FACULTY OF MEDICINE AND HEALTH SCIENCES

1995
The University of Newcastle Calendar consists of the following volumes:

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

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 and Health Sciences.

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Welcome to the Faculty of Medicine and Health Sciences. The Faculty is in a period of development and integration with several undergraduate programmes relating to health care and occupational health and safety now well launched. For those of you entering undergraduate Medicine, you are the seventeenth class to do so, and many who have preceded you are now in established practice. Occupational Therapy graduated its foundation class last year and Nutrition and Dietetics will do the same in this coming year. Medical Radiation Technology and Occupational Health and Safety have both introduced bachelor degrees. Each of these undergraduate programmes have features that are unique and provide leadership in the field. Some of you are entering postgraduate programmes, either for vocational development or for research development. Some of these courses are administered through the Centre for Clinical Epidemiology and Biostatistics with some students resident locally and some studying through distance learning. Others in health promotion are administered through the Centre for Health Advancement, a unique joint venture between the Hunter Area Health Service and the Discipline of Behavioural Science in Relation to Medicine. No matter which programme you enter you will be involved in a close linkage with your professional field, either with the Hunter Area Health Service and other hospitals and services elsewhere, or with industry. These relationships are highly supportive and must be respected and in particular the interests and rights of patients who allow you to learn from them.

I hope that during your time here you will develop productive links with other parts of the University, difficult as this may sometimes be with clinical attachments and learning at remote sites.

I shall look forward to welcoming all of you in the first few days of your time within the Faculty. From time to time during your studies you may be in need of some extra help, either personal or academic. Please do not hesitate to seek out that help. I am always happy to see students but you may also prefer to see other members of Faculty with whom you have had close contact or the University Counselling system. 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
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G.R. Tyler, BMed, FRACP
G. Warner, BSc(Med), MB BS(NSW), FRACP
T. J. Woolard, MB BS, DPH(Syd), FACMA, FACRM, FACOM

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- J. Gwynn, Discipline
- L. Mackenzie, Discipline
- J. Associate Lecturers
- A. S. Technical Officers
- T. Professor of Occupational
- P. Associate Lecturer

**Lecturers:**
- A. I.A. Muoro, DipHomeEc, TeachCert(Glasgow), BEd(Z'lobe)
- I.A. Webb, GradDipNut&Diet(Syd), DipND(Syd)
- T.j. Woolard, MB BS(Syd), FRACP
- G. Warner, Discipline Office
- M.L. Garg, MSc(Punj), PhD(Adel), FRACP

**Assistants:**
- T. Office Staff
- D. Kitevski
- D. K. G. Office Staff
- E. V. E. V.

**Discipline of Pathology**
- R. Anderson, MB BS(Syd), FRACP
- I. O'Loughlin, MD, BS(NSW), FRACP
- S.B. Beagley, BSc(Immuno), PhD(Otago), MA, ScD(Camb) (Immunology)
- R. Price, MB BS(Syd), FRCPA (Anatomical Pathology)

**Clinical Lecturers**
- P. A. Crock, MB BS(Melt), FRACP
- P. M. Davidson, MB ChB(Glasgow), MRCP, FRCS, FRACS (Paediatric Surgery)
- R. W. Epling, BSc(Med), MB BS(NSW), FRACP
- R. G. Evans, MB BS(Adel), FRACP
- A.J. Gardiner, MB BS(Syd), FRACP
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- J.C.S. Heeg, MB BS(Syd), FRACP
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- D.L. Mulcahy, MB BS(NSW), FRACP
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- I.A. Wilkinson, MB BS(Adel), FRACP
- J.R. Wright, BSc(Med), MB BS(Syd), FRACS, FACS (Paediatric Surgery)

**Clinical Senior Lecturers**
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**Lecturers:**
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- R. Warden, BSc(Syd), MHPEd(NSW), DipND(Syd), joint appointment Medical Biochemistry - Paediatrics(Nutrition)

**Clinical Lecturers**
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- A.W. Gill, BM(Southampton), FRACP
- J.C.S. Heeg, MB BS(Syd), FRACP
- C.S. Hosking, MB BS, FRACP, FRCPA
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- A. Price, MB BS(Syd), FRCPA (Anatomical Pathology)

**Lecturers:**
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- M.J. Edwards, MB BS(NSW), FRACP(Clinical Genetics)
- R.W. Ferguson, MB BS(Syd), MRCPath (Anatomical Pathology)
- M. Gleeson, BSc(Syd), PhD (Immunology)
- R. Muragashu, MB BS(Singapore), FRCPA(Anatomical Pathology)
The Faculty Board

The Faculty Board, Faculty of Medicine and Health Sciences is charged with conducting the affairs of the Faculty. The membership of the Board is set out in Schedule 8 of the Faculty Board Rules and includes the Vice-Chancellor, the Dean of the Faculty, the academic staff of the Faculty, the University Librarian, student members and a range of other internal and external representatives. The Dean is Chair and executive officer of the Faculty Board.

The responsibilities of Faculty Boards are set out in the University’s Bye-law and Rules made under that Bye-law.

Awards

The awards which can be conferred as a result of studies undertaken within the Faculty of Medicine and Health Sciences are listed below.

- Diploma in Occupational Health and Safety
- Bachelor of Applied Science (Consumer Science)
- Bachelor of Applied Science (Medical Radiation Technology)
- Bachelor of Health Science (Nutrition and Dietetics)
- Bachelor of Health Science (Occupational Therapy)
- Bachelor of Medicine
- Bachelor of Medical Science
- Bachelor of Medical Science in Community Health
- Bachelor of Occupational Health and Safety
- Graduate Diploma in Epidemiology
- Graduate Diploma in Genetic Counselling
- Graduate Diploma in Health Promotion
- Graduate Diploma in Health Science
- Graduate Diploma in Health Social Science
- Graduate Diploma in Health Services Management
- Graduate Diploma in Medical Statistics
- Graduate Diploma in Musculoskeletal Medicine
- Bachelor of Occupational Health and Safety
Graduate Diploma in Occupational Health and Safety
Master of Genetic Counselling
Master of Health Science
Master of Health Services Management
Master of Medical Science
Master of Medical Statistics
Master of Occupational Health and Safety
Master of Science
Doctor of Philosophy
Doctor of Medicine

Board of Studies in Clinical Epidemiology and Biostatistics

The University has established a Board of Studies in Clinical Epidemiology and Biostatistics responsible to the Faculty Board, Faculty of Medicine and Health Sciences for the academic administration of Graduate Diploma courses in Epidemiology, Health Social Science and Medical Statistics, and Master Degree courses in Medical Science and Medical Statistics. The membership of the Board of Studies is set out in Schedule 3 of the Rules Governing Boards of Studies and includes the Dean of the Faculty of Medicine and Health Sciences, The Director of the Centre for Clinical Epidemiology and Biostatistics, academic staff involved in teaching in the courses for which the Board has responsibilities, student members, and other members external to the Faculty. The responsibilities of the Board of Studies are set out in the Board of Studies Rules and in the Rules governing the diplomas and degrees for which the Board is responsible.

Board of Studies in Health Services Management

The University has established a Board of Studies in Health Services Management responsible to the Faculty Board, Faculty of Medicine and Health Sciences for the conduct of matters pertaining to the Graduate Diploma and Master Degree courses in Health Services Management. The membership of the Board is set out in Schedule 6 of the Rules governing Boards of Studies and includes the Deans of the Faculties of Medicine and Health Sciences, Economics and Commerce, Nursing, and Law, the Director of the Centre for Clinical Epidemiology and Biostatistics, members of academic staff involved in teaching in the Health Services Management programs, student members, and other internal and external representatives. The responsibilities of the Board of Studies are set out in the Board of Studies Rules and in the Rules governing the diplomas and degrees for which the Board is responsible.

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 (RHH) and the Newcastle Mater Misericordiae Hospital (MMH). In recent years however, the physical deterioration of RHH has led to the building of a new teaching hospital, the John Hunter Hospital (JHH) at Rankin Park. This opened in 1991. The Faculty has been closely involved in the planning of this hospital and the State government has provided for academic facilities to be built into it in exchange for some facilities previously located at RHH. The main facilities are as follows:

Buildings

Medical Sciences Building (MSB). Located on the Callaghan campus, it houses the Disciplines of Anatomy, Human Physiology, Medical Biochemistry and Nutrition and Dietetics and has large animal research facilities, support staff for the undergraduate medical education program, a computer laboratory, the main bioengineering workshop, the Dean’s Office and educational facilities.

David Maddison Clinical Sciences Building (DMB) - 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. Department of Health staff specialists and some service laboratories have also been accommodated in this building.

Clinical Sciences Building - Newcastle Mater Misericordiae Hospital (also called NEWMED II). The Faculty occupies one floor. Other floors are committed to the oncology unit and service laboratories for the hospital. It is the academic base for the Disciplines of Environmental and Occupational Health, Psychiatry and Clinical Pharmacology. The Chairs in Palliative Care and Surgical Oncology are also located in NEWMED II.

The Disciplines of General Practice and Behavioural Science in Relation to Medicine are located on the site of the former Wallsend Hospital.

The remaining medical 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.

The Disciplines of Medical Radiation Technology and Occupational Therapy are located on the Callaghan Campus.

Teaching Hospitals

MAJOR HOSPITALS IN NEWCASTLE AREA

John Hunter Hospital (JHH). This opened in 1991 and has 490 beds. It is the referral hospital for major medical and surgical specialties and the regional centre for obstetrics and paediatrics. It is located at New Lambton Heights, approximately 5km from the Callaghan campus.

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

Newcastle Mater Misericordiae Hospital (MMH). This is operated by Catholic Health Care Services as a general surgical and medical public hospital and is the centre for regional programs in oncology and environmental and occupational medicine.

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

Other Hospitals in the Newcastle Area

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

Other Teaching/Clinical Facilities

The Health Sciences disciplines place students throughout NSW including the Hunter region, in a range of settings.

Country Hospitals

These hospitals are used for medical students country attachments. A Clinical Supervisor overseas 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>
<th>Distance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maitland District Hospital</td>
<td>30</td>
</tr>
<tr>
<td>Gosford District Hospital</td>
<td>90</td>
</tr>
<tr>
<td>Manning Base Hospital, Tarrawarra</td>
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<tr>
<td>Tamworth Base Hospital</td>
<td>250</td>
</tr>
<tr>
<td>Orange Base Hospital</td>
<td>400</td>
</tr>
<tr>
<td>Dubbo Base Hospital</td>
<td>400</td>
</tr>
<tr>
<td>Lithgow Base Hospital</td>
<td>600</td>
</tr>
</tbody>
</table>

Private Practices

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

Other Facilities

Libraries. The University biomedical library is located in the Auchmuty Library on the Callaghan campus, while an extensive Health Sciences collection is located in the Huxley Library. Together with the Royal Newcastle Hospital and NSW Department of Health, the University contributes to the Gardiner Library Service based at John Hunter Hospital. The Gardiner Library Service is 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. Its mission is to be a centre of excellence for research, teaching and professional service in clinical epidemiology, biostatistics and community pediatrics, clinical economics, general practice, health social science, health promotion, pharmacoeconomics and psychiatric epidemiology.

Teaching

- To provide postgraduate education, unique in Australia and overseas, in the areas of clinical epidemiology, biostatistics, community pediatrics, clinical economics, general practice, health social science, health promotion, pharmacoeconomics and psychiatric epidemiology.
- To run an effective distance learning scheme, in Australian and overseas, for these postgraduate programs.
Section Two

The activities of the Centre have been funded by a grant from J. Byles, Lecturer in Research and Research Program. The Centre is located in the David Maddison Clinical Building adjacent to the Royal Newcastle Hospital.

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 Science Building adjacent to the Royal Newcastle Hospital.

Participants in the academic activities of the Centre include:

- K. Boyle, Tutor in Biostatistics
- J. Byles, Lecturer in Clinical Epidemiology
- V. J. Carr, Professor of Psychiatry
- L. Connor, Senior Lecturer in Sociology and Anthropology
- M. Coeby, Tutor in Biostatistics
- K. Dear, Senior Lecturer in Statistics
- A. J. Dobson, Professor of Biostatistics, Director of the Centre
- R. W. Gibberd, Associate Professor of Biostatistics
- R. W. Hardie, Director of Health Service Development
- R. F. Heller, Professor of Community Medicine and Clinical Epidemiology, Deputy Director of the Centre
- D. Henry, Senior Lecturer in Clinical Pharmacology
- H. R. Higginbotham, Senior Lecturer in Health Social Sciences
- E. Jordan, Senior Lecturer in Sociology and Anthropology
- R. J. Kemp, Lecturer in Health Economics
- S. Kinlay, Tutor in Clinical Epidemiology
- L. Lim, Senior Lecturer in Biostatistics
- A. Monaco, Lecturer in Community Medicine
- D. L. O'Connor, Senior Lecturer in Biostatistics
- J. Page, Tutor in Biostatistics
- H. Pelarsky, Tutor in Health Economics
- M. R. Phillips, Senior Lecturer in Clinical Epidemiology
- J. S. Perto, Lecturer in Clinical Epidemiology
- J. Robertson, Lecturer in Clinical Pharmacology
- D. Ross-Degnan, Associate Professor in Social Medicine and Health Policy
- M. Schofield, Lecturer in Behavioural Science in Relation to Medicine
- C. Treloar, Tutor in Health Social Sciences
- B. Walker, Tutor in Biostatistics
- B. Walsh, Tutor in Clinical Epidemiology

STUDENT PARTICIPATION IN UNIVERSITY AFFAIRS

Provision is made for students to be elected as members of Faculty Boards and other committees or bodies. Details of elections of student members are posted on Faculty Notice Boards.

ENROLMENT

It is the responsibility of students to ensure that they are appropriately enrolled in a program which meets currently applicable course requirements.

Note: Students are not fully enrolled until they have completed the following steps:

1. completed and returned an enrolment/re-enrolment form (including the statistics section);
2. indicated to the University their HECS payment option; and
3. paid all notified fees/finances as required by University Rules.

During the course of the academic year, students will receive a Confirmation of Enrolment, HECS Liability Accounts and possibly other letters confirming details of enrolment. Students are requested to check all details carefully. Failure to do so may result in errors in enrolment and may cost money or result in academic penalty.

Credit Points

Credit points are the basis on which student workload is defined. The normal workload of a full-time student is 80 credit points per year. A student may not enrol in subjects totally more than the equivalent of 40 credit points in any one semester except with approval of the Dean.

Course programs are specified and timetabled each year. Students are not to enrol in subjects which clash in the timetable.

Prerequisites, Corequisites and Assumed Knowledge

In sequenced studies, prerequisites are set between levels of study. A student who is not officially enrolled in a subject will not receive a result in that subject. A student who is not officially enrolled in a subject will not receive a result in that subject.

ADVICE

Students requiring specific advice on their programs or content of subjects in their course should seek help from members of the Faculty. For personal counselling and study skills training it is suggested that students consult the University Counselling Services or CALT.

Enquiries regarding enrolment, variation to program and general administrative matters should be directed to the Faculty Office, Level 6, Medical Sciences Building (Telephone 049 21.5676).

Only in exceptional circumstances will prerequisites, corequisites or assumed knowledge requirements be waived.

Adjusting Second Semester Enrolment

Enrolment in second semester subjects which require completion of first semester subjects to meet prerequisite, corequisite or assumed knowledge requirements is contingent upon successful completion of the relevant first semester subjects.

It is the responsibility of the student to apply to withdraw from any second semester subject for which they do not meet prerequisite, corequisite or assumed knowledge requirements unless a formal waiver of such requirements is received.

A student who fails a semester one subject, and has the opportunity, provided that the subject is offered in semester two, to repeat that subject in semester two of the same year, must formally apply to re-enrol in that subject. This is done by completing a Variation to Program form and lodging it prior to the semester two HECS census date (31 August).

A student who remains officially enrolled in a subject will receive a result in that subject. A student who is not officially enrolled in a subject will not receive a result in that subject.

ADVICE

Students requiring specific advice on their programs or content of subjects in their course should seek help from members of the Faculty. For personal counselling and study skills training it is suggested that students consult the University Counselling Services or CALT.

Enquiries regarding enrolment, variation to program and general administrative matters should be directed to the Faculty Office, Level 6, Medical Sciences Building (Telephone 049 21.5676).

Only in exceptional circumstances will prerequisites, corequisites or assumed knowledge requirements be waived.
section three
Rules Governing Academic Awards

Rules Governing Academic Awards

Application of Rules

1. These Rules shall apply to all the academic awards of the University other than the degrees of Doctor and degrees classified as Master degrees by research.

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 shall not be 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 and subject to any contrary provision in the schedule:

(a) a candidate may not enrol in subjects totalling more than the equivalent of 40 credit points in any semester;

(b) a candidate shall not enrol in a subject which does not count towards the award; and

(c) a candidate shall not be permitted to enrol in any subject which is substantially equivalent to one which that candidate has previously counted towards a degree or diploma.

(3) Except as otherwise permitted 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.

(4) A candidate attaining a Terminating Pass 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 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.
Section Three

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, before the first Higher Education Contribution Scheme census date for that academic year.

(3) Except with the permission of the Dean:

(a) a candidate shall not be permitted to withdraw from a subject after the relevant date which shall be:

(i) in the case of a semester length subject, the last day of that semester; or

(ii) in the case of a full year subject, the last day of second semester; and/or

(iii) subject to any provision within the schedules and

(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 readmission 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 satisfy all 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 assessed in quantity and quality than if the two courses were taken separately.

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

Relaxing Provision

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

SCHEDULE — ASSOCIATE DIPLOMA IN OCCUPATIONAL HEALTH AND SAFETY

Admission

1. 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

2. To qualify for the award of the Associate Diploma a candidate shall pass the program of subjects approved by the Faculty Board totalling 160 credit points.

Credit

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

Time Requirement

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

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

SCHEDULE — DIPLOMA IN APPLIED SCIENCE (MEDICAL RADIATION TECHNOLOGY)

Specialisations

1. The program of studies for the Diploma shall be pursued in one of the following specialisations:

- Diagnostic Radiography
- Nuclear Medicine
- Radiation Therapy

Qualification for Award of the Diploma

2. To qualify for the award of the Diploma a candidate shall pass the program of study approved by the Faculty Board consisting of subjects totalling 240 credit points.

Grading of the Diploma

3. The Diploma shall be awarded as an Ordinary Diploma except that, in a case where a candidate's performance in the program has reached a level determined by the Faculty Board to be of sufficient merit, the Diploma may be awarded with Merit.

SCHEDULE — BACHELOR OF OCCUPATIONAL HEALTH AND SAFETY

Enrolment

1. In any year a candidate will enrol in not more than 40 credit points unless granted the permission of the Faculty Board to enrol in more.

Qualification for the Degree

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

SCHEDULE — BACHELOR OF HEALTH SCIENCE (OCCUPATIONAL THERAPY)

Division of Schedule

1. This Schedule is divided into two parts, Part I being the Ordinary Degree and Part II being the Degree with Honours.

PART I — ORDINARY DEGREE

Admissions to Candidature

2. Except in cases where they meet the published selection criteria determined by the Faculty Board, applicants for admission to candidature shall be required to undertake selection assessment.

3. (1) The selection assessment shall consist of:

(a) the submission of such written work; and

(b) the attendance at such interviews as the Faculty Board shall determine.

(2) Applicants who do not submit work or attend the University as required as part of the selection assessment shall be deemed to have withdrawn
their applications unless a reason acceptable to the Academic Registrar is provided.

Ranking for Selection

4. Applicants shall be ranked in descending order or merit on the basis of either:
   (a) academic performance based on the selection criteria determined under Clause 2; or
   (b) academic performance and results determined by the Faculty Board arising out of the selection assessment.

Offers of Admission

5. (1) The Academic Registrar shall ensure that offers of admission are made in descending rank order to applicants ranked under clause 4, such that the places available in the course each year are filled.
   (2) The Faculty Board shall determine how many places in the course should be filled from applicants ranked under parts (a) and (b) of clause 4 respectively.

Qualification for Admission to the Ordinary Degree

6. To qualify for admission to the Ordinary degree a candidate shall pass the program of study approved by the Faculty Board totalling 320 credit points.

Time Requirements

7. (1) Except with the permission of the Faculty Board, a candidate shall complete the course within five years of study from the date of commencement. (2) A candidate who has been granted credit shall be deemed to have commenced the course from a date determined by the Dean at the time the credit is granted.

PART II - DEGREE WITH HONOURS

Progression to Honours Component

8. To be permitted to enrol in the Honours component a candidate shall:
   (1) have completed 240 credit points from the 100, 200 and 300 level compulsory subjects; and
   (2) have achieved a satisfactory level of competence in those subjects as may be determined by the Faculty Board.

Credit

9. Candidates eligible to enrol in the Honours component, having successfully completed 240 credit points, shall be granted credit of 240 credit points, in recognition of work completed towards the ordinary degree.

Qualification for the Degree with Honours

10. To qualify for the degree with Honours a candidate shall pass the program of study approved by the Faculty Board totalling 320 credit points.

Grading of Degree

6. The Degree shall be conferred as an Ordinary Degree except that, where the performance of a candidate has reached a standard determined by the Faculty Board to be of sufficient merit, the Degree may be conferred with Honours.

Credit

8. In addition to the provisions of Rule 7 of the Rules Governing Academic Awards, a candidate who has completed the requirements for the award of the Diploma of Applied Science (Medical Radiation Technology) shall be deemed to have commenced the course from a date determined by the Dean at the time the credit is granted.

Qualification for Admission to the Degree

5. To qualify for admission to the Degree a candidate shall pass the program of study approved by the Faculty Board totalling 320 credit points.

Grading of Degree

6. The Degree shall be conferred as an Ordinary Degree except that, where the performance of a candidate has reached a standard determined by the Faculty Board to be of sufficient merit, the Degree may be conferred with Merit.

Credit

8. In addition to the provisions of Rule 7 of the Rules Governing Academic Awards, a candidate who has completed the requirements for the award of the Diploma of Applied Science (Medical Radiation Technology) shall be deemed to have commenced the course from a date determined by the Dean at the time the credit is granted.

SCHEDULE — BACHELOR OF MEDICAL RADIATION TECHNOLOGY

Admission to Candidature

2. (1) The selection assessment shall consist of:
   (a) the submission of such written work; and
   (b) the attendance at such interviews as the Faculty Board shall determine.

Offers of Admission

4. (1) The Academic Registrar shall ensure that offers of admission are made in descending rank order to applicants ranked under clause 3, such that the places available in the course each year are filled.
   (2) The Faculty Board shall determine how many places in the course should be filled from applicants ranked under parts (a) and (b) of clause 3 respectively.

Qualification for Admission to the Degree

5. To qualify for admission to the Degree a candidate shall pass the program of study approved by the Faculty Board totalling 320 credit points.

Grading of Degree

6. The Degree shall be conferred as an Ordinary Degree except that, where a candidate’s performance in the program has reached a level determined by the Faculty Board to be of sufficient merit, the Degree may be conferred with Honours.

Credit

8. In addition to the provisions of Rule 7 of the Rules Governing Academic Awards, a candidate who has completed the requirements for the award of the Diploma of Applied Science (Medical Radiation Technology) in the same specialisation may be granted credit by the Faculty Board for all subjects passed in that course.

Time Requirements

9. (1) Except with the permission of the Dean, a candidate shall complete the course in not more than four years of study.
   (2) A candidate who has been granted credit shall be deemed to have commenced the course from a date determined by the Dean at the time the credit is granted.

SCHEDULE — BACHELOR OF APPLIED SCIENCE (CONSUMER SCIENCE)

Qualification for Admission to the Degree

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

Grading of Degree

2. The Degree shall be conferred as an Ordinary Degree except that, where the performance of a candidate has reached a standard determined by the Faculty Board to be of sufficient merit, the Degree may be conferred with Merit.
Time Requirements
3. (1) Except with the permission of the Faculty Board, a candidate shall complete the course in not less than three years and not more than eight years of study.
(2) A candidate who has been granted credit shall be deemed to have commenced the course from a date determined by the Dean at the time the credit is granted.

SCHEDULE — BACHELOR OF APPLIED SCIENCE (CONSUMER SCIENCE) (HONOURS)

Admission to Candidature
1. An applicant for admission to candidature shall have completed the requirements for the ordinary degree of Bachelor of Applied Science (Consumer Science) of the University or to any other degree approved for this purpose by the Faculty Board.

Qualification for the Degree
2. To qualify for admission to the degree a candidate shall pass subjects totalling 80 credit points from the List of Approved Subjects.

Classes of Honours
3. There shall be three classes of Honours: Class I, Class II and Class III. Class II shall have two divisions, namely Division 1 and Division 2.

Time Requirements
4. A candidate shall complete the course in not more than two years of study unless otherwise permitted by the Faculty Board.

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 candidates 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;
(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

This schedule was being revised at the time of publication. Copies of the new schedule will be available from the Faculty Office.

Qualification for the Diploma
5. To qualify for the award of the diploma in a specialisation, a candidate shall pass the program of study approved by the Faculty Board for that specialisation totalling 80 credit points.

Time Requirements
6. (1) Except with the permission of the Faculty Board, a candidate shall complete the course within three years of study from the date of commencement.

Specialisations
2. The diploma shall be awarded in such areas of specialisation as the Academic Senate shall determine on the recommendation of the Faculty Board.

Appointment of Co-ordinator
3. The Faculty Board shall appoint a member who is a member of academic staff to act as Co-ordinator for each of the programs for the diploma.

Transfer of Candidacy from Related Master Degree Program
7. Candidates for the degree of Master of Health Science who have satisfied the requirements for the related Graduate Diploma may be permitted by the Faculty Board to transfer candidature to the Graduate Diploma in Health Science. Candidates wishing to transfer shall apply in writing to the University Secretary and Registrar for permission to do so.

The following area of specialisation has been approved by the Academic Senate in the Faculty of Medicine and Health Sciences:
- Clinical Drug Dependence Studies
- Primary Health Care
- Women’s Health

The following area of specialisation has been approved by the Academic Senate in the Faculty of Science and Mathematics:
- Rehabilitation Counselling

SCHEDULE — GRADUATE DIPLOMA IN OCCUPATIONAL HEALTH AND SAFETY

Interpretation
1. In this Schedule unless the context or subject matter indicates or requires: "co-ordinator" means the person appointed to co-ordinate the program.

Appointment of Co-ordinator
2. The Faculty 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 Faculty Board; or
(b) have other qualifications approved for this purpose by the Faculty Board and the recommendation of the co-ordinator.
(2) Notwithstanding section 3(1) the Faculty 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 program of subjects approved by the Faculty 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.

SCHEDULE — GRADUATE DIPLOMA IN EPIDEMIOLOGY

This schedule was being revised at the time of publication. Copies of the new Schedule will be available from the Faculty Office.

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 Bachelors degree with a major sequence of study in mathematics or statistics in the University or another University recognised for this purpose by the Board; or
   (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 candidature 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 shall:
   (a) have satisfied the requirements for admission to a Bachelor degree with a major sequence in Mathematics.
   (b) have such other qualifications as may be approved for this purpose by the Board; or
   (c) in exceptional cases produce evidence of possessing such other qualifications as may be approved by the Faculty Board.

Qualification for the Degree

4. To qualify for admission to the degree a candidate shall pass subjects totalling not less than 160 credit points, from the List of Approved Subjects.

Credit

5. A candidate who has completed all requirements for the award of the Graduate Diploma in Health Sciences may be granted credit of up to 80 credit points.

Time Requirements

6. (1) The program shall be completed in not less than two years and not more than five years except with the permission of the Faculty Board.

(2) A candidate who has been granted credit shall be deemed to have commenced the course from a date determined by the Dean at the time the credit is granted.

The following areas of specialisation have been approved by the Academic Senate in the Faculty of Medicine and Health Sciences:

- Primary Health Care
- Women's Health
- Rehabilitation Counselling

SCHEDULE — MASTER OF GENETIC COUNSELLING

This schedule was being revised at the time of publication. Copies of the new Schedule will be available from the Faculty Office.

SCHEDULE — MASTER OF MEDICAL SCIENCE

This schedule was being revised at the time of publication. Copies of the new Schedule will be available from the Faculty Office.

SCHEDULE — MASTER OF MEDICAL STATISTICS

This schedule was being revised at the time of publication. Copies of the new Schedule will be available from the Faculty Office.
RULES GOVERNING MASTER DEGREES BY RESEARCH

PART 1 — PRELIMINARY

Application of Rules

1. (1) These Rules shall apply to degrees classified as Master degrees by research of the University.
   (2) These Rules shall not apply to degrees conferred honoris causa or to degrees classified as Master degrees by coursework.

Interpretation

2. (1) In these Rules, unless the context or subject matter otherwise indicates or requires:
   "Committee" means the Graduate Studies Committee of the Academic Senate established pursuant to the Graduate Studies Committee Rules;
   "Dean" means the Dean of the Faculty in which the degree is offered;
   "degree" means the degree of Master for which a person is, or proposes to be, a candidate;
   "Department" means the Department in which the candidate is carrying out the program of advanced study and research;
   "Head of Department" where the Faculty does not have a Departmental structure, means the Dean of the Faculty, or the Dean’s nominee;
   "schedule" means the schedule to these Rules pertaining to the degree;
   "subject" means any part of the program for which a result may be recorded, other than a thesis;
   "supervisor" means the person appointed by the Committee, or where more than one such person is appointed, the person upon whom is assigned the responsibility as principal supervisor;
   "thesis" means a thesis as defined by Rule 12.

3. These Rules are subject to any provisions in the schedule.

PART 2 — GENERAL

The Degree

3. The degree of Master shall be an ungraded degree awarded for a significant contribution achieved through a program of advanced study and research to any branch of learning of concern to the Faculty in which the candidate is enrolled.

Admission

4. (1) An applicant for admission to candidature for a degree shall satisfy the requirements of the University governing admission and enrolment, and any other additional requirements prescribed in the schedule.
   (2) Before approving an admission to candidature the Committee may require the applicant to sit for such examinations or carry out such work as the Committee may prescribe.
   (3) An applicant shall not be admitted to candidature unless adequate supervision and resources are available. Whether these are available shall be determined by the Committee after considering advice from the Head of Department.
   (4) The Committee shall approve the enrolment of a candidate as either full-time or part-time.

