject is to enable the student to devise, prepare and present a significant industrial training/education seminar using appropriate teaching-learning strategies; recognise the importance of proper communications in an organisational setting; communicate effectively in both the written and oral modes; use problem-based learning techniques to investigate several OH&S case studies; and to attend and report on visits to industrial or other locations as required.
Topics
- Education and Training
  - task analysis and teaching objectives
  - collection and organisation of materials
  - education and training strategies for different levels of the workforce
  - presentation techniques and resources including use of voice, gesture, body language
  - feedback: collection and use
- Business Communication
  - the communication process
  - speaking, reading, speaking, listening and questioning
  - writing business letters, memoranda, short reports, long reports and submissions
  - negotiation and conflict resolution
  - meetings, committees and conferences

OHS242 OCCUPATIONAL HEALTH AND SAFETY PRACTICE IV 10cp
The focus of this subject is the identification, analysis and control of work systems and safety at work. An overview of accident statistics (collection and usage) and department planning is given. Appropriate problem based learning experiences and workplace visits are included.
Topics
- Hazard identification, assessment and evaluation
- workplace inspections
- management/worker consultation: The OH&S Committee
- independent audits
- job safety analysis
- hazard and operability studies
- factors in hazard rating
- Hazard control
- engineering controls
- safe systems of work and permit to work
- fire, first-aid and emergency procedures
- safety training
- System safety
- principles
- methods of analysis including hazard and operability studies, operations review, gross hazard analysis, classification of risk, risk ranking, failure modes and effect and fault-tree analysis
- Disaster planning
- theoretical approaches
- accidental prevention
- Accident investigation and reporting
- statutory requirements
- accident reporting systems and accident data collection
- investigation techniques
- investigation reports
- Accident Statistics
- frequency rate, incidence rate, severity rate, mean duration rate, duration rate
- monitoring accident rates
- Safety Inspection Procedures
- objectives of safety inspection
- safety audit
- safety survey
- safety inspection
- safety tour
- hazard and operability study

OHS341 OCCUPATIONAL HEALTH AND SAFETY PRACTICE V 10cp
International perspectives on OH&S is the focus of this subject. A program of seminar presentations is included, and problem based learning and workplace visits continue.
Topics
- International Perspectives on OH&S
  - approaches of developed industrial nations
  - systems of OH&S: legal foundations
  - under-developed countries: problems and solutions
  - United Nations (World Health Organisation and the International Labour Organisation)
- dissemination of information: publications, special centres, SHARE, conferences, societies

ELECTIVE 10cp
Provision has been made for an elective to enable students to study topics of interest to them which is relevant to Occupational Health and Safety.
Students may enrol for any course offered by the University for which they have the pre-requisite and which is worth at least 10 credit points. The elective is subject to approval of the Course Co-ordinator.

Graduate Diploma in Occupational Health & Safety

OHS501 OCCUPATIONAL HEALTH 10cp
- Historical background to occupational health.
- Occupational health practitioners in Australia.
- National and international organisations. Information sources.
- Mortality and morbidity in Australia; changes over time.
- Occupational mortality and morbidity in Australia.
- Diseases of lung and musculoskeletal system attributable to work; general overview of relevant anatomy and physiology.
- Carcinogenesis; asbestos and vinyl chloride monomer.
- Diseases of the skin attributable to work.
- Principles of epidemiology and biostatistics.
- Screening: pre-employment medicals, surveillance systems.
- Biological monitoring; lead, agricultural chemicals.
- Ethical issues.
- Epidemiology and Biostatistics: applications.
- Psychological factors and work: stress; shifts; sickness absence.
- Non-occupationally induced disorders in the workplace.
- Women at work: general overview of relevant anatomy and physiology; the reproductive system and occupational factors.
- Establishment and management of an Occupational Health and Safety Program.
- Health promotion.

OHS502 OCCUPATIONAL HYGIENE AND TOXICOLOGY 10cp
- Role of occupational hygiene and toxicology in improving health and safety at work.
- Nature of environmental pollutants (physical, chemical and biological).
- Anatomy and physiology pertaining to routes of entry, transport, distribution, metabolism and elimination of toxic materials and body defence mechanisms.
- Dysfunction resulting from exposure to environmental pollutants, e.g., occupational deafness; electric shock; altered sensitivity; mutagenicity; carcinogenicity; teratogenicity and reproductive organ toxicity; neurotoxicity.
- Principles of occupational toxicology: types of study; dose-effect and dose-response relationships; dose rate dependency.
- Metabolic interactions e.g. synergy.
- Outline of toxicological testing regimens, e.g. oral/inhalation lethality, dermal/ocular irritation; sensitisation; mutagenicity and carcinogenicity testing; reproductive and developmental toxicity testing; neurological and behavioural toxicity testing.
- Toxic effects of selected examples of chemicals in the workplace (metals, solvents, gases).
- Approaches to setting hygiene standards.
- Types of and applicability of hygiene standards with particular reference to ACCC threshold limit values (TLVs).
- Limitations of hygiene standards.
- Roles of environmental, biological and medical monitoring.
- Methods and units of noise measurement.
- Methods and limitations of sampling dusts, mists, gases and vapours.
- Strategies for conducting hygiene surveys.

OHS503 SAFETY TECHNOLOGY 10cp
Chemical Hazards:
- The variety of chemical substances - metal/non-metals, inorganic/organic. Sources and effects of various industrial examples.
- Classifications and hazard indicators. Meaning of terms e.g. oxidizing agent, cryogenic, frequently used in warnings and labels. The IAAEC/GM and NFPA systems.
SECTION FOUR

Sources of data - researching industrial/hazardous materials.
Handling and storage problems. Clean-up problems.
Overview of detection and analysis.
Chemical characteristics of hazardous situations including fire, explosion, polymerisation, pyrolysis.

Physical Hazards:
Overview of the components of physical hazards e.g. velocity, acceleration, momentum, energy.
Safety aspects of static situations - forces in equilibrium.
Types of materials including metals, polymers, ceramics, and the characteristic properties of each (including elastic and failure properties).
Overview of fundamental concepts in electricity, particularly as they apply to safety issues.
Radiation: nature, effects and safety aspects of ionising and non-ionising radiation.

OHS04 ERGONOMICS 10cp
Definition of ergonomics and objectives of the ergonomics.
Biomechanical plans of ergonomics: anatomical lever system.
Application of kinesiology to workplace layout.
Human activities, their nature and effects.
Physiological measurements such as metabolic and quasi-metabolic measurements. Electromyography. Body temperature and heat loss from the body.
Prerequisites of biomechanical work tolerance.
Engineering of the non-equipment interface.
Development of kinesiologically effective modes of behaviour.
Manual materials handling and lifting.
Functional anatomy of forearm and hand.
Tool evaluation.
Chairs and sitting posture - anatomical, anthropometric and biomechanical considerations.
Ergonomic evaluation of work situations.
Displays and controls.
Measurement skills.
Systems of units.
Measurements associated with:
(1) noise: protection against noise, noise level standards, other vibrations, measuring hearing, handling of noise problems, protection devices;
(2) light and colour in surroundings: daylight, colour in the workroom, lighting standards, discomfort, glare, visibility;
(3) climate: thermal regulation in man, dryness of the air during heating periods, heat-stress index, measures of insulation.

SECTION FIVE

BACHELOR OF MEDICINE PROGRAM

This section contains information on the Bachelor of Medicine degree as follows:
• The approved program of study
• Policies with respect to - part-time enrolment
• Prizes and grants-in-aid available to students enrolled in the course

OHS05 OCCUPATIONAL HEALTH AND SAFETY MANAGEMENT AND LAW 20cp
Management:
• Administration theory and systems.
• Individuals and groups in organisations.
• Life span and work.
• Workers at risk.
• Human resource management and strategies.
• Total Quality Management.
• Risk management and loss control.
• Economic factors - budgets, cost benefit analysis, controls.
• Industrial Relations.
• Structure and design of health promotion activities.
• Workplace based rehabilitation.

Legal Aspects:
• Structure of the Law. An analysis of statute and common law.
• Introduction to legal concepts: duty of care, liability, causation.
• Relationship between legal principles and public opinion.
• Stare Decisis - how the common law evolves and the structure of legal decisions. Analysis of case law.
• Contracts - the legalities of employment.
• Accidents at work - an examination of employer liability.
• Overview of Occupational Health and Safety legislation. An examination of what is a safe system of work.
• Negligence - an examination of the principle of the duty of care.
• The nature and extent of employers' liability to safeguard against hazards in the workplace. Common law and statutory breaches to be examined.
• Defences and remedies available.

OHS06 SPECIAL STUDY 20cp
This subject provides opportunity for the student to select one of the following:
• further in depth specialisation in Occupational Health and Safety Management, including Occupational Health Nursing;
• a workplace-based Project;
• development of a research protocol up to and including the pilot study phase.
A preparation phase which includes an introduction to statistics and statistical procedures, and research methodology consisting of approximately 30 hours tuition, is included in first semester.
Program of Study

The program of study approved by the Faculty Board for the degree of Bachelor Medicine is as follows:

Credit Points Prerequisite
MED101 Medicine I 80
MED102 Medicine II 80
MED201 Medicine III 80
MED202 Medicine IV 80
MED321 Medicine V 80
MED401 Medicine VI 80

This program is normally undertaken over five years of full-time study.

In exceptional circumstances arising in individual cases, students may be permitted to enrol in "part" subjects. The "part" subjects approved for this purpose are:

Credit Points Prerequisite
MED102 Medicine IA 40 Credit in 40cp of MED101
MED103 Medicine IB 20 Credit in 60cp of MED101
MED202 Medicine IIA 40 Credit in 40cp of MED201
MED203 Medicine IIB 20 Credit in 60cp of MED201
MED322 Medicine IIIA 40 Credit in 40cp of MED321
MED323 Medicine IIIB 20 Credit in 60cp of MED321
MED402 Medicine IVA 40 Credit in 40cp of MED401
MED403 Medicine IVB 20 Credit in 60cp of MED401
MED522 Medicine VA 40 Credit in 40cp of MED521
MED523 Medicine VB 20 Credit in 60cp of MED521

A statement of the Faculty's policy on part-time enrolment in the Bachelor of Medicine follows.

Policy with Respect to Part-Time Enrolment

1. Under the Rules governing the Bachelor of Medicine the Faculty Board, in exceptional circumstances, e.g. pregnancy, may permit a student in a particular year to enrol as a part-time student.

2. Part-time enrolment will be allowed in the following circumstances:
   - Where a student has failed a subject in the previous year and to pass is required to repeat only part of the subject in the following year and where the student is not permitted to progress to the next subject in the course or elects not to progress to the next subject of the course without completing the previous subject.
   - In such cases the part-time enrolment would be in the year during the partial repeat of the failed subject.

3. The Faculty Board may consider applications from individual students for permission to enrol as part-time students in the course in circumstances outside those described above but permission would only be given in cases of extreme hardship after seeking advice from the Undergraduate Education Committee and the relevant Year Co-ordinating Committee.

Policy with Respect to Leave of Absence

The Rules covering the degree of Bachelor of Medicine make provision for students enrolled in the Bachelor of Medicine course to take a period of leave of absence from the course. A student granted leave of absence is given permission to take a year out of the course with a guarantee that he/she will be permitted to re-enrol in the course in the academic year immediately following the expiration of the period of leave with standing in all subjects passed in the course prior to the period of leave. However, as the Bachelor of Medicine course is a highly integrated full time course, taking leave of absence may disrupt a student's learning significantly. Furthermore, large numbers of students taking leave of absence in any one year may result in large class sizes the following year. Because Faculty resources are limited, group sizes may have to be increased resulting in an unsatisfactory educational experience for the year as a whole.

The Rules governing the Bachelor of Medicine for the Academic Year 1992-93 make provision for the following policy with respect to leave of absence:

1. Leave of absence will only be granted to a student for one year.

2. Leave of absence will only be granted to a student who, in the academic year prior to the year in which the student wishes to take leave and has passed all subjects in which he/she has been enrolled.

3. Leave of absence will only be granted to any particular student once during the course.

4. Leave of absence will not normally be granted to students who are not completing the course within the normal assessment period prior to the academic year. For example, a student who has completed a period of leave of absence in 1992 may re-enrol in the course in 1993 with standing in all subjects passed prior to the period of leave.

5. Leave of absence will only be granted to students in circumstances appropriate to the student's income, financial, health and personal circumstances.

Applications for leave of absence for the following year subject to the condition that they pass the subjects in which they are currently enrolled.

Furthermore, students whose circumstances are "exceptional" will be given priority over other students.

Policy with Respect to Re-enrolment

1. Re-enrolment after successful completion of a year Students who pass a year of the B. Med. course shall be permitted to enrol in the next year of the course in the academic year immediately following the year in which the student passed the subject. A student who has completed a year with standing in all subjects passed in the course before the period of absence.

2. Re-enrolment after failure in a subject A student who fails a subject in the B. Med. course is deemed to have failed unsatisfactory progress. The case of each student is considered by the Faculty who will give priority to students seeking leave for reasons of health, financial problems or family problems.

Policy with Respect to Re-enrolment

1. Re-enrolment after successful completion of a year Students who pass a year of the B. Med. course shall be permitted to enrol in the next year of the course in the academic year immediately following the year in which the student passed the subject. A student who has completed a period of leave of absence in 1992 may re-enrol in the course in 1993 with standing in all subjects passed prior to the period of leave.

2. Re-enrolment after failure in a subject A student who fails a subject in the B. Med. course is deemed to have failed unsatisfactory progress. The case of each student is considered by the Faculty who will give priority to students seeking leave for reasons of health, financial problems or family problems.
6. Re-enrolment after more than one year out of the course.

(a) A student who has not been enrolled in the B. Med. course for two consecutive years (the two years may include a period of leave of absence or a one year period enrolled in the B. Med. Sc. program) will be treated in the same way as students in section 5 above, except that he/she will be required to re-sit assessment in Domain III in such circumstances as indicated in paragraphs 6(c) and 6(b) there are no pre-requisites for the course with standing in Medicine I and Medicine II, that is enrolled in 1992 in Medicine III. If on the other hand the student fails the assessment he/she will be permitted to re-enrol in the course with standing in Medicine I only. That is, this student will be required to repeat the subject Medicine II in 1992.

(b) A student who has not been enrolled in the B. Med. course for three or more consecutive academic years (three or more years out of the course may include a period of leave of absence or a B. Med. Sc. year) will be treated in the same way as students in section 6(a) above except that he/she will be required to re-sit assessment from all Domains for the Medicine subject last taken prior to the period of absence from the course. The specific requirements will vary from year to year (refer to Schedule 1). As a general guide, the assessment will include all instruments except (i) those specifically linked to group activities (e.g. the Group Task in Year 3) and (ii) those of a long term nature in which the candidate could not be expected to have participated (e.g. Population Medicine in Year 1). Re-enrolment will be permitted in parallel with students already enrolled in the year immediately preceding the year in which enrolment is sought.

If the student passes the re-assessment he/she will be granted standing in all Medicine subjects except the last one completed prior to the period of absence. That is, the student would be required to re-enrol in the Medicine subject last taken prior to the period of absence.

7. Re-enrolment after withdrawal partway through an academic year.

(a) Except where the withdrawal is from Medicine I, a student will be permitted to re-enrol in the course in the next academic year in the subject(s) from which he/she withdrew.

(b) A student who has withdrawn from Medicine I without passing it must apply to the Faculty Board for permission to re-enrol in the course. The Faculty Board may permit the student to re-enrol in Medicine I or require him/her to apply for re-admission to the course under the Rules Governing Admission to the Bachelor of Medicine course. Such a student would be required to undertake the Personal Qualities Assessment and be ranked for admission with all other applicants for admission in the year in question.

Schedule 1 — Assessment for Re-Admission to The Bachelor of Medicine

Students who have not been enrolled for two consecutive years will be required to sit assessment in Domains I and III. Those who have not been enrolled for three or more consecutive years will be required to sit assessment in all Domains. As indicated in paragraphs 6(c) and 6(b) there are no pre-requisites for the course with standing in Medicine I and Medicine II, that is enrolled in 1992 in Medicine III. If on the other hand the student fails the assessment he/she will be permitted to re-enrol in the course with standing in Medicine I only. That is, this student will be required to repeat the subject Medicine II in 1992.

To enter Year 2: Modified Year 1 assessment:

Domain I: Long Case assessment as specified but without pre-requisites.

Domain II: Nil

Domain III: Written assessment as specified.

V: Nil

A 24 hr. Student Own Learning Task derived from the Long Case assessment in Domain I. Students will quickly learn by experience what standards are appropriate in different circumstances, not only, for example, on the wards or in private rooms, but also in 'off duty' professional settings, eg hospital dining rooms.

To enter Year 3: Modified Year 2 Assessment:

Domain I: Long Case assessment as specified but without pre-requisites. No General Practice.

Domain II: Analysis of a research paper as specified.

Domain III: Written assessment as specified.

IV: Nil

V: A 24 hr. Student Own Learning Task derived from the Long Case assessment in Domain I. Students will quickly learn by experience what standards are appropriate in different circumstances, not only, for example, on the wards or in private rooms, but also in 'off duty' professional settings, eg hospital dining rooms.

To enter Year 4: Modified Year 3 assessment:

Domain I: 2 Short Cases + 1 Long Case, but without pre-requisites. No Country Term Logbook, Discharge Summary or Referral Letter.

Domain II: Written assessment as specified.

Domain III: Written assessment as specified. No Trauma Report or Chronic Disability Presentation.

IV: S.A.Q.

V: Nil

A M.I.I.S. based on the Long Case in Domain I.

Student Dress and Appearance

In all professional settings, the general appearance and dress of students should be appropriate. This is so that the image which students present to patients and relatives facilitates communication between them, so that students are easily recognised as members of the profession by health professionals and other staff, and so that students themselves develop a sense of professional identity.

In some clinical settings (e.g. wards, clinics, etc.) it will be appropriate to wear a white coat of approved pattern. The Faculty will make available a supply of such coats for purchase by students who will be responsible for laundering them. These should only be worn in hospital or other professional surroundings. Each student should possess two coats.

In some cases it may be more appropriate not to wear a white coat (e.g. private rooms, some surgeries). Advance consultation with the person in charge of the activity will establish whether or not a white coat should be worn.

For laboratory work, protective clothing (when required) will be provided by the Faculty, and should be worn.

Students will be expected to wear a name badge in the clinical setting, and on some other occasions which will again be identified by candidates, both the person in charge. The badge will bear the student’s given name and surname only, and will be provided by the Faculty. In some hospitals, further identification will be necessary; this should be worn or carried at all times, and may be useful identification outside the hospital.

For obvious reasons, a high standard of cleanliness will be required in all clinical settings.

General appearance and dress should be socially acceptable and appropriate to the occasion. Students will quickly learn by experience what standards are appropriate in different circumstances, not only, for example, on the wards or in private rooms, but also in ‘off duty’ professional settings, eg hospital dining rooms.

Supervisors will notify students whose dress and appearance is inappropriate and such students may be refused access to the facilities for which their appearance is deemed inappropriate.

Coats of the approved pattern which cost approximately $50.00 each will be available for purchase by students during the first week of Block 1.

Undergraduate Program Objectives

The Program Objectives act as:

• a basis for curriculum development by the Faculty, and a yardstick for decisions about inclusion or exclusion of particular activities in/from the curriculum;

• an overall statement of goals for students, and a framework within which to set their own efforts;

• the overall basis for the assessment of student progress and achievement;

• one of the yardsticks for evaluation of the program.

However, they do not specify the full range of curriculum development. Responsibility rests with the Faculty to develop a learning environment of acceptable quality and to choose relevant educational content. The notion that the learning environment should be happy and constructive cannot be expressed easily in objective form. In addition there are several aspirations which the Faculty holds which cannot be mandated. Thus the Faculty may wish to maintain a range of values and attitudes such as caring, willingness to help, and dedication, but it is not possible to insist upon these values and yet concurrently adhere to a liberal educational philosophy. This is not to deny their importance, but rather to distinguish them from performance which is the concern of behavioural objectives. In this sense the UPOs identify the behaviour expected of students in the way they carry out the performance of their intellectual and clinical responsibilities (eg 1.1).

