Faculty of Medicine

Volume 1

1994
The Faculty of Medicine

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Faculty Information

The Faculty
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Board of Studies in Occupational Health and Safety
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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
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Also available are the Undergraduate Guides
This Volume is intended as a reference handbook for students enrolling in courses conducted by the Faculty of Medicine.
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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 28 September 1993.
Recommended Price $ Five dollars and fifty cents plus postage.

Designed by Marie-T Wisniowski, Medical Communication Unit
Typeset by Jan Spurr, Office of the University Secretary
Printed by The Pot Still Press Pty Ltd, Artarmon, Sydney
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 up to you, by cooperating with them, to maintain goodwill.

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 Distance Learning Program. This education and education for research is supported by diverse programs of active research and 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.
The Faculty took is also responsible for training in Occupational Health and Safety. We particularly value the close link that this permits to Industry. In 1993, the Bachelors degree in Occupational Health and Safety was introduced.

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.

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 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

section one
Faculty Staff

PRINCIPAL OFFICERS
Visitor His Excellency, The Governor of New South Wales
Chancellor The Honourable Justice E.A. Evatt, AO, LLB, HonLLD(Syd), LLM(Trav), HonLLD(Macq), HonDUniv
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Assistant Dean (Educational Extension) N. Bogduk, BSc(Med), MD BS(Syd), PhD(NSW), DpAnat(ASANZ), HonMMTAA, HonFACRM
### Faculty of Medicine

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**Senior Lecturer**
A Schwarzer, MB BS[Syd], FRACP

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A Frame

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J.E. Stuart, MB BS[WA], DCH(Lond), DipClnEpid, FRACP (joint appointment Community Medicine — Paediatrics)

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**Clinical Lecturers**
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**Occupational Hygienist**
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M. Lange

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M. Boden

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J.A.P. Rostas, BSc, PhD(Monash)

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

**Lecturer** R. Warden, BSc(Syd), MHPED(NSW), DipND(Syd)(joint appointment Medical Biochemistry - Paediatrics [Nutrition])

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**Senior Technical Officer** P. Jarvis, BSc

Discipline Office Staff E. Mawer

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A.H.B. Gilles, MBChB(Outage), PhD, FRACP
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R.S. Nanda, MB BS(Malaya), FRACP
T. Singh, MB BS(Malaysia), MMed(Singapore), FRACP, FRCP, FACC

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J.S. Silberberg, MB BCh(Witwatersrand), MSc(McGill), FRACP

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P.G. Gibson, MB BS(NSW), FRACP
R.A. Hackworthy, MB BS(Syd), FRACP
B.F. Jones, MB BS(Syd), MRACP
J.W. Leitch, MB BS(Syd), FRACP
K. Murree-Allen, MB BS(Syd), FRACP, FCCP
B.R. Nair, MB BS(Kerala), FRCP, FRACP
D.B. Williams, MB BS, PhD(Syd), FRACP

Discipline Office Staff D. Kitevski

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**Fellow** D. Brewster, BA(Guelph), MD(McMaster), MPH(Syd), FRACP

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E.G. Henson, MB BS(Syd), FRACP
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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. Ratnarajah, MB BS(Singapore), MRCP, FRACP
N Sallos, MB BS(Syd), MRCP, MRCPI, FRCP, FCCP
M. Seldon, BSc(Med), MB BS(Syd), FRACP, FRCPA
J.R.A. Sippe, MB BS(Syd), DDM, FACD
A.B. Tierney, MB BS(NSW), MSc(Lond), MRCP, FRACP
P. Trevillian, MB BS(Syd), FRACP
G.R. Tyler, BMed, FRACP
G. Warner, BSc(Med), MB BS(NSW), FRACP
T.J. Woolard, MB BS, DPH(Syd), FRACM, FACRM, FACOM

**Professional Officer** C.D. Ray, BSc(Monash), PhD

**Faculty of Medicine**

**Section One**

**Faculty Staff**

**Staff**
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**Clinical Professor** — *Anatomical Pathology* S.B. Bhagwanjee, MCh(Natal), FRCPA, FRPath

**Professorial Fellow** M.W. Partington, MB BS(Lond), FRCP(Edin), DCH(Lond), FRCP(Can), FCCMG

**Associate Professors**
- R.D. Barry, BVSc(Syd), PhD(ANU), MA, ScD(Camb) (Microbiology)
- A.W. Cryp, BSc(NE), PhD(Syd)(Immunology)
- G.A. Tannock, MSc(WAust), PhD(ANU) (Microbiology)

**Senior Lecturers**
- K.W. Beagley, BSc, DSc(Immunology), PhD(Otago) (Immunology)
- A. Price, MB BS(Syd), FRCPA (Anatomical Pathology)
- B. Young, BSc(St And), MB Chir, PhD(Camb), MRCP, FRCPA (Anatomical Pathology)

**Lecturer** C.G. Johnson, MB BS(Syd), FRCPA (Microbiology)

**Clinical Lecturers**
- A.P. 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. Gleeson, BSc(Syd), PhD (Immunology)

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**Senior Technical Officer** C.S. Cardoso, BSc(Bom)

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**Professor of Orthopaedic Surgery** Vacant

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- E.J. Henessey, MB BS(Syd), FRACS
- A.D. Hibble, MB BS, BMEdSc(Melb), MD(Otago), FRACS
- G. Kerridge, AM, MB BS(Syd), FRCS(Ed), FRACS, FACS, FACRM (Orthopaedics)
### Faculty of Medicine

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<td>M.V. Agrex, MB BS(WA), PhD, FRCS, FRACS</td>
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<td>E. Ho, MB BS(HK), FRCS, FRAC(S) (Orthopaedics)</td>
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<td>Fellow D.W. Jackson, MB BS(Syd), FRCS, FRACS</td>
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<td><strong>Clinical Senior Lecturers</strong></td>
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<td>R.L. Bisset, MB BS(Melb), FRACS, FRCS</td>
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<tr>
<td>A.J. Bookalll, MB BS(Syd), FRCS, FRAC(S) (Neurosurgery)</td>
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<tr>
<td>P. Byth, MB BS(Qld), FFARACS (Anaesthetics &amp; Intensive Care)</td>
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<td>P.S. Dhasanna, MB BS, DLO(Adel), FRCS, FRAC(S) (Ear Nose and Throat)</td>
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<td>H. Foster, BSc, MB BS(Melb), FRACS, FRCS, FICS</td>
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<td>M.S. Manku, MBChB(Makere), DO(Syd), FRACS, FRACO, FCOPHTh, FACS (Ophthalmology)</td>
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<td>J.E. Sage, MB BS(Syd), FRCS, FRAC(S) (Orthopaedics)</td>
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<td><strong>Clinical Lecturers</strong></td>
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<td>P.F. Anseline, MB BS(Syd), FRACS</td>
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<td>P.J. Barrie, MB BS(Syd), FRACS (Ear, Nose &amp; Throat)</td>
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<td>J. Beckett-Wood, MB BS(Syd), DA(Lond), FFARACS (Anaesthetics)</td>
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<td>F.A. Benjamin, MB BS(Ceylon), DO(Lond), FRCS, FCOPHTh, FICS (Ophthalmology)</td>
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<tr>
<td>C.J. Chalil, MB BS(Syd), FRACS, FRACO (Ophthalmology)</td>
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<td>D.H. Chapman, MB BS(Syd), FRCS, FRAC(S) (Orthopaedics)</td>
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<td>J.G. Christie, MB BS(Syd), FRACS (Neurosurgery)</td>
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<tr>
<td>S.V. Darbar, BSc (Karnatak), MB BS, MS (Bombay), FRCS, FRACS</td>
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<tr>
<td>C. Dunlop, BSc (Med), MB BS(Syd), FRACO, FRAC(S) (Ophthalmology)</td>
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<tr>
<td>T.D. Farebrother, PhC, MB BS(Syd), FRACS (Urology)</td>
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<tr>
<td>S.V. Fernandez, BSc, MB BS, FRCS, FRACO, FACS (Ear Nose &amp; Throat)</td>
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<tr>
<td>C.E. Harrington, MB BS(NSW), FRACS, FRAC(S) (Orthopaedics)</td>
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<td>J.C. Hooley, MB BS(Syd), FRACS</td>
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<td>L. Kleinman, MB BS(Capetown), FRCSI(Can), FACS, FRAC(S) (Orthopaedics)</td>
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<td>K Ongita, MB BS(Syd), FRCS, FRAC(S) (Orthopaedics)</td>
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<td>W.T. Porter, MB BS(Syd), DO(Lond), FRACO (Ophthalmology)</td>
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<td>B.E. Reed, MDS(Syd), FRACS (Oral &amp; Maxillofacial)</td>
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<td>S.E.C. Ruthven, BSc, MB BS(Syd), FRACS (Urology)</td>
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<td>R.W. Sillar, MB BS(Syd), FRCS, FRACS</td>
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<td>I. Simpson, MB BS(Syd), FFARACS (Anaesthetics)</td>
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<td>M.B. Simpson, MB BS(NSW), FRACS, FRACO (Ophthalmology)</td>
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<td>G.C. Sjost, MB BS(Syd), FRCS (Ear Nose &amp; Throat)</td>
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<td>M.I. Tarrant, MB BS(Syd), FRACS (Orthopaedics)</td>
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<td>J.S. Taylor, MB BS(Syd), FRCS (Ed), FRCS (Eng), FRACS (Urology)</td>
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<td>D.G. Walker, MB BS(Syd), FRCS, FRACS</td>
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<td>I.R. Wilson, MDS(Syd), FRACDS (Oral &amp; Maxillofacial)</td>
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<td><strong>Professional Officer</strong></td>
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<td>Y.C. Smart, BSc (WA), PhD</td>
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#### NBN TELETHON CANCER RESEARCH UNIT

<table>
<thead>
<tr>
<th>Senior Lecturer</th>
<th>Faculty of Medicine</th>
<th>Section One</th>
<th>Faculty Staff</th>
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<tr>
<td>J.L. Scott, BSc (Flinders), PhD (Adel)</td>
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#### DEAN'S UNIT

**Dean and Professor of Medicine** J.D. Hamilton, MB BS(Lond), FRCP, FRCPCan

**Senior Lecturer — Health, Law & Ethics** C. Myer, BAI(St Marys, Georgetown), MA(Georgetown)

**Senior Lecturer — Medical Education** - Vacant

**Assistant Registrar** B.J. Kelicher, BSc BCom

**School Accountant** G.J. Burrell, BCom, ASA

**Aboriginal Student Liaison Officer** K.D. Lambert, BMed

**Senior Tutor Aboriginal Student Liaison Office** R.E. Gibson, BSc(UNI), DipEd(HIHE)

**Professional Officers**

T. Bristow, BA (Admissions)

S. Maastricht, BScSc(Melb) (Animal House)

T.E. Mangan, BSc(Tech)(NSW) (Laboratory Manager)

S. Pearson, BSc (Program Evaluation)

**Computer Systems Officers**

L.S. Benn, BSc(Warwick)

J.D. Hendricks, BSc, DipEd, GradDiplDataProc(NSWIT) (Computer Manager)

W. Swinkels, BSc, GradDiplLibStud(WAIT)

**Senior Technical Officer** G.B. Davis, (Electronics)

**Technical Officer** B. Clipsham (Electronics)

**Senior Laboratory Craftsman** T. Oldham

**Laboratory Craftsman** D. Kirkland

**Laboratory Assistant** J. Bolton (Animal House)

**Clinical Supervisors Associated Hospitals**

D.V. Cody, MB BS(Syd), FRACP, FACRM, FACC (Lismore Base Hospital)

M.B. Donohue, MB BS(Syd), PACEM (Gosford District Hospital)

J. Hunt, MB BS(Syd), DObst, WCOG (Orange Base Hospital)

S.E. Jewell, MB BS(Syd), Dubbo Base Hospital)

I.B. McDonald, MB BS(Syd), FRCS (Maitland District Hospital)

P. C. Wakeford, MB BS(Syd), FRACP (Tamworth Base Hospital)

W.S. Wickremesinghe, MB BS(Ceyl), MRCP, FRACP (Manning Base Hospital)

**Dean's Unit Office Staff**

V. Caesar

S. James

R. Kay

**Clerical Staff**

L. Asper (Aboriginal Student Liaison Office)

M.P. Dick (Laboratory Manager's Office)

C. Jenkins (School Accountant)

**Services Officers**

B. Ferry

P. Nix

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

- the Vice-Chancellor;
- the Dean of the Faculty;
- the full-time academic staff of the Faculty;
- members elected by the Academic Senate from the academic staff of the University other than the Faculty of Medicine;
- 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 Hunter Medical Association;
- a member nominated by the Hunter 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 as 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:

- Associate Diploma in Occupational Health and Safety
- Bachelor of Medicine
- Bachelor of Medical Science
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 Medical Statistics, 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, Pharmacoeconomics, 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 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 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 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 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, the Bachelor of Occupational Health and Safety and the Graduate Diploma in Occupational Health and Safety. The membership of the Board is set out in Schedule 6 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, 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, nominated by the Head of the Department of Applied Life Sciences;
- 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, nominated by the Dean of the Faculty of Medicine.

**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 hospital was 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 and Clinical Epidemiology and Pathology as well as the Chair in Orthopaedics and the NBN Telethon Cancer Research Unit. It also has extensive laboratory facilities, educational facilities, the Medical Communication Unit and a branch of the Gardiner Library Service.

**MAJOR HOSPITALS IN NEWCASTLE AREA**

**Teaching Hospitals**

**Royal Newcastle Hospital (RNH).** With approximately 150 beds, this hospital has now changed its role to that of an orthopaedic hospital and houses the teaching base for the Faculty of Medicine. The oncology and environmental and occupational medicine. The oncology program at the Mater Hospital has become the centre of a regional network of services.

**Newcastle Mater Misericordiae Hospital (MMH).** This is operated by the religious order, the Sisters of Mercy as a general surgical 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 has become the centre of a regional network of services.

**Belmont Hospital.** Located in the southern suburbs of Newcastle, it provides general medical and surgical services as well as being the teaching hospital for the Faculty of Medicine. The hospital's name is derived from its location in the Belmont area of the city.

**John Hunter Hospital (JHH).** Located in the Newcastle suburb of Merewether, it provides a range of medical and surgical services to the local community. It is also the teaching hospital for the Faculty of Medicine and houses the University's Department of Public Health.

**New Lambton Heights Hospital.** Located in the suburbs of New Lambton Heights, it provides general medical and surgical services to the local community. It is also the teaching hospital for the Faculty of Medicine and houses the University's Department of Public Health.

**Clinical Sciences Building - Newcastle Mater Misericordiae Hospital (also called Newmed II).** This hospital occupies one floor. Other floors are committed to the oncology unit and service laboratories for the hospital. It is the teaching hospital for the Faculty of Medicine and is closely involved in the teaching program. The Chairs in Clinical Epidemiology and Pathology are also located in Newmed II.

In mid 1992 the discipline of Behavioural Science was relocated to the new Academic and Clinical building on the University campus.