Concurrent Enrolment

5. Except with the permission of the Committee, a candidate for the degree shall not be concurrently enrolled as a candidate for any other degree or award whether of this or another tertiary institution.

Program of Study and Research

6. (1) A candidate shall enrol and complete to the satisfaction of the Committee the program of advanced study and research prescribed in the schedule. The research shall be embodied in a thesis.
   (2) The program shall be carried out under the direction of a supervisor or supervisors appointed by the Committee on the recommendation of the Head of the Department.
   (3) A candidate shall be required to carry out the program in the University, except as otherwise permitted by the Committee.

Examinations

7. Examinations in subjects shall be conducted in accordance with the Examination Rules and any other additional requirements prescribed in the schedule.

Progress

8. (1) The candidate, the supervisor and the Head of Department shall submit annual progress reports to the Committee.
   (2) For the purpose of assessing a candidate’s progress in a degree by research, the supervisor and the Head of Department may submit to the Committee reports at any time on the candidate’s progress.

9. (1) Upon request in writing by a candidate the Committee may grant to that candidate leave of absence from the program. Such leave shall not be taken into account in calculating the period for the program prescribed in the schedule.
   (2) On return from leave of absence, a candidate must enrol prior to submission of a thesis.

Withdrawal

10. (1) A candidate may withdraw from the program only by informing the Academic Registrar in writing and the withdrawal shall take effect from the date of receipt of such notification.
    (2) A candidate shall not be permitted to withdraw from a subject except with the permission of the Dean, on the advice of the Head of Department.

Relaxing Provision

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

PART 3 — PROVISIONS RELATING TO THES

Thesis

12. (1) The topic of a thesis shall be approved by the Committee on the recommendation of the Head of the Department in which the candidate is carrying out the research for the thesis.
    (2) A thesis submitted for a degree shall embody the result of an investigation or design or other research undertaken by the candidate, and shall comply with the following requirements, namely:
       (a) A thesis—
           (i) shall be written in English or in another language approved by the Committee;
           (ii) shall be accompanied by an abstract of approximately 300 words describing its content; and

Submissions of Thesis for Examination

13. (1) A candidate shall give to the University Secretary not less than two months written notice of intention to submit the thesis for examination.
    (2) A candidate shall submit to the University Secretary three copies of the thesis together with:
       (a) a certificate signed by the candidate that the thesis complies with Rule 12(2); and
       (b) if the candidate so desires, any documents or work published by the candidate bearing on the subject of the thesis.

The Supervisors shall provide a report—

(a) advising the candidate that has completed the program in the University, under the direction of the supervisor; and
(b) confirming that the thesis has sufficient merit to warrant examination.

4. In the event that the supervisor does not provide the report required under sub-Rule (3) within two weeks following submission, or that such report is unfavourable, a candidate may request in writing to the Committee that the thesis nevertheless be accepted for examination. The Committee shall seek—
   (a) the comments of the supervisor on the thesis; and
   (b) such other information as the Committee may require;
Section Three

Rules Governing Academic Awards

and shall determine whether or not the thesis will be accepted for examination.

Examination of Thesis

14. (1) For each candidate two examiners, at least one of whom shall not be a member of the staff of the University, shall be appointed by the Committee.

(2) The Committee shall consider the results in subjects, the reports of examiners and any other recommendations prescribed in the schedule and shall:

(a) recommend that the candidate be admitted to the degree subject to any condition that the Committee may impose; or

(b) permit the candidate to amend and resubmit the thesis; or

(c) require the candidate to undertake further oral, written or practical examinations; or

(d) recommend that the candidate be not admitted to the degree, and that the candidature be terminated.

15. The candidate must have completed the requirements of the degree before the thesis is submitted.

Availability of Thesis

15. (1) The University shall be entitled to retain the submitted copies of the thesis.

(2) A copy of the thesis of a candidate satisfying the requirements for the degree shall be deposited in the University Library.

(3) The copy of the thesis deposited in the University Library shall be available immediately to any person for consultation or copying unless, on the application of the candidate concerned, a Committee comprising the Chair of the Graduate Studies Committee, the Dean of the Faculty concerned or the Dean’s nominee and one other member of the Graduate Studies Committee from a cognate Faculty appointed by that Committee, determines that it shall not be made available without the written consent of the author for a period which shall not exceed two years.

(4) Subject to any determination by the Committee constituted under sub-rule (3), the Library may supply in any medium, a copy of the thesis upon request to any person or library.

SCHEDULE — MASTER OF MEDICAL SCIENCE

This schedule was being revised at the time of publication.

Copies of the new Schedule will be available from the Faculty Office.

SCHEDULE — MASTER OF SCIENCE

Classification

1. The Master of Science shall be a degree by research offered by the Faculty of Science and Mathematics, the Faculty of Engineering or the Faculty of Medicine and Health Sciences. The Faculty in which the candidate is enrolled shall be responsible for the program.

Admission to Candidature

2. (1) To be eligible for admission to candidature in the Faculty of Science and Mathematics an applicant shall:

(a) have satisfied all the requirements for admission to the degree of Bachelor of Science with Honours Class I or Class II of the University or to a degree approved for this purpose by the Faculty Board;

(b) have completed such work and passed such examinations as the Faculty Board may have determined and have achieved a standard at least equivalent to that required for admission to a degree of Bachelor with second class Honours;

(c) in exceptional cases produce evidence of possessing such other qualifications as may be approved by the Faculty Board on the recommendation of the Head of the Department in which the candidate proposes to carry out the program.

(3) To be eligible for admission to candidature in the Faculty of Medicine and Health Sciences an applicant shall:

(a) have satisfied the requirements for admission to a relevant professional Bachelor degree of the University or to a degree approved for this purpose by the Faculty Board;

(b) have completed such work and passed such examinations as the Faculty Board may have determined and have achieved a standard at least equivalent to that required for admission to a degree of Bachelor with second class Honours;

(c) in exceptional cases produce evidence of possessing such other qualifications as may be approved by the Faculty Board on the recommendation of the Head of the Department in which the candidate proposes to carry out the program.

Qualification for the Degree

3. To qualify for admission to the degree a candidate shall complete to the satisfaction of the Faculty Board a program consisting of:

(a) such work and examinations as may be prescribed by the Faculty Board; and

(b) a thesis embodying the results of an original investigation or design.

Time Requirements

4. The program shall be completed:

(a) in not less than two academic years except that, in the case of a candidate who has completed the requirements for a degree of Bachelor with Honours or a qualification deemed by the Faculty Board to be equivalent or who has had previous research experience, the Faculty Board may reduce this period to not less than one academic year; and

(b) in not more than 5 years, except with the permission of the Faculty Board.

DOCTORAL DEGREE RULES

PART 1 — PRELIMINARY

Application of Rules

1. (1) These Rules shall apply to the Doctoral Degrees of the University.

(2) These Rules shall not apply to degrees conferred honoris causa.

Interpretation

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

"Committee" means the Graduate Studies Committee of the Academic Senate established pursuant to the Graduate Studies Committee Rules;

"degree" means the doctoral degree for which a person is, or proposes to be, a candidate;

"Department" means the department in which a candidate is carrying out the program of study and research;

"Head of Department", where the Faculty does not have a departmental structure, means the Dean of the Faculty, or the Dean’s nominee;

"schedule" means the schedule to these Rules relevant to the degree;

"supervisor" means the person appointed by the Committee, or where more than one such person is appointed, the person to whom is assigned the responsibility as principal supervisor;

"thesis" means a thesis as defined by Rule 9;

PART 2 — GENERAL

Admission to Candidature

3. An applicant for admission to candidature for a degree shall satisfy —

(a) the requirements of the University governing admission and enrolment; and

This schedule was being revised at the time of publication.
Withdrawal

7. A candidate may withdraw from the program of study by informing the University Secretary in writing and the withdrawal shall take effect from the date of receipt of such notification.

Relaxing Provision

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

PART 3 — PROVISIONS RELATING TO THESSES

Thesis

9. A thesis submitted for a degree shall embody the result of an original investigation or design or other original research undertaken by the candidate, and shall comply with the following requirements, namely:

(1) A thesis -
   (a) shall be written in English or in another language approved by the Committee;
   (b) shall be accompanied by an abstract of approximately 300 words describing its content; and
   (c) shall be typed, bound or presented in the manner prescribed by the Committee.

(2) A thesis -
   (a) must consist of a candidate's own account of the research undertaken by the candidate the greater part of which must have been completed subsequent to admission to candidature for the degree. Work done conjointly with other persons may be accepted provided the Committee is satisfied on the candidate's part in the joint research; and
   (b) must not contain as its main content any work or material which has previously been submitted for a University degree or other similar qualification unless the Committee otherwise permits.

Submission of Thesis for Examination

10. (1) A candidate shall give to the University Secretary not less than two months written notice of intention to submit the thesis for examination.

   (2) A candidate shall submit to the University Secretary four copies of the thesis together with
   (a) a certificate signed by the candidate that the thesis complies with Rule 9(2); and
   (b) if the candidate so desires, any documents or work published by the candidate bearing on the subject of the thesis.

11. (1) The University shall be entitled to retain the submitted copies of the thesis.

SCHEDULE — DOCTOR OF PHILOSOPHY

The Degree

1. The degree of Doctor of Philosophy shall be awarded for an original and significant contribution of merit achieved through a program of advanced study and research to any branch of learning of concern to the University.

Admission to Candidature

2. (1) An applicant for admission to candidature for the degree shall -
   (a) have satisfied all of the requirements for admission to the degree of Master or the degree of Bachelor with first class honours or second class honours Division 1 in the University or any other degree approved for this purpose by the Committee; or
   (b) have satisfied all of the requirements for admission to the degree of Bachelor in the University or any other degree approved for this purpose by the Committee, and have achieved by subsequent work and study a standard recognised by the Committee as equivalent to at least second class honours Division 1; or
   (c) in exceptional cases submit such other evidence of general and professional qualifications as may be approved by the Committee.

3. An applicant shall not be admitted to candidature unless adequate supervision and resources are available. Whether these are available shall be determined by the Committee after considering advice from the Head of Department.

Enrolment

3. The Committee shall approve the enrolment of a candidate as either full-time or part-time.

Program of Study and Research

4. (1) A candidate shall enrol and complete to the satisfaction of the Committee a program of advanced study and research approved by the Committee ("the program"). The research shall be embodied in a thesis.

   (2) The program shall be carried out under the direction of a supervisor or supervisors appointed by the Committee on the recommendation of the Head of the Department.

   (3) A candidate shall be required to carry out the program in the University, except as otherwise permitted by the Committee.

Thesis Topic

5. A candidate shall submit the topic of the thesis for approval by the Committee not later than one year after admission to candidature. After the thesis topic has been approved it may be changed only with the permission of the Committee.

Progress

6. (1) The candidate, the supervisor and the Head of Department shall submit progress reports annually.

   (2) For the purpose of assessing a candidate's progress, the supervisor and the Head of Department may submit to the Committee reports at any time on the candidate's progress.

   (3) The Committee, after considering any reports and other evidence of unsatisfactory progress may terminate or place conditions on the continuation of the candidature.

   (4) Before exercising the power referred to in sub-Clauses (3), the Committee shall give the candidate an opportunity to make representations orally or in writing and shall take such representations into account before reaching its decision.
Examination of Thesis

7. (1) The Committee shall appoint three examiners of whom at least two shall not be members of the staff of the University.

(2) The Committee may consider the reports of examiners and any other recommendations and shall:
(a) recommend that the candidate be admitted to the degree subject to any condition that the Committee may impose; or
(b) permit the candidate to amend and resubmit the thesis; or
(c) require the candidate to undertake further oral, written or practical examinations; or
(d) recommend that the candidate not be admitted to the degree, and that the candidature be terminated;

(3) A candidate will be permitted to amend and resubmit a thesis for examination once only.

(4) A candidate permitted to revise and resubmit a thesis shall re-enrol as a candidate for the degree. The revised thesis shall be submitted within a period of one year from the date on which the candidate is advised of the result of the first examination, otherwise the candidature shall terminate.

Transfer of Candidature

8. (1) A candidate for a master degree by research in the University may be permitted to transfer candidature to the degree under such terms and conditions as the Committee shall determine.

(2) Except with the permission of the Committee, candidates who transfer from a master degree shall be deemed to have commenced from the time of admission to candidature to that degree.

Time Requirements

9. The thesis shall be completed and submitted for examination in not less than two years of full-time and four years of part-time enrolment from admission to candidature and except with the permission of the Committee, not more than five years of full-time or eight years of part-time enrolment.

Absence

10. (1) Upon request in writing by a candidate the Committee may grant to that candidate leave of absence from the program. Such leave shall not be taken into account in calculating the period prescribed in Clause 9.

(2) On return from leave of absence, the candidate must enrol prior to the submission of the thesis.

SCHEDULE — DOCTOR OF MEDICINE

The Degree

1. The degree of Doctor of Medicine shall be awarded for an original contribution of distinguished merit to any branch of learning with which the Faculty of Medicine is directly concerned.

Admission to Candidature

2. (1) An application for admission to candidature for the degree shall —
(a) at least eight years prior to application have been admitted to the degree of Bachelor of Medicine of the University or any other degree approved for this purpose by the Committee; and
(b) since being admitted to such degree have been engaged substantially in medical research and study or in scientific work which in the opinion of the Committee is relevant to the practice of medicine.

(2) In addition to sub-Clause (1), applicants who have not been admitted to the Bachelor of Medicine degree in the University must have carried out advanced study in the University for a period of at least three years since graduation.

(3) For the purposes of sub-Clause (2) advanced study in the University may include advanced study in a teaching hospital or health service approved by the Committee on the advice of the Faculty of Medicine or its equivalent in another State or Territory.

(4) A written application for admission to candidature setting out full details of the applicant’s academic qualifications shall be lodged with the University Secretary and shall include —
(a) a short statement describing the nature of the advanced study which it is proposed will form the basis of the work submitted for examination; and
(b) the names of three people whose advice as referees may be sought.

(5) The application shall be considered by the Committee which in determining whether admission to candidature shall be approved may seek such other advice as it deems fit.
Admission
3. (1) To be considered for admission an applicant shall satisfy the personal qualities requirements as determined by the Faculty Board.
(2) An applicant’s personal qualities shall be assessed by means of the Personal Qualities Assessment.
(3) To be eligible for the Personal Qualities Assessment an applicant must satisfy the academic requirements as specified in Rule 4.

Academic Requirements
4. To satisfy the academic requirements an applicant must:
(a) have achieved a result in the New South Wales Higher School Certificate Examination which in terms of the University’s selection aggregate places the applicant in the top 10% of all candidates for the examination in that year; or
(b) in the case of an applicant who has completed one year of full-time study or its equivalent in an approved course, have achieved results in that study at a level prescribed by the Faculty Board; or
(c) have achieved results in examinations leading to other qualifications at a level deemed by the Faculty Board as equivalent to those in (a) or (b) above.

Personal Qualities Assessment
5. The Personal Qualities Assessment shall consist of such written tests and interviews as the Faculty Board shall determine.
6. Only those applicants who satisfy the academic requirements shall be invited to take the Personal Qualities Assessment except that:
(a) an applicant taking the Higher School Certificate in the year of application shall be invited to undertake the Personal Qualities Assessment if the Principal of the school or college attended by the applicant estimates that the applicant’s performance in the Higher School Certificate will satisfy the academic requirements; or
(b) an applicant who does not satisfy the academic requirements at the closing date and who is undertaking study in the year of application may be invited to take the Personal Qualities Assessment if in the opinion of the Faculty Board the applicant is likely to satisfy the academic requirements when results of that study are available.
7. 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 University Secretary and Registrar.

Selection
8. (1) Applicants shall be ranked for selection in descending order of merit according to criteria determined by the Faculty Board based on:
(a) results in the Higher School Certificate examination;
(b) results in studies for an approved course; or
(c) results in the Personal Qualities Assessment.
(2) Applicants whose results in the Personal Qualities Assessment do not reach the standard determined by the Faculty Board shall not be included in the ranked lists under sub-rule (1)(a) or (b).
(3) Only those applicants who have completed all requirements for an approved course, and are eligible for admission to the award of an approved qualification will be ranked under sub-rule (1)(b).
9. (1) The University Secretary and Registrar shall ensure that sufficient offers of admission are made each year such that 54 students are admitted to the first year of the degree course.
(2) Approximately half the places referred to in sub-rule (1) shall be offered from the ranked list of applicants established under Rule 8(1)(c).
(3) The remaining places shall be offered from the ranked lists of applicants established under parts (a) and (b) of Rule 8(1). The number of places to be filled from each of these lists shall be determined by the Faculty Board.

Enrolment
10. (1) Applicants offered admission to candidates will not be permitted to enrol in the course unless they are able to demonstrate to the University Secretary and Registrar that their state of health is commensurate with the standard of fitness required to undertake the course.
(2) The standard of fitness required in sub-rule (1) shall be determined by the Faculty Board.

Deferral of Admission
11. (1) The Dean or the Dean’s nominee may grant an applicant offered admission a deferment 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;
(c) to allow an applicant enrolled as a candidate for a postgraduate degree in a university time to complete the requirements for admission to 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 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 candidature in the course for an additional period of one year.
(3) An applicant who wishes to defer admission must apply to do so to the University Secretary and Registrar 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.

Relaxing Provisions
12. (1) 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.
(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 an Australian Aborigine or Torres Strait Islander and is accepted as such by the community in which that person lives.
section four

Medical Radiation Technology Course and Subject Details

MEDICAL RADIATION TECHNOLOGY

Professional Recognition

The Bachelor of Applied Science (Medical Radiation Technology) has been accredited by the Australian Institute of Radiography and The Australian and New Zealand Society for Nuclear Medicine.

Prizes

1. A.I.R. NSW Newcastle
   The Australian Institute of Radiography NSW (Newcastle Branch) offers a prize to the highest academic achievement for a third year medical radiation technology student (Diagnostic and Radiation Therapy).

2. Kathy Fitzgerald Prize
   The Kathy Fitzgerald Prize is awarded to the student with the highest grade point average over the duration of the Radiography course. (Diagnostic and Radiation Therapy).

Merit

Both the Diploma in Applied Science (Medical Radiation Technology) and the Bachelor of Applied Science (Medical Radiation Technology) degree may be awarded/conferred with Merit, provided that the candidate has achieved a Grade Point Average of 2.5 or higher (above a credit average), calculated over the duration of enrolment in the course.

Phasing out of Diploma in Applied Science (Medical Radiation Technology)

This Diploma is being phased out, having received its last intake of students in 1991. 1995 is the last year in which Diploma subjects will be offered. (Year Three subjects only are on offer in 1995).

Repeating students must be mindful of this, as Failures in subjects may prevent progress in, and completion of the award.

Honours

It is proposed to introduce an Honours degree in Medical Radiation Technology in 1996.

Credit (Advanced Standing)

Graduates:

(1) A graduate of this University or of another university, or graduates or diplomates of an approved tertiary institution, may be granted credit in recognition of subjects passed, provided that:
   (a) each subject for which credit is sought should be substantially the same (as determined by the relevant Head of Department) as a subject included in the list of subjects approved for the course to which the graduate is seeking admission;

Undergraduates:

(2) Undergraduates of this or of another university or of an approved tertiary institution who have not previously enrolled in the course to which admission is being sought, may be granted credit in recognition of subjects passed, provided that:
   (a) the subject for which credit is sought shall be substantially the same (as determined by the relevant Head of Department) as a subject included in the list of subjects approved for the course in which the undergraduate is seeking admission.

(3) *Undergraduates who have passed subjects in a degree course may seek to complete the requirements for that degree by undertaking studies at another university or approved tertiary institution.

   (a) Applications from such undergraduates who, after the completion of at least two years of full-time enrolment or five years part-time enrolment have not maintained a satisfactory rate of progress as determined by the Faculty Board under the Rules Governing Unsatisfactory Progress, shall not be approved by the Faculty Board except in exceptional circumstances and on the recommendation of the Dean.

   (b) The Faculty Board may grant credit to an undergraduate previously enrolled in a degree course in this Faculty in recognition of any subject or subjects passed at another university on the following conditions:
      (i) the subject or subjects passed shall be substantially the same as a subject or subjects included in the list of subjects approved for the course in which the candidate is enrolled;
      (ii) credit shall not be granted in the respect of subjects with a combined value exceeding 80 credit points, except that in special circumstances the Dean may approve otherwise.

An undergraduate wishing to obtain the benefit of these sections must apply in writing to the Dean for approval of the proposed course by the last day of the previous semester. The students must supply full and completed details of the proposed course including details of the content of individual subjects. The Dean will consult Heads of Departments about individual subjects and prepare a submission for the Faculty Board.

Subjects approved by the Faculty Board will be specific and will be for one academic year only. The Faculty Board will determine the extend of credit to be granted in the course if the approved subject is completed successfully. If the approved subjects are not completed within the academic year specified by the Faculty Board, a student wishing to gain credit under these sections must submit a new application to the Dean in writing.

Unsatisfactory Progress

In accordance with the Rules Governing Unsatisfactory Progress, the following policy has been developed:

A student will be regarded as not having made satisfactory progress if:

(a) the student has failed a compulsory subject twice and/or;
(b) the student has failed more than 50% of his/her full program in any given academic year (calculated by total credit points attempted) and/or;
(c) the student has failed a subject designated as a Clinical or Fieldwork subject and/or;
(d) the student will fail to fulfill any specified time requirements of the course.

For the purposes of (c) the following subjects are designated as Clinical or Fieldwork subjects:

Diplomas: Clinical Studies I, Clinical Studies II, Clinical Studies III

Degrees: Clinical Applications I, Clinical Applications II, Clinical Applications III

Leave of Absence

A student eligible to re-enrol shall be deemed to be in good academic standing and may thus take Leave of Absence for one year from the course. There is no need to formally apply for this absence.

Students taking Leave must re-apply for admission by the due date. It is the responsibility of the student to do this, to regain entry to the course.
### Course and Subject Details and Description

#### DIPLOMA IN APPLIED SCIENCE (MEDICAL RADIATION TECHNOLOGY)

- **Diagnostic**
- **Radiation Therapy**
- **Nuclear Medicine**

**Note:** Students enrolled prior to 1992 (i.e., continuing students only) in Medical Radiation Technology - the Year One (100 level) subjects were offered for the last time in 1993, given that the course is being phased out. Year Two (200 level) subjects will be offered for the last time in 1994, and Year Three subjects will be available in 1995 for the last time.

**Duration:** 3 years full time

**Availability:** On Campus (continuing students only. No further intakes).

**Attendance:** Full-time

**Total Credit Points:** 240

**Course Co-ordinator:** Mr Tony Burton

#### APPROVED PROGRAM OF STUDY

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<thead>
<tr>
<th>Year</th>
<th>All Strands</th>
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<td>RA111S Imaging Instrumentation</td>
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<td>RA112S Anatomy and Physiology I</td>
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<td>RA218S Clinical Studies II</td>
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<td>RA219W Behavioural Studies</td>
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<td>RA221S Radiation Therapy Practice I</td>
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<tr>
<td>3</td>
<td>Nuclear Medicine Strand</td>
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<td>RA222S Nuclear Medicine Principles I</td>
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<td>RA223S Radiopharmacy and Biological Effect</td>
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<td>RA224S Nuclear Medicine Practice I</td>
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<tbody>
<tr>
<td>3</td>
<td>RA318S Cross Sectional Anatomy</td>
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<td></td>
<td>RA319W Biochemical &amp; Social Issues in Health Care</td>
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<td>RA320S Clinical Studies III</td>
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### Section Four

#### Medical Radiation Technology Course and Subject Details

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#### Year 3

**Diagnostic Strand**

- RA316S Techniques and Surface Anatomy III
- RA317S Studies in Ultrasound
- RA318S Cross Sectional Anatomy
- RA319W Biochemical & Social Issues in Health Care
- RA320S Clinical Studies III

**Radiation Therapy Strand**

- RA318S Cross Sectional Anatomy
- RA319W Biochemical & Social Issues in Health Care
- RA320S Clinical Studies III

**Nuclear Medicine Strand**

- RA318S Cross Sectional Anatomy
- RA319W Biochemical & Social Issues in Health Care
- RA320S Clinical Studies III

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</thead>
<tbody>
<tr>
<td>RA110S</td>
<td>PHYSICS FOR MEDICAL RADIATION TECHNOLOGISTS</td>
<td>15cp</td>
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</tbody>
</table>

*Last offered in 1993.*

Physics provides the foundation study in an understanding of the principles utilised by the various modalities of medical radiation technology. This subject will provide the student a basis, that will enable the student to understand and appreciate the principles of operation of radiographic, ultrasonic and nuclear medicine instrumentation.

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<tbody>
<tr>
<td>RA111S</td>
<td>IMAGING INSTRUMENTATION 1</td>
<td>10cp</td>
</tr>
</tbody>
</table>

*Last offered in 1993.*

This subject provides the student with the opportunity to develop an understanding of the mode of operation of frequently encountered radiographic, ultrasonic and nuclear medicine instrumentation.

### Year 2

**Diagnostic Strand**

- RA214S Imaging Instrumentation II
- RA215S Anatomy and Physiology II
- RA216S Techniques and Surface Anatomy II
- RA217S Pathology
- RA218S Clinical Studies II
- RA219W Behavioural Studies

**Radiation Therapy Strand**

- RA218S Clinical Studies II
- RA219W Behavioural Studies
- RA220S Radiation Therapy Principles
- RA221S Radiation Therapy Practice I

**Nuclear Medicine Strand**

- RA215S Anatomy & Physiology II
- RA217S Pathology

### Year 3

**Diagnostic Strand**

- RA318S Cross Sectional Anatomy
- RA319W Biochemical & Social Issues in Health Care
- RA320S Clinical Studies III

**Radiation Therapy Strand**

- RA318S Cross Sectional Anatomy
- RA319W Biochemical & Social Issues in Health Care
- RA320S Clinical Studies III

**Nuclear Medicine Strand**

- RA318S Cross Sectional Anatomy
- RA319W Biochemical & Social Issues in Health Care
- RA320S Clinical Studies III

### Section Four

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<tbody>
<tr>
<td>RA114S</td>
<td>CLINICAL STUDIES 1</td>
<td>15cp</td>
</tr>
</tbody>
</table>

*Corequisite RA113S.*

This subject provides the student with the opportunity to apply theoretical concepts in a clinical setting. In addition, the skills of positioning introduced in Techniques and Surface Anatomy will be further reinforced. The integrated blocks of clinical studies will facilitate increased confidence and competence in the performance of selected procedures. At the same time, the student will gain a better understanding of the health care team and the role of the medical radiation technologist as a member of their team.

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<tbody>
<tr>
<td>RA115Q</td>
<td>COMPUTING TECHNOLOGY IN MEDICAL RADIATION TECHNOLOGY</td>
<td>5cp</td>
</tr>
</tbody>
</table>

*Last offered in 1993.*

Students will study the application of computer technology in organ imaging. Topics include: hardware, software, application in cardiac studies, computerised axial tomography, ultrasound investigations, archival systems for storage and retrieval, data management systems, word processing, graphics and spreadsheets.

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<tbody>
<tr>
<td>RA116N</td>
<td>PRINCIPLES OF PATIENT CARE</td>
<td>5cp</td>
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*Last offered in 1993.*

This subject will assist students to understand the basis principles of patient care, and to gain a perspective on the role of their chosen profession in the overall care of the patient.

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<tr>
<td>RA214S</td>
<td>IMAGING INSTRUMENTATION 2</td>
<td>10cp</td>
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</table>

*Last offered in 1994.*

**Prerequisite RA110S, RA111S.*

This subject provides the student with further opportunity to develop an understanding of the mode of operation of frequently encountered radiographic, ultrasonic and nuclear medicine instrumentation. This module covers equipment used for specialised radiographic procedures, such as computerised tomography, ultrasound and magnetic resonance imaging.

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<tr>
<td>RA215S</td>
<td>ANATOMY AND PHYSIOLOGY 2</td>
<td>15cp</td>
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</table>

*Last offered in 1994.*

**Prerequisite RA112S.*

A continuation of study from Living Anatomy and Physiology.
1. Topics include: detailed anatomy and physiology of visceral systems; digestive tract; renal tract; reproductive organs; vascular and lymphatic systems; nervous and vestibular systems and spinal nerves.

RA216S TECHNIQUES AND SURFACE ANATOMY 2 15cp
Last offered in 1994.
Prerequisite RA113S
Corequisite RA215S
This subject provides the students with the opportunity to further develop their radiographic skills. The opportunity to practise these procedures will be offered in Clinical Studies 2.

RA217S PATHOLOGY 10cp
Last offered in 1994.
Prerequisite RA113S
Corequisite RA215S
This subject is designed to introduce the student to general pathology, then consider pathologies of the various organ systems. A diagnostic approach is utilised in these considerations.

RA218S CLINICAL STUDIES 2 20cp
Last offered in 1994.
Corequisite RA216S
This subject provides the student with the opportunity to apply theoretical concepts in a clinical setting. In addition, the skills of positioning introduced in Techniques and Surface Anatomy 2 will be further reinforced.

RA219W BEHAVIOURAL STUDIES 10cp
Last offered in 1994.
This subject has two parts. The first will contain an overview of lifespan development with relevance to the practice of diagnostic radiography. The second will focus on normal human behaviour to provide a yardstick by which other behaviour may be determined as abnormal.

RA220S RADIATION THERAPY PRINCIPLES 10cp
Last offered in 1994.
This subject aims to present the student with the physical principles underlying the use of ionising radiation in radiotherapy. Topics include:

- methods of apparatus calibration;
- radiation protection and its applications;
- application of computers in radiotherapy.

RA221S RADIATION THERAPY PRACTICE 15cp
Last offered in 1994.
Students will begin to develop an understanding of manual and computer planned radiotherapy treatment. Topics include:

- applications of ionising radiation;
- principles of hand planning;
- principles of computer planning;
- dose distribution and its application;
- optimisation of treatment plans;
- treatment modalities;
- effects of radiation;
- applications of a simulator.