The Objectives

They are designed to ensure that, at the conclusion of the course, the graduate demonstrates the ability to:

• engage in productive professional relationships and maintain those relationships to acquire, evaluate and communicate information;

• apply the processes of critical reasoning to medical care;

• apply his or her understanding of illness to its prevention, identification and management and to the promotion and maintenance of health;

• apply his or her understanding of the practice of medicine in a community or population context;

• take responsibility for evaluating his or her own performance and implementing his or her own education.

These objectives assume a dynamic environment in which medicine will be practised. In consequence the graduating student should be able to participate in change and to adapt to change.

DOMAIN I — PROFESSIONAL SKILLS

1. By the time of graduation students demonstrate ability to relate to, and function in an effective fashion with, patients and their families as well as fellow professionals:
1.1 manifesting those personal characteristics essential for the practice of excellent medicine, including (i) an awareness of their own assets, limitations and responsiveness, (ii) responsibility, thoroughness, reliability and confidentiality, (iii) sensitivity to the needs of others and concern for other persons;

1.2 consistently displaying a deep regard for others, thereby showing that caring and comforting are held to be amongst the appropriate tasks for a medical practitioner;

1.3 showing that their approach to all patients reflects an understanding that the person who is ill is more important than the illness from which he or she suffers;

1.4 applying in an observable way both an understanding of the importance of the doctor/patient relationship, and its place within the provision of medical care at all levels;

1.5 showing, (i) an enlightened involvement with patients, free from undue interference with communication created by the excessive use of psychological defence mechanisms, thus avoiding the demonstration of aloof and unfelt detachment, undue aggressiveness and other unhelpful behaviours, (ii) a recognition of those patients who display dependency or hostility to an extent which affects patient management and patient co-operation, and interacting appropriately with them, (iii) an awareness of how their own personality affects their interaction with their patients and how their own anxieties and prejudices may alter patient attitudes and behaviour, (iv) a capacity to accord with ethical principles, (v) the recognition that unrealistic practitioners from taking advantage of patients;

1.6 applying an awareness of the role of the physician in health/welfare professional teams and working co-operatively within them;

1.7 showing the establishment of effective communication and co-operation with a wide variety of patients, healthy members of the community and other professionals;

1.8 applying an awareness of the potential conflicts imposed upon them by their obligations to themselves and their family, to their patients and the community they serve;

1.9 applying an understanding of the ethical basis of medical practice;

1.10 applying a logical and probabilistic approach to clinical problems, and displaying a tolerance for ambiguous situations by coping with uncertainty in the clinical context;

1.11 applying skills in interacting with patients to increase the probability of accurate diagnosis, patient satisfaction and compliance, and the patient’s accurate recall of supplied information, and to decrease the anxiety associated with potentially frightening information;

1.12 obtaining a clinical history from a wide variety of patients, and eliciting clinical signs through the conduct of physical examination - these skills should be demonstrated with both adults and children;

1.13 writing an accurate clinical record on the basis of their own observations, recognizing and defining a clinical problem, and communicating their findings to others clearly and concisely (orally and in writing);

1.14 carrying out the basic tasks required to be performed by all medical graduates during their pre-registration postgraduate period.

SECTION II - CRITICAL REASONING

2.1 by the time of graduation students demonstrate ability to apply the processes of scientific reasoning by:

2.1.1 making reliable observations of cellular, pathophysiological and behavioural phenomena, and extracting the relevant data from these observations, integrating where appropriate the information provided from these three perspectives on human biology;

2.1.2 applying a critical appreciation of the techniques, procedures, goals and results of biomedicinal research, and applying the various scientific methods in current use (particularly the hypothetico-deductive method) to the reliability and validity of observations, and the testing of hypotheses;

2.1.3 applying scientific principles to the study of the behaviour of individuals, groups and institutions;

2.1.4 locating bio-medical information required for the understanding and management of medical problems, through the use of available educational resources;

2.1.5 assessing the veracity of conclusions based on reported data, including the interpretation of statistical treatment applied to the analysis of such data;

2.1.6 interpreting and criticising data from evaluation studies of medical services supplied to communities or populations.

DOMAINT III - IDENTIFICATION, PREVENTION AND MANAGEMENT OF ILLNESS

3.1 by the time of graduation students will demonstrate ability to apply their understanding of illness and its prevention and management, by:

3.1.1 applying an understanding of the mechanism and significance of health-related physical and behavioural events and adaptive responses to those events, both normal and abnormal, at levels ranging from the molecular to that of the community and wider environmental contexts;

3.1.2 applying an understanding of biological, psychological, social, developmental and environmental mechanisms to the diagnosis, management and prevention of illness;

3.1.3 applying a knowledge of the significance and limitations of the findings of standard laboratory and allied investigations;

3.1.4 planning and interpreting a program of investigations appropriate to the clinical problem presented by the patient, with due regard for patient comfort and safety and for economic factors;

3.1.5 applying the understanding implicit in 3.2, 3.3 and 3.4 to the diagnosis of a defined range of clinical problems;

3.1.6 applying an understanding of the principles of therapeutics, including the possible complications and human costs of treatment;

3.1.7 taking responsibility, under supervision, for the management of a defined range of common, acute and chronic clinical conditions;

3.1.8 devising and implementing, under supervision, a management plan appropriate for patients with chronic, intractable illnesses, including terminal diseases;

3.1.9 carrying out the basic psychomotor skills required to be performed by all medical graduates during their pre-registration postgraduate period;

3.1.10 applying an understanding of the impact of illness upon families, and the importance of family factors in prevention, treatment and rehabilitation;

3.1.11 demonstrating a positive, consistent and informed behaviour towards promotion and maintenance of health, as well as the prevention of illness at both individual and population levels, and skill in educating patients, their families and other health professionals for this purpose;

3.1.12 applying an awareness that major changes in individual and community health are likely to depend as much or more on change in the behaviour of people as on the manipulation of the physical environment.

SECTION IV - POPULATION MEDICINE

4.1 by the time of graduation students will demonstrate ability to apply their understanding of the practice of medicine in a community or population by:

4.1.1 applying an awareness of the importance of the practice of medicine in both community settings and in hospital settings;

4.1.2 contributing to the identification and solution of community health problems and to the evaluation of the results of such interventions;

4.1.3 applying knowledge of the incidence and prevalence of disease in the Australian community;

4.1.4 applying an understanding of the organisation of the Australian health system, as exemplified by that existing in the Hunter Region, at primary, secondary and tertiary care levels, from conception to death, including the care of the chronically sick of all ages, and including the impact of prevention and the promotion and maintenance of health;

4.1.5 evaluating health care needs of individuals, groups and communities, and evaluating the efficacy of health care delivery and the functioning of community health services;

4.1.6 applying an understanding of the impact of illness upon families, and the importance of family factors in prevention, treatment and rehabilitation;

4.1.7 applying a positive, consistent and informed behaviour towards promotion and maintenance of health, as well as the prevention of illness at both individual and population levels;

4.1.8 applying an awareness that major changes in individual and community health are likely to depend as much or more on change in the behaviour of people as on the manipulation of the physical environment.

Learning Methods

A variety of learning methods are used throughout the curriculum, and these will be explained in the Introductory Week. A particular emphasis is placed on problem-based learning. For example, in the early years of the course, learning in Domain II is based on activities in tutorial groups of approximately eight members guided by a Faculty tutor. The method requires students to analyse and solve biomedical problems, usually those of ill patients but sometimes of communities. The sequence of identifying the nature and breadth of the problem, researching information to both understand and solve the problem and suggesting solutions follows the same sequence as is used in clinical diagnosis and in scientific research. The various basic, social, and quantitative sciences upon which clinical medicine is based are learnt in the course of these problem-solving exercises. There are therefore no separate courses of, for example, anatomy, physiology, biochemistry, pharmacology, etc. Instead, Faculty members in those disciplines contribute to the biomedical problems by supplying topics for study, and these are taught as resources for students to consult, either in problem-based seminars, fixed resource sessions, demonstrations or individual and group consultations on selected topics. From the beginning students learn from contact with patients and communities and this contact becomes increasingly important as they progress through clinical rotations in the later part of the curriculum. In the first two years of the course, students will learn from contact with patients and communities and this contact becomes increasingly important as they progress through clinical rotations in the later part of the curriculum.
# Course and Subject Descriptions

Detailed documentation of activities in each Year and within each Domain will be distributed from time to time. This account provides a general overview with brief comments on assessment.

## YEAR 1

YEAR 1 consists of the subject MEDICINE I. The year is divided into three blocks, each of approximately 10 weeks' duration.

### Block 1
**MEDICINE I** 80cp

This provides a broad introduction to the health care system with adults and paediatric ward experience linked to activities in Domain III.

### Block 2
**Medical consultation skills** are expanded. The techniques of history taking and physical examination are introduced under the guidance of a clinical tutor in the setting and in the wards.

### Block 3
Consultation skills are refined and applied to disorders of the body system under study in Domain III (renal and gastrointestinal).

## YEAR 2

YEAR 2 consists of the subject MEDICINE II. The year is divided into three blocks, each of approximately 10 weeks' duration.

### Block 1 - Homeostasis Under Stress

#### Domain IV - Population Medicine

A year-long program providing contact with, and insight into, the needs and resources of individuals and society. This is arranged through role-playing of disability and through visits within the community including a family visit, visits to facilities and self-help agencies, and exploration of alternative health systems. An introduction to the basic concepts of epidemiology and biostatistics is linked to the exercises in Domain II.

### Domain V - Self-Directed Learning

There are three parts:

1. Learning topics are identified from a clinical problem considered by the students as part of Domain I assessment. Each student selects a topic as their "own learning task," for individual study and research based on literature and consultation.
2. A year-long program in medical informatics provides an introduction to the basic skills and concepts of computer applications in medicine.
3. A "mini-elective." This elective is based upon a field of interest identified by the student during the year. A program is arranged in consultation with a Faculty supervisor and a report is written.

#### Timetable Commitments

Typical weekly timetables for each block are shown below.

**Block 1 - Homeostasis Under Stress**

<table>
<thead>
<tr>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medical Interviewing</td>
<td>Medical Informatics</td>
<td>Population Medicine</td>
<td>Microscopy</td>
<td>Medical Information</td>
</tr>
</tbody>
</table>

In addition, this block includes critical reasoning tutorials, paediatric ward experience, adult ward experience, community visits, computer training and sessions with ambulance officers.

**Block 2 - Homeostasis Under Stress**

<table>
<thead>
<tr>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medical Interviewing</td>
<td>Medical Informatics</td>
<td>Population Medicine</td>
<td>Fixed Resource Sessions</td>
<td>Medical Information</td>
</tr>
</tbody>
</table>

In addition, students in this block have CD-ROM training sessions, anatomy sessions, professional skills sessions in the hospital and on campus, and critical reasoning tutorials.

**Block 3 - Organ Systems: Renal, Urinary Tract and Gastrointestinal**

<table>
<thead>
<tr>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
</tr>
</thead>
</table>

In addition, students in this block have regular sessions with physicians and surgeons, and post-mortem tutorials.

## Domain V - Self-Directed Learning

Extended "own learning tasks" will be identified in relation to Domain III. This may be based on an area of difficulty from Year 1, providing an opportunity for remediation. Alternatively, students may select a topic of particular interest from Year 1 and anticipate an area of study in Year 2. This task is carried out under academic supervision and a written report is required.

### Block 4 - Organ Systems: Cardiovascular and Respiratory

**Domain I - Professional Skills**

Clinical skills are further practised and strengthened under supervision of clinical tutors in hospitals and private rooms. Students are also attached to a general practice, where the special basic skills relevant to general practice are developed. Clinical tutors relate to the successive body systems under study in Domain III; the cardiovascular, respiratory, neurological, psychiatric, endocrine, and haematological systems.

**Domain II - Critical Reasoning**

Students pursue a number of literature research projects linked to the activities of Domain III. These all have a special emphasis on evidence of causation and association, the efficacy of health care systems, and modes of intervention in acute and chronic disease.

**Domain III - Identification, Prevention and Management of Illness**

The sequence of study through successive body systems commenced in Block 3 of Year 1 is now continued as follows:

- **Block 5:** Neurology and Psychiatry
- **Block 6:** Endocrinology and Haematology

**Domain IV - Population Medicine**

The entire class studies a single topic of broad community significance. The study is divided into separate fields, each the responsibility of an individual tutorial group. A research protocol is drawn up, an investigation is carried out and a report is written by each group.

**Domain V - Self-Directed Learning**

Extended "own learning tasks" will be identified in relation to Domain III. This may be based on an area of difficulty from Year 1, providing an opportunity for remediation. Alternatively, students may select a topic of particular interest from Year 1 and anticipate an area of study in Year 2. This task is carried out under academic supervision and a written report is required.

**Additional, a topic will be identified in the course of a long case (clinical skills) assessment and this will form the basis of a 48-hour learning task based upon literature, research and consultation.**

At the end of the year a two-week mini-elective will be undertaken based upon a topic of the student's choice, as in Year 1.

#### Timetable Commitments

Typical weekly timetables for each Block are shown below.

**Block 5 - Organ Systems: Endocrinology & Haematology**

**Domain I - Professional Skills**

Students in this block have regular professional skills attachments in endocrinology and respiratory medicine, general practice attachments and an autopsy dissection session.

**Block 6 - Organ Systems: Dermatology**

**Domain I - Professional Skills**

Students in this block have regular professional skills attachments in dermatology and respiratory medicine, general practice attachments and an autopsy dissection session.
YEAR 3
YEAR 3 consists of the subject MEDICINE III. The year is divided into four Blocks, one of 11 and three of 8 weeks' duration. The first two 8 week Blocks are run twice in parallel, for each half of the class. The third 8 week Block is an elective.

MED321 MEDICINE III 80cp
DOMAIN I — PROFESSIONAL SKILLS
Clinical skills are further refined, linking with the various earlier experiences. In the program of human sexuality the foundation of counselling skills is laid down. The write-up of histories, referral and discharge letters is included in professional skills training.

DOMAIN II — CRITICAL REASONING
Further reinforcement of the skills of critical appraisal through the study of published papers dealing with the effects of treatment, prognosis, the efficiency of diagnostic tests and issues in occupational medicine.

DOMAIN III — IDENTIFICATION, PREVENTION AND MANAGEMENT OF ILLNESS
The learning of Years 1 and 2 is consolidated in two Blocks and extended to the special considerations of individual sub-specialties. These two Blocks are undertaken in Newcastle. For the first Block all students are in Newcastle together. For the second Block half the students study in Newcastle and the other half are allocated to the country hospitals. In the third Block the country group returns to complete their second Newcastle Block, and the other half go to the country.

Block 1: (Newcastle block)
Understanding of the mechanisms and manifestations of normal and disturbed structure and function are consolidated and extended through further clinical problems of the respiratory, cardiology and gastrointestinal system. In addition, problems in ear, nose and throat, ophthalmology, rheumatology, orthopedics, and immunology are considered, and appropriate clinical experiences are provided in these areas.

Block 2: (Country block)
Further problems in relation to neurosurgery, psychiatry, dermatology, vascular/hypertension, and the renal system and diabetes are considered. In addition, there is a segment on human sexuality together with genito-urinary medicine.

Block 3: (Country block)
The understanding of basic mechanisms and of the manifestations of disease is now applied in direct clinical clerking of patients in a variety of country hospital postings. Students are attached to members of staff of these hospitals, and particular emphasis is placed on general medicine, general surgery, casualty and emergency care, and general practice. Further clinical experience is obtained in sub-specialties.

DOMAIN IV — POPULATION MEDICINE
Topics are based upon the problems of Domain III, as they apply to a given population. In addition, special studies focus upon methods and value of assessing the quality of care and health economics.

DOMAIN V — SELF-DIRECTED LEARNING
An extended own learning task is permitted, either on a student's topic of choice or as remediation for a previously identified deficiency from Year 2.

In addition, students are required to undertake an eight week elective at the end of Year 3. This elective is student oriented both in content and process.

Preparation for the elective period starts long before the elective itself. Elective topics may be proposed either by Faculty staff or by students. However, the onus for selecting a topic rests with the student. The student must find a member of Faculty staff, or an individual approved by the Faculty, who is prepared to supervise the study of the chosen topic. The location for the elective is not restricted and may be anywhere in Australia or overseas. The student, in consultation with the supervisor, is required to draw up a set of objectives to be achieved during the elective. These objectives may be included in an "elective study contract" which must be submitted to the Faculty for approval before the elective is begun. Students are then required to submit a report of at least 1000 works in length on their elective experience. The supervisor is also required to report on the student's performance during the elective.

Timetable Commitments
Weeks 1-4 Ear Nose and Throat and Ophthalmology (in parallel)
Week 5 Respiratory
Week 6 Liver
Week 7 Cardiology
Week 8 Immunology
Weeks 9 & 10 Orthopedics
Week 11 Rheumatology

Monday Tuesday Wednesday Thursday Friday

Practical Skills
Case Study/ FRS Professional Skills FRS Professional Skills FRS Professional Skills FRS Professional Skills
Case Study/ FRS Professional Skills FRS Professional Skills FRS Professional Skills
Pre clinical
Practical Skills
Resource Sessions
Professional Skills
PCP Student Case Presentations

Students in this Block rotate through three professional skills attachments: surgery, ENT clinic, and ophthalmology rooms. There are also extra sessions for orthopedic clinical skills, ear, nose and throat skills, ophthalmoscope tutorial, and female pelvic examination.

Block 8 - Newcastle Block
Weeks 1 & 2 Sexuality
Weeks 3 & 4 Dermatology
Week 5 Neurosurgery and Psychiatry
Week 6 Vasculature/Hypertension
Week 7 Diabetes
Week 8 Renal

GENERAL INFORMATION
Principal Dates 1993
(See separate essay for the Bachelor of Medicine degree course).

January
1 Friday Public Holiday — New Year's Day
6 Wednesday Last day for return of Enrolment Application Forms
Continuing Students

February
5 Friday New students accept UAC main round offer
12 Friday TO New student enrol
22 Monday
26 Friday Last date for payment of General Service Charge

March
1 Monday First Semester begins
30 Tuesday Last day for variation of program in relation to HSIC liability for Semester 1.

April
9 Friday Good Friday — Easter Recess commences
19 Monday — Lectures Resume

June
7 Monday Public Holiday — Queen's Birthday
11 Friday First Semester concludes — Last date for withdrawal from Semester 1 subjects.
14 Monday Mid year Examinations begin
30 Wednesday Closing date for applications for selection to the Bachelor of Medicine and Bachelor of Science (Aviation) in 1994.

July
2 Friday Mid Year Examinations end
19 Monday Second Semester begins

August
30 Monday Last day for variation of program in relation to HSIC liability for Semester 2.

September
25 Saturday Mid Semester recess begins

30 Thursday Closing date for UAC applications for enrolment in 1994 (Undergraduate courses other than Medicine and Aviation).
Year Two
Semester 1
- Commences: Monday 1 March 1993
- Resumes: Friday 9 April 1993
- Concludes: Friday 27 September 1993
- Year Five
- Commences: Monday 19 July 1993
- Concludes: Friday 3 December 1993

NOTE:
- Semester One consists of Block Four (10 weeks) and 7 blocks of Block Five.
- Semester Two consists of the remaining 3 weeks of Block Five, all of Block Six (10 weeks) and Stacks (1 week)

Year Three
Block 7
- Block Four from 26 May - 4 June 1993
- Year Five
- Block 3 from 13-17 August 1993
- Block 5 from 29 Aug - 2 Sep 1993
- Block 9 from 9-13 September 1993

Clinical Attachment 1
- Feb 1 - Mar 12 1993
- Mar 15 - April 3 1993
- April 4 - May 23 1993
- May 24 - July 7 1993

Clinical Attachment 2
- Aug 5 - Sept 29 1993

Assessment
- May 10 - May 14 1993
- Sept 27 - May 21 1993

Vacation
- July 12 - Aug 27 1993

Student Services
- Available for all students to assist with many practical matters which may affect personal adjustment to University and success in studies.

Advice and Information
- The main point contact for enquiries concerning courses and enrolment is the Faculty Office.
- The Faculty Office can direct enquiries to the appropriate Dean, Assistant Dean, Course Coordination or Head of Department.