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

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**New Lambton Heights Hospital.** Located in the suburbs of New Lambton Heights, it provides general medical and surgical services to the local community. It is also the teaching hospital for the Faculty of Medicine and houses the University's Department of Public Health.
Other Hospitals in the Newcastle Area

Rankin Park Hospital - rehabilitation and geriatrics
James Fletcher Hospital including Shortland Clinic
Lingard Private Hospital

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 (km)

<table>
<thead>
<tr>
<th>Hospital</th>
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<tr>
<td>Maitland District Hospital</td>
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<tr>
<td>Gosford District Hospital</td>
<td>90</td>
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<tr>
<td>Manning Base Hospital, Turce</td>
<td>180</td>
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<tr>
<td>Tamworth Base Hospital</td>
<td>250</td>
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<tr>
<td>Orange Base Hospital</td>
<td>400</td>
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<tr>
<td>Dubbo Base Hospital</td>
<td>400</td>
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<tr>
<td>Lismore Base Hospital</td>
<td>600</td>
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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 patterns of practice not accessible within the teaching hospitals.

Other Facilities

Libraries. The University medical library is located in the Auchmuty Library on the Callaghan campus. Together with the Royal Newcastle Hospital and the NSW Department of Health, the University contributes to the Gardiner Library Service based at John Hunter Hospital. The role of the Gardiner Library Service has been extended to that of a resource for the entire Hunter Area Health Service with branches also located at Royal Newcastle Hospital and the Mater Hospital.

Medical Communication Unit. This is an integrated media resource production unit providing graphic, video, film and audio-visual services. The 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 Centre's mission statement is as follows:

Mission

To be a centre of excellence for research, teaching and professional service in clinical epidemiology, biostatistics and social sciences related to population health both within Australia and overseas.

Aims

Activities of the Centre include interdisciplinary teaching, research and professional service. The aims are:

- Teaching
  - To provide postgraduate education, unique in Australia and the Pacific region, in the areas of clinical epidemiology, biostatistics, clinical economics, health social science, health promotion, occupational epidemiology, pharmacoepidemiology and psychiatric epidemiology.
  - To run an effective distance learning scheme, in Australia and overseas, for these postgraduate programs.
  - To encourage research among graduates into essential national health issues which will have an impact on health policy.

- Research
  - To conduct high quality clinical and population-based research of an interdisciplinary nature which will have an impact on health policy and outcomes.
  - To nurture the development and application of innovative methodology in clinical epidemiology, biostatistics and the health social sciences.

- Professional Service
  - To provide expertise and advice to the health sector, in order to influence policy and outcomes related to health services and prevention of disease.
  - To encourage funding policies that are conducive to the pursuit of postgraduate education and research in population health.

The activities of the Centre have been funded by a grant from the Rockefeller Foundation in the United States under the INCLEN Program and also by a grant from the Commonwealth Department of Health under the Public Health Education and Research Program.

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 Pharmacoepidemiology.

Participants in the academic activities of the Centre include:

- L. Barnsley, Tutor in Clinical Epidemiology
- K. Boyle, Tutor in Biostatistics
- A.M. Brown, Senior Lecturer in Environmental and Occupational Health
- J. Byles, Distance Learning Co-ordinator for Health Promotion
- D. Christie, Professor of Environmental and Occupational Health
- L.H. Connor, Senior Lecturer in Sociology and Anthropology
- M. Coory, Lecturer in Biostatistics
- A.J. Dobson, Professor of Biostatistics, Director of the Centre
- R.F. Heller, Professor of Community Medicine and Clinical Epidemiology, Deputy Director of the Centre
- M.J. Hensley, Associate Professor in Clinical Epidemiology
- D. Henry, Senior Lecturer in Clinical Pharmacology
- H.N. Higgins, Senior Lecturer in Health Social Sciences

R.J. Kemp, Lecturer in Health Economics
L. Lim, Senior Lecturer in Biostatistics
D.L. O'Connell, Senior Lecturer in Biostatistics
B. Pekarsky, Tutor in Health Economics
M.R. Phillips, Senior Lecturer in Clinical Epidemiology
S. Redman, Senior Lecturer in Behavioural Science in Relation to Medicine
J. Robertson, Tutor in Clinical Pharmacology
K.M. Robinson, Senior Lecturer in Sociology and Anthropology
A. Sprigs, Lecturer in Clinical Epidemiology
J.E. Stuart, Senior Lecturer in Community Medicine and Paediatrics
C. Treloar, Tutor in Health Social Sciences
R. Walker, Tutor in Biostatistics
B. Walsh, Tutor in Clinical Epidemiology
section three

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 to qualify a candidate for the award as set out in the schedule;

"Dean" means the Dean of a Faculty;

"department" means the department offering a particular subject and includes any other body so doing;

"Faculty" means the Faculty responsible for the course;

"Faculty Board" means the Faculty Board of the Faculty;

"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 a 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 Academic Senate after considering the advice of the Faculty Board of the Faculty in which the department is located.

(3) The Academic Senate, after considering a request from a 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 will have effect in the following year shall be approved by a date determined by the Academic Senate.

(5) Where there is any change in the list of approved subjects, 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, a candidate will not have satisfied a pre-requisite if the pre-requisite subject has not been completed in the preceding eight calendar years.

(3) A candidate attaining a Terminating Grade in a subject shall be deemed not to have passed that subject for pre-requisite purposes.

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 substantially equivalent to one which that 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.

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 Pass in a subject shall be deemed not to have passed that subject for pre-requisite purposes.
credit for more than sixty-five percent 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 a 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 such notification.

(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, the last day of second semester; and/or

(c) subject to any provision within the schedule; and/or

(b) a candidate shall not be permitted to withdraw from a subject on more than two occasions.

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.

(3) A person who has been enrolled in a course but is absent without leave or has been excluded from the course may apply for re-admission to that course and may be re-admitted to candidature under such conditions and at such time as the Faculty Board may determine, unless otherwise specified in the schedule.

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 so 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 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 from persons who are under 21 years of age as at March 1 in the year in which they first wish to enrol in the course.

Qualification for Associate Diploma

3. To qualify for the award of the Associate Diploma a candidate shall pass the programme of subjects approved by the Board totalling 40 credit points.

Credit

4. The credit granted to candidates shall not exceed 80 credit points.

Time Requirement

5. The course shall be completed in not more than five years of study.

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

SCHEDULE — BACHELOR OF MEDICINE

Admission to Candidature

1. An applicant for admission to candidature shall satisfy the Rules Governing Admission to the Bachelor of Medicine Course.

Enrolment

2. 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 totalling 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 to 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 Medicine 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 under such conditions and at such time as the Faculty Board may determine.

SCHEDULE — BACHELOR OF MEDICAL SCIENCE

Interpretation
1. In this Schedule unless the context or subject matter otherwise indicates or requires: “co-ordinator” means the co-ordinator for the program.

Appointment of Co-ordinator
1. The Faculty Board shall appoint a member of full-time academic staff of the Faculty as co-ordinator for a period to be determined by the Faculty Board.

Admission to Candidature
2. (1) To be eligible for admission to candidature, an applicant shall:
   (a) have passed subjects totalling at least 240 credit points in the course leading to the degree of Bachelor of Medicine in the University; or
   (b) have passed at least three years of a course leading to an equivalent degree in another university recognised for this purpose by the Faculty Board.

(2) Faculty Board shall consider the recommendations of the co-ordinator, and if satisfied that facilities and supervision are adequate for the program, approve the application.

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 totalling 80 credit points.

Grading of Degree
4. (1) The degree shall be conferred as an Honours degree only. (2) There shall be three classes of Honours, namely Class I, Class II and Class III. Class II shall have two divisions, namely Division II and Division III. (3) The Faculty Board shall determine the grade of Honours to be awarded to a candidate after considering the recommendation of the co-ordinator.

Enrolment
5. Except with the permission of the Faculty Board, given only in exceptional circumstances, a candidate who withdraws from the course will not be permitted to re-enrol in the course.

Time Requirements
6. The course shall be completed in one year of study.

SCHEDULE — BACHELOR OF OCCUPATIONAL HEALTH AND SAFETY

Interpretation
1. In this Schedule unless the context or subject matter otherwise indicates or requires: “Board” means the “Board of Studies in Clinical Epidemiology and Biostatistics”; “Co-ordinator” means the co-ordinator for the specialisation concerned.

Specialisations Offered
2. The program of studies for the diploma shall be pursued in one of the following specialisations:
   - Clinical Epidemiology;
   - General Practice;
   - Occupational Epidemiology;
   - Pharmaceutical Epidemiology;
   - Psychiatric Epidemiology.

Appointment of Co-ordinator
3. The Board shall appoint one of its members, who is a member of full-time academic staff as co-ordinator for each of the specialisations offered.

Qualification for the Degree
3. To qualify for admission to the degree a candidate shall pass the program of study approved by the Board totalling 240 credit points.

SCHEDULE — DIPLOMA IN OCCUPATIONAL HEALTH AND SAFETY

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

Transfer of Candidates
2. Candidates for the degree of Bachelor of Occupational Health and Safety who have satisfied the requirements for the Diploma in Occupational Health and Safety may be permitted by the Board to transfer candidature to the Diploma in Occupational Health and Safety. Candidates wishing to transfer shall apply in writing to the Academic Registrar for permission to do so.

Qualification for the Diploma
3. To qualify for the award of the Diploma a candidate shall pass the program of study approved by the Board totalling 160 credit points.

SCHEDULE — GRADUATE DIPLOMA IN EPIDEMIOLOGY

Interpretation
1. In this Schedule unless the context or subject matter otherwise indicates or requires: “Board” means the “Board of Studies in Clinical Epidemiology and Biostatistics”.

Enrolment
5. Except with the permission of the Faculty Board, given only in exceptional circumstances, a candidate who withdraws from the course will not be permitted to re-enrol in the course.

Time Requirements
6. The course shall be completed in one year 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 recognised options namely:
   - Clinical Epidemiology;
   - General Practice,
Occupational Epidemiology,
Pharmaceutical Epidemiology, or
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.

SCHEDULE — GRADUATE DIPLOMA IN HEALTH
SOCIAL SCIENCE

Interpretation
1. In this Schedule unless the context or subject
matter otherwise indicates or requires:
"Board" means the "Board of Studies in Clinical
Epidemiology and Biostatistics";
"co-ordinator" means the co-ordinator for the
specialisation concerned.

Specialisations Offered
2. The program of studies for the Diploma shall be
pursued in one of the following specialisations:
Health Promotion
Medical Social Science

Appointment of Co-ordinator
3. The Board shall appoint one of its members,
who is a member of full-time academic staff as
course co-ordinator for each of the specialities
offered.

Admission
4. (1) Applicants shall nominate the specialisation
in which they wish to pursue the course.

5. 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;
(b) have satisfied the requirements for
admission to the degree of Bachelor of
Arts or Bachelor of Science with a
major sequence of study in Psychology
or Sociology in the University or another
university recognised for this purpose
by the Board;
(c) have satisfied the requirements for
admission to the degree of Bachelor of
Applied Science in a field related to
health in the University or in a tertiary
institute recognised for this purpose
by the Board;
(d) have other qualifications approved for
this purpose by the Board.

6. Notwithstanding sub-clause (2) the Board
shall consider each application and if it is of
the opinion that the applicant's academic
preparation is not sufficient 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
7. 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
8. 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
9. (1) A student enrolled as a candidate for the
Master of Medical Science degree in one of
the following recognised options namely:
Health Promotion
Medical Social Science
who is permitted to withdraw from the
degree course under Rule 13 of the Master
Degrees Rules 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.

SCHEDULE — GRADUATE DIPLOMA IN
MEDICAL STATISTICS

Interpretation
1. In this Schedule unless the context or subject
matter otherwise indicates or requires:
"Board" means the "Board of Studies in Clinical
Epidemiology and Biostatistics";
"co-ordinator" means the person appointed
to co-ordinate the program.

Appointment of Co-ordinator
2. The Board shall appoint one of its members,
who is a member of full-time academic staff as
course co-ordinator.

Admission
3. (1) To be eligible for admission to candidature
an applicant shall:
(a) have satisfied the requirements for
admission to a Bachelor's degree with a
major sequence of study in psychology
or related field recognised for this purpose
by the Board;
(b) have such other qualifications as may
be approved for this purpose by the Board.

(2) Notwithstanding sub-clause (1) the Board
shall consider each application and if it is of
the opinion that the applicant's academic
preparation is not sufficient to enable the
satisfactory completion of the course 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
4. To qualify for the award of the Diploma a
candidate shall complete the program of study
approved by the Board totalling 80 credit points.

Transfer of Candidacy from Related Master Degree
Program
5. (1) A student enrolled as a candidate for the
Master of Medical Statistics who is permitted
to withdraw from the degree course under
Rule 13 of the Master Degrees Rules or whose
specialisation is terminated under Rule 11 of those Rules
may be permitted by the Board to enrol as
a candidate for the Diploma.

(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.

SCHEDULE — GRADUATE 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";
"co-ordinator" means the person appointed to co-ordinate the program.

Appointment of Co-ordinator
2. The Board shall appoint one of its members, who is a member of full-time academic staff as co-ordinator.

Admission
3. (1) To be eligible for admission to candidature an applicant shall:
   (a) have satisfied the requirements for admission to a Bachelor degree in the University or another university recognised 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 prerequisite 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 programme 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 MASTERS DEGREES

PART I - GENERAL

   (2) In these Rules and the Schedules thereto, unless the context or subject otherwise indicates or requires:
   "Faculty Board" means the Faculty Board of the Faculty responsible for the course in which a person is enrolled or is proposing to enrol;
   "program" means the program of research and study prescribed in the Schedule;
   "Schedule" means the Schedule of these Rules pertaining to the course in which a person is enrolled or is proposing to enrol; and
   "thesis" means any thesis or dissertation submitted by a candidate.

3. These Rules shall not apply to degrees conferred honoris causa.

4. A degree of Master shall be conferred in one grade only.

   (2) An application for admission to candidature for a degree of Master shall be made on the prescribed form and lodged with the Secretary to the University by the prescribed date.

5. (1) To be eligible for admission to candidature an applicant shall:
   (a) (i) have satisfied the requirements for admission to a degree of Bachelor in the University of Newcastle as specified in the Schedule; or
   (ii) have satisfied the requirements for admission to a degree or equivalent qualification, approved for the purpose by the Faculty Board, in another tertiary institution; or
   (iii) have such other qualifications and experience as may be approved by the Academic Senate on the recommendation of the Faculty Board or otherwise as may be specified in the Schedule; and
   (b) have satisfied such other requirements as may be specified in the Schedule.

6. If the Faculty Board is of the opinion that the candidate is not making satisfactory progress towards the degree then it may terminate the candidature or place such conditions on its continuation as it deems fit.

7. For the purpose of assessing a candidate's progress, the Faculty Board may require candidates to submit a report or reports on their progress.

8. (1) A candidate against whom a decision of the Faculty Board has been made under Rule 8(1) of these Rules may request that the Faculty Board review its decision.