RA222S NUCLEAR MEDICINE PRINCIPLES 5cp
Last offered in 1994.
Topics include:

- Review of radioactivity, decay modes and interactions of radiation with matter;
- statistics of nuclear counting;
- historical review of nuclear detection and imaging devices;
- ionisation chambers, geiger detectors, radioisotope dose calibrators;
- scintillation detectors;
- photomultipliers, discriminators, scalers, rate meters, power supplies;
- pulse height analysis, multichannel analysers;
- semiconductor detectors;
- liquid scintillation counters;
- probe systems and collimation;
- whole body counters;
- bone densitometers - single and dual photon;
- gamma camera - design and principles;
- collimators for gamma camera;
- analogue and digital display and recording devices.

RA223S RADIOPHARMACY AND BIOLOGICAL EFFECT 5cp
Last offered in 1994.
The following topics are considered:

- radiopharmaceuticals;
- hot laboratory design and dose dispensing techniques;
- quality control;
- in-house manufacture of cold kits;
- laboratory techniques and relevant equipment;
- fundamental principles of radobiology;
- molecular and cellular radiobiology;
- early effects of radiation;
- late effects of radiation;
- health physics;
- design and implementation of radiation protection procedures.

RA224S NUCLEAR MEDICINE PRACTICE I 15cp
Last offered in 1994.
This subject provides the student with the opportunity to develop study in nuclear medicine. This subject will begin to develop an understanding of manual and computer planned radiotherapy treatment. Topics include:

- radioactive laboratories;
- applications of radionuclides;
- radiopharmaceuticals;
- in-house manufacture of cold kits;
- laboratory techniques and relevant equipment.

RA316S TECHNIQUES AND SURFACE ANATOMY 3 25cp
Last year of offer.
Prerequisite RA216S
Corequisite RA318S
This subject encompasses specialised procedures in radiography as well as computer tomography.

RA317S STUDIES IN ULTRASOUND 15cp
Last year of offer.
Prerequisite RA113S
Corequisite RA316S, RA318S
This foundation study will equip the student with basic skills and knowledge of medical ultrasonography.

RA318S CROSS-SECTIONAL ANATOMY 10cp
Last year of offer.
Prerequisite RA215S
This subject provides the opportunity to develop study in cross-sectional anatomy.

RA319W BIOETHICAL AND SOCIAL ISSUES IN HEALTH CARE 10cp
Last year of offer.
This subject provides the student with the opportunity to apply theoretical concepts in a clinical setting. In addition, the skills of positioning introduced in Techniques and Surface Anatomy 3 and Studies in Ultrasound will be further reinforced.

RA320S CLINICAL STUDIES 3 20cp
Last year of offer.
Prerequisite RA114S, RA218S
Corequisite RA316S, RA317S
This subject provides the student with the opportunity to apply theoretical concepts in a clinical setting. In addition, the skills of positioning introduced in Techniques and Surface Anatomy 3 and Studies in Ultrasound will be further reinforced.

The integrated blocks of clinical studies will facilitate increased confidence and competence in the performance of selected medical imaging procedures. At the same time, the student will gain a better understanding of the health care team and the role of the medical radiation technologist as a member of that team.

The examinations and procedures in the modules Techniques and Surface Anatomy 3 and Foundation Studies in Ultrasound will provide the range of topics addressed in this subject.
• electronic beam, evaluation and use;
• principles of positioning and immobilisation;
• computerized tomography and planning;
• MRI localization and planning of tumour treatment;
• ultrasound localization and planning of tumour treatment;
• advanced computer aided planning systems.

RA322S PRINCIPLES OF ONCOLOGY 15cp
Last year of offer
This subject aims to develop an understanding of the various treatments and their rationale. Topics include:
• dose tolerance at specific sites;
• treatment methods.

RA323S TUMOUR PATHOLOGY 10cp
Last year of offer
This subject will develop an understanding of tumour types, classifications, patterns of growth and methods of spread. Topics include:
• tumours;
• tumour growth patterns;
• tumour spread;
• classification of tumours;
• tumour histology;
• tumours of specific regions.

RA325S NUCLEAR MEDICINE PRACTICE II 5cp
Last year of offer
Topics include:
• radiopharmaceuticals and pregnancy;
• therapeutic radiopharmaceuticals;
• counting techniques;
• radiation decontamination techniques in relation to radiopharmacy;
• in vitro radiopharmacy;
• laboratory techniques and relevant equipment;
• cell labelling techniques.

RA326S NUCLEAR MEDICINE PRACTICE II 15cp
Last year of offer
Topics in this subject include:
• Applications of radionuclides for:
  • therapeutic applications;
  • radiation decontamination techniques
• counting techniques;
• in vivo tracer studies;
• paediatric applications;
• positron emission tomography;
• bone densitometry;
• the Gamma Camera;
• digital and multichannel cameras;
• nuclear medicine computer systems;
• single photon emission tomography;
• positron emission tomography;
• magnetic resonance imaging and spectroscopy;
• tracer principles;
• in vivo quantitation;
• statistical techniques;
• fourier theory;
• recent developments.

BACHELOR OF APPLIED SCIENCE (MEDICAL RADIATION TECHNOLOGY)
• Diagnostic Strand
• Radiation Therapy Strand
• Nuclear Medicine Strand

Duration 3 years full time
Course Coordinator: Dr. Tony Buxton

Year 1 - Common to all Strands
MRTC101 MRT Physics, Radiation Biology and Protection 15
MRTC102 MRT Instrumentation 10
ALS213 Human Anatomy & Physiology I 20
MRTC104 Medical Radiation Techniques 20
MRTC105 Clinical Applications I 5
MRTC106 MRT Computing 5
MRTC107 MRT Patient Care 5

Year 2 - Diagnostic Strand
MRTC201 Diagnostic Instrumentation 10
ALS203 Human Anatomy & Physiology II 15
MRTC203 Diagnostic Radiography Techniques I 20
ALS204 Pathology for MRT 10
MRTC205 Clinical Studies I 15
PSYC276 Psychology for MRT 10

Year 2 - Radiation Therapy Strand
MRTC207 Radiation Therapy Instrumentation 10
MRTC214 Techniques in Radiation Therapy 15
ALS203 Human Anatomy & Physiology II 15
MRTC205 Clinical Studies II 15
PSYC276 Psychology for MRT 10
ALS204 Pathology for MRT 10
MRTC213 Oncological Principles 5

Year 2 - Nuclear Medicine Strand
ALS203 Human Anatomy & Physiology II 15
ALS204 Pathology for MRT 10
MRTC205 Clinical Studies II 15
PSYC276 Psychology for MRT 10
MRTC209 Nuclear Medicine Instrumentation I 5
MRTC210 Nuclear Medicine Radiology and Radiopharmacy 10
MRTC211 Nuclear Medicine Techniques I 15

Year 3 - Diagnostic Strand
MRTC314 Ultrasound Physics 5
MRTC315 Digital Imaging 5
ALS213 Sectional Anatomy 5

Library hours: 5 hours per week face-to-face, 5 hours per week directed study
Semester offered: Full year
Lecturer: Dr. Ali Shah

SUBJECT DETAILS
YEAR 1
MRTC101 MRT PHYSICS, RADIATION BIOLOGY AND PROTECTION 15cp
Prerequisite: Nil
Corequisite: Nil

YEAR 2
MRTC201 Diagnostic Instrumentation 10
MRTC203 Diagnostic Radiography Techniques I 20
MRTC205 Clinical Studies I 15
PSYC276 Psychology for MRT 10
ALS204 Pathology for MRT 10
MRTC209 Nuclear Medicine Instrumentation I 5
MRTC210 Nuclear Medicine Radiology and Radiopharmacy 10
MRTC211 Nuclear Medicine Techniques I 15

YEAR 3
MRTC314 Ultrasound Physics 5
MRTC315 Digital Imaging 5
ALS213 Sectional Anatomy 5

SOCA384 Social Issues in Health Care 5
SOCA385 Bioethical Issues in Health Care 5
MRTC306 Clinical Applications III 15
MRTC308 Diagnostic Radiography Techniques I 25

Year 3 - Radiation Therapy Strand
ALS213 Sectional Anatomy 10
SOCA384 Social Issues in Health Care 5
SOCA385 Bioethical Issues in Health Care 5
MRTC306 Clinical Applications III 15
MRTC316 Techniques in Radiation Therapy II 25
MRTC313 Oncological Principles II 25
ALS209 Oncological Pathology 10

Year 3 - Nuclear Medicine Strand
MRTC314 Ultrasound Physics 5
MRTC315 Digital Imaging 5
ALS203 Sectional Anatomy 10

Library hours: 5 hours per week face-to-face, 5 hours per week directed study
Semester offered: Full year
Lecturer: Dr. Ali Shah

SUBJECT DETAILS
YEAR 1
MRTC101 MRT PHYSICS, RADIATION BIOLOGY AND PROTECTION 15cp
Prerequisite: Nil
Corequisite: Nil

YEAR 2
MRTC201 Diagnostic Instrumentation 10
MRTC203 Diagnostic Radiography Techniques I 20
MRTC205 Clinical Studies I 15
PSYC276 Psychology for MRT 10
ALS204 Pathology for MRT 10
MRTC209 Nuclear Medicine Instrumentation I 5
MRTC210 Nuclear Medicine Radiology and Radiopharmacy 10
MRTC211 Nuclear Medicine Techniques I 15

YEAR 3
MRTC314 Ultrasound Physics 5
MRTC315 Digital Imaging 5
ALS213 Sectional Anatomy 5

SOCA384 Social Issues in Health Care 5
SOCA385 Bioethical Issues in Health Care 5
MRTC306 Clinical Applications III 15
MRTC308 Diagnostic Radiography Techniques I 25

Year 3 - Radiation Therapy Strand
ALS213 Sectional Anatomy 10
SOCA384 Social Issues in Health Care 5
SOCA385 Bioethical Issues in Health Care 5
MRTC306 Clinical Applications III 15
MRTC316 Techniques in Radiation Therapy II 25
MRTC313 Oncological Principles II 25
ALS209 Oncological Pathology 10

Year 3 - Nuclear Medicine Strand
MRTC314 Ultrasound Physics 5
MRTC315 Digital Imaging 5
ALS203 Sectional Anatomy 10

Library hours: 5 hours per week face-to-face, 5 hours per week directed study
Semester offered: Full year
Lecturer: Dr. Ali Shah
The objectives of the subject include:

Students will know how:

- X-rays are produced and detected
- a radiographic image is obtained
- equipment malfunction will affect a radiograph
- radionuclides are used for imaging and therapy in nuclear medicine
- ultrasound is used for imaging as well as for evaluating blood flow
- high energy photon as well as electron beams are used in radiotherapy

Content

The following topics are sequenced to provide a logical systematic study in human anatomy and physiology, at the same time ensuring that topic sequencing affords maximum integration with the core Year 1 professional preparation subject - Medical Radiation Techniques.

- Cell and tissue histology:
  - cells and tissue structures
  - viruses
  - cell membrane and osmotic fragility
- Detailed regional anatomy and physiology:
  - basic osteology and musculature, joints
  - shoulder girdle and upper limb
  - pelvic girdle and lower limb
  - back, head and neck
- Overview of body systems:
  - nervous, endocrine
  - cardiovascular, lymphatic, respiratory
  - renal, reproductive, gastrointestinal
- Abdominal cavity:
  - landmarks, regions, boundaries
  - relationships of abdominal viscera
- Respiratory anatomy and physiology (including thoracic cait):
- Gastrointestinal System
- Renal System
- Reproductive System
- Cardiovascular System
- Reproductive System

Texts


References


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Texts


References


The topics covered in MRTC104 are divided into units based on all three strands. This approach provides the student with a fundamental knowledge of those concepts common to all three strands in MRT prior to developing strand specific knowledge and skills in the latter part of the first semester and in the second semester.

**Texts**


**MRTC105 CLINICAL APPLICATIONS I** 5cp

**Prerequisites:** Nil

Corequisite MRTC104 Medical Radiation Techniques

**Hours** One two-week block in first semester and one four-week block in second semester

**Semester Offered:** Full Year

**Assessment:** To be advised. Dependent on Strand undertaken

**Content**

This subject provides the student with the opportunity to apply theoretical concepts in a clinical setting.

The integrated blocks of clinical studies will facilitate increased confidence and competence in the performance of elementary procedures. At the same time, the student will gain a better understanding of the health care team and the role of the medical radiation technologist as a member of that team.

As a result of completing this subject, the student will:

- have a basic knowledge of the procedures identified in the subject Medical Radiation Techniques;
- be able to apply relevant theoretical concepts and principles from the foundation studies in the Clinical setting;
- be able to evaluate his/her own performance of activities, according to the level of experience;
- observe the roles and functions of other medical radiation technologists and health team members in the delivery of health care.

**MRTC106 MRT COMPUTING** 5cp

**Prerequisite:** Nil

Corequisite MRTC106

**Hours** Two hours per week face to face, three hours per week directed study

**Semester Offered:** Semester two

**Examination:** Assignments, class tests and examination

**Content**

The impact of computer technology on medical radiation technology has been far reaching, to the extent that some instrumentation, such as CT, may be regarded as a product of radiography and computer technology. The applications of computers including hardware, software and major investigative applications as presented in this subject, will expose the student to the increasing role of computer technology in organ imaging.

On completion of this component, the student will be able to:

- describe and explain the display and image recording systems utilised in organ imaging
- explain the limitations of computer-generated information arising from both software and hardware
- apply software packages to clinical investigations
- demonstrate a working knowledge of common applications of computing, such as data management, word-processing and spreadsheets.

**MRTC107 MRT PATIENT CARE** 5cp

**Lecturer:** Ms. Shirley Rutter

**Prerequisites:** Nil

**Hours** 2 hours per week

**Semester Offered:** Semester 1 only

**Examinations:** One Essay, One Group Presentation

**Content**

Patient Care shall provide the student with an opportunity to see how his/her chosen profession relates to the overall care of the patient, caring for people of all ages in the context of both the community and hospital environment.

The subject will introduce the student to basic communication skills which are considered to be necessary for effective practice within the person-oriented health care professions.

The fundamental principles of universal infection control, lifting/transfer techniques and safety in the workplace will be introduced in order to ensure a safe working environment for both the patient and the care provider.

**Texts**


**Year 2**

**MRTD201 DIAGNOSTIC INSTRUMENTATION** 10cp

**Prerequisite:** MRTC102 MRT Instrumentation, MRTC101 MRT Physics, Radiation, Biology and Protection

**Corequisite:** Nil

**Hours:** Three hours per week face to face, three hours per week directed study

**Semester Offered:** Full Year

**Lecturer:** G. Ali Shah

**Examination/Assessment:** Assignments and Examinations

**Content**

This subject provides a knowledge of diagnostic X-ray circuits, specialist equipment (e.g. tomography), and introduced digital imaging. It also addresses quality assurance as well as protection of patients and staff.

Students will be able to explain:

- how X-ray output is regulated despite variations in space charge and power loss which accompany changes in techniques
- the need for tube ratings as well as the factors which determine them
- equipment used in fluoroscopy, tomography, mammography, etc.
- digital equipment e.g. CT and DSA
- need for quality control programs and how they are practised
- how patient/s and staff exposures can be optimally reduced without compromising imaging criteria
- Principles of magnetic resonance imaging.

**Topics include:**

- Cables, fuses, mechanical switches
- Simplified Diagnostic Circuits, including
  - Mains voltage compensation
  - Supply cable compensation
  - Space charge compensation
  - HV compensation

**Texts**


**ALSC103 HUMAN ANATOMY & PHYSIOLOGY II** 15cp

**Prerequisite:** ALSC102 Human Anatomy and Physiology I

**Hours** Four hours per week face-to-face, five hours per week directed study

**Semester Offered:** Full year

**Examination/Assessment:** The subject is assessed by tutorials, tutorial-laboratory problems, practical reports, written examinations and viva voce examinations.

**Content**

- Endocrinology
- Microbiology
- Embryology
- Circulation to Special Areas
- Genetics
- Immunology

**Texts**


References
Strick, D.P. (ed.) 1992, Basic and Clinical Immunology, 8th edn, Lange, California.

MRTD203 DIAGNOSTIC RADIOGRAPHY TECHNIQUES I 20cp
Prerequisite MRTD104 Medical Radiation Techniques
Corequisite ALSC203 Human Anatomy and Physiology II

Hours Three hours per week
Semester Offered Full Year
Lecturer B.F. Cook
Examination Two 2 hour papers, progressive quizzes, paper critique.

ASC204 PATHOLOGY FOR MRT 10cp
Prerequisite ALSC103 Human Anatomy & Physiology I
Corequisite ALSC203 Human Anatomy & Physiology II

Hours Three hours per week
Semester Offered Full Year
Lecturer B.F. Cook
Examination Two 2 hour papers, progressive quizzes, paper critique.

Content
The subject introduces students to general pathology then considers pathologies of the various organ systems and integrates this with normal anatomy and physiology.

Text
Eisenberg, R.L. Dennis C.A. 1990, Radiographic Pathology, C.V. Mosby, St. Louis.

Prerequisite MRTC105 Clinical Studies II
Corequisites MRTC203 Diagnostic Radiography Techniques I or MRTC218 Radiation Therapy Techniques I or MRTC211 Nuclear Medicine Techniques I

Hours One four-week block and one six-week block
Assessment To be advised.

Prerequisite MRTC101 MRT Physics, Radiation Biology and Protection, MRTC102 MRT Instrumentation
Corequisite Nil

Assessment Final Examination plus progressive assessment

Content
This subject provides the students with the opportunity to apply theoretical concepts in a clinical setting.

The integrated blocks of clinical studies will facilitate increased confidence and competence in the performance of selected procedures. At the same time, the student will gain a better understanding of the health care team and the role of the medical radiation technologist as a member of that team.

As a result of completing this subject, the student will:
- have a comprehensive knowledge of the procedures identified in the subject Diagnostic Radiography Techniques I, or Radiation Therapy Techniques I, or Nuclear Medicine Techniques;
- be able to apply relevant theoretical concepts and principles from the foundation studies in the clinical setting;
- be able to evaluate his/her own performance of activities, according to the level of experience;
- observe the roles and functions of other medical radiation technologists and health team members in the delivery of health care;
- attain the level of imaging or planning and treatment competency detailed in the Clinical Studies Workbook.

PSCY276 PSYCHOLOGY FOR MRT 10cp
Prerequisite Nil
Corequisite Nil

Hours Three hours per week per directed study
Examination Final and mid year examination, laboratory experiences and assignments.

This subject aims to present the student with the physical principles underlying the use of ionising radiation in radiotherapy. The presentation includes the physics of external beam therapy, brachytherapy, and computerised planning. There is an emphasis on radiation safety.

Upon completion of this subject the student will be able to:
- describe the physical principles of radiation beams and their interaction with materials;
- describe dosimetry methods and perform basic calibrations of radiation emitting apparatus;
- analyse the parameters which affect isodose distributions;
- describe the applications of computers in planning.
- demonstrate a knowledge of radiation protection practices.
Topics include

Unit 1
- Usage of ionising apparatus with reference to how beams interact with matter.
- Detailed concepts of Radiation Therapy:
  - Production of x and gamma rays with specific reference to:
    - superficial x-ray (SXR)
    - gamma emitters
    - orthovoltage and superoltage machines.
- Comparison and evaluation of the beam quality generated by therapy machines in establishing its usefulness
- Parameters that affect isodose distribution

Unit 2
- Methods of apparatus calibration
- Application of the principles of planning
- Radiation protection and its applications
- Application of computers in radiotherapy
- Use of planning on computers
- Application of CT images for planning

Text

MRT214 RADIATION THERAPY TECHNIQUES I 15cp
Prerequisite MRTC104 Medical Radiation Techniques
Corequisite ALSC203 Human Anatomy and Physiology II
Hours Five hours per week face to face, five hours per week directed study.
Semester Offered Full Year
Examination/Assessment: Assessment in this subject is by Assignments — 10%, Laboratories — 30%, Mini Tests — 30%, Mid Semester Examination — 30%, Final Examination — 30%
Content
This unit will discuss the design and production of used radiopharmaceuticals.

MRT213 ONCOLOGICAL PRINCIPLES I 5cp
Prerequisite Nil
Corequisite ALSC203 Human Anatomy and Physiology II, ALSC204 Pathology for MRT
Hours One hour per week face-to-face, one hour per week directed study.
Semester Offered Full Year
Examination/Assessment: Assessment in this subject is by Assignments — 40%, Case Studies — 10%, Second Semester examination — 40%
Content
This introductory subject to Oncological Principles II which will detail the subject as it relates to specific regions. On completion of this subject the student will be able to understand malignancies etc. are treated and how the different modes, such as Radiation Therapy surgery and chemotherapy, are involved in the entire patient management. At this stage the student will be able to understand how organ specific sites are affected and how to minimise dose.

Text

MRT209 NUCLEAR MEDICINE INSTRUMENTATION 5cp
Prerequisite MRTC101 MRT Physics, Radiation Biology & Protection MRTC102 MRT Instrumentation
Corequisite MRTN209 Nuclear Medicine Instrumentation I
Hours Two hours per week face-to-face, two hours per week directed study
Semester Offered Full Year
Lecturer Mr. Paul Cardew
Examination/Assessment: Based on practical reports, assignments & examinations
Content
This subject examines the principles and design of instrumentation used in Nuclear Medicine. It discusses methods of detection and measurement of radiation, statistics, instrumentation components and calibration. Applications of the components of particular radiation detectors is covered, together with the display of information via recording devices and analog and digital displays.

Texts To be advised

MRTN210 NUCLEAR MEDICINE RADIobiology & RADiopharmacy 10cp
Prerequisite MRTC101 MRT Physics, Radiation Biology & Protection MRTC102 MRT Instrumentation
Corequisite MRTN209 Nuclear Medicine Instrumentation I
Hours Two hours per week face-to-face, two hours per week directed study
Semester Offered Full Year
Lecturer Mr. Paul Cardew & Mr. Peter Yeates
Content
This subject is divided into two units:

Unit 1: Radiobiology
This unit will cover the objectives of radiation protection programs and the principles on which these are based. Radiobiology covered in Year I will be revised. The recommendations of the ICRP, relevant to Nuclear Medicine, will be discussed. Particular emphasis will be made on the practical aspects of radiation protection in a Nuclear Medicine Department.

Unit 2: Radiopharmacy
This unit will discuss the design and production of radiopharmaceuticals, preparation and dispensing of patient doses, and the chemistry and biological behaviour of commonly used radiopharmaceuticals.

Texts To be advised

MRTN211 NUCLEAR MEDICINE TECHNIQUES I 15cp
Prerequisite MRTC104 Medical Radiation Techniques, ALSC203 Human Anatomy & Physiology I
Corequisite ALSC203 Human Anatomy & Physiology II, ALSC204 Pathology for MRT
**MRTC314 ULTRASOUND PHYSICS** 5cp

**Prerequisite** Nil

**Corequisite** Nil

**Hours** One hour per week face to face, one hour per week directed study.

**Semester Offered** Full Year

**Lecturer** G. Ali Shah

**Examination/Assessment:** Three Tests and Examination

**Content**

This subject will provide a knowledge of the physical principles which underpin medical imaging using ultrasound. On completion of this subject students will understand:

- The physical principles of imaging with ultrasound.
- The basic components of ultrasound instrumentation.
- The causes and detection of artefacts.
- The application of doppler effect in the qualitative and quantitative evaluation of blood flow.

**Topics studied will include:**

- Principles
- High frequency sound
- Pulsed Ultrasound
- Attenuation
- Echoes
- Transducers
- Beam Focusing
- Automatic Scanning
- Image Quality
- Imaging Instruments
- Imaging Artefacts
- Quality Assurance
- Doppler Scanning
- Doppler Effect
- Hemodynamics
- Doppler Instruments
- Spectral Analysis
- Artefacts
- Biological Effects and Safety

**Texts**


**Year 3**

**MRTC315 DIGITAL IMAGING** 5cp

**Prerequisite** Nil

**Corequisite** Nil

**Hours** One hour per week face to face, one hour per week directed study.

**Semester Offered** Full Year

**Lecturer** G. Ali Shah & A. Buxton

**Examination/Assessment:** Three Tests and Examination

**Content**

This subject will provide the student with a knowledge of the theoretical aspects of digital image production and the applications of digital imaging technology in medical radiation technology. In successfully completing this subject the students will gain a knowledge of data acquisition, data manipulation, data storage and image reconstruction in Computed Tomography, Nuclear Medicine Technology, Digital Angiography and Digital Fluoroscopy. They will also have developed an understanding of the technology used in PACS.

**Topics will include:**

- The Common Principles
- Methods of Data Acquisition
- Image Reconstruction
  - Back Projection
  - Iterative Methods
  - Fourier Analysis
  - Filtered Back Projection

**Texts**


**SPECT**

Picture Archiving and Communication Systems

- Teleradiology
- Image Compression and Reconstruction

**Applications**

**Exam**

- Word mode & Byte mode
- Framing rates

**References**

Content

This subject provides the student with the opportunity to apply theoretical concepts in a clinical setting.

The integrated blocks of clinical studies will facilitate increased confidence and competence in the performance of selected procedures. At the same time, the student will gain a better understanding of the health care team and the role of the medical radiation technologist as a member of that team. Students will obtain exposure to technological advances in Medical Radiation Technology such as ultrasound, computed tomography, angiography, stereotactic radiotherapy and positron emission tomography. The experience gained in these areas will be reflected in the specific case study requirements the students will be set.

As a result of completing this subject, the student will:

• have a comprehensive knowledge of the procedures identified in the subjects Diagnostic Radiography Techniques II, or Radiation Therapy Techniques II, or Nuclear Medicine Techniques II.
• be able to apply relevant theoretical concepts and principles from the foundation studies in the clinical setting;
• demonstrate the psychomotor skills required to produce a meaningful result;
• be able to evaluate his/her own performance of activities, according to the level of experience;
• observe the roles and functions of other medical radiation technologists and health team members in the delivery of health care;
• attain a level of understanding and competency in imaging techniques, or planning and treatment as detailed in the Clinical Studies Workbook.

The examinations and procedures in the subjects Diagnostic Radiography Techniques II, Radiation Therapy Techniques II or Nuclear Medicine II provide the range of topics addressed in this subject. Concepts presented in both the human bioscience and psychosocial strands will also be integrated and utilised as appropriate.

The opportunity to develop the practical skills, attitudes and knowledge identified above will take place during block sessions.

MRTD301 DIAGNOSTIC RADIOGRAPHY TECHNIQUES II 35cp
Prerequisite MRTD203 Diagnostic Radiography Techniques I

Corequisite MRTC314 Ultrasound Physics, MRTC315 Digital Imaging, ALSC303 Cross-Sectional Anatomy

Semester Offered Full year

Hours Nine hours per week face to face, nine hours per week directed study.

Content

The ongoing development of radiographic skills, first encountered in Medical Radiation Techniques and expanded in Diagnostic Radiography Techniques I is further integrated in this subject. It encompasses specialised procedures in Vascular Imaging, Computed Tomography, MRI and Ultrasound techniques as well as general specialised radiography skills. The student will see how these modalities are integrated in the modern medical imaging facility.

This subject also develops an understanding of normal radiographic anatomy and the appearance of common diseases currently are demonstrated in all of the above modalities.

By this stage students are able to generate diagnostic radiographs of all regions. They also develop a comprehensive knowledge of surface anatomy and the techniques employed.

This subject will aim at increasing this knowledge by introducing the concept of more clinically complex and radiographically difficult patients. They will also learn to assist in more technically complex techniques used to visualise organs and vessels. The student will also gain an appreciation of the difficulties of problem solving in the diagnostic imaging field.

Examination/Assessment Assessment will be in the form of a "contract", whereby the students will decide how and when they will be assessed.

Texts


MRTT313 ONCOLOGICAL PRINCIPLES II 10cp
Prerequisite MRTT213 Oncological Principles I, ALSC203 Human Anatomy and Physiology II, ALSC204 Pathology for MRT
Corequisite ALSC203 Sectional Anatomy, ALSC209 Oncological Pathology

Semester Offered Full Year

Examination/Assessment Assessment to be advised

Content

With the knowledge of tumour pathology and being aware of the dose tolerances of specific sites the student will now learn the methods of treatment and why these include surgery, radiotherapy and chemotherapy.

On completion of this subject the student will be able understand how malignancies etc. are treated and how the different modes, such as Radiation Therapy surgery and chemotherapy, are involved in the entire patient management.

This subject ties all the anatomy and physiology, pathology, tumour pathology, radiation therapy practice and planning procedures together. The student is taught how different tumours in the same region, eg. breast, may require different management practices.

Topics will include:

• Dose tolerances of specific sites
  - the head, neck and associated structures
  - the spinal column
  - the lung and mediastinum
  - the breast
  - the abdominal viscera with particular reference to:
    - kidneys
    - biliary
    - bladder
  - reproductive system
  - lymphatic system
  - skin
• Treatment methods
  - how they are chosen
  - use of chemotherapy, surgery and radiotherapy in combination
  - why they are employed
  - how different tumours of the same region are treated differently and why

Text


MRTT316 RADIATION THERAPY TECHNIQUES II 25cp
Prerequisite MRTT214 Radiation Therapy Techniques I
Corequisite ALSC303 Sectional Anatomy, ALSC309 Oncological Pathology

Semester Offered Full Year

Hours Six hours face to face, seven hours directed study.

Examination/Assessment Assessment of this subject to be advised.

Content

Refinement of radiation therapy technique requires a thorough knowledge of physics, equipment and anatomy and physiology as the outcome of the treatment plan must provide a safe, satisfactory, optimal result for the patient. This subject encompasses use of all specialised procedures in radiation therapy such as treatment, target planning and/or computer planning as well as the application of specialised procedures such as Computed Tomography and brachytherapy.
The student will be able to perform treatment planning for all procedures and reproduce exactly these plans in the treatment rooms as required by the treatment prescription. These procedures will be capable performed for any treatment region of the body, thereby demonstrating that the student has attained the comprehensive knowledge required to fulfill the needs of the radiation therapy techniques involved. Students will have gained a total insight into the radiosensitivity of the various organs, and how this information is necessary for the optimisation of the treatment plan with the patient’s comfort a priority.