FACULTY OFFICE
- Contact
- Location
- Telephone
- Faculty
- Contact
- Location
- Telephone

Art
- Design & Visual Arts
- Communication
- Maryann Cartwright
- Vicki Dwyer

Arts
- David Donnelly
- Danielle Harrison
- Natalie Downing
- S18

Business
- Chandra Murti
- Karina Ketel
- Ernest O'Brien
- S19

Block 7
- Feb 8 - April 30 1993
- 3 weeks
- 1 week (ACVC/Easter Vacation 9/164)
- 1 week

Block 8
- May 9 - June 25 1993
- 2 weeks
- 1 week

Block 10
- Oct 18 - Dec 10 1993
- 4 weeks

Block 9
- July 12 - Sept 9 1993
- 6 weeks

Block 11
- Mar 15 - April 3 1993
- 2 weeks

Clinical Attachment 1
- Feb 1 - Mar 12 1993
- 6 weeks

Clinical Attachment 2
- Mar 15 - April 3 1993
- 2 weeks

Clinical Attachment 3
- Mar 22 - May 7 1993
- 1 week

Clinical Attachment 4
- May 24 - July 7 1993
- 6 weeks

Clinical Attachment 5
- Aug 5 - Sept 29 1993
- 4 weeks

Clinical Attachment 6
- Sept 27 - Nov 5 1993
- 6 weeks

Block 8
- May 9 - June 25 1993
- 6 weeks

Block 9
- July 12 - Sept 9 1993
- 6 weeks

Block 10
- Oct 18 - Dec 10 1993
- 4 weeks

Block 11
- Mar 15 - April 3 1993
- 2 weeks

Clinical Attachment 3
- May 24 - July 7 1993
- 1 week

Clinical Attachment 4
- July 12 - Aug 27 1993

Satuv
- Sept 6 - Sept 12 1993
- 1 week

Assessment
- Sept 27 - Nov 9 1993
- 2 weeks

Final Assessment
- Nov 22 - Nov 26 1993

Students with Disabilities
- The University of Newcastle has a policy to provide equal opportunity to students with disabilities.
- Practical assistance, which may be required by students with disabilities to facilitate their participation in their course of study, can be arranged through the Students Support Officer.
- Most services are located in the Temporary Buildings adjacent to the Computing Building except where indicated. Most services are also available on the Central Coast Campus.
- The Dean of Students, Professor K.R. Dutson (located in the Bowen Building) is responsible for the network of Student Services and his assistance or advice is available to students when appropriate. The Sub-Dean, Ms. M. Kibby (Hunter Building Room C189) will advise students on the correct procedures to follow in cases of appeal or grievance applications. Both can be contacted on 216506.
- Accommodation Office
- Offers advice on rental matters and assistance in resolving accommodation problems. Maintains lists of accommodation available off-campus in private homes, rooms, blocks.
- Accommodation Office: (Ph) 215539.
- Careers and Student Employement Office
- A free service to students in their studies covering all matters relating to employment: careers information and planning, resume and interview preparation workshops, graduate recruitment, vacation employment and part-time student employment service. Ms. H. Parker, phone (Ph) 215538.
- Chapelcy
- The Chaplancy Centre is located in the temporary buildings adjacent to the Computer Teaching Building and also in Room A187 in the Hunter Building near the Horror Library. Pastoral and spiritual care is available from denominational chaplains. Ph: (Ph) 2151571 or 216644.
- Counselling Service
- Location: Courtyard level Anarchy Library Building. Assists people who are having academic or personal difficulties, or who simply want to function more effectively. Individual counselling and group courses are available. Ph: (Ph) 215506.
- Health Service
- Doctor's surgery is located in the Shortland Union building basement, phone (Ph) 2165060. A nursing sister is available on the main concourse Hunter Building, phone 2165422. The health service offers medical care similar to a general doctor's surgery with a special interest in the health needs of students. Patients are bulk-billed. All consultations are strictly confidential. Health education and information also available. Dr. S. Brockman, phone (Ph) 2165060.
- Sport & Recreation Office
- Promotes, controls and administers all sporting activities of the University. Organises classes in wide range of sporting and recreational pursuits.
- Sport & Recreation Office: (Ph) 2155060.
- Student Support Office
- Student Service enquires, student loans and financial advice for students on low incomes, advice and referral on welfare matters and assistance and information for students with disabilities. Ms A. Reddin, phone (Ph) 216467.
- Student Entitlements
- For all students to assist with many practical matters which may affect personal adjustment to University and success in studies.
- Available for all students to assist with many practical matters which may affect personal adjustment to University and success in studies.

Special equipment is available in some lecture theatres and in the Library.

If you need academic assistance, please do not hesitate to contact your relevant academic advisor.

Faculty Advisors
- Architecture: Mr. Arthur Kingsland (Ph) 215973.
- Art, Design & Communication: Mr. Bruce Wilson (Ph) 216606.
- Arts: Dr. A. Percival/Barber (Ph) 215572.
- Economics & Commerce: Ms. Anne Finlay (Ph) 216769.
- Education: Ms. Margaret Davies (Ph) 216873.
- Engineering: Dr. David Wood (Ph) 216198.
- Health Sciences: Mr. Andrew Bertram (Ph) 217373.
- Medicine: Prof. Dr. Paul Oasis (Ph) 218152.
- Music: Mr. Paul Curtis (Ph) 216753.
- Nursing: Ms. Susan Lyons (Ph) 216512.
- Science & Mathematics: Mr. Graham Cooper (Ph) 216529.
- Social Science: Ms. Sue Malcolm (Ph) 216787.
- University Libraries: Ms. Anne Robinson (Ph) 216531.

Enrolment of New Undergraduate Students
- Persons of suitable, who wish to transfer to a different undergraduate course in 1993, must apply through the University Admission Centre (UAC) by 30 September 1992. Late applications may be accepted through UAC until 31 October 1993. Late applications may be accepted through UAC until 31 October 1993.
- The Chaplancy Centre is located in the temporary buildings adjacent to the Computer Teaching Building and also in Room A187 in the Hunter Building near the Horror Library. Pastoral and spiritual care is available from denominational chaplains. Ph: (Ph) 2151571 or 216644.
- Counselling Service
- Location: Courtyard level Anarchy Library Building. Assists people who are having academic or personal difficulties, or who simply want to function more effectively. Individual counselling and group courses are available. Ph: (Ph) 215506.

Re-Enrolment for Continuing Students
- There are five steps involved for re-enrolment by continuing students:
  - receive a re-enrolment kit in the mail
  - lodge the Enrolment Application form with details of your proposed program
  - receive a fees & charges notice in the mail in late January
  - receive a fees & charges notice in the mail in early January
  - payment of the General Service Charge at any Commonwealth Bank by 26 February 1993

- Receive a re-enrolment kit for 1993 will be mailed to students in October.

- Receive a re-enrolment kit containing the Student Enrolment Application and Student Information Form, Minibook and Enrolment Guide.
- A fees and charges notice will be mailed separately in late January (please note a Fees and Charges Notice will be sent not all outstanding debits have been paid).

STUDENTS WITH DISABILITIES
- The University of Newcastle has a policy to provide equal opportunity to students with disabilities.
- Practical assistance, which may be required by students with disabilities to facilitate their participation in their course of study, can be arranged through the Student Support Officer.

- (Ph) 216467.

- STUDENTS WITH DISABILITIES
- The University of Newcastle has a policy to provide equal opportunity to students with disabilities.
- Practical assistance, which may be required by students with disabilities to facilitate their participation in their course of study, can be arranged through the Student Support Officer.

- (Ph) 216467.

- STUDENTS WITH DISABILITIES
- The University of Newcastle has a policy to provide equal opportunity to students with disabilities.
- Practical assistance, which may be required by students with disabilities to facilitate their participation in their course of study, can be arranged through the Student Support Officer.

- (Ph) 216467.

- STUDENTS WITH DISABILITIES
- The University of Newcastle has a policy to provide equal opportunity to students with disabilities.
- Practical assistance, which may be required by students with disabilities to facilitate their participation in their course of study, can be arranged through the Student Support Officer.

- (Ph) 216467.
Lodging Enrollment Application Forms
The Enrollment Application form must be completed carefully and lodged at the Student Division Office by 6 January 1993. Students should know their examination requirements before completing the re-enrollment form. There is no late charge payable if the form is late, but it is very important that the Enrollment Application form is lodged by 6 January 1993 as late lodgment will mean that enrollment approval and student card may not be available for the start of the semester

Enrollment Approval
All re-enrolling students will receive in early February either a confirmation program and student card or a letter asking them to attend in person because there is a problem with their proposed program. Enrollment in tutorial or laboratory sessions should be arranged with Departments on an individual basis.

Payment of Charges
The Fees and Charges Notice will be mailed to re-enrolling students in late January (Please note a Fees and Charges Notice will not be sent until all outstanding debts/fines have been paid). The 1993 General Service Charge must be paid at any Commonwealth bank branch using the Fees and Charges Notice. Payments made after 26 February 1993 will incur a $50.00 late fee.

All charges listed on the Fees and Charges Notice must be paid. The Bank will not accept partial payments.

SCHOLARSHIPS AND SPONSORED STUDENTS
Students holding scholarships or receiving other forms of financial assistance must lodge with the Cashier their Fees and Charges Notice together with a warrant or other written evidence that charges will be paid by the sponsor. The Student Services Office will provide a separate voucher warrant or letter for each student sponsored.

LATE PAYMENT
The final date for payment of the General Service Charge is 26 February 1992. Payments made after this date will incur a $50.00 late fee.

Thereafter enrolment will be cancelled if charges remain unpaid by 19 March.

FAILURE TO PAY OVERTDUE FEES
Any student who is deducted by the University by reason of non-payment of any fee or charge, even if an amount is subsequently paid, or who has failed to pay any overdue debts shall not be permitted to:
- complete enrolment in a following year;
- receive a transcript of record;
- graduate or be awarded a Diploma;
- receive a replacement Student ID Card.
Until such debts are paid.

Students are requested to pay any debts incurred without delay.

STUDENT CARDS
Students will be mailed their Confirmation of Program and Student Card in early February. The Student Card should be carried by students when at the University. The Student Card has machine readable foils which are used when borrowing books from the University Library, and contains the student’s identification number and a password for access to various Computer Centres. Please note that the Student Card is not evidence of enrolment, students must also have paid the General Service Charge and fulfilled HESAC requirements.

Students are urged to take good care of their Student Card. If the card is lost or destroyed, there is a service charge of $5 payable before the card will be replaced.

A student who withdraws completely from studies should return the Student Card to the Student Division Office.

RE-ENROLLMENT AFTER ABSENCE
A person wishing to resume an undergraduate degree course who has not enrolled previously at the University of Newcasle, but not enrolled in 1992, is required to apply for admission again through the Universities Admissions Centre, Locked Bag 500 Lidcombe 2141. Application forms may be obtained from the UAC or from the Student Division Office and close with the UAC on 30 September each year. There is a $60.00 fee for late applications. Students who withdraw from their course after 31 March 1992 are not required to apply for re-admission.

CHANGE OF ADDRESS
The University holds on record both an address for correspondence and a home address. Students are responsible for notifying the Student Division Office of writing of any change in their address. A Change of Address form should be used and is available from the Student Division Office.

Failure to notify changes to your correspondence address could lead to important correspondence or course information not reaching you. The University cannot accept responsibility if official communications fail to reach a student who has not notified the Student Division Office of a change of address.

CHANGE OF NAME
Students who change their name should advise the Student Division Office. A marriage or deed poll certificate or must be presented for sight in order that the change can be noted on University records. All change of name by marriage or deed poll applications must be received in the Student Division Office within 14 days of the marriage or deed poll.

CHANGE OF PROGRAMME
Approval must be sought for any changes to the programme for which a student is enrolled. This includes adding subjects, withdrawing from subjects or the course, or replacing one subject with another. All proposed changes should be entered on the Programme Variation section of the Confirmation of Programme form. Programme Variation forms are available from the Student Services Office. Programme Variation forms should be lodged in the form of either the home address.

Withdrawal from Subjects or Course
Approval must be gained by making an appropriate list as described below before the date listed above.

Withdrawing from Subjects
(a) a student shall not be permitted to withdraw from a subject after the dates listed above;
(b) a student shall not be permitted to withdraw from a subject on more than two occasions.

If a student believes that a failure should not be recorded because of the circumstances leading to his or her failure, it is important that full details of these circumstances be provided with the application to withdraw.

Addition of Subjects
Students seeking to add a subject or subjects more than two weeks after the start of the semester should seek advice from the Faculty Office prior to lodging their application. In some instances Faculty policy or restrictions on class size preclude late enrolment and students should make every attempt to finalise their enrolment within the first two weeks of semester.

ENROLLMENT CONFIRMATION
Students should ensure that all details on their Confirmation of Program form are correct. Failure to do so could cause problems at examination time. Please note that it is the student's responsibility to:
(i) ensure that all enrolment details are correct and
(ii) to withdraw from a Semester II subject if a failure has been incurred in the Pre-requisite Semester I subject.

LATE ABSENCE
Undergraduate Awards
Subject to any provision concerning your course as set out in the schedule, a student in good academic standing in the course:
(a) may take leave of absence of one year from the course;
(b) with the permission of the Dean, may take leave of absence for two consecutive years from the course without prejudice to any right of the candidate to re-enrol in the course following such absence.

Students should also refer to the Rules Governing Undergraduate Awards, Rule 10 Leave of Absence, and the regulations regarding the definition of "good standing." You should also consult with your Faculty Office regarding any requirement to lodge a formal application for leave.

Research Higher Degrees
Leave of absence is not automatically granted, and candidates are required to lodge a written application for leave of absence prior to the end of the preceding semester. Applications should be lodged with the Postgraduate Studies Office for approval by the Graduate Studies Committee. Refer to the Masters and Doctoral Degree Rules. Scholarship holders, both undergraduate and postgraduate, who wish to take leave of absence from their course, or who do not intend to take a full-time program in any semester, are required to lodge a written application for approval for leave of absence after the dates listed above. Applications for suspension should be lodged with the Scholarships Office for approval by the Scholarships Committee. Refer to the Conditions of Award of your scholarship.

ATTENDANCE AT CLASSES
Where a student's attendance or progress has not been satisfactory, action may be taken under the Regulations Governing Unsatisfactory Progress.

In the case of illness or absence for some other unavoidable cause, a student should inform the Faculty Office prior to the start of the term. All applications for exemption from attendance at classes must be made in writing to the Head of the Department offering the subject. Where tests or term examinations have been missed, this fact should be noted in the student's record. The granting of an exemption from attendance at classes does not carry with it any waiver of the General Services Charge.

GENERAL CONDUCT
In accepting membership of the University, students undertake to observe the by-laws and other requirements of the University. Students are expected to conduct themselves at all times in a socially fitting manner. Unruly conduct, permitted during lectures, in examination rooms or in the University Library. Gambling is forbidden.

Memorandum of the academic staff of the University, senior administrative officers, and other persons authorized for the purpose have authority to request any student or improper conduct occurring in the University.

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

The Hunter Building Coursework is used for the specific purpose of displaying examination time-tables and other notices about examinations and final results.

EXAMINATIONS
Tests and assessments may be held in any subject from time to time. In the assessment of a student's progress in a university course, consideration will be given to laboratory work, tutorials and assignments and to any form of other tests conducted throughout the year. The results of such assessments and class work may be incorporated with those of formal written examinations.

EXAMINATION PERIODS
Formal written examinations take place on prescribed dates within the following periods. Saturdays may be included:

Mid-Year: 14 June - 6 July
End of Year: 8 to 26 November, 1993

Timetables showing the date and time at which individual examinations will be held will be displayed in the Hunter Building Concourse, specific Departmental noticeboards and other prominent locations on campus. Misreading of the timetable will not under any circumstances be accepted as an excuse for failure to attend an examination.

SETTING FOR EXAMINATIONS
Formal examinations, when prescribed, are compulsory. Students should consult the final timetable in advance to find out the date and time of their examinations.

LOCATION OF EXAMINATIONS
Seating allocation lists for examinations will be displayed about two weeks before the commencement of the examination period on the noticeboard of the Department running the subject and on a noticeboard outside the examination room on the day of the examination. Candidates should allow themselves plenty of time to get to the examination room so that they can take advantage of the 10 minutes reading time that is allowed before the commencement of the examination. Normally, entry into the examination room will be permitted from 15 minutes before the actual commencement of the examination writing time. This is to allow the candidate time to locate the allocated seat and complete the necessary attendance slip and any related necessary registration details before the commencement of reading time. During reading time no writing will be permitted. Materials which are taken into the examination will also be displayed outside the examination room. A complete day seat listing will also be displayed in the Great Hall Foyer and Hunter Building Foyer.

PERMITTED AIDS
Students can take into any examination any writing instrument, drawing instruments, protractors, logarithmic tables may not be taken in into an examination room unless the Examiner has instructed on the
examination or supplementary examination for any candidate; and
(c) to record in an examination return a judgement in respect of each candidate for submission to the Departmental Examinations Committee.

Departmental examinations of results

The Departmental Examinations Committee shall consider the examination committee’s recommendations for candidates and make recommendations to the Faculty Board as to the result to be recorded for each candidate.

Determination of results in subjects

10. (1) The recommendations of the Departmental Examinations Committee shall be presented to the Faculty Board by the Head of the Department or the representative of that Head, who shall be entitled to vary any recommended result if it is appropriate to do so on the request of the Faculty Board.

(2) The Dean shall ensure that in making its recommendations the Departmental Examinations Committee has considered any request for special consideration made by a candidate pursuant to Rule 13.

(3) Each Faculty Board shall consider the recommendations of the Departmental Examinations Committee and, taking into account any change in a recommendation under sub-rules (1) or (2), shall either:
(a) confirm the result;
(b) defer the decision pending the outcome of such other action as the Faculty Board deems appropriate.

Grading of results in subjects

11. The result awarded in a subject to a candidate shall be one of those in the list of approved results determined by the Academic Registrar from time to time.

Review of result in subject

12. (1) A candidate may apply for a review of any result awarded in a subject to that candidate.

(2) An application made under sub-rule (1) shall be made to the Academic Registrar on the prescribed form and shall be accompanied by the prescribed fee.

(3) A review of the result shall include a check:
(a) that all required parts of the examination have been included in the final grade;
(b) that the content of examination scripts has been fairly considered, including, wherever possible, a review of marks awarded by the examiner;
(c) that all marks contributing to the final grade have been correctly weighted and their total accurately obtained but shall not include any review of earlier assessments which have been made available to the candidate on a continuing basis throughout the examination.

(4) If the Faculty Board, on the recommendation of the Head of the Department concerned or the representative of that Head, changes the result following a review, the fee shall be refunded to the candidate.

Special Consideration

13. (1) A candidate who claims:
(a) study during the year or preparation for an examination;
(b) attendance at or performance in an examination has been affected by illness, disability or other serious cause, may request the circumstances in writing, supported by medical or other evidence to the Academic Registrar and request that they be taken into account in the assessment of the examination results of that candidate. Such request shall be made no later than:
(2) A request made pursuant to sub-rule (1)(a) shall be submitted by the candidate within seven days after any absence arising from the illness or event on which the request is based, or such longer period as the Dean of the Faculty in which the candidate is enrolled may accept.

(3) A request made pursuant to sub-rule (1)(b) shall be submitted by the candidate not later than three days after the date of the examination or within such further period as the Dean of the Faculty in which the candidate is enrolled may permit.

(4) Where a candidate is personally unable to take the action prescribed by this Rule, some other person may take such action on behalf of that candidate.

(5) The Academic Registrar may call for such other evidence in respect of the candidate’s request as may be reasonable required.

(6) A candidate who is granted special consideration may be required to attend a further examination or undertake further assessment to determine a result.

PART 4 - FORMAL WRITTEN EXAMINATIONS

Responsibility

14. The Academic Registrar shall be responsible for the administration and supervision of the formal written examination of the University.

Timetable for formal written examinations

15. (1) The Academic Registrar shall publish a timetable showing when and where formal written examinations will be held and it shall be the responsibility of candidates to attend these examinations prescribed for the subjects in which they are enrolled.