   (2) Such request shall be made to the Dean of the Faculty within seven days from the date of posting to the candidate the advice of the Faculty Board's decision or such further period as the Dean may accept.

   (3) A candidate may appeal to the Vice-Chancellor against any decision made following the review under Rule 8(3) of these Rules.

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

PART II - EXAMINATION AND RESULTS

10. The Examination Rules approved from time to time by the Council shall apply to all examinations with respect to a degree of Master with the exception of the examination of a thesis which shall be conducted in accordance with the provisions of Rules 12 to 16 inclusive of these Rules.

11. The Faculty Board shall consider the results in subjects, the reports of examiners and any other recommendations prescribed in the Schedule and shall decide:
   (a) to recommend to the Council that the candidate be admitted to the degree; or
   (b) in the case of a subject offered only in the second semester, the Monday of the 9th week of second semester;
   (c) in the case of any other subject, the Monday of the 3rd week of second semester.
(b) In a case where a thesis has been submitted, to permit the candidate to resubmit an amended thesis within twelve months of the date on which the candidate is advised of the result of the first examination or within such longer period of time as the Faculty Board may prescribe; or
(c) to require the candidate to undertake such further oral, written or practical examinations as the Faculty Board may prescribe; or
(d) not to recommend that the candidate be admitted to the degree, in which case the candidate shall be terminated.

PART III - PROVISIONS RELATING TO THeses

12. (1) The subject of a thesis shall be approved by the Faculty Board on the recommendation of the Head of the Department in which the candidate is carrying out the research for the thesis.

(2) The thesis shall not contain any work or document which has previously been submitted by the candidate for a degree in any tertiary institution unless the Faculty Board otherwise permits.

13. The candidate shall give to the Secretary to the University three months' written notice of intention to submit a thesis and such notice shall be accompanied by any prescribed fee.

14. (1) The candidate shall comply with the following provisions concerning the presentation of a thesis:

(a) the thesis shall contain an abstract of approximately 200 words describing its content;
(b) the thesis shall be typed and bound in a manner prescribed by the University;
(c) three copies of the thesis shall be submitted together with:
(i) a certificate signed by the candidate that the main content of the thesis has not been submitted by the candidate for a degree in any other tertiary institution; and
(ii) a certificate signed by the supervisor indicating whether the candidate has completed the program and whether the thesis is of sufficient academic merit to warrant examination; and

(2) If the candidate so desires, any document or published work of the candidate whether bearing on the subject of the thesis or not shall be accompanied by any prescribed fee.

(2) The Faculty Board shall determine the course of action to be taken should the certificate of the supervisor indicate that in the opinion of the supervisor the thesis is not of sufficient academic merit to warrant examination.

15. The University shall be entitled to retain the submitted copies of the thesis, accompanying documents and published work. The University shall be free to allow the thesis to be consulted or borrowed and, subject to the provisions of the Copyright Act, 1968 (Com), may issue it in whole or in part in photocopy or microfilm or other copying medium.

16. (1) For each candidate two examiners, at least one of whom shall be an external examiner (being a person who is not a member of the staff of the University), shall be appointed either by the Faculty Board or otherwise as prescribed in the Schedule.

(2) If the examiners' reports are such that the Faculty Board is unable to make any decision pursuant to Rule 11 of these Rules, a third examiner shall be appointed either by the Faculty Board or otherwise as prescribed in the Schedule.

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 may be obtained from the Faculty Office.

RULES GOVERNING ADMISSION TO THE BACHELOR OF MEDICINE COURSE

General

1. These rules are made in accordance with the powers vested in the Council.

Definitions

2. In these Rules unless the context or the subject matter otherwise indicates or requires:

(1) "approved qualification" means a diploma or degree course at a College of Advanced Education or University approved by the Faculty Board for the purposes of these Rules;
(2) "degree" means the degree of Bachelor of Medicine;
(3) "Faculty Board" means the Faculty Board, Faculty of Medicine;
(4) "Higher School Certificate examination" means the South Wales Higher School Certificate examination or its equivalent in another State or Territory; and
(5) "Secretary" means Secretary to the University.

Application for Admission

3. (1) An application for admission to candidature for the degree shall be made on the prescribed form and lodged with the Secretary by the closing date.

(2) For the purposes of these Rules the closing date referred to in sub-rule (1) shall be 5.00 pm on June 30 of the year prior to that in which admission is sought. If June 30 falls on a weekend the prescribed date shall be 5.00 pm on the next working day after June 30.

4. (1) Except in cases where the Faculty Board holds that exceptional circumstances exist, applications will not be accepted from persons who are over 35 years of age as at March 1 in the year in which they wish to enrol in the course.

(2) In determining whether exceptional circumstances exist in a particular case the Faculty Board shall take into account:
(a) the number of years by which the applicant exceeds 35 years of age;
(b) the applicant's chances of succeeding in the course as judged by his or her previous academic achievements;
(c) the applicant's employment experience in medical or related fields; and
(d) any other matters it considers relevant.

5. (1) In addition to the application under Rule 3(1), an application for enrolment, including the Bachelor of Medicine course in this University as one of the preferences, shall be lodged with the Universities and Colleges Admissions Centre by the closing date.

(2) The closing date referred to in sub-rule (1) shall be the date determined from time to time by the Universities and Colleges Admissions Centre after which the Centre will not accept applications.

Enrolment

6. (1) In order to be admitted to the course an applicant shall:
(a) as at the closing date satisfy Rule 3 of the Rules Governing Admissions and Enrolment save that applicants who are candidates for the current Higher School Certificate examination may be considered;
(b) complete the Personal Qualities Assessment;
(c) receive approval to enrol;
(d) complete the prescribed enrolment procedures; and
(e) pay fees and charges prescribed by the Council.

(2) Approval to enrol will not be given to applicants who are unable to demonstrate to the Secretary that their state of health is commensurate with the standard of fitness required to undertake the course.

(3) The standard of fitness required in sub-rule (2) shall be determined by the Faculty Board.

Personal Qualities Assessment

7. The Personal Qualities Assessment shall consist of such written tests and interviews as the Faculty Board shall require.

8. Applicants will be invited to take part in the Personal Qualities Assessment:
(a) they are ranked in the top 10% of all candidates at the South Wales Higher School Certificate examination judged on the basis of this University's selection aggregate; or
(b) they have achieved results in courses leading to the award of or admission to an approved qualification at a level prescribed by the Faculty Board; or
9. (1) An applicant who is a candidate for the current Higher School Certificate examination shall be invited to take part in the Personal Qualities Assessment if the principal of the school or college attended by the applicant estimates that the applicant's results in the examination will place the applicant in the top 10% of all candidates at the examination.

(2) If the principal's estimate places an applicant below the top 10% and that applicant achieves an actual result in the top 10% the applicant will be invited to take part in the Personal Qualities Assessment as soon as is convenient to the University.

(3) If the principal's estimate places an applicant in the top 10% and that applicant achieves an actual result below the top 10% the applicant will not be eligible for admission to candidature regardless of their Personal Qualities Assessment result.

10. (1) The eligibility of an applicant, who has a record of studies at the tertiary level, to take part in the Personal Qualities Assessment shall normally be determined on the basis of the results obtained in those studies.

(2) In cases where an applicant's record of studies at the tertiary level is below the level required for participation in the Personal Qualities Assessment the Faculty Board may take into account the applicant's performance at the Higher School Certificate examination which may have been attempted either prior to or after attendance at a tertiary institution.

11. Applicants who do not attend the University for Personal Qualities Assessment as invited will be deemed to have withdrawn their application unless they can provide a reason for their failure to do so which is acceptable to the Secretary.

Selection

12. (1) The Secretary shall ensure that sufficient offers of admission to the course are made each year such that 64 students are admitted to the first year of the course.

(2) Approximately half of the 64 places referred to in sub-rule (1) will be allocated to applicants judged by the Faculty Board to have the highest academic merit. The remainder will be allocated to applicants achieving the highest results in the Personal Qualities Assessment.

(3) The Faculty Board may further subdivide the places allocated on the basis of academic merit into those allocated on the basis of academic merit as demonstrated in studies at the secondary level or those on the basis of academic merit as demonstrated in studies at the tertiary level.

(4) Places allocated on the basis of academic merit as demonstrated in studies at the tertiary level shall be allocated to applicants who have completed an approved qualification.

(5) Applicants whose results in the Personal Qualities Assessment do not reach a standard deemed to be satisfactory by the Faculty Board shall not be allocated a place on the basis of academic merit.

Deferment of Admission

13. (1) The Dean of the Faculty of Medicine or the Dean's nominee may grant an applicant offered admission to candidature in the course a deferral of admission of one year:

(a) to allow an applicant who has just left school an opportunity to gain broader experience through travel or work before commencing university studies;

(b) to afford an applicant sufficient time to make necessary arrangements concerning financial, domestic or employment commitments; or

(c) to allow an applicant enrolled as a candidate for a postgraduate degree in a university time to complete the requirements for the admission of that degree.

(2) An applicant granted deferment under sub-rule (1)(c) who at the end of the period of deferment has not met the requirements for admission to the degree, but who is considered by the Dean of the Faculty of Medicine or the Dean's nominee to be making satisfactory progress towards satisfying the requirements for admission to the degree, may be granted deferment of admission to candidacy in the course for an additional period of one year.

(3) An applicant who wishes to defer admission must apply to the Secretary in writing prior to the expiry date of the offer of admission.

(4) The number of applicants permitted to defer admission in any one year shall not exceed 16.

(5) Applicants permitted to defer admission who enrol in another degree or diploma course in a University or College of Advanced Education may be refused permission to enrol in the course at the expiration of their period of deferment on the grounds that their academic performance in that other course has fallen below the standard required for admission to the Bachelor of Medicine course.

(6) The standard required in sub-rule (5) shall be that as set out in Rule 8(b) and (c) of these Rules.

Faculty Admissions Committee

14. (1) There shall be a Faculty Admissions Committee comprising the following members:

(a) the Dean of the Faculty;

(b) the Sub-Dean of the Faculty who shall chair the Committee;

(c) the Deputy President of Academic Senate;

(d) up to four members of academic staff of the Faculty elected by the Faculty Board;

(e) up to four residents of the Hunter Region, not being members of staff of the University, appointed by the Faculty Board on the nomination of the Sub-Dean.

(2) Any vacancy occurring in the office of an elected or appointed member of the Committee shall be filled by election or appointment in the same manner as that in which the member whose office is vacated was elected or appointed, and the person so elected or appointed shall hold office for the remainder of that term.

(3) The number of members constituting the quorum of the Committee shall be five.

(4) In the absence of the Sub-Dean from any meeting of the Committee a person to chair the meeting shall be elected for the meeting by and from those members present.

Relaxing Provisio

15. The Faculty Admissions Committee shall exercise such powers and responsibilities under these Rules as the Faculty Board may authorise.

16. (1) The Academic Senate on the recommendation of the Faculty Board may relax any provision of these Rules to allow the admission of Australian Aborigines and Torres Strait Islanders to the course under such terms and conditions as the Academic Senate on the recommendation of the Faculty Board may determine.

(2) For the purposes of sub-rule (1) "Australian Aborigine" or "Torres Strait Islander" shall mean a person of Australian Aborigine or Torres Strait Islander descent who identifies as such by the community in which that person lives.

17. The Academic Senate on the recommendation of the Faculty Board may relax any provision of these Rules to allow the admission of overseas students to the course under such terms and conditions as the Academic Senate on the recommendation of the Faculty Board may determine.
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
- the Graduate 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 on 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:

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<th>Credit Points</th>
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<tr>
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<tr>
<td>OS101S</td>
<td>Occupational Health and Hygiene 12</td>
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<tr>
<td>OS102S</td>
<td>Occupational Safety Technology 12</td>
</tr>
<tr>
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<td>Social Dimensions of Occupational Health and Safety 12</td>
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<td>OS105S</td>
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<td>Overview Problems in Occupational Health and Safety 18</td>
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<td>OS204B</td>
<td>Project in Occupational Health and Safety 18</td>
</tr>
<tr>
<td>OS205B</td>
<td>Legal Studies in Occupational Health and Safety 12</td>
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</tbody>
</table>

Bachelor of Occupational Health and Safety

This program of study is offered as a 4 year part time course. It is designed to enable graduates to assume a leading role in the management and practice of occupational health and safety by combining theoretical knowledge with a wide understanding of occupational health and safety issues and practical studies.

Fundamental principles with which the course is concerned are:
- the promotion and maintenance of the highest degree of physical, mental and social well-being of workers in all occupations;
- the prevention of ill-health in people caused by working conditions;
- the protection of workers in their employment from risks resultant on factors adverse to health and safety;
- the placing and maintenance of the worker in an occupational environment adapted to the workers' physiological and psychological needs and capabilities.

As graduates, students will have the knowledge, skills and professional approach expected of fully competent professionals in occupational health and safety. These attributes will be based on a sound understanding of basic and social sciences which contribute to occupational health and safety as well as the broad range of occupational health and safety practices. In recognition of the need to be able to critically evaluate functional tasks and theoretical developments in the occupational health and safety field, students will also develop important problem solving and analytical skills over the entire course.

There are four strands which provide the foundation for the course:
- Occupational Health and Hygiene
- Safety Science
- Human Factors in OH&S
- Occupational Health and Safety Practice

The approved program of study for the Bachelor course is:

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<td>OH1112</td>
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to the occupational health and safety needs of their organisations.

The scope of such work would include the dissemination of information regarding health and safety issues, increasing employee awareness of how hazards to themselves and others can be minimised, and the general promotion of safety consciousness. Employee training would also be an important component of a graduate's work.

The major aims of the course are:

- to develop the theoretical and practical application of occupational health and safety principles;
- to extend each student's skill in communicating an understanding of occupational health and safety to others and in dealing with risk and danger in the workplace;
- to encourage the desire to promote the health, safety and well-being of others;
- to develop a problem-solving approach to occupational health and safety issues;
- to encourage and enhance skills which form the basis of continuing learning.

The approved program of study for the Graduate Diploma is:

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Subject Descriptions Associate Diploma in Occupational Health and Safety

OS101S OCCUPATIONAL HEALTH AND HYGIENE 12cp

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

The first part is designed to introduce the major areas of study encompassed by occupational health and hygiene and will form a base for the proper integration of occupational health and hygiene 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, 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.

OS102S OCCUPATIONAL SAFETY TECHNOLOGY 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.

OS105S ERGONOMICS AND ENVIRONMENTAL SYSTEMS 12cp

This subject is an introduction to ergonomics and work place design, and systems measurement and control. The first part will enable the student to:

- plan the composition of a multidisciplinary team;
- recognise possible sources of injury and inefficiency which arise from the neglect of the application of sound ergonomic principles.

The second part will enable students to:

- classify and describe the various types of environmental systems;
- identify ergonomically undeasirable characteristics of the work environment -
  (a) vibration and noise
  (b) heat
  (c) level of illumination
  (d) motion
  (e) humidity;
- use correctly measuring devices (within their expected range of expertise) associated with assessment of such qualities as noise level, temperature, light intensity, vibration, humidity and air pressure;
- propose solutions, within the limits of the students' expertise, to problems of the work situation associated with the phenomena described above.