Topics covered include:
- Treatment planning
  - evaluation of techniques used
- Advanced hand planning techniques
  - complicated isocentric methods
  - inhomogeneity corrections
- Tissue compensation
  - applications and uses
- Mould Room
  - application
  - advantages and disadvantages
  - mould room techniques
- Modalities and applications
  - brachytherapy
  - interstitial
  - intravacancy
- Electron beam evaluation and use
- Principles of mixing modalities
- Interactive CT planning
- 3-D Planning
- Putting the plan into effect - is it viable

**Examination/Assessment**
- Laboratory reports — 15%
- Assignments — 15%
- Mid year examination — 35%
- Final year examination — 35%

### Content
The subject is designed to provide the student with a theoretical knowledge of radiopharmacy principles and techniques. Practical laboratory experience will prepare the student to undertake these techniques in the clinical environment.

Upon completion of this subject the student will be able to:
- describe general laboratory technique and the relevant equipment used
- understand quality control and its applications in radiochemistry
- understand counting techniques
- describe radio-labeling procedures
- describe and perform cell radio-labeling techniques
- describe in vitro radiopharmacy tests.

The topics studied include:
- Laboratory techniques and relevant equipment
  - PI meters
  - autolaves
  - centrifuges
- Quality control
  - Generator systems
  - Theory of ITLC and its applications
- Light microscopy and particulate radiochemicals
- Radionuclide and patient record systems
- Manufacture of "cold" kits
- Counting techniques
  - Gamma counting
  - Liquid scintillation counting
- Radio-labeling procedures
- Cell radio-labeling techniques
  - 99mTc-RBC (in vivo, in vitro & in vitro)
  - 99mTc-BC
  - 99mTc-WBC
  - I131-WBC
  - In vitro radiopharmacy tests
  - Plasma volume
  - Red cell mass
  - GFR determination
  - 14C Breath tests
  - Thyroid uptakes, etc.

### Text
- Khan, F.M. 1994, Texts Putting the plan into effect - is it viable
- Wilkens, B.W. et al. (eds.) 1987, Essentials of Nuclear Medicine Science, Williams & Wilkens, Baltimore.

### Subject Details
- **Prerequisite** MRTN311 Nuclear Medicine Radiopharmacy
- **Corequisite** MRTN311 Nuclear Medicine Instrumentation I
- **Hours** Two hours per week face-to-face, one hour per week directed study
- **Semester Offered** Full Year

### Examination/Assessment
- Laboratory reports — 15%
- Assignments — 15%
- Mid year examination — 35%
- Final examination — 35%

### Content
The subject expands and develops studies in Nuclear Medicine instrumentation. It provides the student with comprehensive and up-to-date knowledge of gamma camera specifications and quality control, nuclear medicine computer systems, quantitative nuclear medicine, Single Photon Emission Computed Tomography (SPECT), Positron Emission Tomography (PET), and other recent developments.

The objective of the subject is to provide the student with a detailed theoretical knowledge of the following Nuclear Medicine instrumentation, including:
- Gamma cameras
- Nuclear Medicine computer systems
- Single Photon Emission Computed Tomography (SPECT)
- Positron Emission Tomography (PET)
- Magnetic Resonance Imaging (MRI)
- Data Quantitation
- Recent developments

Each topic will cover:
- Review of historical development
- Physical principles
- Limitation and advantages
- Guidelines for usage
- Relevance to nuclear medicine
- Review of currently available models
- Fault finding techniques
- Future role of instrumentation

Upon completion of this subject the student will be able to:
- describe and understand the operating principles of the instrumentation
- understand how to use the instrumentation to perform diagnostic procedures
- evaluate the appropriateness of the instrumentation for particular medical applications
- understand and apply data quantitation techniques
- describe and understand instrumentation quality control and the significance of any quality control findings
- describe recent developments in nuclear medicine instrumentation

### Subject Details
- **Prerequisite** MRTN211 Nuclear Medicine Techniques I
- **Corequisite** ALSC203 Sectional Anatomy, MRTC314 Ultrasound Physics, MRTC315 Digital Imaging
- **Hours** Eight hours face-to-face, seven hours directed study
- **Semester Offered** Full year

### Examination/Assessment
- Assessment of this subject will be by Mini Tests — 10%, Assignments — 10%, Laboratories — 10%, Mid year examination — 35%, Final examination — 35%
Section Four

Medical Radiation Technology Course and Subject Details

Tumour and infection localisation;
Paediatrics
Radionuclide therapy;
In vivo tracer studies;
Positron emission tomography;
Radioimmunoassay;
Bone densitometry;

Ultrasound Procedures provide an understanding of how to perform each procedure. To develop the students' awareness of the appropriateness of a procedure and the significance of the results.
To develop the students’ awareness of how these procedures fit into the diagnostic process.
Each topic will cover:
- review of anatomy and physiology;
- review of relevant pathology;
- review of non nuclear medicine tests in the area;
- Nuclear Medicine protocols:
  - indications
  - patient preparation
  - detailed technique
  - variations and modifications
  - limitations and advantages
  - interpretation of results

Texts

section five

Occupational Therapy
Course and Subject Details

OCCUPATIONAL THERAPY

Professional Recognition
The Bachelor of Health Science (Occupational Therapy) has been accredited with the Australian Association of Occupational Therapists and meets World Federation of Occupational Therapists requirements.

Prizes
1. Hunter Occupational Therapists Prize
The Hunter region Occupational Therapists Group offers a prize to the final year Occupational Therapy Student whose clinical performance has been outstanding.
2. NSW Association of Occupational Therapists
The NSW Association offers a prize for any final year Occupational Therapy student with the highest grade point average in Occupational Therapy practice over the duration of the course.
3. Smith and Nephew Splinting Prize
This prize is awarded annually to the student having prepared the most outstanding splint in clinical fieldwork practice in the subjects OCCT201/OCCT301.
4. The Total Patient Care Prize for Research
Awarded to the Fourth Year student in the Bachelor of Health Science (Occupational Therapy) having presented the most outstanding research paper.
5. The Total Patient Care Prize for Excellence
This prize is awarded to the student having achieved the highest grade point average by the end of the Third Year of the Bachelor of Health Science (Occupational Therapy).

Honours
Candidates having completed the required 240 credit points towards the Ordinary Bachelor of Health Science (Occupational Therapy) degree and having achieved a Grade Point Average greater than 2.5 (above a credit average) calculated on performance in the 200 (2nd year) and 300 (3rd year) level subjects only, may be admitted to the Honours program.
Section Five

Occupational Therapy Course and Subject Details

Credit (Advanced Standing)

Graduates:

(1) A graduate of this University or of another university, or graduates or diplomates of an approved tertiary institution, may be granted credit in recognition of subjects passed, provided that:

(a) each subject for which credit is sought should be substantially the same (as determined by the relevant Head of Department) or a subject included in the list of subjects approved for the course to which the graduate is seeking admission;

Undergraduates:

(2) Undergraduates of this or of another university or of an approved tertiary institution who have not previously enrolled in the course to which admission is being sought, may be granted credit in recognition of subjects passed, provided that:

(a) the subject for which credit is sought shall be substantially the same (as determined by the relevant Head of Department) as a subject included in the list of subjects approved for the course in which the undergraduate is seeking admission;

(3) Undergraduates who have passed subjects in a degree course may seek to complete the requirements for that degree by undertaking studies at another university or approved tertiary institution.

(b) Applications from such undergraduates who, after the completion of at least two years of full-time enrolment or five years part-time enrolment have not maintained a satisfactory rate of progress as determined by the Faculty Board under the Rules Governing Unsatisfactory Progress, shall not be approved by the Faculty Board except in exceptional circumstances and on the recommendation of the Dean.

The Faculty Board may grant credit to an undergraduate wishing to obtain the benefit of any course of study at another university or of an approved tertiary institution who have not previously enrolled in a degree program in any given academic year specified by the Faculty Board, a student wishing to gain credit under these sections must submit a new application to the Dean in writing.

Unsatisfactory Progress

In accordance with the Rules Governing Unsatisfactory Progress, the following policy has been developed:

A student will be regarded as not having made satisfactory progress if:

(a) the student has failed a compulsory subject twice and/or;
(b) the student has failed more than 50% of his/her total program in any given academic year (calculated by total credit points attempted) and/or;
(c) the student has failed a subject designated as a Clinical or Fieldwork subject and/or;
(d) the student will fail to fulfil any specified time requirements of the course.

For the purpose of (c) the following subjects are designated as Clinical or Fieldwork subjects:

O.T. Practice 1, O.T. Practice 2, O.T. Practice 3 and O.T. Practice 4.

Leave of Absence

A student eligible to re-enrol shall be deemed to be in good academic standing and may thus take Leave of Absence for one year from the course. There is no need to formally apply for this absence.

Students taking Leave must re-apply for admission by the due date. It is the responsibility of the student to do this, to regain entry to the course.

Clinical Fieldwork

Clinical fieldwork placements are undertaken during the four years of coursework in various facilities throughout NSW. These may include public and private hospitals, both acute physical and psychiatric, community centres and private health care providers.

The Discipline places students throughout NSW including the Hunter region. Clinical placements occur from Tweed Heads to Broken Hill to Bega and include using major teaching hospitals, in Newcastle and Sydney, smaller rural base hospitals, community health service providers, schools, private practice and mental health service providers. In all, the Discipline utilises over 145 facilities, finding approximately 500 clinical fieldwork placements per year. Students also have the opportunity to travel interstate and internationally, and clinical placements have been negotiated in Tasmania, Northern Territory, New Zealand, Great Britain and Canada.

BACHELOR OF HEALTH SCIENCE (OCCUPATIONAL THERAPY)

Course and Subject Details and Descriptions

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Year 2

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Year 3

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Year 4 (Honours Degree)

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<td>O.T.</td>
<td>OBSS110</td>
<td>Current Practice in O.H. &amp; S.</td>
<td>10</td>
</tr>
</tbody>
</table>

The Bachelor of Health Science (Occupational Therapy) is one of several health professional education programs developed by the Faculty, which adopts a common core plus professional strand design. The common core subjects are applicable to undergraduate health practitioner programs and those of the professional strand cover all professional preparation requirements.

The design is in line with current thinking in both health and tertiary education spheres. The core rationale aims to foster breadth of vision on health issues, and to develop problem solving abilities, communication skills and ability to cope with conflict and change. It includes consideration of professional role boundaries and encourages clearer definition of the roles of different health practitioners in a number of practice domains. Essentially, the focus is on a multidisciplinary, holistic approach to health, taking into account Australia's current health inequalities and health goals. The Occupational Therapy dedicated material aims to produce competent occupational therapy practitioners who will be able to function safely and effectively in any domain of occupational therapy practice.

Continuing students note: there are changes in subject codes and structure. These changes are identified in the transition table below.

Note: An Honours option was introduced in 1993 for those students completing their final year. For students commencing in 1993 or prior to that, the Honours option makes the course 4 years in length.

APPROVED PROGRAM OF STUDY FOR STUDENTS COMMENCING IN 1993 OR PRIOR TO THAT YEAR

<table>
<thead>
<tr>
<th>Year</th>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>HOST101</td>
<td>Health 1</td>
<td>10</td>
</tr>
<tr>
<td>2</td>
<td>HOST101</td>
<td>Health 1</td>
<td>10</td>
</tr>
<tr>
<td>3</td>
<td>HOST201</td>
<td>Health 2</td>
<td>10</td>
</tr>
<tr>
<td>4</td>
<td>HOST301</td>
<td>Health 3</td>
<td>10</td>
</tr>
<tr>
<td>5</td>
<td>OCCT401</td>
<td>O.T. Practice 4</td>
<td>35</td>
</tr>
<tr>
<td>6</td>
<td>OCCT410</td>
<td>Community Practice (O.T.)</td>
<td>10</td>
</tr>
<tr>
<td>7</td>
<td>OBSS909</td>
<td>Research in O.H. &amp; S.</td>
<td>10</td>
</tr>
<tr>
<td>8</td>
<td>OBSS110</td>
<td>Current Practice in O.H. &amp; S.</td>
<td>10</td>
</tr>
</tbody>
</table>

The Discipline places students throughout NSW including the Hunter region. Clinical placements occur from Tweed Heads to Broken Hill to Bega and include using major teaching hospitals, in Newcastle and Sydney, smaller rural base hospitals, community health service providers, schools, private practice and mental health service providers. In all, the Discipline utilises over 145 facilities, finding approximately 500 clinical fieldwork placements per year. Students also have the opportunity to travel interstate and internationally, and clinical placements have been negotiated in Tasmania, Northern Territory, New Zealand, Great Britain and Canada.

RACHELOR OF HEALTH SCIENCE (OCCUPATIONAL THERAPY)

Course and Subject Details and Descriptions

<table>
<thead>
<tr>
<th>Degree</th>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>O.T.</td>
<td>HOST101</td>
<td>Health 1</td>
<td>10</td>
</tr>
<tr>
<td>O.T.</td>
<td>PSYC103</td>
<td>General Psychology</td>
<td>10</td>
</tr>
<tr>
<td>O.T.</td>
<td>SOCA120</td>
<td>Health Sociology I</td>
<td>10</td>
</tr>
<tr>
<td>O.T.</td>
<td>ALSCH102</td>
<td>Human Bioscience I</td>
<td>15</td>
</tr>
<tr>
<td>O.T.</td>
<td>ALSCH108</td>
<td>Human Anatomy I (O.T.)</td>
<td>15</td>
</tr>
<tr>
<td>O.T.</td>
<td>OCCT101</td>
<td>Occupational Therapy Practice I</td>
<td>15</td>
</tr>
<tr>
<td>O.T.</td>
<td>PROP101</td>
<td>Professional Practice (O.T.)</td>
<td>10</td>
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</table>

Year 2

<table>
<thead>
<tr>
<th>Degree</th>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>O.T.</td>
<td>HOST201</td>
<td>Health 2</td>
<td>10</td>
</tr>
<tr>
<td>O.T.</td>
<td>ALSCH202</td>
<td>Human Bioscience II</td>
<td>10</td>
</tr>
<tr>
<td>O.T.</td>
<td>OCCT201</td>
<td>Occupational Therapy Practice 2</td>
<td>50</td>
</tr>
<tr>
<td>O.T.</td>
<td>PSYC272</td>
<td>Psychology for O.T. II</td>
<td>5</td>
</tr>
<tr>
<td>O.T.</td>
<td>SOCA242</td>
<td>Health Sociology II</td>
<td>5</td>
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</table>

Year 3

<table>
<thead>
<tr>
<th>Degree</th>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>O.T.</td>
<td>HOST301</td>
<td>Health 3</td>
<td>10</td>
</tr>
<tr>
<td>O.T.</td>
<td>OCCT303</td>
<td>Elective (O.T.)</td>
<td>10</td>
</tr>
<tr>
<td>O.T.</td>
<td>OCCT301</td>
<td>Occupational Therapy Practice 3</td>
<td>50</td>
</tr>
<tr>
<td>O.T.</td>
<td>PSYC372</td>
<td>Psychology for O.T. III</td>
<td>5</td>
</tr>
<tr>
<td>O.T.</td>
<td>SOCA383</td>
<td>Health Sociology III</td>
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</table>

Year 4 (Ordinary Degree)

<table>
<thead>
<tr>
<th>Degree</th>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>O.T.</td>
<td>HOST400</td>
<td>Health 4 (O.T.)</td>
<td>5</td>
</tr>
<tr>
<td>O.T.</td>
<td>OCCT401</td>
<td>Occupational Therapy Practice 4</td>
<td>25</td>
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Year 4 (Honours Degree)

<table>
<thead>
<tr>
<th>Degree</th>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>O.T.</td>
<td>HOST400</td>
<td>Health 4</td>
<td>5</td>
</tr>
<tr>
<td>O.T.</td>
<td>OCCT401</td>
<td>O.T. Practice 4</td>
<td>35</td>
</tr>
<tr>
<td>O.T.</td>
<td>OCCT410</td>
<td>Community Practice (O.T.)</td>
<td>10</td>
</tr>
<tr>
<td>O.T.</td>
<td>OBSS909</td>
<td>Research in O.H. &amp; S.</td>
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</tr>
<tr>
<td>O.T.</td>
<td>OBSS110</td>
<td>Current Practice in O.H. &amp; S.</td>
<td>10</td>
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### Section Five

#### Occupational Therapy Course and Subject Details

<table>
<thead>
<tr>
<th>Subject Description</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4 (Ordinary Degree)</th>
<th>Year 4 (Honours Degree)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Year 1</strong></td>
<td><strong>HOLH101 HEALTH 1</strong></td>
<td><strong>HOLH201 HEALTH 2</strong></td>
<td><strong>HOLH301 Heath 3</strong></td>
<td><strong>HOLH400 Health 4</strong></td>
<td><strong>OCTH101 Health 4</strong></td>
</tr>
<tr>
<td><strong>HOURS</strong></td>
<td><strong>10cp</strong></td>
<td><strong>10</strong></td>
<td><strong>10</strong></td>
<td><strong>5</strong></td>
<td><strong>5</strong></td>
</tr>
<tr>
<td><strong>Prerequisite</strong></td>
<td>Nil</td>
<td>Nil</td>
<td>Nil</td>
<td>Nil</td>
<td>Nil</td>
</tr>
<tr>
<td><strong>Hours</strong></td>
<td>3 hours face-to-face per week for 26 weeks (1 hour of mass lecture and 2 hours of tutorial per week)</td>
<td>3 hours face-to-face per week</td>
<td>3 hours face-to-face per week</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td><strong>Semester Offered</strong></td>
<td>Full Year</td>
<td>Full Year</td>
<td>Full Year</td>
<td>Full Year</td>
<td>Year</td>
</tr>
<tr>
<td><strong>Examination</strong></td>
<td>On-going assessment</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Aims of Subject</strong></td>
<td>This subject develops a holistic concept of health, an appreciation of the factors which determine health status, and an understanding of how these factors can be used in attempting to prevent illness and promote health. Health 1 forms the basis of a progressive understanding of the complexity of health. It is an introductory subject for Health 2 and Health 3. The subject aims to encourage critical thinking and active learning by students. Research concepts and strategies are incorporated into topic areas.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Corequisite</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Units</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Texts</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</table>

<table>
<thead>
<tr>
<th><strong>Subj ect Description</strong></th>
<th><strong>Year 1</strong></th>
<th><strong>Year 2</strong></th>
<th><strong>Year 3</strong></th>
<th><strong>Year 4 (Ordinary Degree)</strong></th>
<th><strong>Year 4 (Honours Degree)</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PSYC103 GENERAL PSYCHOLOGY I</strong></td>
<td><strong>10cp</strong></td>
<td><strong>5</strong></td>
<td><strong>10</strong></td>
<td><strong>10</strong></td>
<td><strong>5</strong></td>
</tr>
<tr>
<td><strong>Prerequisite</strong></td>
<td>Nil</td>
<td>Nil</td>
<td>Nil</td>
<td>Nil</td>
<td>Nil</td>
</tr>
<tr>
<td><strong>Corequisite</strong></td>
<td>Nil</td>
<td>Nil</td>
<td>Nil</td>
<td>Nil</td>
<td>Nil</td>
</tr>
<tr>
<td><strong>Hours</strong></td>
<td>One hour mass lecture plus tutorials and workshops</td>
<td>One hour mass lecture plus tutorials and workshops</td>
<td>One hour mass lecture plus tutorials and workshops</td>
<td>One hour mass lecture plus tutorials and workshops</td>
<td>One hour mass lecture plus tutorials and workshops</td>
</tr>
<tr>
<td><strong>Semester Offered</strong></td>
<td>Full Year</td>
<td>Full Year</td>
<td>Full Year</td>
<td>Full Year</td>
<td>Year</td>
</tr>
<tr>
<td><strong>Examination</strong></td>
<td>Final Examination plus progressive assessment</td>
<td>Final Examination plus progressive assessment</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Content</strong></td>
<td>This subject introduces the student to basic concepts in psychology as well as to study of human development across the lifespan. The psychology of communication is also addressed in workshops.</td>
<td>This subject introduces the student to basic concepts in psychology as well as to study of human development across the lifespan. The psychology of communication is also addressed in workshops.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Corequisite</strong></td>
<td>Nil</td>
<td>Nil</td>
<td>Nil</td>
<td>Nil</td>
<td>Nil</td>
</tr>
<tr>
<td><strong>Units</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Texts</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| **SOCA120 HEALTH SOCIOLOGY I** | **10cp** | **10** | **5** | **5** | **5** |
| **Prerequisite** | Nil | Nil | Nil | Nil | Nil |
| **Corequisite** | Nil | Nil | Nil | Nil | Nil |
| **Hours** | Hours 3 hours per week | Hours 3 hours per week | Hours 3 hours per week | | |
| **Semester Offered** | Full Year | Full Year | Full Year | | |
| **Examination** | | | | | |
| **Content** | This subject aims to provide an introduction to the theoretical and historical bases of occupational therapy, and to examine the components and determinants of human occupation through an exploration of the influences of the environment and the development of occupational behaviour. Students are introduced to concepts of activity analysis and the practical aspects of Occupational Therapy. The subject includes a professional experience placement that serves to orient students to the nature and scope of occupational therapy practice. | | | | |
| **Corequisite** | | | | Nil | Nil |
| **Semester Offered** | Full Year | Full Year | Full Year | | |
| **Examination** | | | | | |
| **Content** | | | | | |

### TRANSITION TABLE

Continuing students should note that the codes and names of selected subjects have changed for 1995 and beyond. These are equivalent to:

<table>
<thead>
<tr>
<th>New Code</th>
<th>Old Code</th>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC103</td>
<td>PSRS101</td>
<td>General Psychology</td>
</tr>
<tr>
<td>SOCA120</td>
<td>PSRS102</td>
<td>Health Sociology</td>
</tr>
<tr>
<td>SOCA242</td>
<td>PSRS202</td>
<td>Health Sociology 2</td>
</tr>
<tr>
<td>SOCA320</td>
<td>PSRS203</td>
<td>Health Sociology 3</td>
</tr>
<tr>
<td>PSYC272</td>
<td>PSHS101</td>
<td>Health Psychology I</td>
</tr>
<tr>
<td>PSYC372</td>
<td>PSHS102</td>
<td>Health Psychology II</td>
</tr>
<tr>
<td>SOCA342</td>
<td>PSRS302</td>
<td>Health Sociology 3</td>
</tr>
<tr>
<td>PSYS259</td>
<td>OHTS06</td>
<td>O.H. &amp; S. Special Study</td>
</tr>
<tr>
<td>PSYS310</td>
<td>OHTS07</td>
<td>O.H. &amp; S. Special Study</td>
</tr>
</tbody>
</table>

**Course Total 320 credit points**

---

<table>
<thead>
<tr>
<th><strong>EXAMINATION</strong></th>
<th><strong>PROF101 PROFESSIONAL PRACTICE 1 (O.T.)</strong></th>
<th><strong>10cp</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Lecturer</strong></td>
<td>Josephine Gwyn</td>
<td></td>
</tr>
<tr>
<td><strong>Prerequisite</strong></td>
<td>HOLH101 Health 1, OCCT101 Occupational Therapy Practice 1</td>
<td></td>
</tr>
<tr>
<td><strong>Hours</strong></td>
<td>3 hours per week</td>
<td></td>
</tr>
<tr>
<td><strong>Semester Offered</strong></td>
<td>Full Year</td>
<td></td>
</tr>
<tr>
<td><strong>Examination/Assessment</strong></td>
<td>Progressive assessment</td>
<td></td>
</tr>
<tr>
<td><strong>Content</strong></td>
<td>Students are presented with topics which encourage an understanding of factors significant for personal and professional development, and the foundation is laid for a reflective and critical understanding of professional roles. The subject also provides opportunities for learning and applying practical skills.</td>
<td></td>
</tr>
<tr>
<td><strong>Texts</strong></td>
<td>No compulsory text</td>
<td></td>
</tr>
<tr>
<td><strong>Reference</strong></td>
<td>Reading package to be made available</td>
<td></td>
</tr>
</tbody>
</table>
examinations as they relate to Occupational Therapy.

Texts To be advised

OCCT201 OCCUPATIONAL THERAPY PRACTICE 2 50cp
Coordinator Suzanne Lyons
Hours 6 hours per week
Prerequisite OCCT101 O.T. Practice 1
Corequisite HOLH201 Health 2, PSYC272 Psychology for O.T. II, SOCA242 Health Sociology 2
Semester Offered Full Year

This subject aims to consolidate assessment and communication skills acquired in Occupational Therapy Practice 1 and Professional Practice 1; to provide opportunities to apply the problem solving process in treatment planning and occupational analysis; to develop skills in the analysis, assessment of dysfunction and intervention strategies required for treatment across the lifespan, explore life roles and performance abilities as well as work and home environments; and encourage the use of appropriate media and technology in occupational therapy treatment.

Clinical Fieldwork Placements 4 x 2 weeks, plus 1 x 3 weeks

PSYC272 PSYCHOLOGY FOR O.T. II 5cp
Prerequisite PSYC103 General Psychology
Corequisite Nil
Hours 4 hours per week
Semester Offered Full Year
Examination Final Examination plus progressive assessment

SOCA242 HEALTH SOCIOLOGY II 5cp
Prerequisite SOCA120 Health Sociology I
Corequisite Nil
Hours 4 hours per week
Semester Offered Full Year
Examination Final Examination and progressive assessment

Section Five

OCCUPATIONAL THERAPY Course and Subject Details

YEAR 3

HOLH301 HEALTH 3 10cp
Prerequisite HOLH201 Health 2
Corequisite OCCT301 Occupational Therapy Practice 3
Hours 4 hours face-to-face for 28 weeks (8 hours of mass lecture and 2 hours of tutorial per week)
Semester Offered Full Year
Examination/Assessment Progressive assessment and a final examination

Content
This third year of the undergraduate curriculum in Health further expands the student's boundaries of understanding of health. Emphasis continues on the interdependence of a range of factors which influence health at an individual, group, community, national and global level. This understanding will influence all facets of health professional practice.

Practical: This phase of the health curriculum is a critical re-examination of a comprehensive range of models, concepts and strategies for change. Research concepts and strategies which have been used to appraise health status, health differences and health inequalities.

Candidate: Measures to improve health nationally and globally are examined, as are the research methods to document their health status and the impact of policies and strategies for change. Research concepts and strategies will be incorporated into each unit.

Texts To be advised
Reference: To be advised

OCCT303 ELECTIVE (O.T.) 10cp
Coordinator Judith Curtis
Hours 3 hours per week
Prerequisite OCCT201 O.T. Practice 2
Corequisite OCCT301 Occupational Therapy Practice 3
Semester Offered Full Year
Examination Final Examination plus progressive assessment

Content
A two part subject to broaden skills required for Occupational Therapy practice. Students are offered a choice from 6 areas of specialist practice. These may include for example, Home Modifications, Hand Management, Empathy Training, Creative Expressive Arts.

TEXTS

YEAR 4

HOLH400 HEALTH 4 (O.T.) 5cp
Prerequisite HOLH301 Health 3
Corequisite Nil
Hours 2 hours per week face-to-face
Semester Offered Semester One
Examination/Assessment Progressive Assessment

Content
This subject completes the sequence of Health subjects for Occupational Therapy. Emphasis is placed on the interdependence of a range of factors which influence at a community, national and global level which include measures and strategies to improve health.

Texts To be advised
Reference: To be advised

OCCT401 OCCUPATIONAL THERAPY PRACTICE 4 35cp
Coordinator Trish Jacobs
Prerequisite OCCT301 O.T. Practice 3
Corequisite HOLH400 Health 4 (Occupational Therapy)
Hours 8 hours per week
Semester Offered Semester One

Content
This subject aims to provide opportunities for students to exercise increased responsibility, accountability and independence in clinical decision-making and practice. The
section six

Nutrition and Dietetics
Course and Subject Details

BACHELOR OF HEALTH SCIENCE (NUTRITION & DIETETICS)

Professional Recognition

At the time of publication, accreditation of the Bachelor of Health Science (Nutrition and Dietetics) was being sought from the Dietitians' Association of Australia.

Honours

The Bachelor of Health Science (Nutrition and Dietetics) may be conferred with Honours to those candidates having achieved a Grade Point Average, specified by the Faculty Board, calculated by performance in the 300 level (3rd Year) and 400 level (4th Year) subjects only.

Credit (Advanced Standing)

Graduates:

1. A graduate of this University or of another university, or graduates or diplomates of an approved tertiary institution, may be granted credit in recognition of subjects passed, provided that:
   (a) each subject for which credit is sought should be substantially the same (as determined by the relevant Head of Department) as a subject included in the list of subjects approved for the course to which the graduate is seeking admission;

Undergraduates:

2. Undergraduates of this or of another university or of an approved tertiary institution who have not previously enrolled in the course to which admission is being sought, may be granted credit in recognition of subjects passed, provided that:
   (a) the subject for which credit is sought shall be substantially the same (as determined by the relevant Head of Department) as a subject included in the list of subjects approved for the course to which the undergraduate is seeking admission.

3. Undergraduates who have passed subjects in a degree course may seek to complete the requirements for that degree by undertaking studies at another university or approved tertiary institution.
   (a) Applications from such undergraduates who, after the completion of at least two years of full-time enrolment or five years part-time enrolment have not maintained a satisfactory rate of progress as determined by the Faculty Board under the Rules...
Governing Unsatisfactory Progress, shall not be approved by the Faculty Board except in exceptional circumstances and on the recommendation of the Dean.

(b) The Faculty Board may grant credit to an undergraduate previously enrolled in a degree course in this Faculty in recognition of any subject or subjects passed at another university on the following conditions:

(i) the subject or subjects passed shall be substantially the same as a subject or subjects included in the list of subjects approved for the course in which the candidate is enrolled;

(ii) credit shall not be granted in the respect of subjects with a combined value exceeding 80 credit points, except that in special circumstances the Dean may approve otherwise.

* An undergraduate wishing to obtain the benefit of these sections must apply in writing to the Dean for approval of the proposed course by the last day of the previous semester. The students must supply full and completed details of the proposed course including details of the content of individual subjects. The Dean will consult Heads of Departments about individual subjects and prepare a submission for the Faculty Board.

Subjects approved by the Faculty Board will be specific and will be for one academic year only. The Faculty Board will determine the extent of credit to be granted in the course if the approved subject is completed successfully. If the approved subjects are not completed within the academic year specified by the Faculty Board, a student wishing to gain credit under these sections must submit a new application to the Dean in writing.