(2) Notwithstanding the provisions of Rule 15(1), where the Academic Registrar considers it justified on religious, conscientious or other grounds, special arrangements may be made to allow a candidate to attend a prescribed examination for a subject at a time and place different from that published in the examination timetable for that subject and examination.

(3) Subject to the provision of Rule 13(1)(b), candidates who fail to attend an examination which is show on the examination timetable will be deemed to have sat for and failed the examination.

Rules for formal written examinations

16. (1) Formal written examinations shall be conducted in accordance with the following rules:
(a) candidates shall comply with any instructions given by a supervisor relating to the conduct of the examination;
(b) before the examination begins candidates shall not read the examination paper until granted permission by the supervisor which shall be given ten minutes before the start of the examination;
(c) no candidate shall enter the examination room after thirty minutes from the time the examination has begun;
(d) no candidate shall leave the examination room during the first thirty minutes or the last ten minutes of the examination;
Special Consideration Requests

The granting of Special Consideration in a particular examination must be justified on religious, conscientious, humanitarian or other grounds, and may be refused if the supervisor, acting in the discretion of the Head of Department, considers it unjustified. All applications for Special Consideration must be supported by appropriate documentation.

Applications should be submitted in the form provided by the Department of Examination and Assessment within the prescribed time frame.

In the event of a request for Special Consideration being denied, the student has the right to appeal to the University Appeals Board. The Board's decision is final.

Final Examination Results

Final examination results are released after the conclusion of each semester. Students are notified of their results via email, and results are also available online in the MyAccount portal.

Appeals Against Re-enrolment Application

Students who have not achieved satisfactory performance in their initial attempt may apply for re-enrolment. The decision to re-enrol is made by the relevant faculty based on the documentation provided and may be subject to specific conditions.

In all cases, students are advised to contact the relevant faculty or department for further assistance and to understand the implications of their academic performance.
CHARGES

The General Services Charge (details below) is payable by all students.

In 1993, a fees and charges notice was sent to all continuing students in late January and to commencing students in mid February.

Students are expected to pay charges at any Commonwealth Bank. The last date for payment of charges with the Commonwealth Bank is 19 March 1993.

All other payments should be made directly to the University by cheque, or in person to the Cashier, level 2, Chancellorcy.

1. General Services Charge Per Annum

(a) Students proceeding to a Degree or Diploma $264

Post graduate, Newcastle University Union for the first year $35

(b) Non-Degree Students Newcastle University Union Charge $137

(c) External Students

The exact amount must be paid in full by the prescribed date.

2. Late Charges

Where the Fees and Charges Notice is lodged with all charges payable after the 26 February 1993 $50

3. Other Charges

(a) Examination under special supervision $15 per paper

(b) Review of examination results, per subject $25

(c) Replacement of Re-enrolment Kit $10

(d) Replacement of Student Card $5

(e) Statement of Matriculation Status for non-member of the University $10

(f) Replacement of lost or damaged Testimonial $30

(g) Academic Transcripts

(i) First copy $15

(ii) Second Copy No charge

(iii) Each additional copy $1

Note:

(i) Graduates will be provided with a copy of their transcript free upon notification of eligibility to graduate.

(ii) Transcripts will be issued on request free of charge to other tertiary education institutions.

4. Indebted Students

All debts outstanding to the University must be paid before enrolment can be completed—part payment of total amount due will not be accepted.

HIGHER EDUCATION CONTRIBUTION SCHEME (HECS)

The Higher Education Contribution Scheme (HECS) requires students to contribute towards the cost of their higher education. Each semester a student's HECS liability is calculated according to his or her student Load. The liability for an 80 credit point full-time load in 1993 is $2388.00. Student Loads are calculated as at the census date each semester i.e. 31st March in Semester One and 31st August in Semester Two. Withdrawn subjects are effective on or after the census date and failed subjects incur HECS liability.

Some courses are exempt from HECS charges and some students are exempt. Exemption from payment of the Higher Education Contribution (HECS) applies to:

- a fee-paying student in a “fee-approved postgraduate award course”
- a student in a “basic nursing education course”
- a “full-fee-paying overseas student”
- a “student who has paid the Overseas Student Charge”
- a “fully sponsored overseas student”
- a student in an “enabling course”
- a student in a “non-award” course
- a student who has been awarded a “HECS postgraduate scholarship”

Basic Nursing education courses will not be exempt from HECS after 1993. Currently enrolled students continuing their studies in such a course will also be liable for HECS in 1994 and in subsequent years. HECS is administered as part of the enrolment process. Students commencing a new course may select one of three sections on the HECS Payment Options Form.

On enrolment students must do one of the following:

(a) Elect to pay up front which would require payment of 75% of the fee before the semester begins. The balance to be paid by the end of the first semester. The payment due date is the end of the first week of classes.

(b) Elect to contribute towards the cost of their education under special supervision $15 per semester for the same subject.

(c) Pay by instalments. The instalments will be increased by 5%.

(iii) Parking on areas

(a) park on grassed areas, footpaths, roadways and

(b) park in a restricted area

$50

(c) park on staff and visitors

$100

(d) park on student or non-student parking

$150

(e) park on campus staff only

$200

(f) park in a car park reserved for disabled persons

$50

(g) any other breach of the traffic and parking rules

$10

Loans

Students who do not have sufficient funds to pay the General Services Charge should seek a loan from their bank, building society, credit union or other finance company.

As an application for a loan from the student loan funds is possible if there is no other assistance available. Some of these applications have been made and a list of these is available at the University's bank. The University can provide a list of other finance companies that are interested in providing loans to students.

DEFERRED OF CHARGES

A refund of the General Services Charge paid on enrolment will be made when the University notifies the Student Division of a complete withdrawal from studies under the following conditions:

(i) When a student notifies the University of a complete withdrawal from studies by the following dates, a refund will apply:

- Notification on or before 31 March

- Nil refund

- Notification after the end of the first semester

(ii) When a student notified in a program of studies offered only in Semester 2 notifies the University of a complete withdrawal from studies by the following dates, a refund will apply:

- Notification on or before 31 March

- Nil refund

- Notification after 31 March

Failure to pay charges at the commencement of each semester.

Payment of the General Services Charge is required before any other application for an award will be considered.
COMMUNITY

The University of Newcastle's new conservatory of music campus is available at the Conservatorium of Music campus in Auckland, New Zealand.

Gymnasium

The Chaplaincy Centres

Both centres to the Computer Teaching Building are open Monday to Friday 9.00am - 2.30pm. Opening: Monday, Wednesday and Friday 9.00am - 5.00pm. Tuesday and Thursday 9.00am - 6.00pm. First two weeks of semester 8.50am - 7.00pm.

LOST PROPERTY

Lost property may be collected from, or deposited at two locations on campus:

(a) Patrol Office, Great Hall between 9.00am - 4.00pm
(b) Property Services, 1110 between 9.00am - 4.00pm (Hunter Building)

The chapel is located within the Shortland Student Union.

CO-OP BOOKSHOP

The Co-op Bookshop is located within the Shortland Student Union. It stocks textbooks, general publications, computer discs and other software, audio-tapes, cassette. Discounts are available to Co-op members.

Hours of Opening

Monday to Friday: 9.00am - 4.00pm

An agency is located in the Hunter Building Union.

CASHIER

The cashiers' office on-campus is located on First Floor, Chancellery. The main branch of the University is located on the former University side of the campus. The cashiers' office on-campus is located on the former University side of the campus.

Chaplains: -

The Central Coast Campus and the Conservatorium of Music are both open from Monday to Friday 9.00am - 5.00pm.

Univenity (a) During Semester

Univenity Computing Services provides facilities for student use in teaching and research. The computer system is located on the Hunter University side of the campus.

Opening

Opening: Monday, Wednesday and Friday 9.00am - 5.00pm. Tuesday and Thursday 9.00am - 6.00pm. First two weeks of semester 8.50am - 7.00pm.

UNIVERSITY COMPUTING SERVICES

The University of Newcastle has made use of computers in teaching wherever this is appropriate. Computers are widely used in teaching teaching computer facilities which have been authorised for your use. If access is protected by a password, you must not share that password with anyone else.

The University's liability in the event of any damage or loss shall be limited to the fees and charges paid to the University for the use of the computing facilities which resulted in the loss or damage. You may use only those computing facilities which have been authorised for your use. If access is protected by a password, you must not share that password with anyone else.

You may not attempt to copy information belonging to other users without their express permission.

You may not attempt to interfere with the operation of the University's computing facilities or other facilities accessed by use of the University's computing facilities.

You may not use the University's computing facilities for commercial, offensive, harassing or illegal messages.

You may grant access to your own files by other users when appropriate.

You may use only those facilities which have been authorised for your use.

You may not use authorised software for personal gain.

You may use only those facilities which have been authorised for your use.

You may use only those facilities which have been authorised for your use.

You may use only those facilities which have been authorised for your use.

You may use only those facilities which have been authorised for your use.

You may use only those facilities which have been authorised for your use.

You may use only those facilities which have been authorised for your use.

You may use only those facilities which have been authorised for your use.

You may use only those facilities which have been authorised for your use.

You may use only those facilities which have been authorised for your use.

You may use only those facilities which have been authorised for your use.

You may use only those facilities which have been authorised for your use.

You may use only those facilities which have been authorised for your use.

You may use only those facilities which have been authorised for your use.

You may use only those facilities which have been authorised for your use.

You may use only those facilities which have been authorised for your use.

You may use only those facilities which have been authorised for your use.

You may use only those facilities which have been authorised for your use.

You may use only those facilities which have been authorised for your use.

You may use only those facilities which have been authorised for your use.

You may use only those facilities which have been authorised for your use.

You may use only those facilities which have been authorised for your use.

You may use only those facilities which have been authorised for your use.

You may use only those facilities which have been authorised for your use.

You may use only those facilities which have been authorised for your use.

You may use only those facilities which have been authorised for your use.

You may use only those facilities which have been authorised for your use.

You may use only those facilities which have been authorised for your use.

You may use only those facilities which have been authorised for your use.

You may use only those facilities which have been authorised for your use.

You may use only those facilities which have been authorised for your use.

You may use only those facilities which have been authorised for your use.

You may use only those facilities which have been authorised for your use.

You may use only those facilities which have been authorised for your use.

You may use only those facilities which have been authorised for your use.

You may use only those facilities which have been authorised for your use.

You may use only those facilities which have been authorised for your use.

You may use only those facilities which have been authorised for your use.

You may use only those facilities which have been authored for your use.

You may use only those facilities which have been authored for your use.

You may use only those facilities which have been authored for your use.

You may use only those facilities which have been authored for your use.

You may use only those facilities which have been authored for your use.

You may use only those facilities which have been authored for your use.

You may use only those facilities which have been authored for your use.

You may use only those facilities which have been authored for your use.

You may use only those facilities which have been authored for your use.

You may use only those facilities which have been authored for your use.

You may use only those facilities which have been authored for your use.

You may use only those facilities which have been authored for your use.

You may use only those facilities which have been authored for your use.

You may use only those facilities which have been authored for your use.

You may use only those facilities which have been authored for your use.

You may use only those facilities which have been authored for your use.

You may use only those facilities which have been authored for your use.

You may use only those facilities which have been authored for your use.

You may use only those facilities which have been authored for your use.

You may use only those facilities which have been authored for your use.

You may use only those facilities which have been authored for your use.

You may use only those facilities which have been authored for your use.

You may use only those facilities which have been authored for your use.

You may use only those facilities which have been authored for your use.

You may use only those facilities which have been authored for your use.

You may use only those facilities which have been authored for your use.

You may use only those facilities which have been authored for your use.

You may use only those facilities which have been authored for your use.

You may use only those facilities which have been authored for your use.

You may use only those facilities which have been authored for your use.

You may use only those facilities which have been authored for your use.

You may use only those facilities which have been authored for your use.

You may use only those facilities which have been authored for your use.

You may use only those facilities which have been authored for your use.

You may use only those facilities which have been authored for your use.

You may use only those facilities which have been authored for your use.

You may use only those facilities which have been authored for your use.

You may use only those facilities which have been authored for your use.

You may use only those facilities which have been authored for your use.

You may use only those facilities which have been authored for your use.

You may use only those facilities which have been authored for your use.

You may use only those facilities which have been authored for your use.

You may use only those facilities which have been authored for your use.

You may use only those facilities which have been authored for your use.

You may use only those facilities which have been authored for your use.

You may use only those facilities which have been authored for your use.

You may use only those facilities which have been authored for your use.

You may use only those facilities which have been authored for your use.

You may use only those facilities which have been authored for your use.

You may use only those facilities which have been authored for your use.

You may use only those facilities which have been authored for your use.

You may use only those facilities which have been authored for your use.

You may use only those facilities which have been authored for your use.

You may use only those facilities which have been authored for your use.

You may use only those facilities which have been authored for your use.
and Commerce, Education, Engineering, Medicine, Science and Mathematics and Social Sciences. It holds an extensive range of government publications, microforms, audiovisual media, archival materials and a Rare Book Collection. Specialist services are provided in Biomedicine, Law, and audiovisual media.

Other services include Loans, Short Loans, CD-ROMs, Online Searching, Reference Service, Inter Library Services, Archives.

The Short Loan Collection contains materials in high demand; students may borrow these for restricted periods.

The Biomedical Reading Room houses book, serials, pamphlets and reference material in Biomedical Sciences and Medicine; i.e. within the classification ranges Q16.5-01.6; 570-969. It also includes a special area, in Medical Reserve, which holds a variety of resources and equipment supporting the Faculty of Medicine’s innovative and highly resource-dependent curriculum.

Collections of resources are also maintained in seven country centre hospitals for the use of students in clinical learning stages: Tamworth, Orange, Lithgow, Dubbo. There is a formal agreement between the University and the area’s health board on the operation of the Gardner Library Service under which registered users of the Auchmuty and Gardner Libraries enjoy complete reciprocity.

The Law Reading Room houses books, serials, and primary law materials including law reports, acts, bills and regulations.

The Audiovisual section includes computer-based multimedia.

Further information and assistance can be obtained at the Auchmuty Library Reference Desk, phone 215851.

Huxley Library

Located in the Hunter Building, this Library supports the teaching and research requirements of the Faculties of Health Sciences, Nursing, Education and Art, Design and Communication. The Library has an extensive collection of audiovisual media and curriculum materials and receives all publications from the NSW Department of School Education.

Other services include: Loans, Reference Service, CD-ROMs, Online searching, Inter-Library Services, External Studies Service, Short Loans.

Borrowers may have access to the Short Loan Collection for restricted periods.

Further information and assistance can be obtained at the Huxley Library Reference Desk, phone 216453.

Newcastle Conservatorium of Music Library

The Library contains a collection of books, serials, scores, CDs, and sound recordings. It is located at the Newcastle Conservatorium of Music, on the corner of Gibson and Auckland Streets, in the city.

Currently only students and staff of the Conservatorium of Music can borrow from this Library. This includes Music Education students enrolled on the Callaghan campus.

Further information can be obtained by contacting the Librarian on 294133.

Central Coast Campus Library

The Library has a small but growing collection of books, serials and audiovisual media which supports teaching programmes in Arts, Business, Social Sciences and Education.

Further information can be obtained by ringing (043) 622077.

Gardiner Library Service

There are three separate libraries within the service: the John Hunter Hospital Branch, the Royal Newcastle Hospital Branch and the Mater Hospital Branch. The specific opening hours for these libraries will be published through NEWCAT and the appropriate library guides.

Further information can be obtained by ringing 213799.

Borrowing/Identification Cards

Students need an identification card to borrow. Please remember to carry your card with you at all times if you wish to borrow or use library facilities. If books are borrowed on your card by anyone else, you are responsible for them. Report any lost card to the Loans Desk staff immediately. Replacement cards are available for $5.00 from the Student Division Office in the Chancellery.

Borrowing Rights

For the details of loan conditions students should refer to the Library Guide and the various handouts published at the beginning of each year.

Books must be returned to the Library from which they were borrowed. A fine of $20.00 per item is levied when material is two days overdue. The fine will increase by 30 cents per day per item until the material is returned. Borrowing rights are also withdrawn. If library material is lost or damaged, the replacement cost, plus a processing fee, will be charged.

Access to Information

Library facilities include the computerised catalogue NEWCAT, which provides direct access to information about materials held in the Auchmuty, Huxley, Conservatorium, Central Coast and Area Health Libraries. The Auchmuty and Huxley Libraries also hold databases on CD-ROM to enable students and staff to find journal articles in their subject areas. The print versions of other indexes are available in the Reference Collection for manual searching. Some are on computerised databases available via telecommunication networks. AARNet, the Australian Academic Network, provides access to others.

Photocopying

Photocopying facilities are available in all University Libraries. The machines are operated by magnetic-strip cards which can be purchased in the Library. Credits for the photocopyers can be added to these cards from a dispenser as many times as needed. Users must observe the relevant Copyright Act provisions which are on display near the photocopyers.

Inter Library Services

This service is available to academic staff, higher degree and honours/ final year students. Material not held in the University of Newcastle Libraries may be obtained from other libraries within Australia or overseas. Books and serials readily available within Australia should arrive within two weeks. A Fast Track Service is available, at extra cost, for urgent requests.

Disabled Persons

All libraries provide access for disabled students and staff. Both Auchmuty and Huxley Libraries provide special services for physically disabled and visually impaired library users. Contact librarians in each Library will help with information about the library, parking, lift keys and other facilities such as the Braille Library, a Kurzweil machine which reads aloud from English printed text and access to large-print NEWCAT, the University Libraries’ online catalogue. Please phone 215851.

Hours of Opening

AUCHMUTY LIBRARY

Term Hours:

Monday to Thursday:

8.30am to 11.00pm

5.00pm 1.00am

Friday:

5.30pm to 7.00pm

Saturday & Sunday:

8.30am to 5.00pm

11.00pm 1.00am

Long Vacation:

Monday to Friday:

8.30am to 5.00pm

Semester Breaks:

Monday to Friday:

9.00am to 5.00pm

Saturday & Sunday:

9.00am to 5.00pm

Library Closed:

All public holidays

Conservatorium Library

Please contact the Library on 294133

Central Coast Campus Library

Please contact the Library on (043) 622077.
Students in this Block have professional skills attachments with medical registrars and the dermatology clinic.

**Block 9 - Country Block**

Country hospital attachments include Tamworth, Taree, Dubbo, Orange, Gosford, Maitland and Lismore.

Following the second rotation of Blocks 8 and 9 there is a one week period in Newcastle for consolidation and review.

**Block 10 - Elective**

This 8 week Block concludes Year 3.

**YEAR 4**

YEAR 4 consists of the subject MEDICINE IV. The year is divided into three clinical attachments of twelve weeks, rotating through major clinical specialities. Each group of students undertakes these attachments in a different order.

**MED401 MEDICINE IV 80cp**

**DOMAIN I — PROFESSIONAL SKILLS**

Clinical skills are now strengthened in the course of the clinical rotations. In addition, a program of video role-playing and discussion to develop skills in patient education and counselling is provided with special emphasis on problems of childhood, manipulation of diet and avoidance of alcoholism. These activities have links to population medicine.

**DOMAIN II — CRITICAL REASONING**

Previously developed skills in critical reasoning are applied to the care of patients on the wards.

**DOMAIN III — IDENTIFICATION, PREVENTION AND MANAGEMENT OF ILLNESS**

Students undertake three clinical rotations, each group of students in a different order. The attachments are as follows:

- **Attachment 1:** Paediatrics and Reproductive Medicine
- **Attachment 2a:** Surgery 1 (Orthopaedics and Urology) and Medicine 1 (Ageing, and Respiratory or Gastroenterology) (Haematology) and Medicine 2 (Cardiology, and Endocrinology or Rheumatology or Nephrology)

A ten day General Practice workshop is held at the end of these rotations.

**YEAR 5**

YEAR 5 consists of the subject MEDICINE V. This year is divided into four clinical attachments of seven weeks, followed by an eight week elective attachment. Rotations through major specialities continue.

**MED521 MEDICINE V 80cp**

**DOMAIN I — PROFESSIONAL SKILLS**

Clinical skills are consolidated in each of the clinical rotations. In addition, there is a program to develop skills in the education of patients with respect to their disease and their treatment with a view to improving understanding and compliance; in the breaking of bad news and the explanation of the implications of diagnostic tests and regimens.