OS106W SOCIAL DIMENSIONS OF OCCUPATIONAL HEALTH AND SAFETY 12cp

This subject is broken into two parts, the first part involving industrial psychology and the second part involving industrial sociology.

The subject is designed to promote an awareness and a working understanding of some of the basic psychological and sociological aspects of the effects of work on the individual.

OS201B OVERVIEW PROBLEMS IN OCCUPATIONAL HEALTH AND SAFETY 18cp

Overview problems will be selected from all areas of occupational health and safety. In general, the topics will be chosen to investigate multifaceted problems which require the application of occupational health and safety principles and knowledge from a variety of perspectives.
OS204B PROJECT IN OCCUPATIONAL HEALTH AND SAFETY 18cp

Students will review an area of occupational health and safety. This will lead to a project proposal being submitted for approval. The proposal will then be developed under supervision.

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.

OS205B LEGAL STUDIES IN OCCUPATIONAL HEALTH AND SAFETY 12cp

This subject is broken into two parts. The first part is designed to promote the understanding of the standards of legal responsibility in the workplace while in the second part students will examine in detail the legal standards relating to safety in the workplace and the remedies available from a breach of these standards.

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 ultrastructure and basic biochemistry, through to the major body systems will enable students to:
- describe the basic structures and functions of living cells; distinguish between different types of micro-organism; 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.

Text 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 weighting 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, calorimetry, heat transfer, cryogenics
- Optics - properties of light
- Sound

Text To be advised

OCCUPATIONAL HEALTH AND SAFETY PRACTICE

OCCUPATIONAL HEALTH AND SAFETY PRACTICE is designed to relate the subject-oriented issues of the other strands to workplace practice. As such, it has an important integrating role across all strands, as well as presenting material of practical relevance in the modules it contains.

Most of the subjects contain Problem Based Learning and Workplace Visits. These components are seen as central to the rationale of this strand.

Problem Based Learning

Problem based learning requires students to work individually or in small groups to examine occupational and safety problems selected from a wide range of industries. The problems selected may range from minor incidents to complex case studies. When required, guest lecturers with appropriate expertise will present their viewpoints on issues raised.

Objectives

On completion of the problem based learning component, students will be able to:
- assess the scope of a problem encountered in occupational health and safety
- define and pursue the information required in order to resolve such a problem
- devise a general strategy for the management of such a problem

Problems will be selected to enable students to use and integrate knowledge gained from all strands of the course. Student input will be through individual or group reports, presentations or seminars as required.

Workplace Visits

The program of workplace visits will provide opportunities for observation of workplace practices, theory-into-practice experience, and integration of studies from other strands. Workplace visits will operate over all years of the course. Each visit will be structured with a pre-visit briefing, the visit itself and a post-visit debriefing. A wide variety of workplaces in the Hunter Region will be visited.

Objectives

- to familiarise students with a wide range of workplace processes and operations
OH8141 OCCUPATIONAL HEALTH

Prerequisite

This subject gives an introduction to occupational health and safety practice. It requires knowledge of OH&S in many workplace problems.

Hours

Full-year/2 hours per week

Assessment

To be advised

Content

This subject gives an introduction to OH&S and introduces the mathematical and statistical work required by the student in the early stages of this course. A segment on PC operation and packages is included. In line with the notion of practical application, this subject also contains a program of industrial and other visits. The purpose of the subject is to enable students to be able to use and understand word processing and statistical packages, and to attend and report on visits to industrial or other locations as required.

Topics

Introduction to Occupational Health and Safety
  - brief historical development of the field
  - aims and objectives of OH&S and the ILO Statement
  - general practices and procedures in NSW
  - OH&S in the workplace

Statistical procedures
  - review of arithmetic and algebraic processes
  - diagrammatic representation of data
  - measures of central tendency
  - measures of variability
  - populations and samples
  - distributions - normal, binomial, Poisson-normal curve and z-scores
  - probability
  - correlation
  - hypothesis formulation and levels of significance
  - introduction to hypothesis testing

Computing
  - introduction to the PC and peripherals
  - input/output devices, storage and communication
  - use of packages to teach aspects of computer use, e.g., typing tutor
  - word processing
  - statistical packages
  - desktop publishing

The following subject descriptions are included as a guide to the subjects which comprise the later stages of the Bachelor course but which are not yet available (i.e., not offered in 1993).

OH8112 OCCUPATIONAL HEALTH II 10cp

The purpose of this subject is to provide students with an understanding of the occupationally induced injuries and diseases affecting each body system, and the nature and functions of an OH&S service and the professionals in OH&S. Through the study of occupational disease and the occupational effects on specific organ systems (such as respiratory disease, cancer, stress, back problems), students will gain an appreciation of the OH&S problems of specific groups of workers.

OH811 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 work 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 awareness of the factors influencing toxicity and an understanding of the relevance to hygiene standard setting of dose-effect and dose-response relations and toxicological interactions. The toxicity of specific groups of industrial chemicals is also studied.

OH8122 EPIDEMIOLOGY FOR OCCUPATIONAL HEALTH AND SAFETY 10cp

In this subject students are encouraged to apportion their time so as to spend approximately 48 hours on Epimdemiology and 10 hours on Biostatistics (students will already have studied statistics in Year 1). Epimdemology

This subject introduces students to epidemiology as a way in which new knowledge in OH&S is gained, and equips them with the tools necessary for critical evaluation of OH&S 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.

OH8111 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 toxicity of specific physiological systems; and (e) evaluate toxicological data for the assessment of risk and the establishment of appropriate hygiene standards.

OH8212 SAFETY SCIENCE I 10cp

This subject consists of two concurrent parts of equal weighting which introduce students to concepts in Chemistry, Physics and Material Science relevant to Occupational Health and Safety.

Chemistry Topics
  - Principles of electrochemistry
  - Polymer chemistry
  - Analytical methods relevant to occupational health and safety
  - Chemical health and safety information processing

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

OH8221 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 the fields of materials science and chemical processing.

Materials Science Topics
  - Elasticity - stress/strain
  - Properties of materials - introductory metallurgy
  - Plastics; ceramics and other materials of engineering significance
  - Failure testing/evaluation
  - Corrosion science

Chemical Process Safety Topics
  - Overview of chemical engineering operations and their hazards, e.g., pumping, distillation, cleaning, especially degrading, transfer of bulk quantities.
- Labelling and handling hazardous materials including transport
- Flammable, cryogenics, toxic, radioactive, biochemical.
- Fire and fire control
- Explosion risks including dust and bleve
- Principles of chemical storage
- Spillage and waste disposal
- Developing 'housekeeping' plans for plant sites

**OHS22 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 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 tools
- Demolition

**Fire and Explosion Safety Topics**
- Classification of fires
- Statutory requirements
- Sources of ignition
- Combustibility - properties of building and construction materials
- Fire testing
- Building design for fire protection
- Fire detectors, alarms and suppression
- Firefighting equipment and systems
- Explosion risk assessment
- Suppression of explosion risk including plant layout
- Personnel 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 preconditions 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 exhaust and ventilating systems, forging machines, electric motors, pumps, hoppers, chutes, gas furnaces

**Ventilation Engineering**
- Application of principles of airflow - openings, ducts, filters, fans
- Design techniques for general ventilation, dilution, ventilation, 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, maintenance engineering and safety feature design in plant and machinery.

**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
- Approaches to radiation protection in the workplace

**Maintenance Engineering Topics**
- Factors influencing maintenance procedures (types and speed of failures)
- 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

**OHS132 OCCUPATIONAL HEALTH AND SAFETY LAW 10cp**

Knowledge of the law as it applies to Occupational Health and Safety is necessary for any person intending to fulfill a professional role in the field. This subject is designed to provide the student with a reasonable understanding of the structure and functions of law and legal institutions, in addition to an appreciation of the historical background to Occupational Health and Safety laws. Students will be particularly concerned with the notions of liability and negligence in relation to Occupational Health and Safety; the legal requirements which relate to occupational health and safety and the relevant legislation which should be applied to specific problems.

**OHS231 OCCUPATIONAL HEALTH AND SAFETY MANAGEMENT II 10cp**

In OH&S Management I we were concerned mainly with the behaviour of the individual. In this subject, the primary focus is on that of the organisation. This involves students acquiring an understanding of the various schools of thought and practice relating to organisational behaviour, as well as the various administrative systems operating within those organisations.

In addition, students will be able to identify internal and external constraints influencing organisational functioning; demonstrate the relevance of the study of organisational behaviour to principles of occupational health and safety and to promote
awareness of some of the ways in which organisational behaviour influences 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 Trade Unions
- Conflict Resolution
- Industrial Relations and Occupational Health and Safety Committees
- Different 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

OHS831 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 organisation's ongoing needs and those of the employees; (c) promote leadership in setting up and operating occupational health and safety programs; and (d) promote rank and file involvement in the occupational health and safety program.

Topics
- Marketing survey techniques, interpretation and evaluation of programs.
- Gaining support through persuasion.
- Publication of activities. Bulletins, 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.

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.
- Auditing.

Staffing
- The job, job design, job analysis, job descriptions, job specifications.
- Job advertising and recruitment.
- Legal requirements that shape selection policies. EEO Affirmative Action, ethnic groups, handicapped applicants, discrimination, disadvantage groups, ethical considerations.
- Culling unsuitable applicants. Interviewing techniques, employment tests.

OHS832 OCCUPATIONAL HEALTH AND SAFETY MANAGEMENT IV 10cp
By the end of the subject students will be able to: (a) identify the strategies used in controlling danger in a range of areas; (b) relate the strategies of control to the nature of the problems and the constraints operating in those areas; (c) assess the effectiveness of the control strategies; (d) identify various trends in the macro-economy which impinge on occupational health and safety practice; and (e) identify various trends in the micro-economy which impinge on occupational health and safety practice.

Topics
- Risk Management and Loss Control
  - Doubt and reality
  - Perception of risk
  - Aberrations and distortions
  - Probability and odds
  - Applied probability
  - Probability in action
  - Types of risk
    - The systematic identification and measurement of risk
    - Risk handling decisions
    - Hazards: Moving and stationary
    - Pattern recognition
    - The theory of risk management and critique
- Health and Safety Economics
  - The macro-economy:
    - Types of economic systems
    - The Australian institutional framework
    - The economic problem as it applies to the Australian economy
  - The concept of the circular flow and the multiplier effect
    - Fiscal and monetary regulation of the economy
    - Balance of payments
- The micro-economy:
  - The nature of costs including opportunity costs
  - The real costs of poor occupational health and safety practice
  - Costs vs. benefits in the long run
  - Futures forecasting

OHS842 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 first used in this subject to facilitate improvements. The purpose of this 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 OHS 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
- Communication
  - thinking, reading, speaking, listening and questioning
  - writing business letters, memoranda, short reports, long reports and submissions
  - negotiation and conflict resolution
  - meetings, committees and conferences

OH&S240 OCCUPATIONAL HEALTH AND SAFETY PRACTICE III 10cp
Accident and safety investigation and analysis techniques are introduced in this subject. Basic counselling skills are introduced to supplement the concurrent Human Factors subject. Occupational Health & Safety Management II. Selected industrial visits and problem based learning exercises continue. The purpose of this subject is to enable students to conduct an investigation into a workplace accident and prepare a report; explain the differences between various types of safety inspection procedures and conduct appropriate workplace safety inspections; and to appreciate the skills of basic counselling and demonstrate their use.

Topics
- 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 Inspections Procedures
- objectives of safety inspection
  - safety audit
- safety survey
- safety inspection
- safety tour
- hazard and operability study

Counselling

OH&S241 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 disaster 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 OHS Committee
  - independent audits
  - job safety analysis
  - hazard and operability studies
  - factors in hazard rating

OH&S242 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 a topic 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 Coordinator.

Graduate Diploma in Occupational Health & Safety

OH&S01 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 occupation; 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.

OH&S02 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; mutagenesis; carcinogenesis; teratogenesis 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 and applicability of hygiene standards with particular reference to ACGIH 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.

**OH503 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. oxidising agent, cryogenic, frequently used in warnings and labels. The HAZCHEM and NFPA systems.
- 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 toning and non-toning radiation.

**OH504 ERGONOMICS 10cp**

- Definition of ergonomics and objectives of the ergonomist.
- 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.

**OH505 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.
- Sure Decisions - 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.

**OH506 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:

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<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
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<td>MED101</td>
<td>Medicine I</td>
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<td>Medicine V</td>
<td>80</td>
<td>MED401</td>
</tr>
</tbody>
</table>

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:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
<th>Prerequisite</th>
</tr>
</thead>
<tbody>
<tr>
<td>MED102</td>
<td>Medicine I A</td>
<td>40</td>
<td>Credit in 40cp of MED101</td>
</tr>
<tr>
<td>MED103</td>
<td>Medicine I B</td>
<td>20</td>
<td>Credit in 60cp of MED101</td>
</tr>
<tr>
<td>MED202</td>
<td>Medicine II A</td>
<td>40</td>
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</tr>
<tr>
<td>MED322</td>
<td>Medicine IIIA</td>
<td>40</td>
<td>Credit in 40cp of MED321</td>
</tr>
<tr>
<td>MED323</td>
<td>Medicine IIIB</td>
<td>20</td>
<td>Credit in 60cp of MED321</td>
</tr>
<tr>
<td>MED402</td>
<td>Medicine IVA</td>
<td>40</td>
<td>Credit in 40cp of MED401</td>
</tr>
<tr>
<td>MED403</td>
<td>Medicine IVB</td>
<td>20</td>
<td>Credit in 60cp of MED401</td>
</tr>
<tr>
<td>MED522</td>
<td>Medicine V A</td>
<td>40</td>
<td>Credit in 40cp of MED521</td>
</tr>
<tr>
<td>MED523</td>
<td>Medicine V B</td>
<td>20</td>
<td>Credit in 60cp of MED521</td>
</tr>
</tbody>
</table>

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

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. Accordingly, the Faculty Board under Rules governing the degree of Bachelor of Medicine has adopted 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, 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 have just completed the first
year, the fourth year of the course, or the Bachelor of Medical Science degree. That is, leave of absence will not normally be granted to students immediately upon completion of Medicine I or Medicine IV.

5. Leave of absence will not normally be granted to more than five students from any year of the course.

6. Applications for leave of absence must be in writing giving full reasons why leave is required and must be lodged with the Faculty Office by the first Friday in January each year. In exceptional circumstances an application for leave of absence may be accepted up until the Friday of the first week of the University's first semester in any one year.

7. Applications for leave of absence will be determined by the Faculty Board, who in reaching the decision will give priority to students seeking leave for reasons of health, financial problems or family problems.

8. The Faculty Board may relax the provisions of paragraphs 1, 4 and 5 above to accommodate exceptional circumstances arising in a particular case. Exceptional circumstances include pregnancy, serious illness, serious family problems or serious financial problems.