Unsatisfactory Progress

In accordance with the Rules Governing Unsatisfactory Progress, the following policy has been developed:

A student will be regarded as not having made satisfactory progress if:

(a) the student has failed a compulsory subject twice and/or;

(b) the student has failed more than 50% of his/her total program in any given academic year (calculated by total credit points attempted) and/or;

(c) the student has failed a subject designated as a Clinical or Fieldwork subject and/or;

(d) the student will fail to fulfill any specified time requirements of the course.

For the purpose of (c) the following subjects are designated as Clinical or Fieldwork subjects:

- N & D Practice 2, Foods and Food Service, Therapeutic Dietetics, Nutrition Education and Dietetic Practice.

Leave of Absence

A student eligible to re-enroll shall be deemed to be in good standing if:

- the approved subject is completed successfully.

- Rearrangement of a subject for the following reasons:
  - The student has been granted leave of absence for one year from the course.
  - There is no need to formally apply for this absence.
  - Students taking Leave must re-apply for admission by the due date. It is the responsibility of the student to do this, to regain entry to the course.

BACHELOR OF HEALTH SCIENCE (NUTRITION AND DIETETICS)

Course and Subject Details and Descriptions

**Duration**

4 years full-time

**Availability**

On Campus

**Attendance**

Full-time

**Total Credit Points**

320

**Course Coordinator**

Professor Dave Roberts

**Course Description**

A four-year integrated course, this degree comprises strands of study in Health, Social Science, Biological and Food Science, Food Service and Nutrition and Dietetics.

The approach is to develop problem-solving and communication skills and is based on a holistic approach to health.

Students will complete over 1000 hours of supervised practice in a variety of settings. Students may be required to be away from Newcastle for periods of up to seven weeks to meet this requirement. (All associated expenses are at the cost of the student).

Continuing students note: there are changes in subject codes. These are identified in the transition table below.

**COURSE OUTLINE**

**Year 1**

- **HLOH301 Health I**
  - 10

- **PSY103 General Psychology**
  - 10

- **SOCA120 Health Sociology I**
  - 10

- **ALSC101 Human Biochemistry I**
  - 10

- **ALSC104 Chemistry N & D**
  - 10

- **ANAT101 Human Embryology**
  - 10

- **SOCA121 Professional Practice I**
  - 10

**Year 2**

- **HLOH302 Health 2**
  - 10

- **ALSC205 Human Physiology**
  - 20

- **ALSC206 Biochemistry II**
  - 20

- **NUDI201 N & D Practice 2**
  - 20

- **PSY1273 Psychology for N & D II**
  - 5

- **SOCA243 Health Sociology 2**
  - 5

**Year 3**

- **HLOH301 Health 3**
  - 10

- **NUDI202 Therapeutic Dietetics**
  - 15

- **NUDI303 Foods and Food Service**
  - 15

- **ALSC205 Microbiol & Immun. (N & D)**
  - 15

- **ALSC201 Food Science (N & D)**
  - 15

- **PSY1273 Psychology for N & D III**
  - 5

- **SOCA383 Health Sociology 3**
  - 5

**Year 4**

- **HLOH401 Health 4**
  - 10

- **NUDI404 Applied Dietetics**
  - 10

- **NUDI405 Nutrition Education and Dietetic Practice 30**
  - 10

- **NUDI406 Nutritional Biochemistry**
  - 10

- **NUDI407 Dietetic Research Project**
  - 10

- **NUDI408 Food Service Systems**
  - 10

**TRANSITION TABLE**

Continuing students should note that the codes and names of certain subjects have changed for 1995 and beyond. These are:

**New Code**

- **PSY203**
  - General Psychology

- **SOCA120**
  - Health Sociology

- **ANAT110**
  - Human Anatomy

- **SOCA241**
  - Professional Practice I

- **PSY273**
  - Psychology for N & D II

- **NUDI201**
  - N & D Practice 1

- **NUDI303**
  - Foods and Food Service

**Equivalent to:**

- **PSY203**
  - General Psychology

- **SOCA120**
  - Health Sociology

- **ANAT110**
  - Human Anatomy

- **SOCA241**
  - Professional Practice I

- **PSY273**
  - Psychology for N & D II

- **NUDI201**
  - N & D Practice 1

- **NUDI303**
  - Foods and Food Service

**YEAR 1**

- **HOLH101 HEALTH 1**
  - 10cp

- **Prerequisite Nil**

- **Hours**
  - 3 hours face-to-face per week for 26 weeks (1 hour of mass lecture and 2 hours of tutorial per week)

- **Semester Offered**
  - Full Year

**Aims of Subject**

This subject develops an holistic concept of health, an appreciation of the factors which determine health status, and an understanding of how those factors can be used in attempting to prevent illness and promote health.

Health 1 forms the basis of a progressive understanding of the complexity of health. It is an introductory subject for Health 2 and Health 3. The subject aims to encourage critical thinking and active learning by students. Research concepts and strategies are incorporated into topic areas.

Units within this subject are:

- Experiences of Health
- Challenges to Australia's Health
- Determinants of Health
- Health Promotion & Illness Prevention

**Examination On-going assessment**

**Texts**

There are no specific texts

**PSY103 GENERAL PSYCHOLOGY I**

- **10cp**

- **Prerequisite Nil**

- **Corequisite Nil**

- **Hours**
  - One hour mass lecture plus tutorials and workshops

- **Semester Offered**
  - Full Year

**Examination**

Final Examination plus progressive assessment

**Content**

This subject introduces the student to basic concepts in psychology as well as to study of human development across the lifespan. The psychology of communication is also addressed in workshops.

**Tests**

To be advised

**SOCA120 HEALTH SOCIOLOGY I**

- **10cp**

- **Prerequisite Nil**

- **Corequisite Nil**

- **Hours**
  - 3 hours per week

- **Semester Offered**
  - Full Year
Section Six

Nutrition and Dietetics Course and Subject Details

Examination
Progressive assessment and final examination

Content
In this subject students will be introduced to basic sociological concepts and their application to health. In particular they will examine the concepts and theories which underpin the analysis of the distribution of health and illness, and access to health services in Australian society.

Texts
To be advised

ALSC101 HUMAN BIOSCIENCE I 20cp

Prerequisite Nil
Corequisite Nil

Hours up to 5 hours per week
Semester Offered Full Year

Subject Coordinator Paul McGrath

Examination Assessment is based on short tests and laboratory reports throughout the year as well as a semester exam and a final year exam

Content
This subject is designed to provide a foundation study in the life sciences with particular emphasis on human anatomy and physiology. It will provide the basis for subsequent development of more profession-specific subjects.

Texts

ALSC104 CHEMISTRY (N & D) 10cp

Lecturer H. White

Prerequisite Nil
Corequisite Nil

Hours 4 hours per week
Semester Offered Full Year

Examination/Assessment
Laboratory reports, semester and final examination

Content
This subject is designed to provide students of Nutrition and Dietetics with foundation studies in chemistry which will underpin further studies in biochemistry, human physiology and nutrition.

Texts

References To be advised

ANAT101 HUMAN EMBRYOLOGY 10cp

Prerequisite Nil
Corequisite ALSC101 Human Bioscience I or ALSC102 Human Bioscience IA

Hours 4 hours per week
Semester Offered Semester Two

Subject Coordinator Paul McGrath

Examination Assignments, laboratory reports, seminars, semester exam.

Content
This subject will provide an introduction to basic concepts in embryology. Some important aspects of comparative anatomy and physiology of the animal kingdom will be made. Important aspects of plant physiology and genetics will be introduced.

Texts No set text

SOC121 PROFESSIONAL PRACTICE I 10cp

Prerequisite Nil

Corequisite HOLH101 Health 1

Hours Semester One: 4 hours per week, Semester Two: 2 hours per week
Semester Offered Full Year

Examination/Assessment Progressive assessment

Content
In Semester one a series of debates on topical issues related to nutrition is arranged by the Department of Nutrition and Dietetics. Throughout the year students are presented with topics which encourage an understanding of factors significant for personal and professional development, and the foundation is laid for a reflective and critical understanding of professional roles. The subject also provides opportunities for learning and applying practical skills.

Texts No compulsory text

References Reading package to be made available

YEAR 2

HOLH201 HEALTH 2 10cp

Prerequisite HOLH101 Health 1

Semester Offered Full Year

Content
Develops an understanding of interactional relationships between the family, the community and health with particular reference to the Hunter Region and examines discipline statistics using relevant epidemiological data.
General Information

Principal Dates 1995
Provisional Dates 1996
Advice and Information
Enrolment and Re-enrolment Procedures
- New and Re-admitted Undergraduate Students
- Re-enrolling Undergraduate and Postgraduate Students
- Re-admission After Absence
- Course Transfer
Failure to Pay Debts
Student Identification Card
Change of Address
Change of Name
Varying Academic Program
- Withdrawal Dates 1995
- Addition of Subjects
Statement of Academic Record
Leave of Absence
Attendance at Classes
General Conduct
Notices
Examination and Progress Rules and Procedures
- Examination Sessions
- Special Arrangement due to Religious Convictions or Other Conscientious Objections
- Students With a Disability
- Location of Examinations
- Permitted Aids
- Unlisted Candidates
- Special Consideration Requests
- Final Examination Results
- Review of Final Result
- Examination Rules
- Rules Governing Unsatisfactory Progress

Fees, Charges and HECS
- Location of Cashiers Offices
- General Service Charge
- Late Charges
- Administrative Charges
- HECS
- Tuition Fees
- Refund of Changes

University Facilities
- Computing and Communication Facilities
- University Library Services

Campus Traffic and Parking
Public Transport

PRINCIPAL DATES 1995

Note: Semester dates for the Bachelor of Medicine and Bachelor of Laws/Diploma of Legal Practice courses differ from those below. Semester dates for these courses are set out in the Faculty Handbook for the Faculties concerned.

January
2 Monday New Year's Day Public Holiday.
13 Friday Last day for return of Re-enrolment Application Forms - Continuing Students.

February
13 Monday to
21 Tuesday Commencing students enrol.
23 Thursday Last day for payment of General Service Charge (without late fee).
27 Monday Semester 1 begins.

March
10 Friday Last day to pay HECS up-front.
30 Thursday Last day to change HECS option for Semester 1 to "DEFERRED".

April
14 Friday Good Friday - Easter Recess commences.
24 Monday Lectures resume.

June
9 Friday Semester 1 concludes.
12 Monday Queen's Birthday Public Holiday.
13 Tuesday Mid year Examinations begin.
30 Friday Closing date for applications for selection to the Bachelor of Medicine and Bachelor of Science (Aviation) courses in 1996.

July
31 Thursday HECS Census Date.

August
30 Wednesday Last day to change HECS option to "DEFERRED".

September
31 Thursday Last day to pay HECS up-front for Semester 2.

October
11 Monday Last day to add Semester 2 Subjects.
17 Monday Semester 2 begins.
22 Monday Semester 2 begins.
30 Monday Semester 2 recess commences.

November
13 Monday Semester 2 resumes.
11 Monday Semester 2 recess commences.
17 Monday Mid-year examinations begin.

December
31 Friday Mid-year examinations conclude.

ADVISE AND INFORMATION
Students may obtain advice and information on a range of admission, enrolment and course-related matters from the following sources:

- Faculty Offices (listed below)
- Student Enquiry Counter
- The Chancellor
- Callaghan Campus (049) 21 5333
- Student Administration and Services Counter
- Central Coast Campus (043) 48 4030

FACULTY OFFICES
The Faculty Office is the main reference point for students with enquiries concerning course, admission and enrolment matters. It provides advice on Faculty Rules and Policies and course requirements. If academic advice is required the Faculty Office can, where necessary, direct enquiries to the Dean, Assistant Dean, Course Co-ordinator or Head of Department as appropriate.

The locations of Faculty Offices are set out below:

- Faculty Office Location Telephone
  - Architecture Architecture Building 215570
  - Art and Design Bowman Building Room A1.06F 216525
  - Arts and Social Science Computing and Information Sciences Building Room C2733 216526
  - Economics and Social Science Social Sciences Building Room S18 215984
  - Education Bowman Building Room BB1-11 216529

Engineering
- Engineering Administration Engineering Building, Room EA205 216005

Law
- Social Sciences Building Room S18 215984

Music
- Conservatorium Building Room Conn/L4 294133

Nursing
- Richards Wing Hunter Building, Room R110 216523

Science and Mathematics
- Science Building 215562
- Room SB210

CALLAGHAN CAMPUS - STUDENT ENQUIRY COUNTER
Located in The Chancellery, the Student Enquiry Counter is the main point of contact for students with respect to enrolment, course administration, student cards and travel concessions, the administration of the Higher Education Contribution Scheme (HECS), examinations and the issue and receipt of various forms, such as Change of Name/Address and Statement of Academic Record request forms. The Student Enquiry Counter also acts as a point of referral for general student enquiries.

The telephone number for the Student Enquiry Counter is (049) 215333.

CENTRAL COAST CAMPUS - STUDENT ADMINISTRATION AND SERVICES COUNTER
The Student Administration and Services Counter is the main point of contact for students at the Central Coast Campus with respect to enrolment, course administration, student cards and travel concessions, the administration of the Higher Education Contribution Scheme (HECS), the issue and receipt of Variations of Program, Change of Address/Name, Special Consideration, Statement of Academic Record request forms, examinations and student welfare and service matters including accommodation, careers and employment, chaplaincy, counselling, loans and financial advice.

The telephone number for the Student Administration and Services Counter at the Central Coast Campus is (043) 484030.

ENROLMENT PROCEDURES FOR NEW AND RE-ENROLLED UNDERGRADUATE STUDENTS
Applicants who have accepted an offer of enrolment at the Callaghan Campus are required to attend an enrolment session in mid-February 1995 at the Great Hall. Applicants who have accepted an offer of enrolment at the Central Coast Campus are required to attend an enrolment session in mid-February 1995 at the Central Coast Campus. Detailed instructions concerning the exact date, time and venue for these enrolment sessions are provided in the Enrolment Guide sent out with the Universities Admissions Centre (UAC) offer. A Fees and Charges Notice will be sent to the student’s correspondence address in mid-February 1995. All Fees and Charges should be paid by 23 February 1995 at a branch of the Commonwealth Bank, unless otherwise instructed. Payments made after 23 February 1995 will incur a $50 late fee. If Fees and Charges remain unpaid after 31 March 1995 enrolment will be automatically cancelled. All Fees and Charges listed on the Notice must be paid in full. The Commonwealth Bank cannot accept part payments.

Scholarship Holders and Sponsoring Students
Students holding scholarships or receiving other forms of financial assistance are required to lodge with the Cashier their Fees and Charges Notice together with a warrant or other written evidence that charges will be paid by the sponsors. Sponsors must provide a separate warrant or letter for each student sponsored.

RE-ENROLMENT PROCEDURES FOR ALL UNDERGRADUATE AND POSTGRADUATE (COURSEWORK AND RESEARCH) STUDENTS
All continuing undergraduate and postgraduate students are sent a re-enrolment kit in December.

A re-enrolment kit contains:

- The student’s Re-enrolment Application form
- A 1995 Class Thoetable (where applicable)
- A 1995 Re-enrolment Guide
- A Booklet, "HECS: Your Questions Answered 1995".

Students must:

(i) Return their completed, signed and dated Re-enrolment Application form, either in person or by mail, to the Student Enquiry Counter, Callaghan Campus, or the Student Administration and Services Counter, Central Coast Campus by 13 January, 1995.

(ii) Lodge a new completed, signed and dated HECS Pay­ment Options form, if the previous year’s option was for one year only, in HECS exempt and Up-Front payment students, if applicable.

(iii) Clear all outstanding debts (loans and fines) in order to receive their Fees and Charges Notice in late January 1995.
(iv) Pay their Fees and Charges by the 23 February 1995 at any branch of the Commonwealth Bank, unless otherwise instructed. Payments made after 23 February 1995 will incur a $50 late fee. The enrolments of students whose fees remain unpaid after 31 March, 1995 will be cancelled. All Fees and Charges listed on the Notice must be paid in full. The Commonwealth Bank will not accept part payment.

ENROLMENT/RE-ENROLMENT APPROVAL

In early February 1995 all re-enrolling students will receive either a Program Approval letter with a student identification card attached or a Clarification of Re-enrolment Program letter requesting that they attend a special re-enrolment approval session during the last week of February 1995 to clarify and amend details of their proposed programs.

Registering for Tutorial or Laboratory Sessions

All tutorial or laboratory sessions should be arranged with Departments on an individual basis. Where clinical, field work placements are a component of the program, students should consult the relevant sections of the Faculty Handbook or contact their Faculty Office.

RE-ADMISSION AFTER ABSENCE

Persons wishing to resume an undergraduate degree course in 1996, but who were not enrolled in that particular course in 1995 must apply for admission through the UAC. UAC application forms and Guides are available from the Student Enquiry/Administration and Services Counters on the Callaghan and Central Coast Campuses (see p. v) as well as from:

- The Universities Admissions Centre
  Locked Bag 500
  Lidcombe NSW 2141
- all other UAC participating universities.

A student who is not enrolled by the University by reason of non-payment of any fee or charge, non-payment of any fine imposed, or who has failed to pay any overdue debts shall not (until such debts are paid) be permitted to:

- enrol in a following semester or year as the case may be;
- receive a Statement of Academic Record;
- graduate or receive any other award; or
- receive a replacement student identification card.

Students are requested to pay any debts incurred without delay.

STUDENT IDENTIFICATION CARD

All students should carry their student identification card when at the University. The card’s machine readable lettering enables the University Library staff to verify a student’s identity and library status when borrowing material. The identification card also has a temporary password for initial access to the University’s computing facilities. Lost or damaged identification cards can be replaced at a cost of $5 at the Student Enquiry/Administration and Services Counters at the Callaghan and Central Coast Campuses (see p. v).

Please note that the student identification card is not evidence of enrolment or re-enrolment. To be enrolled students must also have paid their fees and charges, fulfilled the HECS requirements and, where applicable, paid all tuition fees.

CHANGE OF ADDRESS

The University records correspondence and home addresses for all students. Students are responsible for notifying the University in writing of any change in their addresses. A Change of Address form should be used. These are available from Faculty Offices, as well as the Student Enquiry/ Administration and Services Counters at the Callaghan and Central Coast Campuses (see p. v).

Failure to notify the University of any change to a correspondence address could result in important correspondence and/or course information not being received.

CHANGE OF NAME

Students who change their name(s) should complete a Notification of Change of Name form. Please note that it may be necessary to provide supporting documents such as Birth Certificate, Marriage Certificate, Court Documentation and/or Instrument Evidencing Change of Name. Forms are available from the Student Enquiry/Administration and Services Counters at the Callaghan and Central Coast Campuses (see p. v).

VARYING ACADEMIC PROGRAM

Students must ensure that all details on their approved programs are correct including semester and campus information. If the approved program is correct students should retain the form for their records and possible variation at a later date. An Application to Vary Academic Program is printed on the reverse side of the Program Approval Form.

If the approved program is not correct the student must insert the appropriate corrections on the Application to Vary Academic Program and return it to the appropriate Faculty Office, the Student Enquiry/Administration and Services Counters at the Callaghan and Central Coast Campuses.

Failure to change an incorrect program could result in a student:

- incurring a HECS liability and receiving a Fail grade for the subject(s) concerned even if the student did not attend classes.
- not being awarded a grade for the subject(s) concerned even if the student attempted all the assessments.

Students must also ensure that they withdraw from all Semester 2 subjects if failures have been incurred in the prerequisite Semester 1 subjects.

WITHDRAWAL DATES 1995

A student may withdraw from a subject without academic penalty on or before the above dates.

- Semester 1 Subjects: 31 March 1995
- Semester 2 or Full Year Subjects: 31 August 1995

A student who withdraws from a subject after the above dates will be awarded the grade of "Fail" in the subject unless the Dean of the appropriate Faculty approves the withdrawal without failure.

A student who withdraws from a subject on or before the above dates will not incur HECS liability for that subject in the semester concerned.

ADDITION OF SUBJECTS

Addition of subjects to a student’s program will not be permitted after the following dates:

- Semester 1 or Full Year Subjects: 31 March 1995
- Semester 2 or Full Year Subjects: 31 August 1995

In exceptional cases, the Dean of the appropriate Faculty may approve the addition of a subject after the above dates.

STATEMENT OF ACADEMIC RECORD

A statement of Academic Record may be obtained by completing the appropriate application form and lodging it either in person or by mail, together with a fee of $10, with the University Cashier. The statement will be mailed to the nominated address as soon as it becomes available.

Normally statements will be mailed within a week. Statements involving pre-1979 records may take a little longer as these are manually produced. Indelible applicants must clearly state the reason for their absence by the following dates:

- Full Year Subjects: 31 March 1995
- Semester 2: 31 August 1995

In exceptional cases, the Dean of the appropriate Faculty may approve the addition of a subject after the above dates.

LEAVE OF ABSENCE

Undergraduate Awards

Generally, a student ‘in good academic standing’ (i.e. eligible to re-enrol) may take Leave of Absence from his/her course for one year, or with the permission of the Dean, for two consecutive years, without prejudice to any right to re-enrol in the course.

However, as some courses have special requirements concerning Leave of Absence, students should contact their Faculty Office for advice. To re-enrol in a course after a period of leave of absence, students must re-apply through the Universities Admissions Centre by 30 September.

Postgraduate Coursework Awards

Leave of Absence may not be available for some courses. Students should seek information from the relevant Faculty Offices regarding any requirement to lodge a formal application for leave.

Research Higher Degrees

Leave of Absence is not automatically granted, and candidates are required to lodge a written application for Leave of Absence prior to the end of the semester preceding the intended absence with the Graduate Studies and Scholarships Office for approval by the Graduate Studies Committee. Research students may wish to refer to the Masters and Doctoral Degree Rules for further information.
Scholarship Recipients

Scholarship holders, both undergraduate and postgraduate, who wish to take Leave of Absence from their courses, or who do not intend to take full-time programs in any semester, are required to lodge written applications for suspension of their scholarships prior to the end of the semester preceding the intended absence. Applications for suspension should be lodged with the Graduate Studies and Scholarships Office for approval by the Scholarships Committee. Scholarship holders should refer to the conditions of their scholarships.

ATTENDANCE AT CLASSES

Where a student’s attendance or progress has not been satisfactory, action may be taken under the Rules Governing Unsatisfactory Progress (see p. xiii).

In the case of illness or absence for some other unavoidable cause, a student may be excused for non-attendance at classes.

All applications for exemption from attendance at classes must be made in writing to the Head of the Department offering the subject. Where assessments have been missed, this fact should be noted in the application.

The granting of an exemption from attendance at classes does not carry with it any waiver of the General Services Charge.

GENERAL CONDUCT

In accepting membership of the University, students undertake to observe the By-law and other requirements of the University.

Students are expected to conduct themselves at all times in a seamy fashion. Smoking is not permitted during classes, in examination rooms or in the University libraries.

Members of the academic staff of the University, senior administrative officers, and other persons authorised for the purpose have authority to report on disorderly or improper conduct occurring in the University or in relation to University activities away from the University.

NOTICES

Official University notices are displayed on Departmental noticeboards and other prominent locations within the University. Students should consult the final timetable in advance to find out the date and time of their examinations. Misreading of the timetable will not under any circumstances be accepted as an excuse for failure to attend an examination.

EXAMINATION SESSIONS

Formal written examination sessions take place on prescribed dates within the periods given below and may include Saturdays and evenings.

Mid Year: 13 to 30 June 1995
End of Year: 6 to 24 November 1995

Timetables showing the date and time at which individual examinations will be held will be displayed in the Hunter Building Concourse, on specific Departmental noticeboards and other prominent locations within the University. Students should consult the final timetable in advance to find out the date and time of their examinations. Misreading of the timetable will not under any circumstances be accepted as an excuse for failure to attend an examination.

SPECIAL ARRANGEMENTS DUE TO RELIGIOUS CONVICTIONS OR OTHER CONSCIENTIOUS OBJECTIONS

Special arrangements may be made for students who have religious or other conscientious objections preventing them from attending an examination timetable on a certain day. Students should contact the Student Enquiry/Administration and Services counters at the Callaghan (049) 216490 or Central Coast (043) 494030 campuses for further advice.

STUDENTS WITH A DISABILITY

A special examination facility is available, for students who, for physical or psychological reasons, are unable to sit their examinations in the normal fashion. Further information with respect to this facility may be obtained from Callaghan Campus - Disability Coordinator (049) 216467, Central Coast Campus - Student Services Officer (043) 494034.

LOCATION OF EXAMINATIONS

Seats allocation lists for examinations will be displayed about two weeks before the commencement of the examination period on the Departmental noticeboards and on a noticeboard outside the examination room on the day of the examination. Candidates should allow themselves plenty of time to get to the examination room so that they can take advantage of the 10 minutes reading time that is allowed before the examination commences. Normally, entry into the examination room will be permitted from 15 minutes before the actual commencement of the examination writing time. This allows the candidate time to locate the allocated seat and complete the necessary attendance slip and any related necessary registration details before the commencement of reading time. A list of materials which may be taken into each examination will also be displayed outside the examination room.

PERMITTED AIDS

Students may take into an examination room any writing or drawing instrument or eraser. Logarithmic tables are not permitted. These will be provided by the supervisor if required.

Calculators may not be taken into an examination room. For examinations where calculators are necessary the University will provide calculators for use by students. Further details of those calculators will be provided to students during 1995.

UNLISTED CANDIDATES

Students expecting to sit for an examination and whose names do not appear on the displayed seat allocation listings may not be formally recorded as being enrolled and are therefore unable to sit and receive a result. In these circumstances students should contact the Student Enquiry Counter at the Callaghan Campus and the Student Administration and Services Counter at Central Coast Campus to identify the problem. If an enrolment problem is confirmed the student may also need to discuss the matter with the relevant Faculty Assistant Registrar.

SPECIAL CONSIDERATION REQUESTS

The Examination Rules provide for students whose preparation for an examination, attendance or performance in an examination has been affected by illness, disability or other serious cause to apply for special consideration.

All applications for special consideration should be made on the Application for Special Consideration form available from Faculty Offices, the Student Enquiry Counter, Callaghan Campus, the University Health Service, the Counselling Service and the Student Administration and Services Counter, Central Coast Campus.

The granting of Special Consideration could involve a further examination or other form of assessment held shortly after the formal examination. Any further examination or assessment will be administered by the Department that offered the subject. Consequently students must check with the Department that offered the subject to ascertain that Department’s requirements. Students should also check the Department’s noticeboard for further advice concerning Special Consideration. The rules dealing with special consideration are mentioned in Part 3 of the Examination Rules. For details see page xi.

FINAL EXAMINATION RESULTS

End of year examination results will be mailed out by late December. Examination results for Semester 1 subjects will be mailed out the week preceding the commencement of Semester 2.

Final examination results are also displayed in the Hunter Building Concourse and Student Administration and Services Building, Central Coast Campus as soon as they become available. No results will be given by telephone.

REVIEW OF FINAL RESULT

After the release of both Semester 1 and Semester 2/end of year final examination results students may apply to have results reviewed. Part 3 of the University’s Examination Rules specifies procedures relating to the review of results. For details see page xi and the necessary application form. You should read the instructions on the application form before applying for a Review. There is a charge per subject, which is refundable in the event of an error being discovered. However, it should be noted that examination results are released only after careful assessment of students’ performances and that, amongst other things, marginal failures are reviewed before results are released.

EXAMINATION RULES

Part 1 - Preliminary

Application of Rules

1. These Rules shall apply to all examinations of the University with the exception of the examination of a thesis submitted by a candidate for a degree of Master or the degree of Doctor of Philosophy. The examination of theses for these degrees or the assessment of published works submitted for Higher Doctoral Degrees shall be conducted in accordance with the requirements for the degree.

Interpretation

2. 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;
"Department" means the department assigned responsibility for a particular subject and includes any other body so responsible; "Departmental Examinations Committee" means the Departmental Examinations Committee of the Department constituted in accordance with the Rules Governing Departments; "examination" includes any form of examination, assignment, test or any other work by which the final grade of a candidate in a subject is assessed; "external examiner for a candidate" means an examiner, not being a member of the staff of the University, appointed to assist in the examination of an extended essay, project or similar work submitted by a candidate; "external examiner for the Department" means an examiner, not being a member of the staff of the University, appointed to assist in the examination of a single department; "Faculty Board" means the Faculty Board of the Faculty responsible for the course in which a candidate is enrolled and includes a Board of Studies where a Faculty has been formally constituted in accordance with the Rules for the Faculty; "Faculties responsible for the course in which a candidate is enrolled and includes a Board of Studies where a Faculty is enrolled and includes a Board of Studies where departments are responsible for a particular subject and includes any other body so responsible; "Faculty in which a candidate is enrolled and includes a Board of Studies where a Faculty is enrolled and includes a Board of Studies where the Faculty Board has recommended the subject by the end of the second week of the semester in which the subject commences including the weight and timing of each task comprising the total assessment to be applied in determining the final grade; "subject" means any part of a course of study for which examination shall be conducted under Part 4 of these Rules; "supervisor" means the supervisor for a candidate in respect of whom the Faculty Board has recommended the subject by the end of the second week of the semester in which the subject commences including the weight and timing of each task comprising the total assessment to be applied in determining the final grade; "external examiner for a candidate" means an examiner, not being a member of the staff of the University, appointed to assist in the examination of an extended essay, project or similar work submitted by a candidate; "external examiner for the Department" means an examiner, not being a member of the staff of the University, appointed to assist in the examination of a single department; "Faculty Board" means the Faculty Board of the Faculty responsible for the course in which a candidate is enrolled and includes a Board of Studies where a Faculty has been formally constituted in accordance with the Rules for the Faculty; "Faculties responsible for the course in which a candidate is enrolled and includes a Board of Studies where a Faculty is enrolled and includes a Board of Studies where the Faculty Board has recommended the subject by the end of the second week of the semester in which the subject commences including the weight and timing of each task comprising the total assessment to be applied in determining the final grade; "subject" means any part of a course of study for which examination shall be conducted under Part 4 of these Rules; "supervisor" means the supervisor for an examination administered to a candidate in respect of whom any doubt exists as to the judgement to be recorded in an examination return.