**DOMAIN II — CRITICAL REASONING**

A particular emphasis on the assessment of the effectiveness of diagnostic tests and regimens for the management of illness.

**DOMAIN III — IDENTIFICATION, PREVENTION AND MANAGEMENT OF ILLNESS**

Students undertake four clinical rotations, each group of students in a different order. During the general practice component of the fourth attachment, students are attached to individual general practitioners outside the Newcastle region to consolidate their skills in managing problems in a primary care setting.

- **Attachment 1:** Medicine
- **Attachment 2:** Paediatrics/Reproductive Medicine

**DOMAIN IV — POPULATION MEDICINE**

A sequence of activities integrated with those of Domain III and with particular emphasis on strategies for the prevention of cancer, paediatric screening, and additional selected topics.

**DOMAIN V — SELF-DIRECTED LEARNING**

Students gain experience with the arrival of a baby in a family and submit a "baby in the family" report.

Students also undertake a Medical Independent Learning Exercise (MILE) related to a patient problem which is determined by the clinical attachment being undertaken at the time of assessment.

The exercise is designed to evaluate how well students can formulate questions relating to their patient problem, use available resources systematically and interpret that information for the benefit of the patient. Students are encouraged to practise these skills during all of their attachments.

**Timetable Commitments**

The timetable for Medicine IV is organised in a similar fashion to that for Medicine V with clinical attachments and tutorials on Mondays, Tuesdays, Fridays and Wednesday and Thursday mornings, and Fixed Resource Sessions organised for Wednesday and Thursday afternoons.
SECTION FIVE

Attachment 3: Surgery (Oncology and Anaesthesia/Intensive Care)
Attachment 4: General Practice (2 weeks)
Psychiatry (5 weeks)

DOMAIN IV - POPULATION MEDICINE

Continuation of the program of activities in Year 3 with emphasis now on diabetes, alcoholism, cardiovascular disease, ageing, dementia.

DOMAIN V — SELF-DIRECTED LEARNING

An 8 week elective attachment concludes Year 5 and is structured and governed in the same way as the elective in Year 3.

Timetable Commitments

Students are expected to attend all appropriate clinical activities (e.g. ward rounds, operating theatre) on Monday, Tuesday, Wednesday and Friday. Students may also be rostered on any night of the week and on weekends. Students may be attached to country hospitals for clinical activities.

Every Thursday students attend Fixed Resource Sessions scheduled between 8.30 a.m. and 5.00 p.m., covering topics in Domain II (Critical Reasoning), Domain III (Identification, Prevention and Management of Illness) and Domain IV (Population Medicine). During one of their first two rotations students also spend approximately two hours per week working in small groups to discuss videotapes they have made on various Domain I International Skills topics. Practical Therapeutics is scheduled from 5.00 p.m. - 6.00 p.m. each Thursday.

SECTION FIVE

BACHELOR OF MEDICINE PROGRAM

General Summative Assessment Guidelines

1. Assessment is by Domain. All Domains rank equally in regard to student progress.
2. Summative assessment is subject to the same general conditions of examinations and unsatisfactory progress as any other examination in the University. Students should refer to the University’s By-laws and Regulations for details. (Volume 1, Part 2, of the University of Newcastle Calendar).
3. Attendance at Prescribed First and Final Assessments is Compulsory:
   (i) Failure to attend first assessment will result in a mark of Not Satisfactory, unless there are extenuating circumstances. Students who do not attend first assessment will be permitted one final assessment in the final assessment period.
   (ii) Failure to attend final assessment will result in a final result of Not Satisfactory for that assessment, unless there are extenuating circumstances; i.e. no further assessment will be permitted.
   (iii) Misreading of the timetable will not be accepted under any circumstances as an excuse for failure to attend an assessment.
   (iv) For short cases and long cases only, students who attend first assessment but are deemed Not Satisfactory will be permitted a second assessment in the relevant instrument in that Domain, in the second assessment period. Students found Not Satisfactory at second assessment will be permitted one final assessment in that instrument in the final assessment period. Students may choose not to undertake second assessment and sit for final assessment only. In this case students MUST notify the Faculty in writing prior to the scheduled assessment period. An alternative second assessment date will not be available.
   (v) For Medicine I Group Task only, student groups Not Satisfactory at first assessment will be permitted a second assessment in the relevant instrument. Student groups found Not Satisfactory at second assessment will be permitted one final assessment in that instrument. Attendance at second assessment for those group assessments is compulsory.
4. Submission of Reports by a Stipulated Date is Compulsory:
   (a) If the report is a pre-condition for assessment in a Domain (for example, Certifications in Domain I) then:
      (i) Failure to submit the appropriate document(s) by the stipulated date will result in a mark of Not Satisfactory at first assessment for that certification and for the dependent instrument in that Domain, unless there are extenuating circumstances. The appropriate and satisfactory certification must be submitted prior to the relevant final assessment period. Students will then be permitted to undertake final assessment in the dependent instrument. Note: If the dependent instrument is a short or long case the appropriate and satisfactory certification must be submitted prior to the relevant first assessment.
   (b) If the report is itself a summative assessment instrument then:
      (i) Failure to submit the report by the stipulated date will result in a mark of Not Satisfactory at first assessment, unless there are extenuating circumstances. Students will be permitted one final assessment in that instrument, to be submitted by the final assessment date detailed in the relevant Year Assessment Guidelines.
      (ii) Failure to submit the report by the stipulated date for final assessment will result in a final mark of Not Satisfactory for that instrument; i.e. no further assessment will be permitted.

Notes for (a) and (b): Misreading of the stipulated date will not be accepted under any circumstances as an excuse for failure to submit a report. All reports and certifications must be lodged in the appropriate box on Level 6, Medical Sciences Building or in the Student Common Room in the John Hunter Hospital by 5.00 p.m. on the date stipulated, except for:
   (i) 48 Hour Task, Years 2 and 4: to be submitted to the Clinical Attachment Supervisor or Administrative Officer by the date and time specified at the time of the assessment.
   (ii) Clinical Supervisors’ Report Forms, Years 4 and 5: to be submitted to the relevant Discipline Secretary by 5.00 p.m. on the Monday following the end of each rotation.
5. All formal written assessments will be conducted on a closed book basis unless otherwise specified, i.e. students may not take into the assessment room any bag, paper, book, written material, device or aid other than any that may be specified for the particular assessment.
6. Rating forms to be used in assessments will be made available to students at appropriate times prior to the assessments. It is the student’s responsibility to be familiar with them.
7. A specific timetable for each assessment will be posted on assessment noticeboards at least one week in advance of the assessments. Assessment notices will not be posted on general notice boards. It is the student’s responsibility to ensure they are aware of all assessment requirements, dates, locations and so on.
8. Assessment results will be posted on the assessment noticeboards. It is the student’s responsibility to check these notice boards in time for final assessments. An official final notice list will be sent to students for confirmation of final results.
9. Locations of assessment notice boards are: Level 6, Medical Sciences Building; the Student Common Room, John Hunter
Assessment Guidelines 1993

MEDICINE I

DOMAIN I PROFESSIONAL SKILLS

1. Certification
Each student must submit a completed certification sheet by the due date specified on the Year 1 schedule of key dates, on which tutors certify that the student has attended and can satisfactorily carry out the prescribed tasks. This is a pre-requisite to being permitted to undertake the Long Case. The certification sheet is at the end of the Block 3 Professional Skills handout.

2. Long Case
Each student will undertake a long case assessment, over 65 minutes per case. The student will be given a maximum of two hours to plan the case presentation and 15 minutes for the case presentation and viva voce (oral) assessment.

3. Group Task
Each student will complete a “practice problem” in a given three-hour period. The first 1.5 hours will be observed by the assessors. The Group Task assesses the ability of the group to interact together, to generate hypotheses, to plan an enquiry strategy, and to define learning goals. The group must submit a written report at the end of the task.

DOMAIN II CRITICAL REASONING
Each student will undertake a written assessment of up to two hours in which they will analyze research literature which will be given to them at least one week before the assessment.

DOMAIN III IDENTIFICATION, PREVENTION AND MANAGEMENT OF ILLNESS

Students will undertake up to 12 hours of written assessments. The following assessment instruments may be used:

(i) Modified Essay Questions (MEQs) - a series of short, integrated and sequential questions relating to a particular patient problem.
(ii) Short Answer Questions (SAQs) - a series of short independent questions each relating to important concepts studied during the course of the year.
(iii) Short Essay Questions - independent short essays on given topics.
(iv) Multiple Choice Questions (MCQs) - a series of short questions and answers from which the correct answer(s) is/are selected.
(v) Objective Structured Clinical Assessments (OSCA) - a series of separate procedures, requiring observation and interpretation of some practical resource or the performance of some practical task using medically relevant equipment; the assessment for this instrument may, in some cases, be in the form of a viva.

DOMAIN IV POPULATION MEDICINE

1. Reports
Each student is required to submit two reports during the first assessment period. Each report must be no longer than 2,000 words. This word limit does not include references and tables, but these should be limited to another three A4 pages only. References and tables must not be included in the body of the report text but appended in a separate section at the end.

2. Written Assessment
Each student will undertake an individual written assessment of up to two hours duration in which they will be required to answer six essay format questions.

DOMAIN V SELF-DIRECTED LEARNING

1. Students' Own Learning Viva
Students will be given a 24-hour period after the Group Task to investigate a learning goal of their choice, identified during the Group Task. An individual 30-minute viva assessment will then be held, during which students may consult their own notes.

2. Medical Informatics Skills Task
Each student will be given 30 minutes to carry out a defined task to demonstrate the application of basic skills learned during the Medical Informatics course. Students may present for assessment at any of the prescribed times up to the beginning of the first assessment period by negotiation with the Medical Informatics Unit, and will be given two opportunities to achieve a Satisfactory result.

CRITERIA FOR COMPETENCE AND DETAILS OF SECOND AND FINAL ASSESSMENT
Competence is determined by instrument. That is, students must be satisfactory in each component of each Domain.

DOMAIN I

1. Certification
Students who do not submit the completed Certification by the due date will not be permitted to undertake the first assessment Long Case, unless there are extenuating circumstances. The appropriate and satisfactory certification must be submitted prior to the Long Case first assessment period. Students will then be permitted to undertake second assessment Long Case in the first assessment period. Students whose certification is deemed Not Satisfactory will not be permitted to undertake the Long Case first assessment and will be required to repeat the process of certification so that it is Satisfactory prior to the first assessment period. Students will then be permitted to undertake second assessment Long Case in the first assessment period.

2. Long Case
Students who are Not Satisfactory in the first Long Case will be required to undertake a second Long Case. Students who are Not Satisfactory in the second Long Case will be required to undertake a final Long Case. Second and final Long Cases will be in the same format as the first assessment.

3. Group Task
If a group is considered Not Satisfactory on the Group Task assessment it will be required to undertake second assessment Group Task. The group is still Not Satisfactory if it will be required to undertake one final Group Task.

DOMAIN II

Any student found Not Satisfactory will be required to undertake final assessment in the same format as first assessment.

DOMAIN III

Students considered Not Satisfactory in the Domain III assessments will be required to undertake final assessment of up to 12 hours, in the same format as first assessment.

DOMAIN IV

1. Reports
Students who do not submit a report by the due date will be deemed Not Satisfactory at first assessment and will be required to submit the relevant report(s) for one final assessment by the final assessment date.

Students who submit a report that exceeds the stipulated length will be judged Not Satisfactory at the first assessment and will be required to reduce the length of the report and re-submit the report for one final assessment by the final assessment date.

Students found Not Satisfactory in one or both of the reports will be required to re-submit the amended appropriate report(s) for one final assessment by the final assessment date.

2. Written Assessment
Students considered Not Satisfactory in the Domain IV written assessments will be required to undertake one final assessment by written instruments.

DOMAIN V

1. Students' Own Learning Viva
Students found Not Satisfactory will be required to undertake one final assessment in the same format as first assessment.

2. Medical Informatics Skills Task
Students found Not Satisfactory in Medical Informatics will be required to undertake one final assessment in the same format as the first assessment.

MEDICINE I KEY DATES, 1993

<table>
<thead>
<tr>
<th>First Assessment</th>
<th>Domain</th>
<th>Instrument</th>
<th>Due Date/Assessment Period</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Certification</td>
<td>Long Case</td>
<td>Group Task</td>
<td>1/11/93 - 8/11/93 - 19/11/93 - 18/10/93 - 22/10/93</td>
</tr>
</tbody>
</table>
MEICINE II

DOMAIN I PROFESSIONAL SKILLS

1. Certification
   Students must be certified by clinicians as having certain professional skills:
   (i) Block 4 - Cardiovascular and Respiratory systems
   (ii) Block 5 - Neurology and Psychiatry
   (iii) Block - Endocrinology and Haematology
   (iv) General Practice - Logbook of attendance

   Appropriate documents are to be found in the Professional Skills handouts relating to each Block. Students must submit the appropriate documents by the dates nominated in the schedule of key dates for Year 2. This is a pre-requisite to being permitted to undertake the Long Case.

2. Long Case
   Each student will be required to take a history from, and examine a patient during a 30 minute period. The student will be observed and will be required to make a short case presentation summarizing the patient’s problem. The examiner should seek clarification of clinical points relevant to the particular patient, but should not explore detailed knowledge of the specific disorders, crises of management. Discussion should not exceed 10 minutes duration and should be followed by 5 minutes feedback.

3. General Practice
   Each student must submit by the nominated date 8 tasks as described in the General Practice document distributed to students prior to commencement of the General Practice attachment. These tasks will assess understanding of the process of general practice.

DOMAIN II CRITICAL REASONING

Each student will undertake a written assessment of up to 3 hours in which they will analyse given research literature.

DOMAIN III IDENTIFICATION, PREVENTION AND MANAGEMENT OF ILLNESS

Students will undertake up to 13 hours of written assessments. The following assessment instruments may be used:
   (i) Modified Essay Questions (MEQs)
   (ii) Short Answer Questions (SAQs)
   (iii) Short Essays
   (iv) Multiple Choice Questions (MCQs)
   (v) Objective Structured Clinical Assessments (OSCA)

DOMAIN IV POPULATION MEDICINE

1. Group Report
   Each group will be required to submit a report of not more than the equivalent of 16 x A4 pages, typed and single spaced.

2. Group Presentation
   Each group will be required to make a 15 minute presentation, followed by 5 minutes of question time.

3. Individual Viva Assessment
   Each student will be required to undertake a 10 minute viva.

DOMAIN V SELF-DIRECTED LEARNING

1. 48 Hour Task
   Each student will identify an own-learning task immediately following their Long Case. 48 hours later students will be required to submit a 1000 word report, plus a list of the resources consulted during the 48 hours (including books, journals and people). Students may also be required to present for a supplementary viva to clarify any aspect of the report, at the discretion of the assessor. Full details of the format of the 48 hour task report are contained in a separate document.

2. Extended Own Learning Task
   By the end of week 4 of Block 4 students will be required to have registered with the Chair, Domain V, topics or topics for independent study. The topic of the task will be decided in consultation with the Domain V Chair, but may include remodelling in specific areas of the curriculum. A suitably qualified person must be nominated as the supervisor for each topic. The learning contract must be signed both by the student and the supervisor(s). Students will be required to submit to their supervisor a written report (minimum 1000 words) for marking. The marked report together with confirmation from their supervisor (on the appropriate contract) that they have undertaken the task satisfactorily must be submitted to the Faculty by the specified date.

CRITERIA FOR COMPETENCE AND DETAILS OF SECOND AND FINAL ASSESSMENTS

COMPETENCE is determined by instrument. That is, students must be Satisfactory in each component of each Domain.

DOMAIN I

1. Certification
   Students who do not submit the required certification(s) by the due dates will not be permitted to undertake the first assessment Long Case unless there are extenuating circumstances. The appropriate and satisfactory certification(s) must be submitted prior to the Long Case first assessment period. Students will then be permitted to undertake second assessment Long Case in the first assessment period. Students whose certification is submitted by the due date but is deemed Not Satisfactory will not be permitted to undertake the Long Case first assessment and will be required to repeat the process of certification so that it is Satisfactory prior to the first assessment period. Students will then be permitted to undertake second assessment Long Case in the first assessment period.

   Students deemed Not Satisfactory at second assessment in the Long Case during the first assessment period, may choose to attempt final assessment in the Long Case during the second assessment period, provided that the student informs the year co-ordinator of this decision in writing at least one week before the commencement of the second assessment period. If the student was also deemed Not Satisfactory in the 48 hour task, the final assessment in this instrument must be attempted at the same time as the final assessment in the Long Case. A student who does not produce the appropriate evidence of attendance in General practice will be required to make his/her own arrangements to attend a General Practice to enable the attendance record to be completed.

2. Long Case
   Students found Not Satisfactory in the Long Case will be required to undertake second and, if necessary, final assessment. These assessments will be in the same format as the first assessment.

3. General Practice
   A student whose tasks are considered to be Not Satisfactory will be required either to amend and re-submit the task book or to submit new material as prescribed by the assessor(s), for one final assessment.

   Students who do not submit the task book by the nominated date should refer to the General Summative Assessment Guidelines, paragraph 4, Section (b). The General Practice Logbook must be completed and submitted by the specified date for final assessment.

DOMAIN II

Students considered Not Satisfactory in the Critical Reasoning assessment will be required to undertake one final assessment of up to 3 hours, in the same format as first assessment.

DOMAIN III

Students considered Not Satisfactory in the Domain III assessments will be required to undertake one final assessment of up to 3 hours, in the same format as first assessment.

DOMAIN IV

1. Group Report
   Students groups found Not Satisfactory on their group report will be required to submit one further report by the final assessment date. No further assessment will be permitted.

2. Group Presentation
   Student groups found Not Satisfactory on their group presentation will be required to re-present within one month of the first presentation. No further assessment will be permitted.

3. Individual Viva Assessment
   Students found Not Satisfactory in the viva assessment will be required to undertake one final assessment in the same format as the first assessment.

DOMAIN V

1. 48 Hour Task
   Students who do not submit their report by the stipulated date and time will be deemed to be Not Satisfactory at first assessment, unless there are extenuating circumstances. Students will be permitted one new task as final assessment in the same form as the first assessment, to be conducted in the second or final assessment period. Students wishing to
1. Certification
   Is required for:
   (a) Ophthalmology, E.N.T., Dermatology, Theatre Scrubbing.
   (b) Specified procedures
   (c) Specified observations
   (d) Short cases

Each student must submit a complete and approved certification for these items as specified in the Year 3 Logbook of Professional Skills.

2. Country Term Logbook

The logbook itself must be submitted for summative assessment of content of the specified procedures and specified observations (i.e. (b) and (c) above).

3. Discharge Summary and Referral Letter

Students are required to submit for summative assessment a discharge summary and referral letter as described in the country term handbook.

4. Short Cases

Students will be summatively assessed in two short cases (additional to the certification that they have satisfactorily completed three short case examinations).

The short case assessments will be of 20 minutes duration and students will be asked to demonstrate a limited examination of a patient and present the findings to the assessor, who will ask questions about the rationale for the examination undertaken, the pathological or physiological events which are being observed, and the pathophysiology of the specific patient's condition.

Summative short case assessments will be held in two of the seven specified systems. Whether this will occur in Newcastle or the country will vary between blocks and country centres.

5. Long Case

Each student will be required to undertake a long case. Up to 60 minutes will be allowed with a patient, the first 15 minutes of which will be observed. After a further 20 minutes the student will undertake a 30 minute case presentation/viva.

6. Specific Counselling

6.1 Certification

Each student will be required to submit a form signed by their tutor indicating completion of four specified videotapes during their second Newcastle Block. This is a pre-requisite to being permitted to undertake summative assessment in specific counselling.

6.2 Assessment

Summative assessment will be with a simulated patient and will be videotaped. The duration of the interview will be up to 20 minutes.