Notes:
To be read in conjunction with the above policy statements on Leave of Absence.

A student wishing to take leave of absence in a particular year can only be granted leave if she/he has fulfilled the requirements specified for the course that she/he is enrolled in. As a result, decisions on applications for leave of absence cannot be made until all assessment results for all students enrolled in a particular year have been determined. This means that a student who wishes to take leave and who has been successful at first assessment, will not be granted leave until the results of the rest of the students enrolled in the same year of the course are known. This may cause some difficulty for a person who wishes to go overseas, but the Faculty needs to retain control over numbers. An exception to this will be made in the cases of students whose circumstances are considered "exceptional". In such cases students will, on application, be granted 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.

Applications for leave of absence in a particular year cannot be considered if they are submitted after the end of the first week of the first semester of that year. This is a University wide requirement.

A student who is not granted leave of absence may still be able to take time out of the course because the Faculty cannot require a student to re-enrol against that student's wishes. However, a student who takes time out without leave of absence will not be guaranteed re-admission to the course in a particular year. The re-admission of such students will be determined in accordance with the Faculty's policies on re-enrolment made under Rules governing the degree of Bachelor of Medicine.

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. For example, a student who passes Medicine II in one year will be permitted to enrol in Medicine III in the following academic year.

2. Re-enrolment after failure in a subject

A student who fails a subject in the B. Med. course is considered to have made unsatisfactory progress. The cases of such students are reviewed under the Regulations governing Unsatisfactory Progress by the Faculty Student Progress Committee which may decide to:

(a) permit the student to continue;
(b) permit the student to continue subject to certain conditions;
(c) exclude the student from the course; or
(d) refer the case to the University's Admissions Committee.

3. Re-enrolment after a period of leave of absence

A student who has completed a period of approved leave of absence may re-enrol in the B. Med. course in the academic year immediately following the leave period. This period of standing in all subjects passed in the course prior to the period of leave of absence. For example, a student who has been granted 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.

4. Re-enrolment after one year out of the course to take the B Med Sc degree

A student who has taken one year out of the B. Med. course to enrol in the B. Med. Sc. program will be permitted to re-enrol in the B. Med. course in the academic year immediately following the B. Med. Sc. year with standing in all subjects passed in the course prior to the B. Med. Sc. year. For example, a student who enrols in the B. Med. Sc. degree in 1992 after passing the third year of the B. Med. course in 1991 will be permitted to re-enrol in 1993 in the fourth year of the B. Med. course.

5. Re-enrolment after one year out of the course without leave of absence nor BMedSc enrolment

A student who does not re-enrol in the course in one academic year and who is not granted leave of absence nor has enrolled in the B. Med. Sc. degree will be permitted to re-enrol in the course if the student

(i) the student will be required to re-sit Domain I - Professional Skills assessments in the Medicine subject last passed in the course before the period of absence (see (v) below).
(ii) if the student passes this re-assessment he/she will be permitted to re-enrol in the course with standing in all but the last Medicine subject passed before the period of absence.
(iii) if the student is found Not Satisfactory at this re-assessment he/she will be permitted to re-enrol in the course with standing in all but the last Medicine subject passed before the period of absence.
(iv) the re-assessment will be scheduled to take place during the normal assessment period prior to the academic year in which re-enrolment is sought. The student will be permitted to take first, second and final assessment if necessary.
(v) the Domain I assessment for the various years of the course that re-enrolling students will be required to take will be:

Subject Last Completed

Assessment Required

| Medicine I | 2 cases in the format used for Medicine I |
| Medicine II | 2 cases in the format used for Medicine II |
| Medicine III | The long and short cases specified for Medicine III |
| Medicine IV | Two long cases : one each from the pairs Reproductive Medicine/Paediatrics, and Medicine/Surgery |

Students who are in this position are advised to contact the Chair of Domain I to discuss ways in which they can refresh their skills prior to assessment.

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 one year period of leave of absence or a one year period of enrolment 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 as well as in Domain I. The student will be expected to take these assessments in parallel with the students enrolled in the year which precedes the year the student wishes to enter, and will be entitled to the same number of attempts at assessment. The components of Domains I and III to be assessed are detailed in Schedule (1).

An example is: a student who was last enrolled in the course in 1989 and who had passed Medicine II in that year. The student did not re-enrol in 1990 and 1991 but wishes to re-enrol in 1992. This student would be required to re-sit the Domain I and Domain III assessments of Medicine II. If the student passes the assessment he/she will be permitted to re-enrol in the course with standing in Medicine I and Medicine II, that is enrol 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 III.
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 (the 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 in 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 (I)). 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 I) 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 I).

Re-assessment 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 subjects in the course passed prior to the period of absence. If the student fails the re-assessment he/she will be granted standing in all Medicine subjects except the last one completed before the period of absence. The student would be required to re-enroll 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-enroll 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-enroll in the course. The Faculty Board may permit the student to re-enroll 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 re-sit assessment in all Domains. As indicated in paragraphs 6(a) and 6(b) there are modifications from full assessment: precise requirements are outlined below.

In order to enter a particular Year, the student will be required to sit a modification of the Previous Year's assessment.

To enter Year 2: Modified Year 1 assessment:

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

II Nil

III Written assessment as specified.

IV Nil

V A 24 hr. Student Own Learning Task derived from the Long Case assessment in Domain I.

To enter Year 3: Modified Year 2 assessment:

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

II Analysis of a research paper as specified.

III Written assessment as specified.

IV Nil

V A 24 hr. Student Own Learning Task derived from the Long Case assessment in Domain I.

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.
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 (e.g. 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 these relationships to acquire, evaluate and communicate information;
- apply the processes of critical reasoning to medical care;
- apply his or her understanding of illness to the 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 by:

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 confidence, (iii) sensitivity to the needs of others and respect 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 in 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 unfeeling detachment, undue aggression 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 which restrain 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 threatening medical interventions;

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, recognising and defining a clinical problem, and communicating their findings to others clearly and concisely (orally and/or in writing);

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

**DOMAIN II — CRITICAL REASONING**

2. By the time of graduation students will demonstrate ability to apply the processes of critical reasoning to medical and other health care, with specific ability to apply the processes of scientific reasoning by:

2.1 precisely defining a health problem, related to an individual or to a community, and stating what information is required to resolve the problem, efficiently searching the relevant literature and selecting the best and most appropriate research by application of rules of evidence to determine its validity;

2.2 applying a critical appreciation of the techniques, procedures, goals and results of biomedical research including not only that carried out in the laboratory but also that based on population and group studies;

2.3 interpreting diagnostic and other tests in terms of their likely contribution to diagnosis, prognosis and management of the health problems of individuals and evaluating the validity of such tests in early diagnosis, and other community based programs;

2.4 interpreting and evaluating data generated by studies of medical and other health services supplied to communities and populations;

2.5 assessing the degree to which assertions concerning health matters made in the medical and lay press are well-founded on scientific evidence.

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

3. By the time of graduation students will demonstrate ability to apply their understanding of illness and its prevention and management by:

3.1 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 environment;

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

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

3.4 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;

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

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

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

3.8 devising and implementing, under supervision, a management program appropriate for patients with chronic, intractable illness, including terminal disease;

3.9 carrying out the basic psychomotor tasks required to be performed by all medical graduates during their pre-registration post-graduation period;

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

3.11 demonstrating a positive, consistent and informed behaviour towards promotion and
Fourth, by the time of graduation students will demonstrate ability to apply their understanding of the practice of medicine in a community or population by:

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

4.4 applying an understanding of the organisation of the Australian health care 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 critically sick of all ages, and including treatment, prevention and the promotion and maintenance of health;

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

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

4.7 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;

4.8 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.

**DOMAIN IV — POPULATION MEDICINE**

By the time of graduation students will demonstrate ability to apply their understanding of the role of the physician in health/welfare professional teams, and working co-operatively within them.

**DOMAIN V — SELF-DIRECTED LEARNING**

5. By the time of graduation students will demonstrate ability to take responsibility for evaluating their own performance, implementing their own education and contributing to the education of others, by:

5.1 monitoring, granted appropriate consultation, their own progress in the acquisition of information and skills;

5.2 monitoring and evaluating, for the purpose of mutual education, the performance of their juniors and their peers;

5.3 engaging in a critical evaluation of the objectives and implementation of the Faculty's education program;

5.4 being educationally prepared to undertake postgraduate training;

5.5 demonstrating that medical education in its full sense is a lifelong activity and investing time in the maintenance and further development of their own knowledge and skills, above and beyond the pursuit of higher professional qualifications.

**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 comment on assessment.

**YEAR 1**

**YEAR 1 consists of the subject MEDICINE:**

The year is divided into three blocks, each of approximately 10 weeks' duration.

**MED101 MEDICINE I**

This week consists of an overall introduction to the medical school, the curriculum, learning methods and learning objectives. The remainder of the year is organised by Domain as described below.

**DOMAIN I — PROFESSIONAL SKILLS**

Block 1:

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

An introduction and supervised experience is provided in communication skills as a foundation for the medical consultation.

Group skills are developed under guidance in the setting of the small group tutorials of Domain III.

**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 long program on 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. Detailed timetables are distributed to students at the beginning of each block.

Block 1 — Homeostasis Under Stress

In addition, this block includes infection control sessions, critical reasoning tutorials, paediatric and adult ward experience, elective anatomy sessions, and ambulance officers.

Block 2 — Homeostasis Under Stress

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

Block 3 — Organ Systems: Renal, Urinary Tract and Gastrointestinal

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<tr>
<th>Monday</th>
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<th>Thursday</th>
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<tbody>
<tr>
<td>Prof. Skills</td>
<td>Prof. Skills</td>
<td>Pop. Medicine</td>
<td>Prof. Skills</td>
<td>Prof. Skills</td>
</tr>
<tr>
<td>Microscopy</td>
<td>Working Problem Tutorial</td>
<td>Prof. Skills</td>
<td>Prof. Skills</td>
<td>Prof. Skills</td>
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</tbody>
</table>

In addition, students in this block have regular sessions with physicians and surgeons, elective anatomy sessions, a post-mortem tutorial and critical reasoning tutorials.

YEAR 2

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

MED201 MEDICINE II 80cp

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 tutorials 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 efficiency 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 4: cardiovascular and respiratory systems
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 or anticipate an area of study in Year 2. This work is carried out under academic supervision and a written report is required.

Additionally, 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 4 — Organ Systems: Cardiovascular and Respiratory

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<thead>
<tr>
<th>Monday</th>
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</tr>
</tbody>
</table>

Students in this block have regular professional skills sessions in haematology, clinic-pathology assessments, elective anatomy sessions and critical reasoning tutorials.

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.

MED301 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-specialities. 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 7: (first 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, cardiovascular and gastrointestinal system. In addition, problems in ear, nose and throat, ophthalmology, rheumatology, orthopaedics, and immunology are considered, and appropriate clinical experiences are provided in these areas.

**Block 8: (second Newcastle block)**
Further problems in relation to neurosurgery, psychiatry, dermatology, vascular/hypertension, and the renal systems and diabetes are considered. In addition, there is a segment on human sexuality together with genito-urinary and the renal systems and diabetes are considered. In addition, there is a segment on human sexuality together with genito-urinary.

**Block 9: (country block)**
The understanding of basic mechanisms and of the renal systems and diabetes are considered. In addition, problems of the respiratory, cardiology, and gastro-intestinal system. In addition, there is a segment on human sexuality together with genito-urinary and the renal systems and diabetes are considered. In addition, there is a segment on human sexuality together with genito-urinary and the renal systems and diabetes are considered. In addition, there is a segment on human sexuality together with genito-urinary.

**Domain IV: Population Medicine**
Topics are based upon the disciplines 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 pursued, 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 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 are then included in an "elective study contract" which must be submitted to the Faculty for approval before the elective begins. Students are then required to submit a report of at least 1000 words in length on their elective experience. The supervisor is also required to report on the student's performance during the elective.

**Timetable Commitments**
Typical timetables for each Block are shown below.

**Block 7 - Newcastle Block**
- 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: Orthopaedics
- Week 11: Rheumatology

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

**Domain IV - Population Medicine**
This year is divided into three clinical attachments of twelve weeks, rotating through major clinical specialties. 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 counseling 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 in the wards.

**Domain III - Identification, Prevention and Management of Illness**
Students undertake three clinical rotations of twelve weeks, each group of students in a different order. The attachments are as follows:

**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 specialties. Each group of students undertakes these attachments in a different order.

**Attatchment 1:** Paediatrics and Reproductive Medicine
**Attachment 2:** Surgery 1 (Orthopaedics and Urology) and Surgery 2 (General Surgery)
**Attachment 3:** Medicine (Ageing, and two of Cardiovascular, Clinical Pharmacology/Drug and Alcohol, Endocrinology, Gastroenterology, Haematology, Infectious Diseases, Nephrology, Neurology, Nuclear Medicine, Respiratory, Rheumatology)

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

**Domain IV - Population Medicine**
A sequence of activities integrated with those of Domain III and Domain I 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 with clinical attachments and tutorials on Mondays, Tuesdays, Fridays, and Wednesday and Thursday mornings, and Fixed Resource Sessions on Wednesday and Thursday afternoons.

**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 specialties 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, the breaking of bad news and the explanation of the implications of investigations and treatment; in counselling for smoking prevention.

DOMAIN II — CRITICAL REASONING

A particular emphasis is placed 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
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 begun 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 (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 6.00 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 Interpersonal Skills topics.

SUMMATIVE ASSESSMENT GUIDELINES

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 Rules for details. (See Section Nine of this Handbook).
3. Attendance at Prescribed First and Final Assessments is Compulsory:
   (i) Failure to attend first assessment will result in a mark of Not Satisfactory 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 period. Students will then be permitted to undertake second assessment in the short case or long case, as appropriate, during the first assessment period.
   (ii) Students who do not submit the appropriate and satisfactory certifications by the final assessment period will receive a final mark of Not Satisfactory in that certification and the dependent instrument.
   (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 mark of Not Satisfactory for that instrument; i.e. no further assessment will be permitted.
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<tr>
<th>Faculty of Medicine</th>
<th>Section Five</th>
<th>Bachelor of Medicine Program</th>
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</table>

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 ensure they are aware of all assessment requirements, dates, locations and so on.

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 result letter 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 Hospital and Level 2, David Maddison Clinical Sciences Building.

10. Enquiries concerning the nature of the assessments should be directed to the appropriate Year Co-ordinator.

Enquiries concerning the administration of the assessments (e.g., timetabling) should be directed to the Professional Officer (Assessment).

11. Students who feel that their study during the year or preparation for assessment was affected by illness, disability or other serious cause may apply for Special Consideration. The application, supported by medical or other appropriate evidence, must be made on the prescribed form addressed to the Academic Registrar and lodged with the Faculty Office within seven days after any absence arising from the illness or event on which the request is based.