Part 2 - General

Examinations other than in single department

3. (1) Where a Faculty is not composed of Departments, the functions and responsibilities of the Head of a Department and the Departmental Examinations Committee in respect of that subject shall be delegated by the Faculty Board concerned or, where Departments from more than one Faculty are involved, by the Academic Senate.

Determination of nature and extent of examination

4. Each Faculty Board shall determine the nature and extent of examination in subjects in which the Faculty is responsible and each examination may be written, oral, clinical or practical or any combination of these.

Publication of requirements

5. The Head of Department shall ensure the publication of the Department's examination requirements in each subject by the end of the second week of the semester in which the subject commences including the weight and timing of each task comprising the total assessment to be applied in determining the final grade.

Penalties

6. An infringement of any of the rules set out in Rule 16(1), other than pursuant to Rule 16(2), or the instructions referred to in Rule 19 shall constitute an offence against discipline.

Part 3 - Procedures

External Examiners

7. (1) The Academic Senate may, on the recommendation of a Faculty Board, appoint a Head of Department to appoint one or more examiners for an examination in the Department. Such appointment shall be for a term of one year and, with the approval of the Academic Senate, no external examiner for the Department shall be appointed for more than four consecutive terms of office.

(2) Where the appointment of an external examiner for a subject is prescribed by the Rules for an award, or where the Faculty Board considers it appropriate that an external examiner for a candidate be appointed, such appointment shall be made by the Faculty Board or an otherwise prescribed person or body to undertake the functions and responsibilities of the Head of a Department and the Departmental Examinations Committee in respect of that subject shall be delegated by the Faculty Board concerned or, where Departments from more than one Faculty are involved, by the Academic Senate.

Grading of results in subjects

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

Review of result in subject

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

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

(3) A review of the result shall include a check:

(a) that all required parts of the assessment have been included in the final determination of the result;

(b) that the content of examination scripts has been fairly considered, including, where possible, a review of marks awarded by the examiners; and

(c) that all marks contributing to the final grade have been correctly weighted and their total accurately obtained but shall not include any review of earlier assessments which have been fully considered.

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

Special Consideration

13. (1) A candidate who claims that:

(a) study during the year or preparation for an examination;

(b) attendance at or performance in an examination has been affected by illness, disability or other serious cause, may report the circumstances in writing, supported by medical or other appropriate evidence to the University Academic Registrar and request that they be taken into account in the assessment of the examination results of that candidate. Such request shall be made on the prescribed form.

(2) A request made pursuant to sub-rule (1)(a) shall be submitted by the candidate within seven days after the date of the examination or within such further period as the Dean of the Faculty in which the candidate is enrolled may accept.

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

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

(5) The University Secretary and Registrar may call for such other evidence in respect of the candidate's
request as may be reasonably required.

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

Part 4 - Formal Written Examinations

Responsibility
14. The University Secretary and Registrar shall be responsible for the administration and supervision of the formal written examinations of the University.

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

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

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

Rules for formal written examinations
16. (1) Formal written examinations shall be conducted in accordance with the following rules:

(a) candidates shall comply with any instructions given by a supervisor relating to the conduct of the examination;

(b) no candidate shall enter the examination room after thirty minutes from the time the examination has begun;

(c) a candidate shall not bring into the examination room any bag, paper, book, written material, device or aid whatsoever, other than such as may be specified for the particular examination;

(d) a candidate shall not by any means obtain or endeavour to obtain improper assistance, give or endeavour to give assistance to any other candidate, or commit any breach of good order;

(e) a candidate shall not take from the examination room any examination answer book, any examination paper so marked, graph paper, drawing paper or other material issued for use during the examination;

(f) no candidate may smoke in the examination room;

(g) before the examination begins candidates shall not read the examination paper until granted permission by the supervisor which shall be given ten minutes before the start of the examination;

(h) no candidate shall leave the examination room during the first thirty minutes or the last ten minutes of the examination; and

(i) no candidate shall re-enter the examination room after leaving it unless during the full period of absence that candidate has been under approved supervision.

(2) The provision of sub-rule (1) may be relaxed:

(a) by the University Secretary and Registrar; and

(b) in respect of paragraphs (g) and (h) by the supervisor upon the direction of the University Secretary and Registrar or at the discretion of the supervisor, provided that the circumstances of any case in which discretion has been exercised shall be reported in writing to the University Secretary and Registrar immediately following the conclusion of the examination.

Part 5 - Other Examinations

Responsibility
17. The Head of Department shall be responsible for the administration and supervision of the examinations of the University, other than formal written examinations, in the subjects offered by the Department.

Timetable
18. (1) Where appropriate, the Head of Department shall publish a timetable showing when and where examinations will be held and it shall be the responsibility of candidates to attend those examinations prescribed for the subjects in which they are enrolled.

(2) Notwithstanding the provisions of Rule 18(1), where the Head of Department considers it justified on religious, conscientious or other grounds, special arrangements may be made to allow a candidate to attend a prescribed examination for a subject at a time and place different from that published in the examination timetable.

Compliance with instructions
19. Candidates shall comply with any instructions given by the Head of Department or the supervisor relating to an examination.

UNSATISFACTORY PROGRESS
A student's enrolment in a subject or course may be terminated because of unsatisfactory progress in the subject or course.

To regulate such matters the University has adopted Rules Governing Unsatisfactory Progress as set out below.

Students who become liable for action under these Rules will be informed accordingly by mail. Progress requirements for subjects and courses are set out elsewhere in this volume.

RULES GOVERNING UNSATISFACTORY PROGRESS

Application of Rules
1. These Rules shall apply to all students of the University except those who are candidates for a research higher degree.

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

(a) "the Committee" means the Student Progress Sub-Committee as constituted by the Academic Senate from time to time;

(b) "Dean" means the Dean of the Faculty in which a student is enrolled;

(c) "Board" means the Board of the Faculty responsible for the course in which the student is enrolled.

(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.

Termination of Enrolment by Head of Department
3. (1) A student's enrolment in a subject may be terminated by the Head of the Department offering that subject if that student does not maintain a rate of progress considered satisfactory by the Head of the Department. In determining whether a student is failing to maintain satisfactory progress the Head of Department may take into consideration such factors as unsatisfactory attendance or failure to complete a satisfactory standard academic or professional components specified for the subject.

(2) The enrolment of a student in a subject shall not be terminated pursuant to clause 3(1) unless that student has been given prior written notice of the intention to consider the matter, with brief particulars of the grounds for so doing, and has also been given a reasonable opportunity to make representations either in person or in writing or both.

(3) A student whose enrolment in a subject is terminated under clause 3(1) may appeal to the Faculty Board which shall determine the matter.

(4) A student whose enrolment in a subject is terminated under this clause shall be deemed to have failed the subject.

Review of Performance by Board
4. (1) The Faculty Board may review the academic performance of a student who does not maintain a rate of progress considered satisfactory by the Faculty Board and may determine:

(a) that the student be permitted to continue the course;

(b) that the student be permitted to continue the course subject to such conditions as the Faculty Board may decide;

(c) that the student be excluded from further enrolment:

(i) in the course;

(ii) in the course and any other course offered in the Faculty; or

(iii) in the Faculty.

(2) Before a decision is made under clause 4(1), the student shall be given an opportunity to make representations to the Faculty Board with respect to the matter either in person or in writing or both.
Central

Hearing of

(4) The Committee may confirm the decision made

(3) The appellant and the Dean or the Dean's nominee

(2)

(4)

(3) A student who

with the permission of the Board of the Faculty

be made by the Faculty Board of the Faculty

such conditions as it may determine.

(66)

(278)

Where the progress of a student enrolled in a

making of the determination by the Board.

An

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degree of any action it

has
taken

will be publicised throughout the campus early in 1995. The

Cashier's

Office is located on the First Floor, Chancellery Building. The telephone number is (049) 215122. Credit card

facilities are not available.

GENERAL SERVICE CHARGE

There are separate General Service Charges for External, Non-Award and Award students. In 1995 Fees and Charges

notices will be sent in late January to continuing students and in mid February to commencing students.

Students are expected to pay these charges on any branch of the Commonwealth Bank by 23 February, 1995. Payments

made after this date will incur a $50 late fee. The final date for payment of charges with the Commonwealth Bank is

31 March 1995.

All other payments such as fines should be made directly to the University by cheque, or in person to the Cashier at:

either the Callaghan or Central Coast Campuses.

General Service Charge Per Annum

(a) Students Enrolled in courses leading to academic awards proceeding to a Degree or Diploma $275

(b) Additional Students joining Newcastle University Union for the first time $35

Tuition fees are charged for fee-paying international students, specific categories of Non-Award enrolment (Extraneous Subject and Miscellaneous/Vocational) and a range of award courses.

PAYROLL CHARGES

The following policy applies with respect to refunds of the General Service Charge (GSC):

(i) A student shall be eligible for a refund of the GSC if no "student load" existed as at the GSC census date for any semester.

(ii) If, in terms of the above, no "student load" exists for both semesters in the year, the student would be entitled to receive a 50% refund of the GSC paid along with the Student Identification Card.

(iii) If a student has a "student load" for only one semester in any one year he/she will be eligible for a refund of 50% of the GSC paid excluding the Union joining fee.

(iv) Those students who enrolled in a course only offered in second semester and who have only paid 50% of GSC and who have no "student load" in the semester will be entitled to a refund of 100% of the GSC paid.

In exceptional circumstances the Director, Student Administration may vary these provisions in the case of individual students.

A refund cheque will be mailed to a student or if applicable, a sponsor. Any change of address must be notified to the University as soon as possible.

No 100% refund will be made before 30 April. No 50% refund will be made before 30 September.

UNIVERSITY FACILITIES

COMPUTING AND COMMUNICATIONS FACILITIES

The University has extensive computing and communication facilities available for use by students.

Set out below are the terms governing the use of these facilities. The University may at any time revise these terms.

These terms apply to all users (students, staff and others). Use by you of any such facilities indicates your understanding and acceptance of these terms. If you are unsure of the meaning of any of these terms, you should seek advice from the Computing Services Help Desk prior to use. The locations and telephone numbers of the Help Desks are as follows:
The University cannot guarantee the confidentiality of any information stored on any University computer or transmitted through its network. For the purpose of managing the resources, it may be necessary for the University to monitor files and usage.

The University's liability in the event of any loss or damage shall be limited to the fees and charges paid to the University for the use of the computing facilities which resulted in the loss or damage.

3 Conditions

1. You may use only those facilities which have been authorised for your use. If access is protected by a password, you are not to make this password available to others. You may not use any account set up for another user, nor may you attempt to find out the password of another user. This applies both to facilities within the University and to any accessible using the University's network.

2. You may only use authorised facilities for authorised purposes. For example, facilities made available for teaching may not be used for private gain.

3. You must be aware of the law of copyright as it affects computer software. Software must not be copied except with the express permission of the copyright owner.

4. You may not attempt to copy information belonging to other users (whether they be staff, students or other users) without their express permission.

5. You may need to interfere with the operation of the University's computers or any other facilities accessed by use of the University's computers or network.

6. You may not attempt to subvert the security of any of the University's computing facilities or any other facilities accessible by use of the University's facilities.

7. You may not use the University's computing facilities to send obscene, offensive, bogus, harassing or illegal messages.

8. You may grant access to your own files by other users by setting appropriate protection.

9. You may access computing and communications facilities on other sites only with their permission or to others within the University and to any accessible using the University's network.

10. You must, on request by an authorized member of staff, produce evidence of identity (for example by student card) when using University computing facilities.

11. You are required to inform the University of any breach of these Terms (for example, if you become aware that someone else has used your account).

4 Copyright

1. The Copyright Act proceeds on the basis of bringing a computer program within the scope of the expression 'literary work' as used in the Copyright Act. 'Computer program' is defined as meaning:

   'An expression, in any language code or notation, of a set of instructions (whether with or without related information) intended, either directly or indirectly or after either or both of the following:

   (a) conversion to another language, code or notation;

   (b) reproduction in a different material form; to cause a device having digital information processing capabilities to perform a particular function.'

2. Subject to what is said below in relation to backup copies, the reproduction of a computer program (as defined) constitutes a breach of the Copyright Act which may result in civil and/or criminal action against the offender.

3. The Act also prohibits what is termed an 'adaptation' of a computer program - an adaptation being one of the exclusive rights given to the owner of the copyright of literary work.

   In relation to computer program an adaptation is defined as:

   'a version of the work (whether or not in the language, code or notation in which the work was originally expressed) not being a reproduction of the work.'

   This definition is intended to prevent persons purchasing a computer program in one language and converting it to another language without the consent of the copyright owner.

4. The purchase or lease of computer software normally provides a licence to use the software, together with a copy of the software and associated documentation. The title to the software remains with the copyright owner, who is entitled, subject to the Copyright Act, to place conditions upon the use of the software.

5. Members of the University are personally responsible for complying with the Commonwealth Copyright Act relating to the copying of computer software and to the terms and conditions of the particular contract or software licence relating to leased or purchased software.

6. The Copyright Act makes specific provision for the making of a backup copy of either or both the original or an adaptation of a computer program. Thus the University can only make backup copies of programs for which it has purchased a licence. If a program is on loan or has been hired, the right to make copies will have to be expressly authorised by the copyright owner.

In addition, the reproduction may only be made for the purpose of being used in lieu of the original copy in the event that the original copy is lost, destroyed or rendered unusable.

Such a backup copy cannot be made from an infringing copy of the computer program or where the owner of the copyright in the program has given an express direction to the contrary.

7. Copying of computer software to hard disk shall only occur if

   (a) the computer software licence specifically allows it for other than normal backup purposes. The hard disk copy must not be used by more than one person at a time unless the agreement states otherwise;

   (b) in the absence of an agreement, it is used on the hard disk by no more than one person at a time.

8. Hard disk copies of software used in a network environment to allow simultaneous access by more than one user can only be provided if

   (a) specially permitted in the contract or software licence;

   (b) a copy of the software has been purchased for every simultaneous user of the hard disk copy.

9. Copying of software for classroom use is not permitted unless specifically permitted under the contract or software licence for the leased or purchased product.

UNIVERSITY LIBRARY SERVICES

As members of the University of Newcastle, students are entitled to use the Anschutz, Huskey, Conservatorium and Central Coastal Libraries as well as the libraries of the teaching hospitals. The University's library collections are accessible through the computerised catalogue NEWCAT.

Anschutz Library

Located adjacent to the Shoretown Union, the Anschutz Library is the main library on the Callaghan campus. It supports the teaching and research requirements of the Faculties of Architecture, Arts and Social Science, Economics and Commerce, Education, Engineering, Law, Medicine and Health Sciences and Science and Mathematics. It holds an extensive range of books, serials, government publications, microforms, audiovisual media, archival materials and a Rare Book Collection. Specialist services are provided in Biomedicine, Law, and audiovisual media.
Other services include: Reference Services providing access to CD-ROM and on-line databases, Inter-Library Services and Archives.

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

The Biomedical Library houses books, serials, pamphlets and reference material in Biological Sciences and Medicine. It also includes a special area, the Medical Reserve, which holds a variety of resources and equipment supporting the innovative and highly resource-dependent curriculum of the Bachelor of Medicine course.

Collections of resources are also maintained in ten country centre hospitals for the use of students in clinical learning stages: Taree, Tamworth, Gosford, Maitland, Orange, Lismore, Dubbo and Port Macquarie.

The Law Library houses books, serials and primary law materials including law reports, acts, bills and regulations. It also includes a Law Reserve section which houses major texts and looseleaf services. The Rankin and Nathan Database provides access to large-print NEWCAT, the University Libraries’ online catalogue. Please phone (049) 217046 for further information.

Further information can be obtained by contacting (049) 215851.

Central Coast Campus Library

The Library has a rapidly developing collection of books, serials and audiovisual media which supports teaching programs in Arts, Business, Social Sciences, Education, Applied Science and Nursing. Reference Services providing access to CD-ROM and online databases are available.

Further information can be obtained by ringing (043) 484020.

Gardiner Library Service

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

Further information can be obtained by ringing (049) 213779.

Borrowing Rights

Borrowing/Student Identification Cards

Students need a student identification card to borrow. Please remember to carry your card with you at all times if you wish to borrow or use library facilities. If books are borrowed on your card by anyone else, you are responsible for them. Report any lost card to the Loans Desk staff immediately to prevent unauthorised use. Replacement cards are available for $5.00 from the Student Enquiry Counter, Callaghan Campus or the Student Administration and Services Counter, Central Coast Campus.

Additional charges of $5.00 per day per item will be charged for library material. Library material needs to be returned by the last date of your library course. A fine of $2.00 per day is levied on material out for more than two days. If you have outstanding fines, you may be denied further borrowing privileges.

Photocopying

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

Central Coast Campus Library uses $2.00 and $5.00 disposable cards.

Further information can be obtained by contacting the Librarian on (049) 204133.

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that such a space is available. It is essential that, for the protection of the University's landscape and for the safety of students, staff and visitors, vehicles are not parked on grassed areas and footpaths.

The scale of penalties for traffic and parking infringements as contained in the Rules are as follows:

(a) exceeding the speed limit on University roads $30
(b) failing to stop when signalled to do so by a Security Officer $30
(c) refusal to provide information requested by a Security Officer $30
(d) failing to obey instructions given by a Security Officer $30
(e) illegal parking:
   (i) parking on University roadways $15
   (ii) parking on footpaths $15
   (iii) parking on areas marked by sign $50
   (iv) parking in a way that may risk injury to others $50
   (v) not displaying parking permit $30
   (vi) parking in a restricted area $15
(f) parking in an area reserved for disabled person $50
(g) any other breach of the Traffic and Parking Rules $1

The penalty will be imposed:

(a) on the spot by an infringement notice being put on the vehicle; or
(b) by sending an infringement notice by ordinary prepaid post to the registered person responsible for the vehicle, or to the registered owner of the vehicle.

Any objection to the imposition of the penalty must include full details of the grounds on which the objection is based and be lodged in writing with the Senior Facilities Officer within 14 days of the date the infringement notice shows the breach as having been committed. The Senior Facilities Officer, after considering an objection, shall either reject it or waive the penalty.

Penalties must be paid:

(a) within 28 days of the date the infringement notice shows the breach as having been committed:

   (b) where applicable, within 28 days of notification that any objection has been rejected by the Senior Facilities Officer.

Any enquiries in relation to traffic and parking matters at the Callaghan Campus should be referred to the Manager, Security Services, located in the foyer of the Great Hall and at the Central Coast Campus to the Property and Estates Officer, Finance and Estates Building. Application forms to bring a vehicle on to the campus are also available from these offices.

The Traffic and Parking Rules apply to all University campus locations.

**PUBLIC TRANSPORT**

The State Transit Authority provides a comprehensive bus service to and from locations throughout Newcastle. Private bus companies also provide services to Maitland, Wallsend, Toronto and Raymond Terrace. Bus Timetables are available from the Student Enquiry Counter, Callaghan Campus and the Students Association Office, in the Shortland Union.

Bus timetables for services between the Central Coast Campus and Gosford and Wyong are available from the Student Administration and Services Counter, Central Coast Campus.

**Section Six**

**ALSC205 HUMAN PHYSIOLOGY** 20cp

- **Prerequisite**: ALSC101 Human Bioscience I
- **Corequisite**: Nil
- **Hours**: 6 hours per week
- **Semester Offered**: Fall Year
- **Lecturer**: B.F. Cook
- **Examination**: Two 3 hour papers and laboratory reports

**Content**

A laboratory oriented subject which provides in-depth studies in areas essential to dietitians. Topics include endocrinology, neurophysiology, sensory physiology, renal physiology, gastrointestinal physiology, haematology, immunology, embryology and exercise physiology.

**Texts**


**References**

West, J.B. 1990, *Physiological Basis of Medical Practice*, 12th Ed. Williams & Wilkins


**ALSC206 BIOCHEMISTRY II** 20cp

- **Lecturer**: Dr. R. Murdoch (Semester 1) Prof. D. Roberts (Semester 2)
- **Prerequisite**: ALSC101 Human Bioscience I, ANAT101 Human Embryology, ALSC104 Chemistry I & D
- **Corequisite**: NUDI201 N & D Practice 2
- **Hours**: 8 hours per week
- **Semester Offered**: Fall Year (with BIOL201 in Sem. I)
- **Examination/Assessment**: Exam/assignment/labouratory at end Semesters 1 & 2

**Content**

Biochemistry of carbohydrates, lipids, proteins, vitamins, enzymes. Carbohydrate metabolism, energy metabolism, lipid or protein metabolism. Integration of the above knowledge to provide a basis for understanding the nutritional management of disease states.

**Texts**


**References**


**NUDI201 NUTRITION AND DIETETICS PRACTICE II** 20cp

- **Lecturer**: To be advised
- **Prerequisite**: ALSC101 Human Bioscience I, ALSC104 Chemistry I & D, ANAT101 Human Embryology, SOCA121 Professional Practice I
- **Corequisite**: ALSC205 Human Physiology, ALSC206 Biochemistry II
- **Hours**: 4 hours per week lectures and seminars; 1 hour tutorial; 4 weeks (160 hours) practice
- **Semester Offered**: Full Year
- **Examination/Assessment**: Annual examination; 2 seminar presentations; and written presentation of Community Nutrition

**Content**

Nutritional aspects of micro and macro nutrients; dietary tools; nutrition throughout the life cycle; cultural, religious and ethnic influences on food habits; development of community nutrition process. Practice consists of a placement in Community Nutrition to develop skills assessment and other relevant methodologies.

**Texts**


Pips, P. & Trahms, C.M. *Nutrition in Infancy and Childhood*, 5th edn, Times/Mirror/Mosley College Publishing.


**References**


**PSYC273 PSYCHOLOGY FOR NUTRITION & DIETETICS II** 5cp

- **Prerequisite**: PSYC103 General Psychology
- **Corequisite**: Nil
- **Hours**: One hour mass lecture plus tutorials
Hours range of factors which influence health at an individual, further expands the student's boundaries of understanding practice.

Pivotal to this phase of the health curriculum is a critical re-examination of a comprehensive range of models, concepts and strategies for change. Research concepts and strategies will be incorporated into each unit.

Students will examine the features and processes of organisations, identify key structural interests, and examine the relationship between structural interests and the organisation and administration of the health care system.

Measures to improve health nationally and globally are examined, as are the research methods to document their health status and the impact of policies and strategies for change. Research concepts and strategies will be incorporated into each unit.

Students will examine the features and processes of organisations, identify key structural interests, and examine the relationship between structural interests and the organisation and administration of the health care system.

This subject includes a seven week clinical placement.

Subjects to be explored include the principles of social behaviour and attitude change. Client/professional relationships are examined, as are the research methods to document their health status and the impact of policies and strategies for change. Research concepts and strategies will be incorporated into each unit.

Students will examine the theory and practice of nutrition and dietetics in the field of therapeutics.

Molecular and cellular aspects of the function of the immune system including phylogeny, reproductive and tumour immunology

- a study of food science - the properties of carbohydrates, fats and proteins related to the commercial production of foods; systematic discussion of classifications and properties of feed additives; food labelling and regulations;
- a study of food technology techniques and nutritional implications of freezing, drying, canning, heating and milling, brewing and distilling of foods and drinks;
- commodities - a study of the classification and marketing of natural and manufactured goods

Semester Offered Semester 1 (Microbiology). Semester 2 (Immunology)

Exam/Assignment Exam/Assignment in BIOL310 AND BIOL305

Texts To be advised

References see BIOL310 and BIOL305 below

BIOL305 IMMUNOLOGY

- Bacteria, fungi, viruses, mycoplasma, protozoa and algae; comparative biochemistry; nutrient cycles; pathogenicity (interactions of agricultural and human significance); industrial microbiology/biotechnology.

Texts To be advised

SOCA383 HEALTH SOCIOLOGY 3 (N & D) 5cp
Prerequisites SOCA242 Health Sociology 2
Corequisite Nil
Hours 2 hours per week

Exam/Assignment Final examination only

Content

This subject will focus on the social and political constraints which impinge upon the administration of food services in health care settings. These include medical dominance, professional prerogatives and projects, and social structures at the national and international level.

Texts To be advised

YEAR 4

HOLH401 HEALTH 4

Prerequisite HOLH301 Health 3
Corequisite NUDI407 Dietetic Research Project
Hours 4 hours per week face-to-face for one semester

Semester Offered Full Year
Section Six

Nutrition and Dietetics Course and Subject Details

Examination/Assessment: Progressive Assessment

Content

This final subject of the undergraduate Health curriculum for Nutrition and Dietetics completes the critical examination of models, concepts, and strategies introduced throughout the previous three years of the program. Emphasis is placed on the interdependence of a range of factors which influence health at a national and global level. Measures to improve the health of nations are examined; research methods and strategies are incorporated.

Text: To be advised

References: To be advised

NUDI404 APPLIED DIETETICS 10cp

Prerequisite: NUDI302 Therapeutic Dietetics, NUDI303 Foods and Food Service, FSTC373 Psychology for N&D III, SOCA383 Health Sociology 3

Corequisite: NUDI405 Nutrition Education and Dietetic Practice

Semester Offered: Full Year

Examination/Assessment: 40% written examination, 60% continuing assessment

Content

Student will examine the practical application of nutrition and dietetics knowledge in the field of therapeutics, community, and public health nutrition.

NUDI405 NUTRITION EDUCATION & DIETETICS PRACTICE 30cp

Prerequisite: NUDI302 Therapeutic Dietetics, NUDI303 Foods and Food Service, FSTC373 Psychology for N&D III, SOCA383 Health Sociology 3

Corequisite: NUDI404 Applied Dietetics, NUDI408 Food Service Systems

Semester Offered: Full Year

Examination/Assessment: Competencies are assessed by continuous assessment in the field (pass/fail). Ten percent of the total grade is based on written continuous assessment for Nutrition Education in groups.

Content

This subject allows final year students to undertake fieldwork training to attain competencies of entry level dietitians. The Nutrition Education in groups is conducted by workshop sessions and self-directed problem-based learning.

The attainment of competencies is accomplished by a 15 week fieldwork program; 11 weeks in clinical setting, 2 weeks food service; 2 weeks nutrition education in groups.

Text: To be advised.

NUDI406 NUTRITIONAL BIOCHEMISTRY 4 10cp

Prerequisite: ALSC206 Biochemistry II

Corequisite: Nil

Semester Offered: Semester One

Examination/Assessment: 50% written examination, 40% laboratory practical reports (written), 10% assignments (written).

Content

This subject allows for the extension of knowledge gained in second year biochemistry and nutrition, and third year food science. It will involve integration of knowledge on nutrition and metabolism with practical applications of nutritional biochemistry.

NUDI407 DIETETIC RESEARCH PROJECT 10cp

Prerequisite: HOLH301 Health 3

Corequisite: Nil

Semester Offered: Full Year

Examination/Assessment: 100% of the assessment will be allocated to the research report prepared in the form of a long essay.

Content

Students will undertake a supervised research project. The project will involve integration of existing knowledge of nutrition/dietetics and research design and methodology. Students will undertake self-directed guided learning with assistance from their research supervisors.

NUDI408 FOOD SERVICE SYSTEMS 10cp

Prerequisite: NUDI302 Therapeutic Dietetics, ALSC301 Food Science (N&D)

Corequisite: NUDI405 Nutrition Education and Dietetic Practice

Semester Offered: Full Year

Examination/Assessment: 50% written examination (food component) 50% continuing assessment (food service component)

Content

Students will apply their knowledge of biochemistry, food science, and nutrition to the practical areas of food and food service systems.

Section Seven

Consumer Science

Course and Subject Details

CONSUMER SCIENCE

Credit (Advanced Standing)

Graduates:

(1) A graduate of this University or of another university or of a recognized tertiary institution may be granted credit in recognition of subjects passed, provided that:

(a) each subject for which credit is sought should be substantially the same as (as determined by the relevant Head of Department) as a subject included in the list of subjects approved for the course to which the graduate is seeking admission;

Undergraduates:

(2) Undergraduates of this or of another university or of an approved tertiary institution who have not previously enrolled in the course to which admission is being sought, may be granted credit in recognition of subjects passed, provided that:

(a) the subject for which credit is sought shall be substantially the same as (as determined by the relevant Head of Department) as a subject included in the list of subjects approved for the course to which the undergraduate is seeking admission.

(3) Undergraduates who have passed subjects in a degree course may seek to complete the requirements for that degree by undertaking studies at another university or approved tertiary institution.

(a) Applications from such undergraduates who, after the completion of at least two years of full-time enrolment or five years part-time enrolment have not maintained an satisfactory rate of progress as determined by the Faculty Board under the Rules Governing Unsatisfactory Progress, shall not be approved by the Faculty Board except in exceptional circumstances and on the recommendation of the Dean.

(b) The Faculty Board may grant credit to an undergraduate previously enrolled in a degree course in this Faculty in recognition of any subject or subjects passed at another university on the following conditions:

(i) the subject or subjects passed shall be substantially the same as a subject or subjects included in the list of subjects approved for the course in which the candidate is enrolled.
BACHELOR OF APPLIED SCIENCE (CONSUMER SCIENCE)

Course and Subject Details and Descriptions

Duration: 3 years full-time/6 years part-time (Ordinary degree).
4 years full-time/8 years part-time (Honours)

Availability: On campus

Total Credit Points: 240 (320 for Honours)

Course Co-ordinator: Ms. Irene Munro

Course Description

Amendment to the course structure was approved in June 1992 and June 1993. Students commencing in 1992 or prior to that year will follow a transition program. Check these transition arrangements below. Students commencing in 1993 and beyond should follow the program identified for them.

The focus of the degree is on the study of the Food Sciences, that is Nutrition, Food Production and Preparation, Food Science, and Food Technology, from a consumer perspective.

First year subjects include Chemistry, Human Bioscience, Food and Nutrition, Management and Consumer Studies. Food Science, Food Technology and Nutrition are core second and third year subjects, and are supported by a range of electives designed for specific career paths.

Students also learn about consumer behaviour, consumer rights and law, management and marketing, consumerism and the environment. Consumer Scientists must be good communicators as they are the key link in the dissemination of information between producers and consumers. Through individual and group projects, student work develops problem solving and communication skills. Work experience placement in the third year encourages students to explore possible career options.