MEDICINE II KEY DATES, 1993

First Assessment

<table>
<thead>
<tr>
<th>Domain</th>
<th>Instrument</th>
<th>Due Date/Assessment Period</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>Certification</td>
<td>17/11/93 - 19/11/93 Block 4</td>
</tr>
<tr>
<td>II</td>
<td>Written Assessment</td>
<td>8/11/93 - 19/11/93 Block 5</td>
</tr>
<tr>
<td>III</td>
<td>Written Assessment</td>
<td>811193 - 19/11/93 Block 6</td>
</tr>
<tr>
<td>IV</td>
<td>Group Report</td>
<td>29/1/93</td>
</tr>
<tr>
<td>V</td>
<td>Group Presentation</td>
<td>19/1/93</td>
</tr>
<tr>
<td></td>
<td>Individua l Viva</td>
<td>8/11/93 - 19/11/93 Block 1</td>
</tr>
<tr>
<td></td>
<td>48 Hour Task</td>
<td>8/11/93 - 19/11/93 Block 2</td>
</tr>
<tr>
<td></td>
<td>Extended Own Learning Task</td>
<td>26/3/93</td>
</tr>
<tr>
<td></td>
<td>Topic Registrations</td>
<td>26/3/93</td>
</tr>
</tbody>
</table>

Second Assessment (Long Case only)

Long Case second assessment will be held in the period 6/12/93 - 10/12/93.

Final Assessment

Final assessments will be held in the period 3/1/94 - 7/1/94, except for:

(i) Extended Own Learning Task: Date to be set by the Chair, Domain V.
(ii) Domain IV Group Report: to be submitted by 3/1/94.
(iii) Long Case and 48 hour task where students elect to undertake final assessment in the second assessment period (6/12/93 - 10/12/93).
(iv) Task book (General Practice): due by 3/1/94.
DOMAIN V

1. Extended Own Learning Task

- Students who do not have an Extended Own Learning Task topic approved by the due date or do not submit the report by the due date will be deemed Not Satisfactory at first assessment, unless there are extenuating circumstances. Students will be permitted one final assessment to be completed by the due date set by the Chair, Domain V.
- Students whose report is submitted by the due date but is deemed to be Not Satisfactory will be required to submit one further report one month after the first report has been returned to the student. No further assessment will be permitted.

2. Elective

- Students who do not submit an elective contract and/or report by the stipulated dates will be deemed not satisfactory at first assessment unless there is good reason for the omission. Students who do not submit a contract and/or report which is Not Satisfactory will be asked to resubmit the report by a set date. If there are exceptional circumstances, students who do not meet this date, or who submit a second Not Satisfactory contract or report, will be considered to have failed the elective requirements.

MEDICINE III KEY DATES, 1993

First Assessment

<table>
<thead>
<tr>
<th>Domain</th>
<th>Instrument</th>
<th>Due Date/Assessment Period</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>Certification: Specialities Procedures, Observations and Short Cases</td>
<td>16/7/93 or 10/9/93*</td>
</tr>
<tr>
<td></td>
<td>Country Term Logbook</td>
<td>16/7/93 or 10/9/93*</td>
</tr>
<tr>
<td></td>
<td>Discharge Summary and Referral Letter</td>
<td>16/7/93 or 10/9/93*</td>
</tr>
<tr>
<td>II</td>
<td>Short Cases</td>
<td>During Country Block</td>
</tr>
<tr>
<td></td>
<td>Long Case</td>
<td>20/9/93 to 8/10/93</td>
</tr>
<tr>
<td>II</td>
<td>Certification: Specific Counselling Interview</td>
<td>4/6/93 or 13/9/93*</td>
</tr>
<tr>
<td>III</td>
<td>Written Assessment</td>
<td>10/6/93 or 19/8/93*</td>
</tr>
<tr>
<td>III</td>
<td>Written Assessments</td>
<td>20/9/93 to 8/10/93</td>
</tr>
<tr>
<td>IV</td>
<td>Trauma Report</td>
<td>During Country Block</td>
</tr>
<tr>
<td>IV</td>
<td>Chronic Disability Presentation</td>
<td>20/9/93 - 8/10/93</td>
</tr>
<tr>
<td>V</td>
<td>Extended Own Learning Task: Topic Registration and Approval</td>
<td>5/3/93</td>
</tr>
</tbody>
</table>

DOMIN IV

Students found Not Satisfactory will be required to undertake final assessment in the same format as first assessment.

MEDECINE IV

DOMIN I - PROFESSIONAL SKILLS

1. Certification

1.1 Clinical Supervisors' Reports (C.S.R.)

Students are required to submit clinical supervisors' reports on the forms provided for each clinical attachment, i.e. 4 medicine, 3 surgery, 1 paediatrics, and 1 reproductive medicine. These must be submitted to the discipline concerned by the times specified on the relevant documents. Students are advised to discuss their progress with their clinical supervisor during their attachments so that any problems seen by the supervisor can be addressed.

1.2. Doctor/Patient Interactions

Students will be required to carry out information transfer exercises on video tape for discussion in group tutorials. Tutors will be required to certify on the appropriate form that this has been done.

Note: There will be no formal summative assessment of interactional skills in Year 4. The content of these exercises will be available for assessment when these students are assessed in Doctor/Patient Interactions in Year 5.

2. Long Cases

Each student will undertake four long cases during the year. These cases will relate to the student's clinical attachments (Medicine, Surgery, Paediatrics and Reproductive Medicine). The first long case of the year will be observed and will assess history taking, physical examination, case presentation and discussion, and case write-up. For the remaining three long cases, students who have been deemed Satisfactory at the first long case will have an assessment which will centre around case presentation and discussion. Assessors reserve the right to observe students but this will not be the major component of the assessment.

DOMIN II - CRITICAL REASONING

Each student will undertake written assessment of up to 3 hours.

DOMIN III - IDENTIFICATION, PREVENTION AND MANAGEMENT OF ILLNESS

Students will undertake up to 10 hours of written assessments in the basic and clinical sciences. The following assessment instruments may be used:

(i) Modified Essay Questions (MEQs)
(ii) Short Answer Questions (SAQs)
(iii) Short Essay Questions
(iv) Multiple Choice Questions (MCQs)
(v) Objective Structured Clinical Assessments (OSCA)

The summative assessment topics will be a reflection of topics covered throughout the year and included in handouts such as
SECTION FIVE

BACHELOR OF MEDICINE PROGRAM

enabling objectives. They will not necessarily be identical, 
however, with formative assessment items or enabling objectives.

DOMAIN IV - POPULATION MEDICINE

Assessment will be by a twenty minute viva.

DOMAIN V - SELF-DIRECTED LEARNING

1. Baby in the Family Report

Students are required to submit a "Baby in the Family" Report which should not exceed 3,000 words. Details are contained in the Paediatrics and Reproductive Medicine handbooks and will be elaborated at the start of the Paediatrics/Reproductive Medicine term.

2. Medical Independent Learning Exercise (MILE)

This is designed to test how well the student can formulate relevant questions in relation to a patient problem, use available resources in a systematic and sensible fashion and interpret that information for direct benefit to the patient.

A task relating to the clinical attachment through which the student is rotating at the time will be distributed to each student. Students will be kept under supervision for 1 hour while they complete the first part of the task (refining their questions and recording their initial enquiry strategies). They then have 48 hours to submit the report. The report should be no more than 2,000 words in length.

CRITERIA FOR COMPETENCE AND DETAILS OF SECOND AND FINAL ASSESSMENTS

Competence is determined by instrument. That is, students must be Satisfactory in each component of each Domain.

DOMAIN I

1. Certification

Students who do not submit the certifications by the due dates should refer to the General Summative Assessment Guidelines, paragraph 4, section (a).

1.1 Clinical Supervisors' Reports (C.S.R.)

- Medicine and Surgery

There are 3 attachments in surgery and 4 in medicine. For each attachment:

(a) A student who is Satisfactory in all attachments will proceed through the prescribed assessment process.

(b) A student with one Not Satisfactory result will be interviewed by the appropriate discipline representative, and may be required to sit for an additional observed long case.

(c) A student with 2 or 3 Not Satisfactory results will be reviewed by the discipline representative(s), in consultation with the Year Co-ordinator, and will be required to sit an additional observed long case assessment(s) in the appropriate discipline(s).

(d) A student with 4 or more Not Satisfactory results will be deemed to be Not Satisfactory in Domain 1. Second Assessment. The student will proceed through the other rotations of the year if this has not already been done, but will be required to undertake second assessment by long cases in the disciplines found to be Not Satisfactory.

Paediatrics and Reproductive Medicine

Students who are Not Satisfactory in Paediatrics or Reproductive Medicine will be reviewed in consultation with the Year Co-ordinator and the student may be required to undertake additional observed long case assessment.

The Faculty reserves the right to require a student to remediate in a specific discipline in which they are Not Satisfactory.

1.2 Doctor/Patient Interactions

Students are required to carry out the prescribed video tape exercises and attend tutorials. Tutors will certify to this effect on the appropriate form, found with the Clinical Supervisors Report forms. Students who do not submit this certification by the due date will be required to complete video tapes and discuss their content with the satisfaction of the Doctor Chair (or nominee). This must be done before the final assessment period.

2. Long Cases

Students must be Satisfactory in the observed component of one long case. Once a student has been rated Satisfactory in this component he/she will not be rated summatively for history taking and physical examination in subsequent long cases. If a student is Not Satisfactory in the observed component at first attempt, a long case at the end of the next student term will be observed. This will be regarded as a Second Assessment.

Any student who is still Not Satisfactory will have a final summative assessment at the end of the final term of the year. If a student is Not Satisfactory on all three summatively observed components no further assessments will be permitted.

A case write-up will be required as part of the first long case of the year. The format should be similar to that of the General Summative Assessment Guidelines, paragraph 4, section (a).

A student with one Not Satisfactory result will be interviewed by the appropriate discipline representative, and may be required to sit an additional observed long case.

A minimum level of competence for the long cases is a Satisfactory performance in three or more of them. The criteria for Satisfactory in each long case is an S performance in all components assessed. In the instance of the observed long case, the components are history taking, physical examination, interactions skills, case presentation, case discussion ± case write-up, if required. In the unobserved long case the components are case presentation, case discussion ± case write-up, if required.

2. MILE

Students who do not submit their MILE report on time and are found to be Not Satisfactory will be required to re-submit the amended report by the date specified by the Year Co-ordinator.

Students who do not submit a Baby in the Family Report by the date specified by the Year Co-ordinator and will proceed through the General Summative Assessment Guidelines, paragraph 4, section (b).

Students whose Baby in the Family Report is submitted on or before the date specified by the Year Co-ordinator will proceed through the General Summative Assessment Guidelines, paragraph 4, section (b).

The performance of students Not Satisfactory in one of the four long cases will be reviewed, and the student may, taking other results and Supervisor's Reports into account, be required to undertake second and, if necessary, final assessment by long case in one or other of the disciplines concerned. The decision will be determined on a case by case basis by the Year Committee. Students who have been Not Satisfactory early in the year and show evidence of good improvement usually will not be required to be re-assessed. If a student is Not Satisfactory in three of the four long cases he/she will be required to undertake final assessment in all of the disciplines concerned. If a student is Not Satisfactory at all four long cases, no further assessment will be permitted.

DOMAIN II

Students considered Not Satisfactory in the Domain II assessments will be required to undertake one final assessment of up to 3 hours, by written instruments.

DOMAIN III

Students considered Not Satisfactory in the Domain III assessments will be required to undertake final assessment of up to 10 hours in the same format as first assessment.

DOMAIN IV

Students found Not Satisfactory in Domain IV will be required to undertake final assessment in the same format as the first assessment.

DOMAIN V

1. Baby in the Family Report

Students whose Baby in the Family Report is submitted on time and found to be Not Satisfactory, will be required to re-submit the amended report by the date specified by the Year Co-ordinator.

Students who do not submit a Baby in the Family Report by the date specified by the Year Co-ordinator will proceed through the General Summative Assessment Guidelines, paragraph 4, section (b).

The performance of students Not Satisfactory in one of the four long cases will be reviewed, and the student may, taking other results and Supervisor's Reports into account, be required to undertake second and, if necessary, final assessment by long case in one or other of the disciplines concerned. The decision will be determined on a case by case basis by the Year Committee. Students who have been Not Satisfactory early in the year and show evidence of good improvement usually will not be required to be re-assessed. If a student is Not Satisfactory in three of the four long cases he/she will be required to undertake final assessment in one of the disciplines concerned. If a student is Not Satisfactory at all four long cases, no further assessment will be permitted.

HONOURS

All instruments will be considered for contribution to Honours.
MEDICINE V

DOMAIN I - PROFESSIONAL SKILLS

1. Certification
   1.1 Clinical Supervisors' Reports (C.S.R.)
   Students are required to submit clinical supervisors' reports on the forms provided for EACH clinical attachment. These forms must be submitted to the discipline(s) concerned by the times specified in the relevant documents.
   1.2 Doctor/Patient Interactions
   Students are required to carry out the prescribed video tape exercises and should attend tutorials when not absent on attachment in the country. Tutors will certify to this effect using the appropriate forms to be found at the back of the Interactions Skills booklet.

2. Long Case
   Each student will interview and examine a patient (without observation by any assessor), and then present the case to, and discuss it with, the assessors. Up to one hour is allowed for the interview/examination and, after a further 15 minutes, up to 30 minutes will be allowed for the viva.

3. Psychiatry Long Case
   A thirty minute viva assessment will be held in the final week of the student's Psychiatry attachment. Students are required to interview a psychiatric patient and present that case in ten minutes to the assessor(s). The case presentation and discussion of relevant Psychiatric issues forms the basis of the viva.

4. Doctor/Patient Interactions
   Each student will interview either a real or simulated patient, presenting one of the problems previously studied in this segment of the course in Years 4 and 5, e.g. patient education and compliance. This student/patient interview will be recorded on video-tape. The duration of the interview will be up to 20 minutes.

DOMAIN II - CRITICAL REASONING

Each student will undertake a written assessment of up to 3 hours.

DOMAIN III - IDENTIFICATION, PREVENTION AND MANAGEMENT OF ILLNESS

Each student will undertake up to 12 hours of written assessments. The following instruments may be used:
   (i) Modified Essay Questions (MEQs)
   (ii) Short Answer Questions (SAQs)
   (iii) Objective Structured Clinical Assessments (OSCA)
   (iv) Short Essays

DOMAIN IV - POPULATION MEDICINE

Each student will undertake a written assessment of up to 3 hours.

DOMAIN V - SELF-DIRECTED LEARNING

Elective
Each student must submit a contract for an elective covering up to six weeks. Undertake the elective and submit both a report on the elective and the supervisor's report. The student's and supervisor's reports are to cover the first six weeks of the elective; however, students must complete the full eight weeks of the elective period. It is the student's responsibility to ensure all reports reach the Faculty office by the due date, even if the elective is undertaken at remote locations.

CRITERIA FOR COMPETENCE AND DETAILS OF SECOND AND FINAL ASSESSMENTS

Competence is determined by instrument. That is, students must be Satisfactory in each component of each Domain.

DOMAIN I
1. Certification
   1.1 Clinical Supervisors' Reports (C.S.R.)
   Students who do not submit the certifications by the due date should refer to the General Summative Assessment Guidelines, paragraph 4 Section (a).
   There are attachments in general practice, psychiatry, paediatrics, reproductive medicine, medicine, oncology and anaesthesia/intensive care. Students must be Satisfactory in all attachments. A student found to be unsatisfactory in any attachment may be required to remediate in a specific discipline in which they are not Satisfactory and may be required to sit extra observed long case(s) or other assessment at the second assessment period, as determined by the Year 5 Committee.
   1.2 Doctor/Patient Interactions
   Students who do not submit the required certification by the due date will not be permitted to undertake first assessment unless there are extenuating circumstances. The appropriate and satisfactory certification must be submitted prior to the final assessment period. Students will then be permitted to undertake Doctor/Patient Interactions final assessment.
   Students who submit Not Satisfactory certifications will not be permitted to sit for first assessment in Doctor/Patient Interactions and will be required to complete further video tapes and discuss their content to the satisfaction of the Domain Chair (or nominee) prior to being permitted to sit for final assessment.

2. Long Case
   Students found Not Satisfactory in the long case will be required to undertake second and, if necessary, final assessment. These assessments will be in the same format as the first assessment.

DOMAIN II
Students found Not Satisfactory will be required to undertake final assessment of up to 3 hours in the same format as first assessment.

DOMAIN III
Students considered Not Satisfactory will be required to undertake final assessment of up to 12 hours in duration, in the same format as first assessment.

DOMAIN IV
Students found Not Satisfactory will be required to undertake final assessment, in the same format as first assessment.

DOMAIN V
Students who do not submit an elective contract and/or report by the stipulated dates will be deemed Not Satisfactory at first assessment and, unless there are good reasons for the omission. These students must then submit their report by the specified final assessment date.

honours

All instruments will be considered for contribution to Honours.

MEDICINE V KEY DATES 1993

Final Assessment

<table>
<thead>
<tr>
<th>Domain</th>
<th>Instrument</th>
<th>Due Date/Assessment Period</th>
</tr>
</thead>
<tbody>
<tr>
<td>Psychiatry Long Case</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Students found Not Satisfactory in the Psychiatry Long Case will be required to undertake second and, if necessary, final assessment. These assessments will be in the same format as first assessment.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Doctor/Patient Interactions Interview</td>
<td>10/5/93 - 14/5/93</td>
</tr>
<tr>
<td></td>
<td>Written Assessment</td>
<td>10/5/93 - 14/5/93</td>
</tr>
<tr>
<td></td>
<td>III Written Assessment</td>
<td>6/9/93 - 17/9/93</td>
</tr>
<tr>
<td></td>
<td>IV Written Assessment</td>
<td>10/5/93 - 14/5/93</td>
</tr>
<tr>
<td></td>
<td>V Elective Contract</td>
<td>30/8/93</td>
</tr>
<tr>
<td></td>
<td>Reports</td>
<td>12/11/93</td>
</tr>
</tbody>
</table>

Second Assessment (Long Cases only)

Long Case second assessment and Psychiatry Long Case second assessment will be held in the period 20/9/93 - 24/9/93.

Final Assessment

All Final Assessments will be held in the period 22/11/93 - 26/11/93, except for:

Certification for Doctor/Patient Interactions: to be submitted by 22/11/93.

Elective: Contract due 13/9/93; reports due 19/11/93.

57
Texts and Reference Books

Notes For Students
This list of text and reference books has been prepared as a guide for your learning in the undergraduate medical curriculum. The books have been listed under discipline headings and books required for specific blocks are listed under subheadings within the most appropriate discipline.

You will note that books have been listed in three categories: introductory (only given where different from the standard text), standard and reference texts. The standard texts are those which have been found to be most suitable overall for student use. You are advised, however, not to buy any textbook until you are certain that you need a book on the subject and that it is the best book for your particular needs. Most students do not find it necessary to purchase reference texts, and you should consider purchase of introductory texts only if you have difficulty with the subject or find you have inadequate access to the introductory texts provided in the first year student collection and the Medical Reserve. If in doubt consult discipline staff, the texts in the Medical Reserve or students in later years. Cheap student editions of some texts are available. Consult the student bookshop about the availability of these.

Year 1 Book Collection
In the first year of the course the following books are provided on loan to each tutorial group. DO NOT PURCHASE any books before the course commences.

Anatomical Pathology and Histopathology


Kumar, V. 1992, Basic pathology, 5th edn, Saunders.

Anatomy


Reference Texts


BEHAVIOURAL SCIENCE IN RELATION TO MEDICINE

Standard Texts

Bloom, B.L. 1984, Health psychology: a psychological perspective, Prentice Hall.


CARIOLOGY


CLINICAL PHARMACOLOGY

Standard Texts

Avery, G.S. (ed) 1987, Drug treatment: principles and practice of clinical pharmacology and therapeutics, 3rd edn, Adis Press. (For later years of the course.)


Reference Texts


COMMUNITY MEDICINE

Standard Texts


Professional Skills


MacLeod, J. 1990, Clinical examination, 8th edn, Churchill Livingstone.


Psychiatry


Reproductive Medicine


Surgical Science


General


Texts and References

ANAESTHESICS/INTENSIVE CARE


ANATOMICAL PATHOLOGY/HISTOPATHOLOGY

Kumar, V. 1992, Basic pathology, 5th edn, Saunders.

CARIOLOGY

Kumar, V., 1992, Basic pathology, 5th edn, Saunders.


Reference Texts


ANATOMY

Standard Texts


Health, Law and Ethics


Dix, A. et al. 1988, Law for the medical profession, Butterworths.