12. Students who feel that attendance at or performance in an assessment has been affected by illness, disability or other serious cause may apply for Special Consideration. The application, supported by medical or other appropriate evidence, must be made on the prescribed form addressed to the Academic Registrar and lodged with the Faculty Office not later than three days after the date of the examination.

The granting of special consideration may allow the student to undertake further assessment in lieu of the assessment for which special consideration was granted. The format of such special assessment is at the discretion of the Faculty and it may be different from the format of the assessment for which special consideration was granted.

13. After the release of final results a student may apply to have a result reviewed. There is a charge for each review, which is refundable in the event of a change of result. Applications for review must be submitted on the appropriate form, together with the prescribed review charge, within one week of the release of the relevant results. It should be noted that assessment results are released only after careful consideration of students’ performances and that, amongst other things, marginal failures are reviewed before results are released.

For the first week following the release of any results, students will only be permitted access to their scripts under supervision. Supervised access times and dates will be displayed on assessment noticeboards at the time results are released. Thereafter, for educational purposes, students may take their scripts with them for an extended period.

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**ASSessment Guidelines 1994**

**MEDICINE I**

**DOMAIN I PROFESSIONAL SKILLS**

1. **Certification**

Each student must submit a completed certification sheet by the 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 a 65 minute period. The student will be given 10 minutes initial planning time, up to 30 minutes with the simulated patient, a further 10 minutes to plan the case presentation and 15 minutes for the case presentation and viva voce (oral) assessment.

3. **Group Task**

Each student group will deal with a "practice problem" in a given three hour period. The first 1 1/2 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 analyse 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 s) - a series of separate problems, 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. Group Presentation
Each group will be required to present a summary of the work that they have done during the year. The presentation will be of 15 minutes duration followed by 5 minutes of discussion and question time.
2. Group Report
Each group will also be required to submit a report on their work during the year. This report must be no longer than 5,000 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.
3. Written Assessment
Each student will undertake an individual written assessment of up to two hours duration.

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

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. 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.
2. Group Report
Student 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.
3. Written Assessment
Students found Not Satisfactory in the written assessment will be required to undertake one final assessment in the same format as first assessment.

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, 1994

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<tr>
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<th>Due Date/Assessment Period</th>
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<td>Group Task</td>
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<td>V</td>
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<tr>
<td></td>
<td>Medical Informatics Skills Task</td>
<td>7/11/94</td>
</tr>
</tbody>
</table>
### ASSESSMENT GUIDELINES 1994

#### MEDICINE 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 6 - 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 summarising 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, or issues of management. Discussion should not exceed 10 minutes duration and should be followed by 5 minutes feedback.

3. **General Practice**
   - Each student must submit 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 Presentation**
   - Each group will be required to make a 15 minute presentation summarising the work they have done during the year. This will be followed by 5 minutes of discussion and question time.

2. **Group Report**
   - Each group will also be required to submit a report on their work during the year. The report must not be more than the equivalent of 16 x A4 pages, typed and single spaced.

3. **Written Assessment**
   - Each student will undertake an individual written assessment of up to two hours duration.

**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 1,000 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, a topic or topics for independent study. The topic of the task will be decided in consultation with the Domain V Chair, but may include remediation in specific areas of the curriculum. A suitably qualified person must be nominated as the supervisor for each topic, and 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 1,000 words) for marking. The marked report together with confirmation from their supervisor (on the appropriate continue form) 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.

2. **Reasoning Assessment**
   - 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.

3. **Group 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 any Domain III assessments will be required to undertake one final assessment of up to 13 hours, in the same format as first assessment.

**DOMAIN IV**

1. **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.

2. **Group Report**
   - Student 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.

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 V**

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 13 hours, in the same format as first assessment.

**DOMAIN IV**

1. **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.

2. **Group Report**
   - Student 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.
### ASSESSMENT GUIDELINES 1994

#### MEDICINE III

**DOMAIN I PROFESSIONAL SKILLS**

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 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 - 20 minutes of which will be observed. After a further 20 minutes the student will undertake a 20 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.

#### DOMAIN II CRITICAL REASONING
- Each student will undertake a written assessment of up to 3 hours.

#### DOMAIN III - IDENTIFICATION, PREVENTION AND MANAGEMENT OF ILLNESS

1. **Written Assessments**
   - Students will undertake up to 18 hours of written assessments. 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)

2. **Trauma Report**
   - Students are required to submit a report of 1000 - 2000 words as described in the country term handbook.

3. **Chronic Disability Presentation**
   - Students will be required to select a case as described in the country term handbook. During the country term (as arranged by each Clinical Supervisor), each student will be required to present that case to a meeting including an academic member of the Faculty of Medicine and students at the country centre. The presentation should be of 10 minutes duration.
and demonstrate an understanding of the medical and social factors impinging on the patient's situation.

**DOMAIN IV POPULATION MEDICINE**
Each student will undertake a written paper of 90 minutes duration.

**DOMAIN V SELF-DIRECTED LEARNING**

1. **Extended Own Learning Task**
   By the end of week 4 of Block 7 students will be required to have registered with the Chair, Domain V, a topic or topics for independent study. The topic of the task will be decided in consultation with the Domain V Chair, but may include remediation in specific areas of the curriculum. A suitably qualified person must be nominated as the supervisor for each topic and the learning contract must be signed by both the student and the supervisor(s). Students will be required to submit to their supervisor a written report (minimum 1,000 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.

2. **Elective**
   Each student must submit a contract for an elective covering eight weeks, undertake the elective and submit both a report on the elective and the supervisor's report. 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**
   Students who do not submit the required 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(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 to be Not Satisfactory will not be permitted to undertake the Long Case first assessment and will be required to submit satisfactory certification prior to the Long Case first assessment period. Students will then be permitted to undertake second assessment Long Case in the first assessment period.

2. **Country Term Logbook**
   Students who do not submit the Logbook by the due date should refer to the General Summative Assessment Guidelines, Paragraph 4, Section (b). The country term Logbook must be completed and submitted by the specified date for final assessment.
   Students who submit the Logbook by the due date but are deemed Not Satisfactory in this assessment will be required to complete requirements of the Logbook satisfactorily before the final assessment period.

3. **Discharge Summary and Referral Letter**
   Students who do not submit the Discharge Summary and/or Referral Letter by the due date should refer to the General Summative Assessment Guidelines, Paragraph 4, Section (b). The Discharge Summary and/or Referral Letter to be submitted by the final assessment date must be based on a new patient.
   Students who submit the Discharge Summary and/or Referral Letter by the due date but are deemed Not Satisfactory in either or both assessments will be required to submit a satisfactory Discharge Summary and/or Referral Letter based on a new patient before the final assessment period.

4. **Short Cases**
   Students found Not Satisfactory in either or both the summative Short Cases will be required to undertake second and, if necessary, final assessment in relation to each case. These assessments will be in the same format as the first assessment. Students must ultimately be Satisfactory in two summative Short Cases.

5. **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.

6. **Specific Counselling**

   6.1 **Certification**
   Students who do not submit the required certification by the due date will not be permitted to undertake the Specific Counselling first assessment unless there are extenuating circumstances. The appropriate and satisfactory certification must be submitted prior to the Specific Counselling final assessment period. Students will then be permitted to undertake final assessment Specific Counselling.
   Students whose certification is submitted by the due date but is deemed to be Not Satisfactory will not be permitted to undertake the Specific Counselling first assessment and will be required to submit satisfactory certification prior to the Specific Counselling final assessment period. They will then be permitted to undertake final assessment Specific Counselling.

   6.2 **Assessment**
   Students found Not Satisfactory in the Specific Counselling assessment will be required to undertake one final assessment in the same format as the first assessment.

**DOMAIN II**

Students found Not Satisfactory will be required to undertake final assessment of up to three hours in the same format as first assessment.

**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 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. An overseas elective or vacation is not considered to be "good reason". These students must then submit their report by the specified final assessment date.
   Students who duly submit a contract and/or report which is Not Satisfactory will be asked to re-submit by a set date. Unless 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, 1994

First Assessment

<table>
<thead>
<tr>
<th>Domain</th>
<th>Instrument</th>
<th>Due Date/Assessment Period</th>
</tr>
</thead>
<tbody>
<tr>
<td>Certification: Specialties Procedures, Observations and Short Cases</td>
<td>15/7/94 or 9/9/94</td>
<td></td>
</tr>
<tr>
<td>Country Term Logbook</td>
<td>15/7/94 or 9/9/94</td>
<td></td>
</tr>
<tr>
<td>Discharge Summary and Referral letter</td>
<td>15/7/94 or 9/9/94</td>
<td></td>
</tr>
<tr>
<td>Short Cases During Country Block</td>
<td>19/9/94 - 7/10/94</td>
<td></td>
</tr>
<tr>
<td>Long Case Certification: Specific Counselling</td>
<td>3/6/94 or 12/8/94</td>
<td></td>
</tr>
<tr>
<td>Long Case Specific Counselling Interview</td>
<td>9/6/94 or 18/8/94</td>
<td></td>
</tr>
<tr>
<td>II</td>
<td>Written Assessment</td>
<td>19/9/94 - 7/10/94</td>
</tr>
<tr>
<td>III</td>
<td>Written Assessments</td>
<td>19/9/94 - 7/10/94</td>
</tr>
<tr>
<td>IV</td>
<td>Written Assessment</td>
<td>19/9/94 - 7/10/94</td>
</tr>
<tr>
<td>V</td>
<td>Extended Own Learning Task:</td>
<td>19/9/94 - 7/10/94</td>
</tr>
<tr>
<td>Topic Registration and Approval</td>
<td>4/3/94</td>
<td></td>
</tr>
<tr>
<td>Written Report</td>
<td>15/7/94</td>
<td></td>
</tr>
<tr>
<td>Elective: Contract</td>
<td>19/9/94</td>
<td></td>
</tr>
<tr>
<td>Reports</td>
<td>23/12/94</td>
<td></td>
</tr>
</tbody>
</table>

Second Assessment (Short Cases and Long Cases only)

Short Cases second assessment will be held in the period 19/9/94 - 7/10/94.

Long Case second assessment will be held in the period 12/1/94 - 16/12/94.

Final Assessment

Final assessment for the Country Term Logbook, Referral Letter and Discharge Summary must be submitted by 3/1/95.

All other final assessments, except short cases, Extended Own Learning Task and Elective, will be held in the period 3/1/95 - 10/1/95.

Short Cases: Students who remain NS in short case[s] after second assessment will be required to give notice in writing stating whether they wish to sit for the final assessment during the long case second assessment period (12/12/94 - 16/12/94) or the final assessment period (3/1/95 - 10/1/95). This note must be submitted by 26/11/94.

Extended Own Learning Task: Dates to be set by the Chair, Domain V.

Elective: Contract due 3/10/94; reports due 13/1/95.

Note: Unless there are extenuating circumstances, second assessment (short cases and long cases only) and final assessments will not be held at any times other than those stated above. Students on an overseas elective or holiday will not be permitted to alter their second and/or final assessment period.

ASSESSMENT GUIDELINES 1994

MEDICINE IV

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, i.e. 3 medicine, 3 surgery, 1 paediatrics, and 1 reproductive medicine. These must be submitted to the discipline concerned by the times specified in 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 these 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.

3. Psychiatry Log Book

Students are required to submit a completed Log Book for Psychiatry. Assessment has two components:

1. Certification

Students are required to obtain certification from each of their Psychiatry clinical tutors as specified in the Log Book.

1. Case Summaries

Students are required to submit six written case summaries as specified in the Log Book.

DOMAIN II - CRITICAL REASONING

Each student will undertake written assessment of up to 3 hours.

DOMAIN III - IDENTIFICATION, PREVENTION AND MANAGEMENT OF ILLNESS

1. Written Assessment

Students will undertake up to 11 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) 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 the enabling objectives. They will not necessarily be identical, however, with formative assessment items or enabling objectives.

2. Clinical Ethics Case Report

Students will be required to submit a written case report in Clinical Ethics. Assessment will be of four weeks duration and will utilise clinical cases identified by students during their clinical rotations. This assessment will emphasise the identification, clarification and resolution of ethical issues in clinical practice and will be based upon the Fixed Resource Sessions on Professional Skills in Clinical Ethics.

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 help you test how well you 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 3 in medicine. For each discipline:
   (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 assessment.

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 Satisfactory 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 a standard hospital admission and include history, physical examination, diagnosis, differential diagnosis and plan of investigation and management. A NS result on this first case write-up will lead to reassessment by case write-up in a long case at the end of the next term. Final assessment (if necessary) will occur in the last long case of the year. If a student is Not Satisfactory on all three case write-ups no further assessment will be permitted.

   The 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, interaction skills, case presentation and case discussion in case write-up, if required. In the unobserved long cases the components are case presentation, case discussion and case write-up, if required.

   The performance of students Not Satisfactory in one of the four long cases will be reviewed, and the student may, taking other results and the Supervisor's Reports into account, be required to undertake second, and if necessary, final assessment by long case in the discipline concerned. If a student is Not Satisfactory in two of the four long cases, he/she may 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 4 Committee. Students who have been Not Satisfactory early in the year and show evidence of good improvement usually will not be required to be reassessed. 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 in all four long cases, no further assessment will be permitted.

3. Psychiatry Log Book
   Students who do not submit the completed Log Book or the component case studies and certification sheet by the due dates should refer to the General Summative Assessment Guidelines paragraph 4, section (b).

   Certification
   Students who are Not Satisfactory in one or more of the Medicine and Surgery attachments will be reviewed by the Psychiatry discipline representative and may be required to undertake further clinical work and assessment. Students who are Not Satisfactory in the Paediatrics or Reproductive Medicine attachment will, after review, be required to undertake further clinical work and assessment.

   Case Summaries
   Students who submit a case summary on time but are assessed as Not Satisfactory will be required to resubmit the summary by the specified date.

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

1. Written Assessment
   Students considered Not Satisfactory in the Domain III assessments will be required to undertake final assessment of up to 11 hours in the same format as first assessment.

2. Clinical Ethics Case Report
   Students who submit their case report on time and are found to be Not Satisfactory will be required to undertake remediation and one further assessment. This will take the form of a four to six 60 minute small group sessions with Health Law and Ethics staff in which the student will be guided through each step of the clinical application of ethics, again based on a clinical case chosen by the student. Assessment will be in the same format as first assessment.

Students who do not submit a case report by the specified date should refer to the General Summative Assessment Guidelines, paragraph 4, section (b).
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 specified date should refer to the General Summative Assessment Guidelines, paragraph 4, section (b).

2. MILE

Students who submit their MILE report on time and are found to be Not Satisfactory will be required to undertake one MILE task as final assessment. This will be arranged during the year and after remediation has occurred.

Students who do not submit a MILE report by the due date should refer to the General Summative Assessment Guidelines, paragraph 4, section (b). Students will be permitted one new task as final assessment in the same format as the first assessment, at a date to be arranged during the year.

HONOURS

All instruments will be considered for contribution to Honours.