Depending on the combination of subjects studied, graduates will find employment in the consumer service industries, the food industry and associated organisations in:

- Market Research
- Technical Sales
- Food Services Management
- Sensory Analysis
- Consumer Education
- Public Relations
- Food Product Development
- Consultancy Services
- Advertising and Promotions
- Consumer Advocacy
- Nutrition Education
- Community Nutrition

Approved Program of Study

1. Approved Program for Students Commencing in 1991

<table>
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<tr>
<th>Subject</th>
<th>Credit Points</th>
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<tr>
<td>AF101S</td>
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<td>MNGT230</td>
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<td>AF201R</td>
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Total 240 credit points

2. Approved Program for Students Commencing in 1992

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<th>Subject</th>
<th>Credit Points</th>
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<td>MNGT227</td>
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Total 240 credit points

1. Approved Program for Students Commencing in 1993 and Beyond

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<th>Subject</th>
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<td>AF203S</td>
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<td>AF204S</td>
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Total 240 credit points

Approved Electives

- Textile Technology II
- Food Technology II
- Textile Performance
- Apparel Technology III
- Microbiology
- Health II
- Foundations of Law
- Tourism Marketing
- Consumer Behaviour
- Human Resource Management

Total 240 credit points

Approved Electives for Students Enrolled in the Bachelor of Applied Science (Consumer Science) for 1995

<table>
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<tr>
<th>Subject</th>
<th>Credit Points</th>
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Total 240 credit points

(Subject to Annual Review and Amendment)

- Human Physiology
- Biochemistry II
- Computer Technology III
- Microbiology
- Health I
- Health II
- Foundations of Law
- Tourism Marketing
- Consumer Behaviour
- Human Resource Management
NUDI05 CONSUMER STUDIES I 10cp
Pre requisite Nil
Co requisite Nil
Semester Offered Full Year
Hours 2 hours per week
Examination Assessment Assignments, case studies, seminars and examinations.
Content
This subject aims to increase the students' understanding of the way in which psychological and social factors influence consumer decision making and patterns of consumption, and the consequential social and environmental impacts of consumer behaviour. A study will also be made of the provisions and proposals for consumer protection, representation, participation and education.
Texts
No set text.
References
These are given to students with the course outlines at the beginning of the year.

NUDI07 FOOD & NUTRITION I 20cp
Pre requisite Nil
Co requisite Nil
Semester Offered Full Year
Hours 5 hours per week
Examination Progressive assessment based on laboratory work, assignments, tests, and recipe development.
Content
This subject examines basic human needs with respect to food and nutrition, the factors affecting food choice, food processing and the availability of food. Topics include food resource management; chemical reactions and physical changes that occur during food preparation, processing and storage; the nutritional role of food, factors affecting nutrition and dietary analysis; the influence of technology on food preparation, recipe development/manipulation.
Texts
References
Given out with course outline at beginning of year.

MNGT111 INTRODUCTION TO MANAGEMENT AND ORGANISATIONAL BEHAVIOUR 10cp
Prerequisite 30 credit points at 100 level
Hours 3 lecture hours per week, 1 or 2 tutorial hours per week
Content
This course examines the distinct but related disciplines of Organisational Behaviour and Management at the individual, group and organisational levels. The course provides a review of major thoughts organisational behaviour and management. It examines aspects of individual and group behaviour including: Communication & Interpersonal Skills, Motivation, Attitudes, Perceptions, Leadership, Power & Authority, Group Dynamics, Corporate Planning and Control, Decision Making, Organisational Effectiveness, Corporate Strategy and Corporate Culture, Types of Organisation Structures.
The practical relevance/applications of the theories and models, exposed in the course, are highlighted through tutorial case-studies, mini project assignments and in-class experimental exercises which emphasise linkages between the two disciplines.
Texts
To be advised.

YEAR 2
NUDI07 FOOD SCIENCE II 20cp
Prerequisite ALSI09 Food Science I, NUDI07 Food & Nutrition I
Hours Lectures - 2 hours per week. Tutorial/Laboratory - 3 hours per week
Examination Assessment Based on assignments, case studies, laboratories and examinations/tests
Content
Semester Offered Full Year

MNGT110 CONSUMER STUDIES II 10cp
Prerequisite NUDI05 Consumer Studies I
Co requisite Nil
Hours 2 hours per week
Semester Offered Full Year
Examination Assignments, case studies, seminars and examination.
Content
This subject focuses on the growth of consumerism, the relationship between producer, consumer and community interests, and on the concept of sustainable lifestyles. Product development and evaluation are studied with regard to human needs, consumer satisfaction and quality of life.
Texts
No set text.

MNGT230 MARKETING PRINCIPLES 10cp
Prerequisite MNGT111 Introduction to Management & Organisations Behaviour
Hours 2 lecture hours/week, 1 tutorial/Workshop hour/week
Content
The course introduces basic concepts/frameworks in marketing. Both short term and long term marketing planning perspectives are developed. Topics include the marketing environment, market segmentation, new produce development, the marketing mix, as well as mix interactions; strategies, implementations and controls.
Text
To be advised.

YEAR 3

NUDI304 FOOD TECHNOLOGY III 20cp
Prerequisite NUDI207 Food Science II
Hours Lectures - 2 hours per week; Laboratory - 3 hours per week
Semester Offered Full year
Examination/Assessment Progressives assessment incorporating assignments, laboratory work and reports, case studies and tests/ examinations
Content
- History of Food Technology in Australia
- Food Preservation - principles and procedures
- Food Legislation/Food Additives/ Labelling
- Quality Assurance/Food Analysis
- Food Microbiology - food safety, importance in food processing
- Novel foods - new ingredients, new technologies, dietary substitutes.

NUDI305 APPLIED NUTRITION III 20cp
Prerequisite NUDI208 Applied Nutrition II
Hours Lectures - 3 hours per week; Seminars/Laboratory - 2 hours per week
Examination/Assessment Exam/assignments/laboratory reports
Semester Offered Full year
Content
- Food habits around the world
- Nutrition Education programs
- Dietary guidelines
- Dietary modification for disease processes

NUDI306 FOOD PRODUCT DEVELOPMENT PROJECT 20cp
Prerequisite NUDI207
Corequisite Nil
Hours 5 hours per week
Semester Offered Full Year
Content
This subject places the student in the position of bringing a food product from concept to commercial stage. Students will be encouraged to liaise with the food industry to develop a food product for the retail market. The investigatory work requires desk, field and practical research relating to consumers, products and commercialisation.

ASTK334 COMPUTER TECHNOLOGY III 10cp
Prerequisites Nil
Corequisites Nil
Hours 2 hours per week
Semester Offered Full Year
Examination The final grade awarded to students is derived from four compulsory projects, one optional higher award project and one final exam. The four compulsory projects and the exam form the base course while the higher award option is an opportunity for students to specialise and be considered for possible higher grades.
Content
This subject concentrates on developing skills in using common computer applications and is structured around content that students can expect to experience in their working environment. Students work with two major microcomputer systems using desktop publishing, graphics, spreadsheets and database software. The course also includes electronic communications using local, national and international networks.
Texts
References

BIOI310 MICROBIOLOGY 10cp
Content
Bacteria, fungi, viruses, mycoplasma, protozoa and algae; comparative microbiology; nutrient cycles; pathogenicity (interactions of agricultural and human significance); industrial microbiology/biotechnology.
Text
References
Cane, R.J. & Coloma, J.S. 1986, Microbiology, West.
HOLH101 HEALTH 1 10cp
Prerequisite Nil
Hours 3 hours face-to-face per week for 26 weeks (1 hour of mass lecture and 3 hours of tutorial per week)
Semester Offered Full Year
Examination On-going assessment
Aims of Subject
This subject develops an holistic concept of health, an appreciation of the factors which determine health status, and an understanding of how those factors can be used in attempting to prevent illness and promote health.
Health 1 forms the basis of a progressive understanding of the complexity of health. It is an introductory subject for Health 2 and Health 3. The subject aims to encourage critical thinking and active learning by students. Research concepts and strategies are incorporated into topic areas.
Units within this subject are:
- Experiences of Health
- Challenges to Australia's Health
- Determinants of Health
- Health Promotion & Illness Prevention
Texts There are no specific texts

HOLH201 HEALTH 2 10cp
Prerequisite HOLH101 Health 1
Semester Offered Full Year
Develops an understanding of interactional relationships between the family, the community and health with particular reference to the Hunter Region and examines discipline statistics using relevant epidemiological data.

LAW101 FOUNDATIONS OF LAW 10cp
Offered Semester 1
Lecturer Callaghan Campus - J. Miller, Central Coast Campus - G. Brown
Prerequisite Nil for students enrolled in degree courses offered in the Faculty of Economics and Commerce.
Hours 2 lecture hours, 1 tutorial hour per week
Examination One (1) mid-semester test and one (1) end of semester examination.
Content
Topics include: The sources of law in Australia; The status of Aboriginal Law; Important provisions of the State and Federal Constitutions; The Court hierarchy and jurisdiction; Alternative methods of dispute resolution; Precedent; Statutory Interpretation; Civil Liability; Aspects of professional negligence.

MNGT224 CONSUMER BEHAVIOUR 10cp
Lecturer To be advised
Prerequisite MNGT230 Marketing Principles
Corequisite Nil
Hours 2 lecture hours per week, tutorials and workshops as required.
Semester Offered Semester 1
Content
This course aims to develop a critical understanding of the role and functions of the various personnel/human resource activities in an organisation. It covers fundamental human resource management concepts, theories and issues such as human resource forecasting; job analysis and design; recruitment & selection; performance evaluation; job evaluation; payment systems, employee termination, the training function and the impact of relevant legislation on the technological change on the human resource function.

References
Morrison, Alastair 1989, Hospitality & Travel Marketing, Delmar, Albany.

MNGT231 MARKETING RESEARCH 10cp
Prerequisite MNGT230 Marketing Principles and STAT101 Introductory Statistics
Hours 2 lecture hours per week. Tutorials and workshops as required.
Content
This course examines how to evaluate the information needs of the firm, how to best satisfy these needs and finally covers a variety of methods by which the data can be turned into useful information.

References
Morison, Alastair 1989, Hospitality & Travel Marketing, Delmar, Albany.

MNGT227 HUMAN RESOURCE MANAGEMENT 10cp
Prerequisite MNGT111 - Introduction to Management & Organisational Behaviour
Hours 2 lecture hours per week, tutorials and workshops as required.
Content
This course aims to develop a critical understanding of the role and functions of the various personnel/human resource activities in an organisation. It covers fundamental human resource management concepts, theories and issues such as human resource forecasting; job analysis and design; recruitment & selection; performance evaluation; job evaluation; payment systems, employee termination, the training function and the impact of relevant legislation on the technological change on the human resource function.

References
To be advised.
MNGT335 INTERNATIONAL MARKETING 10cp
Prerequisite MNGT230 - Marketing Principles
Hours 2 lecture hours per week. Tutorials and workshops as required

Content
This course provides an introduction to the major contribution that psychology can make to our understanding of behaviour in organisations and explores the way in which psychological knowledge is applied within organisations, with special reference to management issues.

The aim of this course is to help students who have little or no previous knowledge of this subject to achieve an understanding of the scope and basic techniques of psychology and to use them critically and with imagination for practical professional applications.

Topics include:
- Psychological Processes and Information Processing
- Principles of Ergonomics
- Intelligence, Human Abilities and their Measurement
- The Use of Personality Tests
- Objective and Subjective Assessment of People:
  - Appraisal and Selection
  - The Psychology of Training
  - The Psychology of Stress and Anxiety
  - Psychological Dimensions of Organisational Change

Text
To be advised

MNGT338 ADVERTISING AND PROMOTIONS MANAGEMENT 10cp
Prerequisite MNGT230 Marketing Principles
Hours Lectures - 2 hours per week. Tutorials and workshops as required

Content
Advertising is one of the major forms of promotion (as distinct from sales promotion). This topic will concentrate on advertising, though it will touch on personal selling, publicity and sales promotion.

Determining effective advertising is an essential part of the promotional campaign. This topic will examine setting advertising objectives, determining advertising plans, developing media strategies, developing advertising and promotional budgets and analysing evaluation procedures.

Advertising research techniques will be used. These techniques will complement the work done in marketing research, though marketing research is not a prerequisite.

References

CONSUMER SCIENCE HONOURS
The Honours year for the Bachelor of Applied Science (Consumer Science) was introduced in 1994.

The Honours program will build on the foundation of the ordinary degree by:

a) providing research experience within the food industry and/or consumer associations,

b) extending the consumer focus of the undergraduate program with the development of food and nutrition programs,

c) developing research skills in the area of consumer science as it applies to foods and nutrition.

To be eligible for the Honours program students must have achieved a credit average or better at the 300 level in the Bachelor of Applied Science (Consumer Science) Ordinary degree, including a distinction for one of the following subjects: NUDI304, NUDI305, or NUDI306.

The fourth Honours year will consist of:

NUDI410 Consumer Science Honours 410 40 cp
NUDI411 Consumer Science Honours 411 40 cp

CONSUMER SCIENCE HONOURS 40cp
Prerequisite A complete B.AppSc (Consumer Science) with a credit average or better at the 300 level, including a distinction for one of the following subjects: NUDI304, NUDI305, or NUDI306

Semester Offered Full Year
Assessment Research thesis

Content
Under supervision students will undertake an original research project. Students will draw on the skills and knowledge they are gaining in NUDI1410 to develop, conduct, analyse and report on a piece of empirical research. The thesis is a formal presentation of this research and should be limited to fifty pages of A4 size, excluding the appendices and references. Students will also present their findings in a seminar in NUDI410.
section eight

Occupational Health and Safety
Course and Subject Descriptions

Phasing out - Associate Diploma in Occupational Health and Safety
The Associate Diploma in Occupational Health and Safety is being phased out. The last intake into this course was in 1992.

Transfer from Bachelor of Occupational Health and Safety to Diploma in Occupational Health and Safety
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 to transfer candidature to the Diploma in Occupational Health and Safety. Candidates wishing to transfer shall apply in writing to the Registrar for permission to do so.

Credit (Advanced Standing)
Graduates:

(1) A graduate of this University or of another university, or graduates or diplomates of an approved tertiary institution, may be granted credit in recognition of subjects passed, provided that:

(a) each subject for which credit is sought should be substantially the same (as determined by the relevant Head of Department) as a subject included in the list of subjects approved for the course to which the candidate is seeking admission;

Undergraduates:

(2) Undergraduates of this or of another university or of an approved tertiary institution who have not previously enrolled in the course to which admission is being sought, may be granted credit in recognition of subjects passed, provided that:

(a) the subject for which credit is sought shall be substantially the same (as determined by the relevant Head of Department) as a subject included in the list of subjects approved for the course in which the candidate is enrolled;

(3) Undergraduates who have passed subjects in a degree course may seek to complete the requirements for that degree by undertaking studies at another university or approved tertiary institution.

(a) Applications from such undergraduates who, after the completion of at least two years of full-time enrolment or five years part-time enrolment have not maintained a satisfactory rate of progress as determined by the Faculty Board under the Rules Governing Unsatisfactory Progress, shall not be approved by the Faculty Board except in exceptional circumstances and on the recommendation of the Dean.

(b) The Faculty Board may grant credit to an undergraduate previously enrolled in a degree course in this Faculty in recognition of any subject or subjects passed at another university on the following conditions:

(i) the subject or subjects passed shall be substantially the same (as determined by the relevant Head of Department) as a subject included in the list of subjects approved for the course in which the candidate is enrolled;
(ii) credit shall not be granted in the respect of subjects with a combined value exceeding 80 credit points, except that in special circumstances the Dean may approve otherwise.

(c) the student has failed a subject designated as a Clinical or Fieldwork subject and/or;
(d) the student will fail to fulfil any specified time requirements of the course.

For the purpose of (c), the following subjects are classified as Clinical or Fieldwork subjects:

OH & S Practice I, OH & S Practice II, OH & S Practice III, OH & S Practice IV and OH & S Practice V.

Leave of Absence
An undergraduate wishing to re-enrol shall be deemed to be in good academic standing and may thus take Leave of Absence for one year from the course. There is no need to formally apply for this absence.

Students taking Leave must re-apply for admission by the due date. It is the responsibility of the student to do this, to regain entry to the course.

Unsatisfactory Progress
In accordance with the Rules Governing Unsatisfactory Progress, the following policy has been developed:

A student will be regarded as not having made satisfactory progress if:

(a) the student has failed a compulsory subject twice and/or;
(b) the student has failed more than 50% of his/her total program in any given academic year (calculated by total credit points attempted) and/or;
Course and Subject Details and Descriptions

**BACHELOR OF OCCUPATIONAL HEALTH AND SAFETY**

Course Coordinator: Mr Ross Coulton

**Brief Description**

This program of study is offered as a six 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.

**Objectives**

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 resulting from factors adverse to health and safety.
- The placing and maintenance of the worker in an occupational environment adapted to the workers' physical, psychological and 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 the 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 Safety**
- **Safety Science**
- **Ergonomics for Occupational Health and Safety**
- **Research Methods for OH&S**

This Strand considers the interaction between work organisation and the worker in the OH&S equation, from the worker on the floor through to management. We do this by considering psychological and sociological aspects of work, a study of OH&S law, organisational structures and industrial relations and ergonomics as it relates to OH&S. The final subjects in this Strand explore the application to OH&S of Strategic Planning, Budgeting, OH&S Promotion, Staffing, Risk Management and Loss Control and Health and Safety Economics.

**The Practice Strand**

The Practice Strand consists of the following subjects:

- **OHS141 OH&S Practice I**
- **OHS142 OH&S Practice II**
- **OHS241 OH&S Practice III**
- **OHS242 OH&S Practice IV**
- **OHS341 OH&S Practice V**

The Strand 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 health 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. Students' 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 working 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 work processes and operations.
- To raise awareness of the diversity of occupational health and safety problems which can occur in workplaces.
- To demonstrate the complex inter-relation of OHS factors in many workplace problems.

Subject Descriptions

All subjects are offered in the evenings only.

OHS111 OCCUPATIONAL HEALTH I 10cp

Assessment Mid-year assignment and end of year examination.

Semester Offered Full Year

Brief Description

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. There is a systematic coverage of topics ranging from animal cell ultrastructure and basic biochemistry, through to the major body systems.

Objectives

By the end of the subject students will be able 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 body's response to the environment and health; 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.

Content

- Ultrastructure of a typical animal cell; cell division - mitosis and meiosis; basic biochemistry - nature of fats, proteins, carbohydrates, cell respiration; distinguishing features of micro-organisms - bacteria, spirochaetes, rickettsia, viruses, fungi, protozoa; organisation of the human body - cells, tissues, organs, systems; physiological systems interacting with the environment - respiratory system, digestive system, skin, eye, ear, placenta; moving materials around the body - heart and cardiovascular system, blood, lymph and lymphatic circulation; metabolism of harmful agents - liver; elimination of waste - renal system; response to the environment - homeostasis, endocrine system, nervous system, musculoskeletal system; body defence mechanisms - superficial and cellular; human reproduction.

Recommended Text


OHS121 SAFETY SCIENCE I 10cp

Assessment Assignment and examination

Semester Offered Full Year

Brief Description

The study of some of the basic psychological and sociological aspects of the nature of work and its effects on groups and the individual. These are considered in two parts of equal weighting.
prospective users of a PC for word processing and statistical use and, for advanced users, desktop publishing; and to attend and report on visits to industrial or other locations as required.

Content

Introduction to Occupational Health and Safety

Brief historical development of the field; aims and objectives of OHS and the EEO Statement; general practices and procedures in NSW; OHS in the workplace.

Statistical procedures

Review of arithmetic and algebraic processes; diagrammatic representation of data; measures of central tendency and variability; populations and samples; distribution - normal, binomial, Poisson; normal curve and Z-scores; probability and correlation; hypothesis formulation, levels of significance and introduction to hypothesis testing.

Computing

Introduction to the computer - typical system configuration; computer architecture; microcomputer system fundamentals; hardware and software; operating systems, including graphical user environments; development and application of skills in key boarding, word processing, spread sheet usage, database understanding and usage, generating graphs and statistical graphical representation.

Workplace Visits

Recommended Text

To be advised

OHS112 OCCUPATIONAL HEALTH II 10cp

Assessment Assignments and end of semester examinations Semester Offered Full Year

Brief Description

The purpose of this subject is to provide students with an understanding of the occupationally induced injuries and diseases affecting each body system. 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 OHS problems of specific groups of workers.

Objectives

By the end of this subject students should be able to demonstrate an understanding of the common and important occupational diseases of the major body systems, their nature, relationship to work exposures and prevention.

Content

OCCUPATIONAL DISEASE - THE NATURE AND SIZE OF THE PROBLEM

History of occupational disease and the community's response

Occupational effects on specific organ systems including respiratory system, blood, skin, liver, kidney, nervous system, musculoskeletal system, eyes and ears

Occupational cancer

Occupational stress

Effects on specific work hazards or situations including shiftwork, hot working conditions, occupational infections, vibration and radiation

Recommended Text


Recommended Reading


OHS112 SAFETY SCIENCE II 10cp

Assessment Assignment and examination Semester Offered Full Year

Brief Description

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

Objectives

On completion of this subject students will be able to interpret chemical and physical data as it relates to safety in the workplace and apply this knowledge to enhance safe working procedures.

Content

Chemistry Topics

1. Organic chemicals
2. Polymers - nature, effect of pyrolysis
3. Fire
4. Analytical methods relevant to occupational health and safety
5. Chemical health and safety information - assessing, interpretation and application

Physics Topics

1. Electricity - static, DC/AC, Basic electronics
2. Principles of electrical safety
3. Radioactivity and nuclear physics
4. Ionising and non-ionising radiation
5. Electromagnetic radiation
6. Principles of radiation safety

Recommended Text


Other texts to be advised.

OHS113 OCCUPATIONAL HEALTH AND SAFETY LAW 10cp

Assessment To be advised Semester Offered Full Year

Brief Description

The purpose of this subject is to provide students with a knowledge of the law as it applies to OHS.

Objectives

By the end of this subject students should be able to demonstrate an understanding of the structure and functions of law and legal institutions and an appreciation of the historical background to OHS.

Content

Notions of liability and negligence; legal requirements; relevant legislation; remedies available for breaches; principles of workers compensation laws; rehabilitation legislation; problems of litigation.

Recommended Text

To be advised

OHS142 OCCUPATIONAL HEALTH AND SAFETY PRACTICE II 10cp

Assessment By coursework Semester Offered Full Year

Brief Description

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 enhance the student's comprehension of OHS and OH&S incidents. An individual seminar on an OHS problem is presented by each student. The workplace visits program continues.

Objectives

On completion of the subject students will be able to devise, prepare and present an individual seminar on an OHS problem using appropriate educational 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; attend and report on visits to industrial or other locations as required.

Content

Education and Training

Task analysis and teaching objectives; collection and organisation of materials; education and training strategies for different levels of the workforce; presentation techniques and resources including use of voice, gesture, body language; feedback; collection and use.

Business Communication

The communication process; thinking, reading, speaking, listening and questioning; writing business letters, memoranda, short reports, long reports and submissions; negotiation and conflict resolution; meetings, committees and conferences.

Problem Based Learning

Individual or small group work to examine occupational health and safety problems selected from a range of prepared studies covering the major occupations and hazard groups found in Australian workplaces.

Individual Seminars

Preparation of an individual seminar on an OHS problem of the student's choice.

Workplace Visits

Recommended Text

To be advised

OHS211 OCCUPATIONAL HYGIENE AND TOXICOLOGY I 10cp

Assessment By coursework and examination: to be advised Semester Offered Full Year

Brief Description

This subject develops a conceptual framework for toxicology and knowledge and skills in methods of assessment and control of the work environment.
### OHS221 SAFETY TECHNOLOGY I 10cp

**Assessment** Progressive assessment by way of assignment work

**Semester Offered** Full Year

**Brief Description**

- Safety aspects of materials choice in engineering design.
- Explain the role of the material in the type of failure which is occurring.

**Content**

- To promote an awareness of the role of materials in the safety of mechanical plant and equipment.
- To allow identification of material related hazards.
- To gain experience in identifying potential hazards in the chemical process industry.

**Recommended Text**

- Individual lecturers will direct further reading

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### OHS231 OH&S MANAGEMENT II 10cp

**Assessment** Assignment and examination

**Semester Offered** Full Year

**Brief Description**

- An examination of organisational structures, management theory and the industrial relations system in an Australian context and with an emphasis on occupational health and safety.

**Objectives**

- To introduce students to the basic elements of Industrial Relations Australia.
- To explore the relationship between Industrial Relations and Occupational Health and Safety.
- To understand and critically evaluate the current developments in Industrial Relations.

**Content**

- Organisation Behaviour
  - 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; The rehabilitation process, organisation, key personnel, service delivery models, industry programs.

**Industrial Relations**

- The employment relationship, the industrial relations context of health and safety.

**Recommended Text**


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### OHS241 OCCUPATIONAL HEALTH AND SAFETY PRACTICE III 10cp

**Assessment** To be advised

**Semester Offered** Full Year

**Brief Description**

- To recognise various schools of thought and practice relating to organisational behaviour.
- To recognise various administrative systems operating within organisations.

**Objectives**

- To identify internal and external constraints influencing organisational functioning.
- To 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.

- To introduce students to the basic elements of Industrial Relations in Australia.
- To explore the relationship between Industrial Relations and Occupational Health and Safety.
- To understand and critically evaluate the current developments in Industrial Relations.

**Content**

- Organisation Behaviour
  - 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; The rehabilitation process, organisation, key personnel, service delivery models, industry programs.

**Industrial Relations**

- The employment relationship, the industrial relations context of health and safety.

**Recommended Text**


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### OHS212 OCCUPATIONAL HEALTH AND SAFETY COURSE AND SUBJECT DESCRIPTIONS

**Brief Description**

- Accident and safety investigation and analysis techniques are introduced in this subject. Basic counselling skills are introduced to supplement the concurrent Human Factors subject. OHS212 Occupational Health and Safety is offered as an equivalent to the OHS211 Occupational Health and Safety course.

**Objectives**

- To recognise various administrative systems operating within organisations.
- To identify internal and external constraints influencing organisational functioning.
- To 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.

- To introduce students to the basic elements of Industrial Relations in Australia.
- To explore the relationship between Industrial Relations and Occupational Health and Safety.
- To understand and critically evaluate the current developments in Industrial Relations.

**Content**

- Organisation Behaviour
  - 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; The rehabilitation process, organisation, key personnel, service delivery models, industry programs.

**Industrial Relations**

- The employment relationship, the industrial relations context of health and safety.

**Recommended Text**

can be critically evaluated. The second part uses the tools to look at the functions of occupational health and safety services and other 'population' issues in occupational health.

Objectives

By the end of the subject, students will be able to apply knowledge of ergonomics to the review of routine occupational health service functions; appraise critically the theory and practice of occupational health services and the particular OHS problems of specific groups.

Content

Introduction to research; hypotheses; hypothesis testing; What is epidemiology? Health indicators; available statistics on morbidity and mortality; age standardisation; time trends. Logic of cause; risk and hazard. Overview of research strategies; bias. The survey; surveillance and monitoring. Relative and attributable risk; odds ratio. Longitudinal studies; historical and concurrent. Case-control studies. Critical appraisal process. Epidemiological investigation.

Objectives

To enable identification of hazards in manufacturing and construction with a view to the correction and elimination of those hazards.

Content

Machinery and Plant Safety

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

Construction Safety

Site hazards; Types of accidents; Statutory requirements; On-site materials handling; Safety in excavations, roofing, scaffolding, lift and cranes, mechanical plant and portable tools, demolition.

Recommended Text

Individual lecturers will direct further reading.

OHS252 ERGONOMICS FOR OHS

Assessment: To be advised

Semester Offered: Full Year

Brief Description

This subject introduces the student to the scope of ergonomics and the application of ergonomic principles to workplace design and work organisation as a component of occupational health and safety management.

Objectives

By the end of this subject, students will be able to:

- Identify various personal attributes which can influence proper safe working practices;
- Recognise the physical factors involved in production processes;
- Appreciate the mechanisms underlying the effects of the working environment on comfort, performance and well being.

Content

- Environmental comfort and its measurement, including noise, temperature, humidity and light;
- Anthropometry - the human operator as a systems component processing human variation. The measurement and application of these variations to occupational health and safety practice.
- Perception - looking at such factors as threshold perception, J.N.D., vigilance, reaction, attitudes and the promotion of attention.

- The prevention of boredom and monotony by appropriate job design.
- The physiology of work emphasising generation of fatigue with factors such as shiftwork, night vs. day, rest pauses, etc.
- The advantages of proper nutrition, work practices and rest periods to a good occupational health and safety environment.
- The pleasant working environment, including visual aesthetics, music and colour.
- Optimum use of muscles, strength, posture, work station design and tools. Poor use of these factors leading to the over-use syndrome.
- The design of the human-machine interface.
- The correct physical handing of loads.
- Optimising skills through learning and memory. Recognition of poor practices through time and motion measurement.

Recommended Text

To be advised.

OHS242 OCCUPATIONAL HEALTH AND SAFETY PRACTICE IV

Assessment: To be advised

Semester Offered: Full Year

Brief Description

This subject focuses on the identification, analysis and control of workplace 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.

Objectives

On completion of this subject, students will be able to:

- Conduct a workplace inspection for hazard identification and assessment; discuss practical approaches to risk assessment; evaluate the effectiveness of control strategies in the workplace; advise on the development of a disaster plan for a workplace.

Content

- Hazard Identification; Assessment and Evaluation
- Workplace inspections, management/worker consultation. The OHS Committee; independent audits; job safety analysis; hazard and operability studies; factors in hazardous rating.

- Hazard Control
- Engineering controls; safe systems of work and permit to work; fire, first-aid and emergency procedures; safety training.

System Safety

Principles; methods of analysis including hazard and operability studies, operations review, gross hazard analysis, classification of risk, risk ranking, failure modes and effect and fault-free analysis.

Disaster Planning

Theoretical approaches; the emergency situation and responses; emergency/disaster control agencies; workplace considerations - evaluations, treatments, access, public awareness; shutdown procedures.

Problem Based Learning

Individual or small group work to examine occupational health and safety problems selected from a range of prepared studies covering the major occupations and hazard groups found in Australian workplaces.

Workplace Visits

Recommended Text

To be advised.

OHS311 OCCUPATIONAL HYGIENE AND TOXICOLOGY II

Assessment: To be advised

Semester Offered: Full Year

Brief Description

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.