Human Physiology


Young, J.A. et al., (ed) 1991, Gastrointestinal physiology, Laboratory of Exocrine Physiology and Biophysics, University of Sydney.

Immunology


Medical Biochemistry


Ucko, D. 1986, Living chemistry, 2nd edn, Academic Press. (Useful for those with no science background)


Medicine


(A very basic introduction to an area many students find difficult.)

Microbiology/Infectious Diseases


In order to keep the page length to a reasonable level, the list of reference books has been abbreviated.
Reference Texts

Dermatology

Ear, Nose and Throat

ENT: Nose

Endocrinology

Environmental and Occupational Health

Reference Texts

Gastroenterology

General Practice
Reference Texts


Geriatric Medicine
Standard Texts

Reference Texts


Haematology
Standard Text

Reference Texts

Health Law and Ethics
Standard Texts

Reference Texts

Human Physiology
Standard Texts


Reference Texts

The Handbooks of physiology: Williams and Wilkins for the American Physiological Society. These are a detailed source of information about the different systems. They are held in the Reference section of the Anschutz Library (Biomedicine), and are strongly recommended for advanced reading.


Immunology
Standard Texts

Reference Texts

Medical Biochemistry
Standard Texts


Reference Texts


Medicine
Standard Text


Reference Texts


Microbiology/Infectious Diseases
Standard Texts


Reference Texts


Neurology


The Neurology section of all text books of medicine.

Oncology
ORTHOPAEDICS

Standard Texts


PAEDIATRICS

Standard Texts


Reference Texts


PROFESSIONAL SKILLS

Standard Texts

MacLeod, J. 1990, MacLeod's Clinical Examination, 8th edn, Churchill Livingstone.

Reference Texts

Dubin, D. 1989, Rapid interpretation of EKG's, a programmed course, 4th edn, Cover Publishing Co.


PSYCHIATRY

Standard Texts


Reference Texts


LEARNING RESOURCES

Standard Texts


SURGICAL SCIENCE

Standard Texts


Tobacco, Alcohol and Other Drugs

Standard Texts


Handbook on alcohol and other drug problems for medical practitioners, 1991, AGPS.

Reference Texts

Bachelor of Medicine Prizes

There are ten Bachelor of Medicine prizes. Details follow:

**Prize** | **Value $** | **Qualifications**
--- | --- | ---
Australian Medical Association Prize | 300 OR Books or Medical Equipment to that value | Awarded to the grandchild(s) who, in the final two years of the course demonstrated the highest overall ability and capacity in the following program objectives prescribed by the Faculty Board, Faculty of Medicine, namely:
   - a. Objectives related to Professional Skills, and
   - b. Objectives related to Population Medicine, if of sufficient merit.

CIBA-GEIGY Prize | CIBA Collection of Medical Illustrations by Dr Frank H. Netter | Awarded to the grandchild who in the fourth and fifth years of the course, demonstrated the highest overall ability and capacity over all domains assessed, if of sufficient merit.

Grants-In-Aid for Electives

Note: Students should refer to the accompanying Guidelines relating to Grants-in-Aid for Electives for information on application procedures.

The Linda and John James Gentle Mother and Son Prize in Paediatrics

Awarded to the medical student who completes the best project for an elective project in Paediatrics in either Block 10 of Medicine III or the elective attachment of Medicine V, if of sufficient merit.

The Steele Douglas Prize in Pathology

Awarded to the medical student who completes the best protocol for an elective project in Pathology in either Block 10 of Medicine III or the elective attachment of Medicine V, provided that it is of sufficient merit.

Margaret Auchmuty Prize for Women Medical Students

Awarded to the medical student who completes the best protocol for an elective project in Aboriginal health for either Block 10 of Medicine III or the elective attachment of Medicine V, if of sufficient merit.

Andrew Lawson Memorial Prize in Oncology

Awarded to the medical student who completes the best project for an elective project in Oncology in either Block 10 of Medicine III or the elective attachment of Medicine V, if of sufficient merit.

NSW Department of Health Rural Health Bursary

Awarded to the medical student who completes the best project for an elective project in rural general practice in Australia in either Block 10 of Medicine III or the elective attachment of Medicine V, if of sufficient merit.

**Guidelines for Grants-in-Aid**

The Grants-in-Aid are available for students undertaking an elective in Year 3 or Year 5. For administrative purposes the Undergraduate Education Committee has approved the following guidelines for the awarding of these Grants-in-Aid.

To be eligible for a grant-in-aid a student shall:

(a) Submit an elective contract for the elective in the usual manner by the dates advertised;

(b) mark on the contract that he/she wishes to be considered for a particular grant-in-aid prize;

(c) apply in writing to the Assistant Registrar, Faculty of Medicine by 5.00 pm on the last working day of August; and

(d) provide a detailed protocol for their proposed elective of at least 1000 words and detailing:
   - (i) the background to their choosing this particular elective
   - (ii) the nature of the institution/practice in which the elective will be carried out and the type of health problems expected
   - (iii) the objectives for the project (as per contract or in more detail)
   - (iv) the anticipated way in which these objectives will be met
   - (v) the criteria for assessing whether these objectives have been met.

In assessing the protocol, the assessing panel shall consider:

- The relevance of the elective topic in relation to the subject of the grant-in-aid prize.
- The appropriateness of the objectives and the likelihood of their being achieved.
- The relevance of the elective to the student's overall medical education.

**Essay Prizes**

The Linda and John James Gentle Mother and Son Prize in Paediatrics

Awarded to the student who completes the best essay written additional to curricular requirements on a rural general practice theme in Australia, if of sufficient merit.

The Steel Douglas Prize in Pathology

Awarded to the student who completes the best essay written additional to curricular requirements on a rural general practice theme in Australia, if of sufficient merit.

Margaret Auchmuty Prize for Women Medical Students

Awarded to the third year student who completes the best essay written additional to curricular requirements on a rural general practice theme in Australia, if of sufficient merit.

Andrew Lawson Memorial Prize in Oncology

The NSW Department of Health Rural Health Bursary

Each protocol will be assessed by a panel consisting of:

1. Chair USC
2. Chair Domain V
3. For The Linda and John James Gentle Mother and Son Prize in Paediatrics The Head of the Discipline of Paediatrics
4. For The Steel Douglas Prize in Pathology The Head of the Discipline of Pathology
5. For Women Medical Students The Aboriginal Studies Liaison Officer
6. For Andrew Lawson Memorial Prize in Oncology A member elected by and from the full-time consultant staff of the Hunter Oncology Centre
7. For The NSW Department of Health Rural Health Bursary A member of the faculty academic staff in General Practice, nominated by the Head of the Discipline of Community Medicine

The student will be informed whether or not their application is successful before the start of the elective period.

The awarding of the grant-in-aid will then be conditional on the submission of a satisfactory elective report. It is expected that the report for an elective that is the subject of a grant-in-aid prize would be substantial and not of the minimum satisfactory level.
The Bachelor of Medical Science degree is comparable to the additional Honours year taken by candidates for the BSc Honours degree or the BA Honours degree in the Faculty of Science or the Faculty of Arts. It is designed to provide students with training in scientific method and in the verbal and written communication of scientific results.

Students take this degree for a variety of reasons. Some take it because of a genuine desire to obtain some research training and to gain an insight into their ability to do research, as they see their future career in medical science; and others because they wish to concentrate on just one problem or aspect of a discipline for a year, so as to gain in-depth understanding and mastery of the subject.

The degree consists of a one year program of supervised research in any of the disciplines represented in the Faculty of Medicine, subject to the availability of adequate supervision. Students wishing to enrol for this degree must have passed the subject Medicine III in the Bachelor of Medicine course. As part of the enrolment procedure, students are required to nominate the research project they wish to pursue and obtain approval for it from the proposed supervisor. Before work on the project can commence, the approval of the Faculty Research Committee, which has been authorised to act on behalf of the Faculty Board with respect to BMedSc degree matters, is required.

Course Requirements
Students are required to enrol in the subject MED411 Thesis which involves a program of research which, on completion, is written up in the form of a thesis. Students are also required to present their research findings at three seminars during the year. These seminars are attended by Faculty staff. A further requirement is that students must submit a fully referenced literature review on their field of study by mid-year. Students are advised of the exact dates for seminars and the submission of the literature review and thesis early in the year.

Assessment
The thesis is the major component of the assessment for the degree and is given a weighting of 60%. It is assessed by two examiners appointed by the Faculty Research Committee. Neither examiner can be the student’s supervisor.

The final seminar presentation is also assessed by two assessors neither of whom is the student’s supervisor. The seminar counts 10% towards the student’s final result.

Students are also assessed by their supervisors. The supervisor’s assessment counts 30% towards the student’s final result.

The literature review (which normally comprises the first chapter of the thesis) is not formally assessed at the time of submission. Similarly the first two seminar presentations, which are really progress reports are not formally assessed. However, the submission of the literature review and the presentation of the first two seminars are used as opportunities to give students guidance in the form of a critical evaluation of their ability to present their work and to defend the scientific basis of their project.

Prizes
There are two Bachelor of Medical Science prizes known as the McGraw-Hill Prizes in Medicine. The prizes consist of sets of books as provided for the purpose by the donor. The prizes are awarded annually to the BMedSc students who obtain the highest and second highest results in the subject MED411 Thesis, if of sufficient merit.
GRADUATE DIPLOMA/MASTER DEGREE PROGRAMS OF STUDY IN EPIDEMIOLOGY, BIOSTATISTICS, HEALTH SOCIAL SCIENCE AND HEALTH PROMOTION

A series of formal graduate diploma/master degree programs of study are available in the following areas:

- Clinical Epidemiology
- Occupational Epidemiology
- Pharmacoepidemiology
- Psychiatric Epidemiology
- Health Promotion
- Medical Social Science
- Medical Statistics

The graduate diplomas consist of a series of subjects totalling 30 credit points taken over one year of full-time study or two years of part-time study. Students enrolling in the master degree program in a specific area are required to complete the subjects comprising the program of study for the related graduate diploma and, in addition, complete a major research project and thesis taking at least one further year of full-time or its equivalent in part-time study. The programs in Clinical Epidemiology, Pharmacoepidemiology, Health Promotion, Medical Social Science and Medical Statistics are also available in an external studies or distance learning format. Students taking a graduate diploma or master degree by distance learning will be required to pay full tuition fees.

Policy with Respect to Standing Granted to Candidates who Enrol in the Master Degree Program After Completion of the Related Diploma

A person permitted to enrol as a candidate for a Master degree after completion of the related Graduate Diploma shall be granted standing in all subjects comprising the coursework component of the Master degree subject to the following:

(i) Standing will not be granted to a candidate who:
   (a) is admitted to candidature in the Master degree program before 1993 and who has completed the requirements for the award of the related Diploma more than eight years prior to enrolment for the Master degree; or
   (b) is admitted to candidature in the Master degree program in 1993 or after and who has completed the requirements for the award of the related Diploma more than five years prior to enrolment for the Master degree.

(ii) With respect to the Master of Medical Statistics degree, standing will only be granted in cases where the candidate has completed subjects offered by the Department of Statistics totalling at least 30 credit points at the 400 level.

(iii) Such standing is granted on condition that upon completion of the requirements for admission to the Master degree, the candidate will surrender the related Diploma.

In dealing with such cases, candidates will be advised in writing that they have been granted standing on the course work component of the Master degree course subject to the condition that upon completion of the requirement for admission to the degree, they will surrender the Diploma testamur to the University and that their academic record will include a statement to this effect. Upon completion of the requirements for admission to the degree, the candidate will be requested in writing to return the Diploma testamur to the University for destruction.

CLINICAL EPIDEMIOLOGY

Students wishing to pursue the program of study in Clinical Epidemiology will enrol in either the Graduate Diploma in Clinical Epidemiology (Clinical Epidemiology specialty) or the Master of Medical Science Degree (Clinical Epidemiology option).

- The approved program for the Clinical Epidemiology specialty is:

<table>
<thead>
<tr>
<th>Subject</th>
<th>Credit points</th>
</tr>
</thead>
<tbody>
<tr>
<td>MED601 Epidemiology I</td>
<td>20</td>
</tr>
<tr>
<td>MED611 Biostatistics I</td>
<td>20</td>
</tr>
<tr>
<td>MED661 Research Protocol Design</td>
<td>10</td>
</tr>
<tr>
<td>MED621 Health Social Science I</td>
<td>10</td>
</tr>
<tr>
<td>MED631 Health Economics I</td>
<td>10</td>
</tr>
<tr>
<td>MED604 Clinical Epidemiology</td>
<td>10</td>
</tr>
<tr>
<td>MED632 Health Economics II</td>
<td>10</td>
</tr>
</tbody>
</table>

- The approved program for the Occupational Epidemiology specialty is:

<table>
<thead>
<tr>
<th>Subject</th>
<th>Credit points</th>
</tr>
</thead>
<tbody>
<tr>
<td>MED601 Epidemiology I</td>
<td>20</td>
</tr>
<tr>
<td>MED611 Biostatistics I</td>
<td>20</td>
</tr>
<tr>
<td>MED661 Research Protocol Design</td>
<td>10</td>
</tr>
<tr>
<td>MED605 Occupational Epidemiology</td>
<td>10</td>
</tr>
<tr>
<td>MED621 Health Social Science I</td>
<td>10</td>
</tr>
<tr>
<td>MED631 Health Economics I</td>
<td>10</td>
</tr>
</tbody>
</table>

PHARMACOEPIDEMIOLOGY

This program is designed to prepare candidates for careers in:

- Research in clinical pharmacology, determination of efficacy, the standards required for evaluation of new therapeutic drugs, quality control, the likely patterns of drug use and adverse effects, cost-effectiveness and subsidy policies and the social implications of different levels of drug distribution.

Our aim is to bring these subjects into one program as they are not dealt with in existing undergraduate or postgraduate courses offered in Australia or elsewhere. In future it is likely that the Drug Evaluation Section of the Commonwealth Government will also see an advantage in putting their trainees through such a program.

GREATUATE DIPLOMA/MASTER DEGREE PROGRAMS

Students wishing to pursue this program will enrol in either the Graduate Diploma in Epidemiology (Pharmacoepidemiology specialty) or the Master of Medical Science Degree (Pharmacoepidemiology option).

- The approved program for the Pharmacoepidemiology specialty is:

<table>
<thead>
<tr>
<th>Subject</th>
<th>Credit points</th>
</tr>
</thead>
<tbody>
<tr>
<td>MED601 Epidemiology I</td>
<td>20</td>
</tr>
<tr>
<td>MED611 Biostatistics I</td>
<td>20</td>
</tr>
<tr>
<td>MED661 Research Protocol Design</td>
<td>10</td>
</tr>
<tr>
<td>MED625 Social and Economic Pharmacology</td>
<td>10</td>
</tr>
<tr>
<td>MED641 Drug Evaluation</td>
<td>10</td>
</tr>
<tr>
<td>MED642 Clinical Pharmacology</td>
<td>10</td>
</tr>
</tbody>
</table>

PSYCHIATRIC EPIDEMIOLOGY

This program is designed to prepare candidates for careers in:

- Mental health administration, health care policy and program development, mental health service evaluation.

Students wishing to pursue a program of study in psychiatric epidemiology under this proposal would enrol in either the Graduate Diploma in Epidemiology (Psychiatric Epidemiology specialty) or the Master of Medical Science Degree (Psychiatric Epidemiology option).

- The approved program for the Psychiatric Epidemiology specialty is:

<table>
<thead>
<tr>
<th>Subject</th>
<th>Credit points</th>
</tr>
</thead>
<tbody>
<tr>
<td>MED601 Epidemiology I</td>
<td>20</td>
</tr>
<tr>
<td>MED611 Biostatistics I</td>
<td>20</td>
</tr>
<tr>
<td>MED661 Research Protocol Design</td>
<td>10</td>
</tr>
<tr>
<td>MED624 Social Psychiatry</td>
<td>10</td>
</tr>
<tr>
<td>MED626 Sociocultural Studies I</td>
<td>10</td>
</tr>
<tr>
<td>MED621 Health Social Science I</td>
<td>10</td>
</tr>
</tbody>
</table>

HEALTH PROMOTION

This program will prepare students in the development, implementation and evaluation of health promotional activities. Students will be introduced to health promotional efforts on an individual, micro and macro basis. It is expected that they will emerge with both conceptual, practical and evaluative skills in health promotion using a multi-disciplinary framework.

Students wishing to pursue this program will enrol in either the Graduate Diploma in Health Social Science (Health Promotion specialty) or the Master of Medical Science Degree (Health Promotion option).
### SECTION SEVEN

The approved program for the Health Promotion specialty is:

<table>
<thead>
<tr>
<th>Subject</th>
<th>Credit points</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MED601 Epidemiology I</strong></td>
<td>20</td>
</tr>
<tr>
<td><strong>MED613 Basic Biostatistics</strong></td>
<td>10</td>
</tr>
<tr>
<td><strong>MED673 Introduction to Health Promotion</strong></td>
<td>10</td>
</tr>
<tr>
<td><strong>MED674 Health Promotion Program Development and Evaluation</strong></td>
<td>10</td>
</tr>
<tr>
<td><strong>MED675 Community Health Promotion</strong></td>
<td>10</td>
</tr>
<tr>
<td><strong>MED676 Health Promotion Agency Attachment and Health Economics</strong> and either</td>
<td>10</td>
</tr>
<tr>
<td><strong>MED664 Health Promotion Project</strong></td>
<td>10</td>
</tr>
<tr>
<td><strong>MED665 Health Promotion Research Protocol</strong></td>
<td>10</td>
</tr>
</tbody>
</table>

Note: Students enrolling in the Master of Medical Science option in Health Promotion will be required to pass MED665 Health Promotion Research Protocol.

It is expected that students who complete the Diploma will be able to function as health educators or health promotional officers in a wide range of Commonwealth and State Agencies. They will acquire the basic principles and apply them to the modification of health risk behaviours. It is expected that both those currently working in health promotion and those wishing to begin a career in the area will be attracted to the course.

Students emerging with a Master Degree will have similar skills to those who obtain a Diploma. However, Masters graduates will also have the ability to function as scientists/practitioners in the field. Such individuals would have opportunity for employment in the fields of health promotion, health evaluation research and policy analysis.

MEDICAL SOCIAL SCIENCE

This program is designed to prepare candidates to competently conceptualise, design and execute transdisciplinary research, as well as, undertake health evaluation research. This requires understanding the social, cultural and psychological processes involved in the aetiology, distribution, prevention and amelioration of illnesses. Graduates of the course will be able to utilise the theoretical and methodological principles underlying health social science research. Such research skills will be applicable to both clinical and community settings.

Students wishing to pursue this program will enroll in either the Graduate Diploma in Health Social Science (Medical Social Science specialty) or the Master of Medical Science Degree (Medical Social Science option).

The approved program for the Medical Social Science specialty is:

<table>
<thead>
<tr>
<th>Subject</th>
<th>Credit points</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MED601 Epidemiology I</strong></td>
<td>20</td>
</tr>
<tr>
<td><strong>MED611 Biostatistics I</strong></td>
<td>20</td>
</tr>
<tr>
<td><strong>MED661 Research Protocol Design</strong></td>
<td>10</td>
</tr>
<tr>
<td><strong>MED622 Health Social Science II</strong></td>
<td>10</td>
</tr>
</tbody>
</table>

### GRADUATE DIPLOMA/MASTER DEGREE PROGRAMS

<table>
<thead>
<tr>
<th>Subject</th>
<th>Credit points</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MED625 Sociological Studies I</strong></td>
<td>10</td>
</tr>
<tr>
<td><strong>MED627 Sociological Studies II</strong></td>
<td>10</td>
</tr>
</tbody>
</table>

*Notes: The approval of the Board of Studies in Clinical Epidemiology and Biostatistics given on the recommendation of the Co-ordinator the subject MED611 Biostatistics I may be replaced with the subject MED612 Biostatistics II and another appropriate 10 credit point subject.*

It is expected that Diplomates will be able to function as researchers in clinical or community health settings. They will have sufficient preparation to work independently or in interdisciplinary teams. They will be able to conceptualise and measure sociocultural variables, evaluate program structure process and impact, and will be able to advise on ethical matters related to research design and intervention.