MEDICINE IV: KEY DATES 1994

'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>5 p.m. on the MONDAY following the end of each attachment.</td>
</tr>
<tr>
<td>II</td>
<td>C.S.R</td>
<td>5 p.m. on the MONDAY following the end of each attachment.</td>
</tr>
<tr>
<td>III</td>
<td>Doctor/Patient Interactions</td>
<td>24/10/94</td>
</tr>
<tr>
<td>IV</td>
<td>Long Case</td>
<td>25/7/94 - 29/7/94</td>
</tr>
<tr>
<td>V</td>
<td>Long Case</td>
<td>31/10/94 - 4/11/94</td>
</tr>
</tbody>
</table>

Final Assessment

<table>
<thead>
<tr>
<th>Domain</th>
<th>Instrument</th>
<th>Due Date/Assessment Period</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>Doctor/Patient Interactions</td>
<td>3/1/95</td>
</tr>
<tr>
<td>II</td>
<td>Psychiatry</td>
<td>3/1/95 - 10/1/95</td>
</tr>
<tr>
<td>III</td>
<td>Psychiatry</td>
<td>3/1/95 - 10/1/95</td>
</tr>
<tr>
<td>IV</td>
<td>Psychiatry</td>
<td>3/1/95 - 10/1/95</td>
</tr>
<tr>
<td>V</td>
<td>Psychiatry</td>
<td>3/1/95 - 10/1/95</td>
</tr>
</tbody>
</table>

ASSESSMENT GUIDELINES 1994

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. Each report 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 form to be found at the back of the Interactionsal Skills booklet.

2. Long Case

Each student will interview and examine a patient (without observation by any assessor), and then present that 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:

- Modified Essay Questions (MEQs)
- Short Answer Questions (SAQs)
- Objective Structured Clinical Assessments (OSCA)
- 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 eight 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 Not Satisfactory in one or more attachments MAY be required to remediate in a specific discipline in which they are Not Satisfactory and MAY be required to sit
Students found Not Satisfactory will be required to undertake final assessment of up to 3 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 unless there is good reason for the omission. These students must then submit their report by the specified final assessment date. Students who duly submit a contract and/or report which is Not Satisfactory will be asked to re-submit by a set date. Unless 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.

HONOURS
All instruments will be considered for contribution to Honours.

MEDICINE V KEY DATES 1994

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>5 p.m. on the Monday following the end of each attachment</td>
</tr>
<tr>
<td></td>
<td>General Practice Supervisor's Report</td>
<td>Within 2 weeks of completion of attachment</td>
</tr>
<tr>
<td>II</td>
<td>Doctor/Patient Interactions</td>
<td>29/4/94</td>
</tr>
<tr>
<td></td>
<td>Long Case</td>
<td>5/9/94 - 16/9/94</td>
</tr>
<tr>
<td></td>
<td>Psychiatry Long Case</td>
<td>During the last week of each Psychiatry attachment</td>
</tr>
<tr>
<td></td>
<td>Doctor/Patient Interactions</td>
<td>Interview 9/5/94 - 13/5/94</td>
</tr>
</tbody>
</table>

Domain Instrument Due Date/Assessment Period

II Written Assessment 9/5/94 - 13/5/94
III Written Assessment 5/9/94 - 16/9/94
IV Written Assessment 9/5/94 - 13/5/94
V Elective: Contract 29/4/94

Reports 11/11/94

Second Assessment (Long Cases only)
Long Case second assessment and Psychiatry Long Case second assessment will be held in the period 19/9/94 - 23/9/94.

Final Assessment
All Final Assessments will be held in the period 21/11/94 - 25/11/94, except for:
Certification for Doctor/Patient Interactions: to be submitted by 21/11/94.

Elective: Contract due 12/9/94; reports due 18/11/94.

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 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.

3. Psychiatry Long Case
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.

4. Doctor/Patient Interactions
Students found Not Satisfactory in Doctor/Patient Interactions will be required to undertake final assessment, in the same format as 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.

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 students 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. et al. 1992, Basic pathology, 5th edn, Saunders.

Anatomy
Reference Texts


Dermatology


Ear, Nose and Throat


Endocrinology


Environmental and Occupational Health


Gastroenterology


General Practice

Standard Text

McWhinney, J.R. 1988, A textbook of family medicine, Rev. edn, Oxford University Press.

Geriatric Medicine

Standard Texts


Reference Texts


Haematology

Standard Text


Reference Texts


Health, Law and Ethics

Standard Texts

Dix, A. et al. 1988, Law for the medical profession, Butterworths.

Reference Text


Human Physiology

Standard Texts


Reference Texts

Alexander, R.S. 1977, Case studies in medical physiology, Little Brown.
Cohn, P.F. 1985, Clinical cardiovascular physiology, Saunders.

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 Auchmuty Library (Biomedicine), and are strongly recommended for advanced reading.

Holmes, O. 1990, Human neurophysiology, Unwin Hyman.

MEDICINE

Standard Texts


West, J.B. 1990, Respiratory physiology: the essentials. 4th edn, Williams and Wilkins.

IMMUNOLOGY

Standard Text


Reference Texts

Brostoff, J. et al 1991, Clinical Immunology, Cower Medical.

MEDICAL BIOCHEMISTRY

No single text has been judged entirely suitable by staff or students. Students might like to choose a text from among those listed. Those marked with an asterisk are frequently referred to by staff.

Standard Texts


MEDICINE

Standard Texts

Reference Texts
MICROBIOLOGY/INFECTIOUS DISEASES
Standard Texts
PAEDIATRICS
Standard Texts
PSYCHIATRY
Standard Texts
Reference Texts
RHEUMATOLOGY
SUGICAL SCIENCE
Standard Texts
Reference Texts
Torrance, ALCOHOL AND OTHER DRUGS
Standard Texts
Handbook on alcohol and other drug problems for medical practitioners, 1981, AGPS.
Reference Texts


Section Five

Bachelor of Medicine Prizes

There are twelve Bachelor of Medicine prizes. Details follow.

<table>
<thead>
<tr>
<th>Prize</th>
<th>Value $</th>
<th>Qualifications</th>
</tr>
</thead>
</table>
| Australian Medical Association Prize | 300 or books or medical equipment to that value | Awarded to the graduand(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 Dr Frank. H. Netter | Awarded to the graduand 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. |
| Hunter Medical Association Prize | Books donated to Auchmuty Library | Awarded to the students of the group whose final report on its population medicine project in the second year of the course best reflects the community and scientific orientation of the Faculty of Medicine. |

Grants-In-Aid for Electives

Note: Students should refer to the accompanying Guidelines for Grants-In-Aid for Information on application procedures, method of assessment and conditions of award.

<table>
<thead>
<tr>
<th>Prize</th>
<th>Value $</th>
<th>Qualifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Linda and John James Gentle Mother and Son Prize</td>
<td>Approx 350</td>
<td>Awarded to the medical student who completes the best protocol for an elective project in Paediatrics in either Block 10 of Medicine III or the elective attachment of Medicine V, if of sufficient merit.</td>
</tr>
<tr>
<td>The Steele Douglas Prize in Pathology</td>
<td>Approx 350</td>
<td>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, if of sufficient merit.</td>
</tr>
<tr>
<td>Margaret Auchmuty Prize for Women Medical Students</td>
<td>Approx 150</td>
<td>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.</td>
</tr>
<tr>
<td>Andrew Lawson Memorial Prize in Oncology</td>
<td>Approx 500</td>
<td>Awarded to the medical student who completes the best protocol in elective project in Oncology in either Block 10 of Medicine III or the elective attachment of Medicine V, if of sufficient merit.</td>
</tr>
<tr>
<td>NSW Department of Health Rural Health Bursary</td>
<td>1000</td>
<td>Awarded to the medical student who completes the best protocol 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.</td>
</tr>
</tbody>
</table>
Faculty of Medicine  
Section Five  
Bachelor of Medicine Program

Prize  Value $  
Carl Mason Memorial Prize  350

Qualifications
Awarded to the medical student who completes the best protocol for an elective project on diabetes in children in either Block 10 of Medicine III or the elective attachment of Medicine V, or the best proposal as part of the requirements for a Bachelor of Medical Science degree in the area of diabetes in children, 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.

Each protocol will be assessed by a panel consisting of:
1. Chair UEC
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. The Steele Douglas Prize in Pathology
   The Head of the Discipline of Pathology
5. Margaret Auchmuty Prize for Women Medical Students
   The Aboriginal Student Liaison Officer
6. Andrew Lawson Memorial Prize in Oncology
   A member elected by and from the full-time consultant staff of the Hunter Oncology Centre
7. The NSW Department of Health Rural Health Bursary Prize
   The Head of the Discipline of General Practice

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 satisfactory completion of the elective and 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 would be substantial and not of the minimum satisfactory level. Essay Prizes.
A student who has been awarded a grant-in-aid will not be eligible to be considered for the award of the same grant-in-aid a second time.

Essay Prizes  Value $  Qualifications
Australasian College of Occupational Medicine Prize in Occupational Health  200
Awarded to the fourth or fifth year student who completes the best essay written additional to curricular requirements in the field of occupational medicine, if of sufficient merit.

NSW Department of Health Rural Health Essay Prize  500
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.

Welch Allyn Diagnostic Set Prize
Approx 500
In the form of a Welch Allyn 3.5 volt Halogen Diagnostic Set
Awarded to the third year student who completes the best essay written additional to curricular requirements in the fields of eye, ear, nose and throat, if of sufficient merit.
section six
Bachelor of Medical Science Program

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 usually take the degree because of a genuine desire to obtain some research training and to gain an insight into their ability to do research. Many holders of the BMedSc undertake further research at a postgraduate level. While some candidates may embark on an entirely novel research program, others will join an existing research team and develop an original project within the context of ongoing research.

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 I in the Bachelor of Medicine course. The BMedSc degree may also be undertaken as a postgraduate program at any time following graduation from the Bachelor of Medicine course.

As part of the enrolment procedure, students are required to nominate a research project they wish to pursue and obtain approval for it from the proposed supervisor. Research may be conducted at other sites within Australia, provided the candidate has a Newcastle faculty supervisor willing to oversee his/her progress. Under such circumstances, the candidate will usually have another supervisor with whom he/she is working more closely at the research site. 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.

In March each year a Fixed Resource Session is held for third year Bachelor of Medicine students in which faculty members present research activities that may be of interest to potential BMedSc candidates. This session is open to anyone who has an interest in the BMedSc degree.

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 report on the progress of their research 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

McGraw-Hill Prizes in Medicine

These two 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.

Carl Mason Memorial Prize

This grant-in-aid is offered to assist students to undertake a BMedSc project or a BMed elective dealing with diabetes in children. Details are set out...
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
- General Practice
- Occupational Epidemiology
- Pharmacoepidemiology
- Psychiatric Epidemiology
- Health Promotion
- Medical Social Science
- Medical Statistics

The graduate diplomas consist of a series of subjects totalling 80 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, General Practice, 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.

A person permitted to enrol as a candidate for a Master degree after completion of the related Graduate Diploma shall be granted credit in all subjects comprising the coursework component of the Master degree subject to the following:

(i) Credit will not be granted to a candidate who:

(a) 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, credit 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 credit 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 credit in the coursework components 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 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 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 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>MED607</td>
<td>Epidemiology B - Research Designs</td>
</tr>
<tr>
<td>MED614</td>
<td>Biostatistics A</td>
</tr>
<tr>
<td>MED615</td>
<td>Biostatistics B</td>
</tr>
<tr>
<td>MED661</td>
<td>Research Protocol Design</td>
</tr>
<tr>
<td>MED682</td>
<td>Health Social Science I</td>
</tr>
<tr>
<td>MED631</td>
<td>Clinical Economics</td>
</tr>
<tr>
<td>MED604</td>
<td>Clinical Epidemiology</td>
</tr>
<tr>
<td>MED632</td>
<td>Health Economics</td>
</tr>
</tbody>
</table>

**GENERAL PRACTICE**

Students wishing to pursue the program of study in General Practice will enrol in either the Graduate Diploma in Epidemiology (General Practice specialty) or the Master of Medical Science degree (General Practice option).

The approved program for the General Practice specialty is:

<table>
<thead>
<tr>
<th>Subject</th>
<th>Credit points</th>
</tr>
</thead>
<tbody>
<tr>
<td>MED651</td>
<td>General Practice Research - Basic Methods</td>
</tr>
<tr>
<td>MED652</td>
<td>General Practice Research - Research Design</td>
</tr>
<tr>
<td>MED653</td>
<td>General Practice - Clinical Epidemiology</td>
</tr>
<tr>
<td>MED614</td>
<td>Biostatistics A</td>
</tr>
<tr>
<td>MED615</td>
<td>Biostatistics B</td>
</tr>
<tr>
<td>MED661</td>
<td>Research Protocol Design</td>
</tr>
<tr>
<td>MED621</td>
<td>Health Social Science I</td>
</tr>
<tr>
<td>MED631</td>
<td>Clinical Economics</td>
</tr>
</tbody>
</table>

**OCCUPATIONAL EPIDEMIOLOGY**

Students wishing to pursue the program of study in Occupational Epidemiology will enrol in either the Graduate Diploma in Epidemiology (Occupational Epidemiology specialty) or the Master of Medical Science Degree (Occupational Epidemiology option).

The approved program for the Occupational Epidemiology specialty is:

<table>
<thead>
<tr>
<th>Subject</th>
<th>Credit points</th>
</tr>
</thead>
<tbody>
<tr>
<td>MED606</td>
<td>Epidemiology A - Basic Methods</td>
</tr>
<tr>
<td>MED607</td>
<td>Epidemiology B - Research Designs</td>
</tr>
<tr>
<td>MED614</td>
<td>Biostatistics A</td>
</tr>
<tr>
<td>MED615</td>
<td>Biostatistics B</td>
</tr>
<tr>
<td>MED661</td>
<td>Research Protocol Design</td>
</tr>
<tr>
<td>MED605</td>
<td>Occupational Epidemiology</td>
</tr>
<tr>
<td>MED621</td>
<td>Health Social Science I</td>
</tr>
<tr>
<td>MED631</td>
<td>Clinical Economics</td>
</tr>
</tbody>
</table>

**PHARMACOEPIEMIDIOLOGY**

This program of study is designed to prepare students for work in agencies responsible for the regulation and evaluation of therapeutic drugs. The coursework will be directed particularly at the needs of developing countries.

Developing countries are confronted with enormous problems. Their health budgets barely cover the costs of essential drugs needed for the treatment of endemic infectious diseases and increasingly their...
For qualified psychiatrists, in addition to the above, a knowledge of the principles and methods of clinical epidemiology will enhance their abilities as clinicians and teachers.

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:

**Subject** | **Credit points**
--- | ---
MED606 Epidemiology A - Basic Methods | 10
MED607 Epidemiology B - Research Design | 10
MED614 Biostatistics A | 10
MED615 Biostatistics B | 10
MED627 Research Protocol Design | 10
MED604 Medical Social Science | 10
MED624 Social Psychiatry and either | 10
MED626 Sociocultural Studies | 10
MED621 Health Social Science | 10

**HEALTH PROMOTION**

This program will prepare students for 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 enrol in either the Graduate Diploma in Health Social Science (Health Promotion specialty) or the Master of Medical Science Degree (Health Promotion option).

The approved program for the Health Promotion specialty is:

**Subject** | **Credit points**
--- | ---
MED606 Epidemiology A - Basic Methods | 10
MED607 Epidemiology B - Research Design | 10
MED614 Biostatistics A | 10
MED615 Biostatistics B | 10
MED674 Health Promotion Program | 10
MED675 Community Health Promotion | 10
MED676 Health Promotion Agency Attachment and Health Economics | 10
MED664 Health Promotion Project | 10
MED665 Health Promotion Research Protocol | 10

**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 illness. 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 enrol in either the Graduate Diploma In Health Social Science (Medical Social Science specialty) or the Master of Medical Science Degree (Medical Social Science option).
MEDICAL STATISTICS

Students wishing to pursue this program will enrol in either 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>MED606 Epidemiology A - Basic Methods</td>
<td>10</td>
</tr>
<tr>
<td>MED607 Epidemiology B - Research Designs</td>
<td>10</td>
</tr>
<tr>
<td>MED616 Biostatistics C</td>
<td>10</td>
</tr>
<tr>
<td>MED618 Research Project</td>
<td>10</td>
</tr>
<tr>
<td>MED663 Research Project</td>
<td>10</td>
</tr>
</tbody>
</table>

The remaining 40 or 30 credit points to be selected must 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>STAT201 Mathematical Statistics</td>
<td>10</td>
</tr>
<tr>
<td>STAT202 Regression Analysis</td>
<td>10</td>
</tr>
<tr>
<td>STAT206 Design &amp; Analysis of Experiments &amp; Surveys</td>
<td>10</td>
</tr>
<tr>
<td>STAT301 Statistical Inference</td>
<td>10</td>
</tr>
<tr>
<td>STAT303 Generalised Linear Models</td>
<td>10</td>
</tr>
<tr>
<td>STAT304 Time Series Analysis</td>
<td>10</td>
</tr>
<tr>
<td>STAT401 Probability Theory</td>
<td>10</td>
</tr>
<tr>
<td>STAT402 Analysis of Categorical Data</td>
<td>10</td>
</tr>
<tr>
<td>STAT403 Demography and Survival Analysis</td>
<td>10</td>
</tr>
<tr>
<td>STAT404 Robust Regression and Smoothing</td>
<td>10</td>
</tr>
<tr>
<td>STAT405 Statistical Consulting</td>
<td>10</td>
</tr>
<tr>
<td>STAT406 Methods for Quality Improvement</td>
<td>10</td>
</tr>
<tr>
<td>STAT407 Advanced Topics in Statistics</td>
<td>10</td>
</tr>
</tbody>
</table>

Policies with Respect to Master of Medical Statistics Degree

1. Progress

Candidates will be permitted to enrol in the Research Thesis component of this degree unless they obtain grades of Credit or better in Level 400 STAT subjects totalling 30 credit points.

2. Admission to Candidature After Completion of Graduate Diploma in Medical Statistics

Persons wishing to enrol in the Master of Medical Statistics program upon completion of the Graduate Diploma in Medical Statistics will be considered not to have had adequate academic preparation to enable satisfactory completion of the degree if they did not obtain grades of Credit or better in Level 400 STAT subjects totalling 30 credit points during the Diploma course.

Diploma/Master Degree Subject Descriptions

Subjects Offered by the Faculty of Medicine

MED614 BIOSTATISTICS A 10cp

Offered Semester 1

This subject is an introduction to statistical methods and includes exploratory data analysis, hypothesis testing and sample size.

Examination Written assignments


MED615 BIOSTATISTICS B 10cp

Offered Semester 2

Deals with statistical methods including regression and correlation, analysis of variance, analysis of discrete data, logistic regression, nonparametric methods and survival analysis.

Examination Written assignments


MED616 BIOSTATISTICS C 10cp

Offered Semester 1

This subject forms a bridge between statistics and epidemiology with the emphasis being on the use of exploratory data analysis, interpretation and presentation of statistical information and data and determination of sample size.

Examination Written assignments


MED631 CLINICAL ECONOMICS 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 critical appraisal
Clinical decision analysis

Time Requirement Approximately 30 hours
MED606 EPIDEMIOLOGY A - BASIC METHODS 30cp
An introduction to Epidemiology. Includes the following topics:
Content
Health indicators
Research Strategies
Risk, Cause and Bias
Epidemic Investigation
Critical Appraisal
Cross-Sectional Studies
Case-Control Studies
Longitudinal Studies
Randomised Control Trials
Synthesis of Research Data
Time Requirements: Approximately 63 hours
Assessment
Written and/or oral assessment.

MED607 EPIDEMIOLOGY B - RESEARCH DESIGNS 10cp
Offered Semester 2
Introduces methods used in Clinical Epidemiology. Includes the following topics:
Cross-Sectional Studies
Case-Control Studies
Cohort Studies
Randomised Controlled Trials
Meta-Analysis

MED651 GENERAL PRACTICE RESEARCH - BASIC METHODS 10cp
This subject has as its main objective the development of epidemiological skills as they relate to general practice research and project development. The aims are to foster an understanding of a wide range of research methodologies within the context of Australian general practice.
Time Requirement: Approximately 30 hours
Assessment
Marked Assignments.

MED652 GENERAL PRACTICE RESEARCH - RESEARCH DESIGN 10cp
This subject continues the themes developed in CPR-Basic Methods but with the emphasis being on a more detailed understanding of specific methods. The specific methods to be examined are: Cross-Sectional Studies, Case-Control Studies, Cohort Studies, Randomised controlled Trials and Meta-Analysis.
Assessment
Marked Assignments.

MED653 GENERAL PRACTICE - CLINICAL EPIDEMIOLOGY 10cp
This subject approaches research from the aspect of clinical general practice. The aim is to develop skills in the assessment of clinical general practice using a wide range of clinical epidemiological methodologies.
The range of areas covered include What Is Normality In Clinical Practice, screening, Clinical Disagreement, N or 1 trials, Natural History and Prognosis, Evaluation of Health Services, determining Priorities, the use of Diagnostic Tests and Ethical considerations.
Assessment
Marked 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; pretest health promotion materials; design and interpret an evaluation of a health promotion programme and develop programmes for use with health care 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 the final grade. Each assignment is graded according to a rating scale which is provided to the students at the outset of the subject.

MED685 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 a description of the steps in designing and piloting 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 the School of Medicine and Public Health at the University of New South Wales.
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 10cp
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 health
promotion programmes. 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 2,5000-
3,000 word assignments each of which contributes to between 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.

<table>
<thead>
<tr>
<th>Faculty of Medicine</th>
<th>Section Seven</th>
<th>Graduate Diploma/ Master Degree Programs</th>
</tr>
</thead>
<tbody>
<tr>
<td>MED621 HEALTH SOCIAL SCIENCE I 10cp</td>
<td>Offered Semester 1</td>
<td>Consists of a series of learning modules covering the following topics: Clinical Pharmacology and its Relationship with Pharmacoepidemiology Introduction to Pharmacoepidemiology Drug Utilisation Studies Questionnaire Development Voluntary Adverse Reaction Reporting Case Control Studies in Pharmacoepidemiology Cohort Studies in Epidemiology Use of Automated Databases in Pharmacoepidemiology Meta-analysis of Pharmacoepidemiological Studies</td>
</tr>
<tr>
<td>MED643 METHODS IN PHARMACOEPIDEMIOLOGY 15cp</td>
<td></td>
<td>Use of qualitative field methods in questionnaire design Questionnaire construction 2. The following topics from Health Economics I: Introduction to clinical economics Cost of illness, including economic costs and discounting Cost analysis Cost minimisation analysis Cost effectiveness analysis</td>
</tr>
<tr>
<td>MED644 PHARMACOEPIDEMIOLOGY - SOCIAL, CULTURAL AND ECONOMIC THEMES 15cp</td>
<td>Offered Semester 2</td>
<td>Consists of a series of learning modules covering the following topics: Prescriber Behaviour -measurement and Social and Cultural Aspects of Pharmaceutical Use Legislation and Regulation of Pharmaceuticals PharmacoEconomics I - Basic Concepts PharmacoEconomics II - Applications and Decision Making Pharmacoepidemiology - Special Considerations in Developing Countries</td>
</tr>
<tr>
<td>MED662 RESEARCH PROJECT 10cp</td>
<td>and</td>
<td></td>
</tr>
<tr>
<td>MED663 RESEARCH PROJECT 20cp</td>
<td>The project usually involves the analysis of a data set arising from an epidemiological study. The student works through the analysis and presentation of the results under the supervision of a faculty member of the Centre for Clinical Epidemiology and Biostatistics or the Department of Statistics. Where possible, interaction with the principal investigator who collected the data is encouraged.</td>
<td></td>
</tr>
</tbody>
</table>
3. Community sampling procedures
4. Monitoring health programmes
5. Impact assessment

Part II: Specific Techniques and Methods
1. Casual modelling
2. Rapid ethnographic appraisal techniques
3. Community participation
4. Cognitive laboratory techniques
5. Factor analysis and reliability analysis
6. Focus groups
7. Measurement of social class/status
8. Applied ethics

Subjects Offered by Department of Statistics

STAT201 MATHEMATICAL STATISTICS 10cp
Prerequisites Either MATH103 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

References
Bowerman, B.L., O'Connell, D.T. et al 1986, Linear statistical models - an applied approach, Duxbury.

STAT203 GENERALISED LINEAR MODELS 10cp
Prerequisite STAT201 Mathematical Statistics and STAT202 Regression Analysis

Advisory Corequisite

STAT201

Hours 3 hours per week

Content
The course covers the theory of generalised linear models and illustrates the ways in which methods for analysing continuous, binary, and categorical data fit into this framework. Topics include the exponential family of distributions, maximum likelihood estimation, model goodness-of-fit statistics, linear models for continuous data (regression and analysis of variance), logistic regression, and log-linear models. Students will implement these methods using various computer packages, including GLM.

Text
Debnath, A.J. 1990, An Introduction to Generalised Linear Modelling, Chapman & Hall

References

STAT204 TIME SERIES ANALYSIS 10cp
Prerequisite STAT201 Mathematical Statistics and STAT202 Regression Analysis


STAT205 DESIGN AND ANALYSIS OF EXPERIMENTS AND SURVEYS 10cp
Prerequisite STAT201

Hours 3 hours per week for one semester

Content
This course contrasts two methods for collecting and analysing data: experimental studies and non-experimental studies including surveys. The principles of experimental design are illustrated by studying 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 MINITAB and SAS are used to carry out analyses.

Texts
Barrett, V. 1986, Elements of sampling theory, Hodder and Stoughton.

References
Kalbfleisch, J.G. 1979, Probability and Statistical Inference II Springer
Silvey, S.D. 1978, Statistical Inference, Chapman & Hall
This course is about the theory and practice of Time Series Analysis—the analysis of data collected at regular intervals in time (or space). Topics covered include: stationary processes, ARMA models, models for periodic phenomena, analysis using MINITAB, SAS and other Time Series packages.

Texts

References
Fuller, W.A. 1976, Introduction to Statistical Time Series, Wiley

STAT401 PROBABILITY THEORY 10cp

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: 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
Billingsley, P. 1979, Probability and Measure, Wiley.
Breiman, L. 1968, Probability Addison-Wesley.

STAT402 ANALYSIS OF CATEGORICAL DATA 10cp

The 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 (r x c) contingency tables. Topics to be covered include probability models for categorical data, measures of association, measures of agreement, the Mantel-Haenszel method for combining tables, applications of logistic regression and log-linear models.

References
Agresti, A. 1990, Categorical data analysis Wiley.

STAT403 DEMOGRAPHY AND SURVIVAL ANALYSIS 10cp

This course presents a mathematical treatment of the techniques used in population projections, manpower studies, and the survival models used in demography and biostatistics.

Text

References

STAT404 ROBUST REGRESSION AND SMOOTHING 10cp

The main theme is the use of the computer to fit models to data when the assumptions of traditional models may not be satisfied. It will be demonstrated that what form of model is appropriate. Topics to be covered include: concepts of robustness, l_1, l_m and high breakdown estimation in linear regression, scatterplot smoothers (e.g. ACE, LOESS and splines), kernel regression and methods for choosing the amount of smoothing, and radically different approaches (e.g. CART and projection pursuit).

References
IEEE SUBJECT COMPUTER NUMBERS

Computer numbers must be shown on enrolment and course variation forms.

ASSOCIATE DIPLOMA IN OCCUPATIONAL HEALTH AND SAFETY
OS10SS Ergonomics and Environmental Systems
OS20SH 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
OS105W Social Dimensions of Occupational Health & Safety

BACHELOR OF MEDICINE
MED101 Medicine I
MED201 Medicine II
MED301 Medicine III
MED401 Medicine IV
MED501 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
OS504 Ergonomics
OS501 Occupational Health
OS505 Occupational Health and Safety Management and Law
OS502 Occupational Hygiene and Toxicology
OS503 Safety Technology
OS506 Special Study

GRADUATE DIPLOMA/MASTER DEGREE IN EPIDEMIOLOGY, BIOSTATISTICS, HEALTH SOCIAL SCIENCE AND HEALTH PROMOTION

Subjects offered by the Faculty of Medicine:
MED614 Biostatistics A
MED615 Biostatistics B
MED616 Biostatistics C
MED617 Clinical Economics
MED604 Clinical Epidemiology
MED675 Community Health Promotion
MED606 Epidemiology A - Basic Methods
MED607 Epidemiology B - Research Designs
MED653 General Practice - Clinical Epidemiology
MED651 General Practice Research - Basic Methods
MED652 General Practice Research - Research Design
MED632 Health Economics
MED676 Health Promotion Agency Attachment & Health Economics
MED674 Health Promotion Development and Evaluation
MED664 Health Promotion Project
MED665 Health Promotion Research Protocol
MED621 Health Social Science I
MED622 Health Social Science II
MED673 Introduction to Health Promotion
MED605 Occupational Epidemiology
MED643 Methods in Pharmacoepidemiology

Faculty of Medicine

Section Eight

Subject Computer Numbers

MED644 Pharmacoepidemiology - Social, Cultural and Economic Themes
MED662 Research Project
MED663 Research Project
MED661 Research Protocol Design
MED625 Social and Economic Pharmacology
MED624 Social Psychiatry
MED626 Sociocultural Studies I
MED627 Sociocultural Studies II

Subjects offered by the Department of Statistics:
STAT407 Advanced Topics in Statistics
STAT402 Analysis of Categorical Data
STAT403 Demography and Survival Analysis
STAT206 Design and Analysis of Experiments and Surveys
STAT303 Generalised Linear Models
STAT201 Mathematical Statistics
STAT406 Methods for Quality Improvement
STAT401 Probability Theory
STAT202 Regression Analysis
STAT404 Robust Regression and Smoothing
STAT405 Statistical Consulting
STAT301 Statistical Inference
STAT304 Time Series Analysis