**Policy with Respect to Admission to Candidature of Arts Graduates**

Persons who have satisfied the requirements for admission to the degree of Bachelor of Arts in the University of Newcastle or to an equivalent degree in another University approved for the purpose of admission to candidature shall be eligible for admission to candidature in the Master of Medical Statistics degree program in Social Medical Science if their Arts degree is with Honours Class I or Class II in the disciplines of Sociology or Psychology.

#### MEDICAL STATISTICS

Students wishing to pursue this program will enrol in the Graduate Diploma in Medical Statistics or the Master of Medical Statistics Degree.

The approved program in Medical Statistics is:

<table>
<thead>
<tr>
<th>Subject</th>
<th>Credit points</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MED601 Epidemiology I</strong></td>
<td>20</td>
</tr>
<tr>
<td><strong>MED612 Biostatistics I</strong></td>
<td>10</td>
</tr>
<tr>
<td><strong>MED662 Research Project</strong></td>
<td>10</td>
</tr>
<tr>
<td><strong>MED663 Research Project</strong></td>
<td>20</td>
</tr>
</tbody>
</table>

The remaining 40 or 30 credit points to be selected from the subjects listed below. For the Master of Medical Statistics Degree at least 30 credit points must be selected from STAT400 level subjects.

<table>
<thead>
<tr>
<th>Subject</th>
<th>Credit points</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>STAT201 Mathematical Statistics</strong></td>
<td>10</td>
</tr>
<tr>
<td><strong>STAT202 Regression Analysis</strong></td>
<td>10</td>
</tr>
<tr>
<td><strong>STAT203 Quantitative Methods</strong></td>
<td>5</td>
</tr>
<tr>
<td><strong>STAT204 Non-parametric Statistics</strong></td>
<td>5</td>
</tr>
<tr>
<td><strong>STAT301 Statistical Inference</strong></td>
<td>10</td>
</tr>
<tr>
<td><strong>STAT302 Study Design</strong></td>
<td>10</td>
</tr>
<tr>
<td><strong>STAT303 Generalised Linear Models</strong></td>
<td>10</td>
</tr>
<tr>
<td><strong>STAT304 Time Series Analysis</strong></td>
<td>10</td>
</tr>
<tr>
<td><strong>STAT401 Probability Theory</strong></td>
<td>10</td>
</tr>
<tr>
<td><strong>STAT402 Analysis of Categorical Data</strong></td>
<td>10</td>
</tr>
</tbody>
</table>

**Diploma/Master Degree Subject Descriptions**

Subjects offered by the Faculty of Medicine

<table>
<thead>
<tr>
<th>Subject</th>
<th>Credit points</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MED613 BASIC BIOSTATISTICS</strong></td>
<td>10</td>
</tr>
</tbody>
</table>

An overview of biostatistical methods relevant to epidemiological data. The course will consist of topics taken from Biostatistics I.

**Time Requirement:** Approximately 30 hours

**Assessment:** Written examination

<table>
<thead>
<tr>
<th>Subject</th>
<th>Credit points</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MED611 BIOSTATISTICS I</strong></td>
<td>20</td>
</tr>
</tbody>
</table>

An introduction to biostatistics relevant to the analysis of epidemiological data. Topics to be covered are: Interpretation of results in published articles, Exploratory data analysis, Probability distributions, Sampling distributions, Confidence intervals, Hypothesis testing, Sample size, Regression and correlation, ANOVA and multiple comparisons, Discrete data analysis, Logistic regression, Nonparametric methods.

**Time Requirement:** Approximately 60 hours

**Assessment:** Written examination

**Text:** Bland, M. 1997 An Introduction to Medical Statistics, Oxford U.P.

<table>
<thead>
<tr>
<th>Subject</th>
<th>Credit points</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MED612 BIOSTATISTICS II</strong></td>
<td>10</td>
</tr>
</tbody>
</table>

Biostatistical techniques relevant to epidemiological data. The course will consist of the more advanced topics taken from Biostatistics I.

**Time Requirement:** Approximately 30 hours

**Assessment:** Written examination

<table>
<thead>
<tr>
<th>Subject</th>
<th>Credit points</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MED604 CLINICAL EPIDEMIOLOGY</strong></td>
<td>10</td>
</tr>
</tbody>
</table>

An introduction to assessing health and intervention outcomes at both the individual and population level.

**Content:** Normality and Diagnostic Tests, Screening, Clinical Disagreement, By the Beside, Natural History and Prognosis, Evaluation of Health Services.
Determination Priorities

Ethics

Time Requirement Approximately 30 hours

Assessment Written and/or oral assessment.

MED642 CLINICAL PHARMACOLOGY 10cp

This subject is concerned with ways in which the human body handles and responds to drugs in health and in disease. The following topics will be taught: essentials of drug action, pharmacokinetics and pharmacodynamics and their relevance in the determination of therapeutic responses and adverse drug reactions; the development and use of suitable computer software; the techniques necessary for the study of comparative bioavailability.

Time Requirement Approximately 30 hours

Assessment Written and/or oral assessment.

MED675 COMMUNITY HEALTH PROMOTION 10cp

This subject provides students with skills in undertaking community wide health promotion programs. At the completion of the course, students will be able to develop, and have some skills in implementing programmes based on the following strategies: community action, mass media, legislative change, modifying the availability of a health related product and adapting a program for use by a disadvantaged group. The course focuses on developing an understanding of the role and effectiveness of community wide health promotion programmes and practical skills in their implementation. Exercises include those designed to develop skills in the following areas: the identification of community opinion leaders and formation and liaison with a community committee; preparing reports of scientific findings for a lay audience; briefs for an advertising agency and skills in interacting with the mass media; planning a shopping centre intervention and developing an understanding of retain organisations and marketing strategies; modification of health promotion materials to meet the needs of disadvantaged groups.

Assessment Assessment consists of five written assignments, each contributing to 20% of final grade. Each assignment is graded according to a rating scale which is provided to the students at the outset of the subject.

MED661 EPIDEMIOLOGY I 20cp

An introduction to methods used in Clinical Epidemiology.

Content
- Health Indicators
- Research Strategies
- Risk, Cause and Bias
- Epidemiologic Investigation
- Critical Appraisal
- Cross-Sectional Studies
- Case-Control Studies
- Longitudinal Studies
- Randomised Controlled Trials
- Synthesis of Research Data

Time Requirements Approximately 63 hours

Assessment Written and/or oral assessment.

MED631 HEALTH ECONOMICS I 10cp

An introduction to Clinical Economics

Content
- The cost of illness
- Economic costs and discounting
- Cost and cost analysis
- Cost minimisation analysis
- Cost effectiveness analysis
- Cost utility analysis
- Cost benefit analysis
- Sensitivity analysis, inflation and clinical appraisal
- Clinical decision analysis

Time Requirement Approximately 30 hours

Assessment Assignments

MED674 HEALTH PROMOTION DEVELOPMENT AND EVALUATION 10cp

This subject provides students with skills in the development and evaluation of health promotion programmes. At the end of the course students will be able to: establish existing rates of health behaviour in a defined group; explore the barriers to performing health behaviour; present health promotion materials; design and interpret an evaluation of a health promotion programme; and develop programmes for use with healthcare providers and in the workplace.

The course focuses on the acquisition of practical skills in health promotion and includes exercises designed to teach skills in working with health care providers; developing work based health promotion programmes; the development and validation of measurement instruments; the collection and interpretation of qualitative and quantitative data; the assessment of the acceptability, coverage and cost effectiveness of interventions.

Assessment Assessment consists of five written assignments. Each assignment contributes to 20% of final grade. Each assignment is graded according to a rating scale which is provided to the students at the outset of the subject.

MED664 HEALTH PROMOTION PROJECT 10cp

This subject involves the development of a health promotion programme. At the end of the project, students will be able to integrate the skills they have acquired in other components of the Diploma to design a health promotion programme. Students will be able to develop a programme from initial conceptualisation through to evaluation and monitoring. Students will work on an individual basis with a designated supervisor to develop a health promotion programme in an area of their own interest.

Assessment The health promotion programme will be assessed by someone other than the student's supervisor. The project will be assessed using a rating scale covering the above areas. Assessment of the project will contribute 100% of the final grade.

MED665 HEALTH PROMOTION RESEARCH PROTOCOL 10cp

This subject is designed to provide students with skills in planning a research project to evaluate the impact of a health promotion programme. At the end of the course, students will have developed a research protocol suitable for implementation in the following year. The protocol will include description of the steps in designing and pilot testing the health promotion programme as well as strategies for evaluating its implementation, outcome and cost effectiveness. Students will work on an individual basis with a designated supervisor from Behavioural Science to develop a research protocol to evaluate a health promotion programme in an area of their own interest.

Assessment The research protocol will be assessed by an independent assessor. Assessment of the protocol will contribute 100% of the final grade.

MED673 INTRODUCTION TO HEALTH PROMOTION

The aim of this subject is to provide students with an introduction to health promotion. At the completion of the course, students will be able to: critically explain the rationale for health promotion; determine the health needs of a population group; assess the scientific evidence supporting health promotion and critically appraise existing programs and strategies. Students are introduced to aspects of the theory and history of health promotion, including the Staged Approach to Health Promotion. A range of practical exercises are undertaken including the design and administration of a perceived needs survey and in-depth critical appraisal of specific health promotion programmes. A prepared module consisting of objectives, exercises, references and assessment is provided for each of the four major topic areas.

Assessment Assessment consists of four 2,500-3,000 word written assignments which contribute to 20 and 30% of final grade. Assignments are graded according to rating scales which are provided to the students at the outset of each module.

MED621 HEALTH SOCIAL SCIENCE I 10cp

An introduction to Health Social Science and Behavioural Change.

Content
- Social, cultural and psychological determinants of disease
- Social, cultural and psychological determinants of health behaviour
- The use of qualitative field methods in questionnaire design
- Questionnaire construction
- Planning interventions based on cultural beliefs and health practices

References
SECTION SEVEN

Assessment

Conun

Time Requirement

Social, cultural and psychological determinants of disease

Use of qualitative field methods in questionnaire design

Questionnaire construction

The following topics from Health Social Science I:

1. Social, cultural and psychological determinants of disease
2. Use of qualitative field methods in questionnaire design
3. Questionnaire construction

Approximately 30 hours

Part 1: Critical Appraisal Exercise. Written and/or oral assessment

References


MED626 SOCIOCULTURAL STUDIES I 10cp

Foundations of a Transdisciplinary Perspective in Health Social Science.

Part I: The Transdisciplinary Perspective
1. Definition, rationale and need for transdisciplinary research
2. Constructing a transdisciplinary framework
3. Examples of transdisciplinary thinking
4. The transdisciplinary team and creation of knowledge

Part II: Transdisciplinary Perspectives of Selected Problems
1. Heart disease
2. Political economy of pharmaceutical use in developing countries
3. Anthropology and social psychology of pharmaceutical misuse
4. AIDS

Part III: Transdisciplinary Perspectives of Research Methods
1. Triangulation of methods
2. Critics of survey methods
3. Demographic and health transition

Med 627 SOCIOCULTURAL STUDIES II 10cp

Techniques and applications of transdisciplinary research in Health Social Science.

Part I: Health Program Evaluation
1. Models and stages of evaluation
2. Diagnostic procedures
3. Community sampling procedures
4. Monitoring health programmes
5. Impact assessment

References


Subjects Offered by Department of Statistics

STAT201 MATHEMATICAL STATISTICS 10cp

Prerequisites Either MATH1103 or STAT101 and MATH112 (or a level of mathematics equivalent to MATH112)

Hours 3 lecture Hours and 1 laboratory/tutorial hour per week for one semester

Content

Random variables, probability, density and distribution functions, expectation. Likelihood, point and interval estimation. Tests of significance.

Text


Reference


STAT202 REGRESSION ANALYSIS 10cp

Prerequisites STAT201 or STAT101 and MATH112 (or equivalent)

Hours 2 lecture Hours, 1 laboratory and 1 tutorial hour per week for one semester

Content


This course covers the practical and theoretical aspects of multiple regression analysis, including the assumptions underlying normal linear models, use of matrix notation, prediction and confidence intervals, stepwise methods, and examination of the adequacy of models. The statistical computer packages MINITAB and SAS are used.

Text

Bowerman, B.L., O'Connell, R.T. et al 1986, Linear statistical models - an applied approach, Duxbury.

STAT203 QUANT & SIMULATION 5cp

Prerequisite MATH112 or equivalent

Hours 2 lecture/tutorial Hours per week for one semester


References

STAT301 STATISTICAL INFERENCE

Prerequisites

MATH211, 12 (or equivalent)

Hours 2 lecture/laboratory Hours per week for one semester

Content

Methods for analysing categorical and ranked data. Randomization tests.

References


STAT302 STUDY DESIGN

Prerequisites

Mathematical Statistics (STAT201) and Regression Analysis (STAT202)

Hours 3 hours per week for one semester

Content

This course consists of two methods for collecting and analysing data: experimental studies and non-experimental studies (including surveys). The topics included to illustrate the principles of experimental design are completely randomised designs, randomised block designs and factorial designs. For surveys the topics include: simple random sampling, stratified and cluster sampling, ratio and regression estimators. Class projects are used to illustrate practical problems and the statistical packages BMDP and SAS are used to carry out analyses.

Topics covered include: elementary measure theory, random variables, expectation, the characteristic function, modes of convergence, laws of large numbers, central limit theorems, law of the iterated logarithm.

References


STAT401 ANALYSIS OF CATEGORICAL DATA

This course will discuss the analysis of categorical data. It will begin with a thorough coverage of 2 x 2 tables before moving on to larger (2 x k) contingency tables. Topics to be covered include probability models for categorical data, measures of association, Mantel-Haenszel method for combining tables, applications of logistic regression and log-linear models.

References


STAT403 DEMOGRAPHY AND SURVIVAL ANALYSIS

This course presents a mathematical treatment of the techniques used in population projections, manpower studies, and the survival models used in demography and biostatistics.

References

Arma models, models for periodic phenomena, analysis using Minitab, SAS and other Time Series packages.

Text


References


STAT404 ROUGH REGRESSION AND SMOOTHING

This is a rigorous course on the mathematical theory of probability, presenting techniques and theory needed to establish limit theorems. The applications of such techniques are spread throughout the discipline of statistics.

Topics covered include: stationary processes, random variables, expectation, the characteristic function, modes of convergence, laws of large numbers, central limit theorems, law of the iterated logarithm.

References


STAT405 STATISTICAL CONSULTING

The aim of this course is to develop both the statistical and nonstatistical skills required for a successful consultant. The course includes a study of the consulting literature, a review of commonly-use statistical procedures, problem formulation and solving, analysis of data sets, report writing and oral presentation, role-playing and consulting with actual clients.

Text


References


SECTION SEVEN

STAT406 METHODS FOR QUALITY IMPROVEMENT 10cp

The course will cover the concepts of total quality management, the Deming philosophy and relevant statistical techniques. Simple methods such as flow charts and Pareto diagrams will be covered, in addition to the various types of control charts and process capability analysis. Modern experimental design techniques for optimizing process performance will be included. The course is a practical one, and the issues involved in actually implementing a quality and productivity improvement program in an organization will be addressed.

Course readings provided.

STAT407 ADVANCED TOPICS IN STATISTICS 10cp

This course consists of four modules that are selected from the following topics:

- Multivariate methods; randomization, bootstrapping and other computer intensive methods; analysis of repeated measurements; sample size estimation, analysing large data sets; meta-analyses.

SECTION EIGHT

SUBJECT COMPUTER NUMBERS

MEDICINE SUBJECT COMPUTER NUMBERS

Computer numbers must be shown on enrolment and course variation forms.

ASSOCIATE DIPLOMA IN OCCUPATIONAL HEALTH AND SAFETY

- OS100S Ergonomics and Environmental Systems
- OS205B Legal Studies in Occupational Health & Safety
- OS101S Occupational Health and Hygiene
- OS102S Occupational Safety Technology
- OS201B Overview Problems in Occupational Health & Safety
- OS204B Project in Occupational Health and Safety
- OS106W Social Dimensions of Occupational Health & Safety

BACHELOR OF MEDICINE

- MED101 Medicine I
- MED201 Medicine II
- MED321 Medicine III
- MED301 Medicine IV
- MED521 Medicine V

BACHELOR OF MEDICAL SCIENCE

- MED411 Thesis

BACHELOR OF OCCUPATIONAL HEALTH AND SAFETY

- OHS111 Occupational Health I
- OHS131 Occupational Health and Safety Management I

- OHS141 Occupational Health and Safety Practice I
- OHS121 Safety Science I

GRADUATE DIPLOMA IN OCCUPATIONAL HEALTH & SAFETY

- OHS504 Ergonomics
- OHS501 Occupational Health
- OHS505 Occupational Health and Safety Management and Law
- OHS502 Occupational Hygiene and Toxicology
- OHS503 Safety Technology
- OHS506 Special Study

GRADUATE DIPLOMA/MASTER DEGREE IN EPIDEMIOLOGY, BIOSTATISTICS, HEALTH SOCIAL SCIENCE AND HEALTH PROMOTION

Subjects offered by the Faculty of Medicine:

- MED613 Basic Biostatistics
- MED611 Biostatistics I
- MED612 Biostatistics II
- MED604 Clinical Epidemiology
- MED642 Clinical Pharmacology
- MED675 Community Health Promotion
- MED641 Drug Evaluation
- MED601 Epidemiology I
- MED631 Health Economics I
- MED632 Health Economics II
- MED676 Health Promotion Agency Attachment & Health Economics
<table>
<thead>
<tr>
<th>Subject Code</th>
<th>Subject Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>MED674</td>
<td>Health Promotion Development and Evaluation</td>
</tr>
<tr>
<td>MED664</td>
<td>Health Promotion Project</td>
</tr>
<tr>
<td>MED665</td>
<td>Health Promotion Research Protocol</td>
</tr>
<tr>
<td>MED621</td>
<td>Health Social Science I</td>
</tr>
<tr>
<td>MED622</td>
<td>Health Social Science II</td>
</tr>
<tr>
<td>MED673</td>
<td>Introduction to Health Promotion</td>
</tr>
<tr>
<td>MED605</td>
<td>Occupational Epidemiology</td>
</tr>
<tr>
<td>MED662</td>
<td>Research Project</td>
</tr>
<tr>
<td>MED663</td>
<td>Research Project</td>
</tr>
<tr>
<td>MED661</td>
<td>Research Protocol Design</td>
</tr>
<tr>
<td>MED625</td>
<td>Social and Economic Pharmacology</td>
</tr>
<tr>
<td>MED624</td>
<td>Social Psychiatry</td>
</tr>
<tr>
<td>MED626</td>
<td>Sociocultural Studies I</td>
</tr>
<tr>
<td>MED627</td>
<td>Sociocultural Studies II</td>
</tr>
<tr>
<td>STAT407</td>
<td>Advanced Topics in Statistics</td>
</tr>
<tr>
<td>STAT402</td>
<td>Analysis of Categorical Data</td>
</tr>
<tr>
<td>STAT403</td>
<td>Demography and Survival Analysis</td>
</tr>
<tr>
<td>STAT303</td>
<td>Generalised Linear Models</td>
</tr>
<tr>
<td>STAT201</td>
<td>Mathematical Statistics</td>
</tr>
<tr>
<td>STAT406</td>
<td>Methods for Quality Improvement</td>
</tr>
<tr>
<td>STAT204</td>
<td>Non-parametric Statistics</td>
</tr>
<tr>
<td>STAT401</td>
<td>Probability Theory</td>
</tr>
<tr>
<td>STAT203</td>
<td>Queues and Simulation</td>
</tr>
<tr>
<td>STAT202</td>
<td>Regression Analysis</td>
</tr>
<tr>
<td>STAT404</td>
<td>Robust Regression and Smoothing</td>
</tr>
<tr>
<td>STAT405</td>
<td>Statistical Consulting</td>
</tr>
<tr>
<td>STAT301</td>
<td>Statistical Inference</td>
</tr>
<tr>
<td>STAT302</td>
<td>Study Design</td>
</tr>
<tr>
<td>STAT304</td>
<td>Time Series Analysis</td>
</tr>
</tbody>
</table>