Objectives

By the end of this subject, students will be able to:

- 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; Make recommendations for appropriate control strategies for environmental pollutants; Discuss the purposes and limitations of the full range of toxicological test methods; Give an account of the toxicology of specific physiological systems; Evaluate toxicological data for the assessment of risk and the establishment of appropriate hygiene standards.
Content

Occupational Hygiene
Calibration and correct use of a range of sampling devices for environmental monitoring; Principles and methods for biological monitoring; Use of gravimetric methods, gas-liquid chromatography, spectrophotometry and atomic absorption spectroscopy for the analysis of sampled contaminants; Conducting occupational hygiene surveys; factors influencing environmental assessment, strategies for sampling contaminants, selection of appropriate instrumentation for sampling and analysis, factors to be considered in interpretation of data, preparation of a hygiene survey report.

Personal Protection Equipment
Assessment of performance, selection of criteria.

Toxicology
Toxicological testing: approaches to assessment of toxicity, suitability of animal tests for assessing human toxicity, acute toxicity tests, chronic toxicity tests, mutagenesis tests, carcinogenicity tests, multi-generation tests, behavioural toxicity tests.

Toxicology of Specific Physiological Systems
neurotoxicology, reproductive/developmental toxicology.

Risk Assessment
Evaluating toxicological data to assess risk; Establishing hygiene standards; Strategies for testing chemicals to assess risk; Regulations for testing new chemicals to assess risk; Establishing hygiene standards; Strategies for testing new chemicals to assess risk; Regulations for testing new.

Environmental Control:
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.

Electrical Safety:
Electrical dangers including static; statutory requirements; protective measures including earthing, installation, fuses, circuit breakers and residual current devices, working precautions including permit-to-work systems; intrinsically safe electrical systems.

Fire Safety:
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; fire-fighting equipment and systems.

Explosion Safety:
Explosion risk assessment; suppression of explosion risk including plant layout; Personnel training for fire and explosion safety.

Assessment
By the end of this subject, students will be able to:

- recognise commitment by top management in the occupational health and safety program;
- plan an occupational health and safety program to maximise the health and safety of employees and to suit the organisation's ongoing needs;
- promote leadership in setting up and operating occupational health and safety programs; promote rank and file involvement in the occupational health and safety program.

OHS312 SAFETY TECHNOLOGY III 10cp

Assessment To be advised
Semester Offered Full Year

Brief Description
This subject looks at various means of optimising safety in the workplace in the context of technological developments and practices in relation to fire and explosion safety, electrical safety and environmental control.

Objectives
By the end of this subject, students will be able to:

- recognise commitment by top management in the occupational health and safety program;
- plan an occupational health and safety program to maximise the health and safety of employees and to suit the organisation’s ongoing needs;
- promote leadership in setting up and operating occupational health and safety programs; promote rank and file involvement in the occupational health and safety program.

Assessment
By the end of this subject, students will have developed an understanding of the scope and problems of OHS in a global sense; the function of international organisations such as ILO; the Australian role in OHS development, overseas aid, etc. An in-depth seminar is to be developed and presented.

OHS312 RESEARCH METHODS 10cp

Assessment Assessment will be on the completed written research protocol
Semester Offered Full Year

Brief Description
This subject enhances the knowledge and skills acquired in 'Epidemiology/Biostatistics' and relates them to the conduct of real research in the workplace.

Objectives
By the end of the subject, students will be able to:

- devise a practical research protocol for a study that could be carried out in the workplace. Data will be collected in a pilot study to facilitate sample size calculations and test the operation of the protocol.

Assessment
By the end of this subject, students will be able to:

- devise a practical research protocol for a study that could be carried out in the workplace. Data will be collected in a pilot study to facilitate sample size calculations and test the operation of the protocol.

Recommended Text

OHS322  SAFETY TECHNOLOGY IV  10cp

Assessment: To be advised
Semester Offered: Full Year

Brief Description
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 features design in plant and machinery.

Objectives
By the end of this subject, students will be able to:
- identify the strategies used in controlling danger in a range of areas; relate the strategies of control to the nature of the problems and the constraints operating in those areas;
- assess the effectiveness of the control strategies; identify various trends in the macro-economy which impinge on occupational health and safety practice; identify various trends in the micro-economy which impinge on occupational health and safety practice.

Content
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 and critique of risk management.

Health and Safety Economics
- The macro-economy:
  - the effect on occupational health and safety practice of different types of economic systems; the Australian institutional framework; the concept of the circular flow and the multiplier effect; fiscal and monetary regulation of the economy; trade and balance of payments.

- The micro-economy:
  - the nature of costs including opportunity costs; the real costs of poor occupational health and safety practice; costs versus benefits and the economic impact of changes in the workforce, technology and legislation on occupational health and safety practice.

Recommended Text
To be advised

OELECTIVE  10cp

Semester Offered: Dependent on choice

Further enquiries regarding elective choice should be directed to the Course Coordinator, Mr Ross Coulton.

OHS332  OH&S MANAGEMENT IV  10cp

Assessment: To be advised
Semester Offered: Full Year

Brief Description
An examination of risk control and economic considerations in the development of occupational health and safety planning and practice.

Objectives
By the end of this subject, students will be able to:
- demonstrate high levels of competence in their knowledge and application of health and safety implications of the listed topic areas. They will also have completed the objectives of the Occupational Safety Strand and be aware of the interdisciplinary outcomes of the study of Safety Science.

Content
Radiation Safety
- 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
- 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
- Requirements for reliability; precision operation; proof against use and abuse and fall to safety; design of safety mechanisms incorporating mechanical, electrical, pneumatic and hydraulic components; ergonomic design of consoles.

Recommended Text
To be advised

GRADUATE DIPLOMA IN OCCUPATIONAL HEALTH AND SAFETY

Course and Subject Details and Descriptions

Brief Description
This program of study is offered as a two year part time course. It is designed to prepare graduates for work in the preparation and implementation of occupational health and safety programs. In most cases, students enrolled in this course will be in positions of managerial or professional responsibility, through which they are required to develop policies and strategies in response 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.

Objectives
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.

Continuing students - note the amendments to subject codes in Year 2 as set out in the Transition Table (below).

THE APPROVED PROGRAM OF STUDY

Subject  Cp

Year 1
OHS01 Occupational Health 10
OHS02 Occupational Hygiene and Toxicology 10
OHS03 Safety Technology 10
OHS04 Ergonomics 10

Year 2
OHS07 Management for OH & S 10
OHS08 Law for OH & S 10
OHS09 Research in OH & S 10
OHS10 Current Practice in OH & S 10
OHS507 MANAGEMENT FOR OH & S 10cp
Semester Offered Full Year
Assessment Assignments and examination
Brief Description
The subject consists of two parts of equal weighting which introduces students to physical and chemical issues relevant to occupational health and safety.

Objectives
On completion of this unit of study, students should be able to interpret data sheets, analyse physical situations and make recommendations that will reduce morbidity and mortality factors.

Content
Chemical: signs and labels, the variety of compounds; change - physical/chemical, heat-corrosives/solutions; chemical storage.
Physical: mechanical; heat; electrical; optics; sound; radiation.

Texts
No set text

OHS508 OCCUPATIONAL HYGIENE AND TOXICOLOGY 10cp
Semester Offered Full Year
Assessment Assignments and examination
Brief Description
The subject introduces the student to the principles and practice of occupational hygiene in hazard identification, risk assessment and control of workplace environments and provides a conceptual framework for occupational toxicology.

Objectives
By the end of the subject, students will be able to: explain the role of the occupational hygienist in identification, assessment and control of workplace hazards; compare and contrast the applicability of environmental, biological and health monitoring in workplace assessment; discuss the uses and limitations of hygiene standards in Australia; devise appropriate monitoring strategies for environmental pollutants; outline strategies for the control of environmental pollutants; explain key toxicological terms such as dose, exposure, effect, response; pharmacokinetic and pharmacodynamics; demonstrate an awareness of the factors influencing toxicity; outline methods of testing for toxicity.

Content
Introduction to the human body in the environment: introduction to occupational hygiene and toxicology; identification, assessment and control of workplace hazards; uses and limitations of hygiene standards in Australia, biological, environmental and health monitoring; principles and practice of measurement of gases, vapours and particulates, overview of the toxicity of solvents, gases, metals and other particulates; principles of toxicology and toxicological interactions; overview of toxicity testing; control strategies; principles of ventilation, personal protective equipment; hygiene surveys; chemical and noise; hygiene case studies.

Texts

References

Recommended Reading

OHS502 OCCUPATIONAL HYGIENE AND TOXICOLOGY 10cp
Semester Offered Full Year
Assessment Assignments and examination
Brief Description
The subject introduces the student to the principles and practice of occupational hygiene in hazard identification, risk assessment and control of workplace environments and provides a conceptual framework for occupational toxicology.

Objectives
By the end of the subject, students will be able to: explain the role of the occupational hygienist in identification, assessment and control of workplace hazards; compare and contrast the applicability of environmental, biological and health monitoring in workplace assessment; discuss the uses and limitations of hygiene standards in Australia; devise appropriate monitoring strategies for environmental pollutants; outline strategies for the control of environmental pollutants; explain key toxicological terms such as dose, exposure, effect, response; pharmacokinetic and pharmacodynamics; demonstrate an awareness of the factors influencing toxicity; outline methods of testing for toxicity.

Content
Introduction to the human body in the environment: introduction to occupational hygiene and toxicology; identification, assessment and control of workplace hazards; uses and limitations of hygiene standards in Australia, biological, environmental and health monitoring; principles and practice of measurement of gases, vapours and particulates, overview of the toxicity of solvents, gases, metals and other particulates; principles of toxicology and toxicological interactions; overview of toxicity testing; control strategies; principles of ventilation, personal protective equipment; hygiene surveys; chemical and noise; hygiene case studies.

Texts

References
Further texts to be advised

OHS508 LAW FOR OCCUPATIONAL HEALTH AND SAFETY 10cp
Semester Offered Full Year
Assessment To be advised
Brief Description
The purpose of this subject is to provide students with a knowledge of the law as it applies to OHS.
Objectives
By the end of this subject, students will be able to understand the legal framework of OHS.
Content
Notions of liability and negligence; legal requirements; relevant legislation; remedies available for breaches; principles of workers compensation laws; rehabilitation legislation; problems of litigation.
Texts To be advised

OHS509 RESEARCH IN OHS 10cp
Semester Offered Full Year
Assessment Assignment and examination
Brief Description
This subject is intended to provide an introduction to research methods and biostatistics and the opportunity to specialise, through the development of an individual seminar, in one of the core areas of OHS.
Objectives
At the end of this subject, students will be able to describe a range of study designs for research in OHS; develop a protocol for investigating an OHS problem; critically review relevant literature and present a seminar on an OHS issue.
Content
Review of descriptive and inferential statistics with emphasis on understanding statistics encountered in the literature. Introduction to epidemiology, an examination of population-based health indicators, risk, cause and bias, overview of research strategies, the survey. Seminar topic chosen by negotiation with supervisor.
Texts

OHS510 CURRENT PRACTICE IN OHS 10cp
Semester Offered Full Year
Assessment To be advised
Brief Description
This subject is intended to develop knowledge and skills on OHS practice through problem-based learning exercises and guest lectures.
Objectives
On completion of this subject, students should be able to draw on knowledge from the core areas of occupational health, occupational hygiene and toxicology, safety technology, ergonomics, OHS management and law and apply it to effective management of real OHS problems; explore OHS problems and their management across a range of occupations from primary to the tertiary sector of industry.
Content
Problem-based learning exercises and guest lectures covering major occupational groups and workplace hazards, e.g., construction industry, rural industry, manufacturing industry, health care industry and office environments.
Texts

MASTER OF OCCUPATIONAL HEALTH AND SAFETY
Course Coordinator Mr Ross Coulton
Course and Subject Details and Descriptions
This degree is by coursework requiring the completion of the Graduate Diploma in Occupational Health and Safety or equivalent, for admission.
This degree provides an academic extension to the current Graduate Diploma program in Occupational Health and Safety. It consists of the development of a thesis protocol and the completion of a minor thesis.
The Master of Occupational Health and Safety is classified as a coursework degree. It is administered through the OHS Course Management Committee in conjunction with the Health Sciences Education Committee of the Faculty Board. Admission requirements include the successful completion of the Graduate Diploma in Occupational Health and Safety or such other qualifications as approved for the purpose by the Health Sciences Education Committee, under delegated authority from Faculty Board. Candidates would be expected to complete the degree in not less than four years of part-time study.
APPROVED PROGRAM OF STUDY
To complete the Masters degree, candidates would be required to complete the following:
OHS601 OHS Thesis Preliminary 20cp (Year 1)
OHS602 OHS Minor Thesis 60cp (Year 2)
Objectives
The course allows students:
- to thoroughly review an appropriate area of Occupational Health and Safety
- to obtain any additional expertise required prior to embarking on their research
- to provide a Minor Thesis in a selected area of OHS for which academic supervision is available within the University
In general, the subjects would be completed in not less than one year of full-time study, or two years part-time.

Subject Descriptions
OHS601 OHS THESIS PRELIMINARY 20cp
Semester Offered Full Year
Hours 56 hours face-to-face or as required by the student
Delivery Mode Part-time evenings and/or day sessions as required
Description
OHS601 is taken in the first year of candidature for the Master’s program. It is designed to allow students to become thoroughly acquainted with the area they intend to study and develop a methodology suitable for their Thesis.
Content
Appropriate review and extension of statistics and statistical techniques in research;
Appropriate readings and investigation pertinent to the chosen Thesis area;
Additional coursework which may be necessary to complement the student’s background for the Thesis;
Seminar presentations, as required;
Development of a protocol for the thesis study.
OHS602 MINOR THESIS 60cp
Semester Offered Full Year
Hours As required
Level Postgraduate
Description
The OHS Minor Thesis will be conducted under a supervisor (or in some cases, dual supervisors). Students are required to maintain regular contact with the supervisor to ensure that appropriate assistance is available throughout the period of the Thesis preparation.
The Thesis will be submitted in approved format not less than one year after enrolment in the case of full-time students or two years for part-time students.
section nine

Bachelor of Medicine
Course and Subject Details

This section contains information on the Bachelor of Medicine degree as follows:

- The approved program of study
- Policies with respect to:
  - part-time enrolment
  - leave of absence
  - re-enrolment
- Student dress and appearance
- Undergraduate Program Objectives by Domain
- Learning methods upon which the course is based
- Course description — Years 1 to 5
- Assessment guidelines — General Summative Assessment Guidelines followed by the Assessment Guidelines for each subject of the course.
- Text and reference books used during the course
- Prizes and grants-in-aid available to students enrolled in the course.
- 1995 Academic year dates

Program of Study

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

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Subject Name</th>
<th>Credit Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>MED101</td>
<td>Medicine I</td>
<td>80</td>
</tr>
<tr>
<td>MED201</td>
<td>Medicine II</td>
<td>80</td>
</tr>
<tr>
<td>MED321</td>
<td>Medicine III</td>
<td>80</td>
</tr>
<tr>
<td>MED401</td>
<td>Medicine IV</td>
<td>80</td>
</tr>
<tr>
<td>MED521</td>
<td>Medicine V</td>
<td>80</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>Subject Name</th>
<th>Credit Points</th>
<th>Prerequisite</th>
</tr>
</thead>
<tbody>
<tr>
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<tr>
<td>MED103</td>
<td>Medicine IB</td>
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<tr>
<td>MED202</td>
<td>Medicine IIA</td>
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<tr>
<td>MED203</td>
<td>Medicine IIB</td>
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<td>MED322</td>
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<td>MED323</td>
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<td>MED402</td>
<td>Medicine IVA</td>
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<td>MED403</td>
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<td>MED522</td>
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<tr>
<td>MED523</td>
<td>Medicine VB</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 Part-Time Enrolment

1. Under the Rules governing the Bachelor of Medicine the Faculty Board, in exceptional circumstances, e.g. pregnancy, may permit a student in a particular year to enrol as a part-time student.
2. Part-time enrolment will be allowed in the following circumstances:
   - Where a student has failed a subject in the previous year and to pass it is required to repeat only part of the subject in the following year and where the student is not permitted to progress to the next subject in the course or elects not to progress to the next subject of the course without completing the previous subject. In such cases the part-time enrolment would be in the year during the partial repeat of the failed subject.
3. The Faculty Board may consider applications from individual students for permission to enrol as part-time students in the course in circumstances outside those described above but permission would only be given in cases of extreme hardship after seeking advice from the Undergraduate Medical Education Committee and the relevant Year Committee.

Policy with Respect to Leave of Absence

The Rules covering the degree of Bachelor of Medicine make provision for students enrolled in the Bachelor of Medicine course to take a period of leave of absence from the course.

A student granted leave of absence is given permission to take a year out of the course with a guarantee that he/she will be permitted to re-enrol in the course in the academic year immediately following the expiration of the period of leave with standing in all subjects passed in the course prior to the period of leave. However, as the Bachelor of Medicine course is a highly integrated full time course, taking leave of absence may disrupt a student's learning significantly.

Furthermore, large numbers of students taking leave of absence in any one year may result in large class sizes the following year. Because Faculty resources are limited, group sizes may have to be increased resulting in an unsatisfactory educational experience for the year as a whole. 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 the course 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 Monday 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 passes all subjects taken in the previous year. 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 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 take time out of the course because the Faculty cannot require a student to re- enroll against that student’s wishes. However, a student who takes time out of leave of absence will not be granted 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 deemed to have made unsatisfactory progress. The cases of such students are reviewed under the Rules 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 and Progression 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 with standing in all subjects passed in the course prior to the period of leave of absence.

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.

5. Re-enrolment after one to seven years of absence

A student who has not been enrolled in the B. Med. course for one to seven academic years, and who has not been granted leave of absence or has not enrolled in the B. Med. Sc. degree, will be permitted to re-enrol in the course in the last Medicine subject passed prior to the period of absence, subject to the availability of places in the course.

Notes:
To be read in conjunction with the above policy statements on Re-enrolment.

A student seeking re-enrolment after a period of absence which is less than eight years may apply to the Undergraduate Medical Education Committee for permission to be exempted from certain components of the curriculum and/or assessment. In this case the matter will be referred to the relevant Year Committee which will take into account all relevant information in reaching a decision about an individual student’s program of study.

It should also be noted that enrolled medical students in New South Wales are required to be registered with the New South Wales Medical Board before their presence in hospital wards has legal sanction. Requirements regarding registration should be directed to the Faculty Office.

Student Dress and Appearance

In all professional settings, the general appearance and dress of students should be appropriate. This is so that the image which students present to patients, relatives, and other hospital professionals is appropriate and worthy of the profession. Supervisors will notify students whose dress and appearance is inappropriate and such students may be refused access to the facilities for which their appearance is deemed inappropriate.

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

Undergraduate Program Objectives

The Program Objectives act as:

- a basis for curriculum development by the Faculty
- a yardstick for decisions about inclusion or exclusion of particular activities in/from the curriculum
- a statement of goals for students, and a framework within which to set their own efforts
- the covert basis for the assessment of student progress and achievement
- one of the yardsticks for evaluation of the program.
However, they do not specify the full range of curriculum development. Responsibility rests with the Faculty to develop a learning environment of acceptable quality and to choose relevant educational content. The notion that the learning environment should be happy and constructive cannot be expressed easily in objective form. In addition there are several aspirations which the Faculty holds which cannot be mandated. Thus the Faculty may wish students to maintain a range of values and attitudes such as caring, willingness to help, and dedication, but it is not possible to insist upon these values and yet concurrently adhere to a liberal educational philosophy. This is not to deny their importance, but rather to distinguish them from performance which is the concern of behavioural objectives. In this sense the UPOs identify the behaviour expected of students in the way they carry out the performance of their intellectual and clinical responsibilities (eg 1.1).

The Objectives

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

- engage in productive professional relationships and maintain those relationships to acquire, evaluate and communicate information;
- apply the processes of critical reasoning to medical care;
- apply his or her understanding of illness to its prevention, identification and management and to the promotion and maintenance of health;
- apply his or her understanding of the practice of medicine in a community or population context;
- take responsibility for evaluating his or her own performance and implementing his or her own education.

These objectives assume a dynamic environment in which medicine will be practiced. 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 confidentiality, (iii) sensitivity to the needs of others and concern for other persons;

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

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

1.4 applying in an observable way both an understanding of the importance of the doctor/patient relationship and its place 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 aloofness 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 diversity of patients, health 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 coherently 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 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 mechanisms 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 programme 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 maintenance of health, as well as the prevention of illness at both individual and population levels, and skill in educating patients, their families and other health professionals for this purpose;

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

DOMAIN IV — POPULATION MEDICINE

4. By the time of graduation students will demonstrate ability to apply their understanding of the practice of medicine in both community settings and in hospital settings by:

4.1 applying an awareness of the importance of the practice of medicine in both community settings and in hospital settings;
Section Nine Bachelor of Medicine Course and Subject Descriptions

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

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 chronically 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 manipulations of the physical environment;

4.9 applying an awareness of the role of the physician in health/welfare professional teams, and working cooperatively 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.

Learning Methods

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

In the first two years of the course, the size and composition of the tutorial groups is rearranged at the end of each year. In the final three years of the course, the size and composition of groups varies more frequently according to the various clinical rotations and hospital postings.

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 I

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

MED101 MEDICINE I 80cp

Week one 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.

Block 2:

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

Block 3:

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

DOMAIN II - CRITICAL REASONING

Topics related to the topics of Domain III are chosen for study with tutors experienced in the techniques of critical reasoning. The main activity is critical appraisal of publications and the quantitative and scientific validity of the evidence they present.

DOMAIN III — IDENTIFICATION, PREVENTION AND MANAGEMENT OF ILLNESS

Blocks 1 & 2:

Through the study of clinical problems, students learn the mechanisms of development under stress and the mechanisms of abnormality and damage. Eight stressors are considered: genetic, nutritional, psychological, traumatic, infective, toxic, vascular and neoplastic. In subsequent Blocks, these mechanisms are further explored in relation to each body system and to clinical mechanisms.

Block 3:

The kidneys, urinary tract and gastrointestinal system. The study through clinical problems of normal structure and function and control mechanisms, and of the mechanisms and manifestations of disorders resulting from selected stresses and disease mechanisms.

DOMAIN IV — POPULATION MEDICINE

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

DOMAIN V — SELF-DIRECTED LEARNING

There is a three-part program:

1. Learning topics are identified from a clinical problem considered by the students as part of Domain I assessment. Each student selects a topic as their "own learning task" for individual study and research based on literature and consultation.

2. A year-long program in medical informatics provides an introduction to the basic skills and concepts of computer applications in medicine.

3. A "mini-elective". This elective is based upon a field of interest identified by the student during the year. A program is arranged in consultation with a Faculty supervisor and a report is written.

Timetable Commitments

Typical weekly timetables for each block are shown below.

Detailed timetables are distributed to students at the beginning of each Block.

Block 1 — Homeostasis Under Stress

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<tr>
<th>Subject</th>
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<tr>
<td>Tutorials</td>
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In addition, this Block includes infection control sessions, critical reasoning tutorials, paediatric and adult ward
experience, elective anatomy sessions, community visits, computer training sessions with ambulance officers.

Block 2 — Homeostasis Under Stress

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

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

Block 4 — Organ Systems: Cardiovascular and Respiratory

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: neurological 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.

Additionally, students may select a topic of particular interest from Year 1 or anticipate an area of study in Year 2. This task is carried out under academic supervision and a written report is required.

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 efficacy of health care systems, and modes of intervention in acute and chronic disease.

DOMAIN V — SELF-DIRECTED LEARNING

In addition, there is a segment on human sexuality together with genito-urinary medicine.

Block 8: (Country block)

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

DOMAIN IV — POPULATION MEDICINE

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

DOMAIN V — SELF-DIRECTED LEARNING

An extended own learning task is 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 context 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 is begun. 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**

<table>
<thead>
<tr>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
</tr>
</thead>
<tbody>
<tr>
<td>Case Study/ CPE</td>
<td>Professional Skills</td>
<td>Professional Skills</td>
<td>Population Medicine</td>
<td>PREPC</td>
</tr>
<tr>
<td>pm</td>
<td>Professional Skills</td>
<td>Case Study/ CPE</td>
<td>Professional Skills</td>
<td>Fixed Resource Sessions</td>
</tr>
</tbody>
</table>

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

**Block 8 - Newcastle Block**

<table>
<thead>
<tr>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
</tr>
</thead>
<tbody>
<tr>
<td>pm</td>
<td>Professional Skills</td>
<td>Professional Skills</td>
<td>Sexuality Counseling Tutorials</td>
<td>CPC and Review</td>
</tr>
</tbody>
</table>

Students in this Block have professional skills attachments with medical registrars and the dermatology clinic as well as critical reasoning tutorials.

**Block 9 - Country Block**

Country hospital attachments include Tamworth, Taree, Dubbo, Orange, Gosford, Maitland and Lismore. Following the second rotation of Blocks 8 and 9 there is a one week period in Newcastle for consolidation and review.

**Block 10 - Elective**

This 8 week Block concludes Year 3.

**YEAR 4**

YEAR 4 consists of the subject MEDICINE IV. The year is divided into three clinical attachments of twelve weeks, rotating through major clinical 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 counselling is provided with special emphasis on problems of childhood, manipulation of diet and avoidance of alcoholism. These activities have links to population medicine.

**DOMAIN II — CRITICAL REASONING**

Previously developed skills in critical reasoning are applied to the care of patients 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:

**Attachment 1:** Paediatrics and Reproductive Medicine

**Attachment 2:** Surgery I (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 Disease, Renal, Neurology, 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.

**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; in 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 Anesthesia/ Intensive Care)

**Attachment 4:** General Practice (2 weeks)

**DOMAIN IV — POPULATION MEDICINE**

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

1. Assessment is by Domain. All Domains rank equally in regard to student progress.

2. Summative assessment is subject to the same general conditions of examinations and unsatisfactory progress as any other examination in the University. Students should refer to the University's By-laws and Regulations for details.

3. Attendance at prescribed First and Final Assessments is compulsory:
   (i) Failure to attend first assessment will result in a mark of Not Satisfactory, unless there are extenuating circumstances. Students who do not attend first assessment will be permitted one final assessment in the final assessment period.
   (ii) Failure to attend final assessment will result in a final result of Not Satisfactory for that assessment, unless there are extenuating circumstances; i.e. no further assessment will be permitted.
   (iii) Misreading of the timetable will not be accepted under any circumstances as an excuse for failure to attend an assessment.
   (iv) For short cases and long cases only, students who should refer to the relevant assessment notices for details.

4. Submission of Certifications and Reports by a Stipulated Date is Compulsory:
   (i) Failure to submit a certification or a report by the stipulated date will result in a mark of Not Satisfactory in that 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 certification or report by the stipulated date for final assessment will result in a final result of Not Satisfactory for that instrument; i.e. no further assessment will be permitted.

Notes: Misreading of the stipulated date will not be accepted under any circumstances as an excuse for failure to submit a certification or 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) All Hour Task, Year 2: 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.
   (iii) Modified Essay Questions (MEQs) - a series of short, integrated and sequential questions relating to a particular patient problem.
   (iv) Clinical Supervisors’ Report Forms, Years 4 and 5.
   (v) For Medicine 1 Group Task on the first assessment, any assessment not to be taken into consideration in the final assessment.
   (vi) For Medicine I Group Task only, student groups will be permitted a second assessment in that instrument. Student groups found Not Satisfactory at second assessment will be permitted one final assessment in that instrument. Attendance at second assessment for these group assessments is compulsory.

5. Formal written assessments will be conducted on a closed book basis unless otherwise specified, i.e. students may not take into the assessment room any bag, paper, book, written material, device or aid other than any that may be specified for the particular assessment.

6. Rating forms to be used in assessments will be made available to students at appropriate times prior to the assessments. It is the student's responsibility to be familiar with them.

7. A specific timetable for each assessment will be posted on assessment noticeboards at least one week before the scheduled assessment period. Students must notify the Faculty in writing prior to the scheduled assessment period. An alternative second assessment date will not be available.

8. For Medicine I Group Task only, student groups will be permitted a second assessment in the relevant instrument. Student groups found Not Satisfactory at second assessment will be permitted one final assessment in that instrument. Attendance at second assessment for these group assessments is compulsory.

9. Locations of assessment notice boards are:
   - Level 6, Medical Sciences Building and the Student Common Room, John Hunter Hospital.

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

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 consideration 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.

In normal circumstances, a student may not apply to have a result reviewed after the release of first assessment results.

For the first week following the release of any results, only students who have been deemed Not Satisfactory will be permitted access to their scripts. Suppressed 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.

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. (The certification sheet is at the end of the Block 3 Professional Skills handbook.)

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 (e-oral) assessment.

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

DOMAIN II — CRITICAL REASONING

Each student will undertake a written assessment of up to two hours in which they will 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) Multiple Choice Questions (MCQs) - a series of short questions and answers from which the correct answer(s) is/are selected.
(v) Objective Structured Clinical Assessments (OSCA) - a series of separate 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 up to 1 hour 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 end of the first assessment period. Students who are Not Satisfactory in the first Long Case will be required to undertake a second Long Case. Students who are Not Satisfactory in the second Long Case will be required to undertake a final Long Case. Second and final Long Cases will be in the same format as the first assessment.

**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**
   Students 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**
   Students 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.

**DOMAINT 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, 1995**

<table>
<thead>
<tr>
<th>Domain</th>
<th>Instrument</th>
<th>Due Date</th>
<th>Assessment Period</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>Certification</td>
<td>30/10/95</td>
<td>6/11/95 - 17/11/95</td>
</tr>
<tr>
<td>II</td>
<td>Long Case</td>
<td>6/11/95 - 17/11/95</td>
<td>16/10/95 - 20/10/95</td>
</tr>
<tr>
<td>III</td>
<td>Group Task</td>
<td>6/11/95 - 17/11/95</td>
<td>19/1/96 - 21/11/96</td>
</tr>
<tr>
<td>IV</td>
<td>Critical Reasoning</td>
<td>6/11/95 - 17/11/95</td>
<td>16/10/95 - 20/10/95</td>
</tr>
<tr>
<td>V</td>
<td>Written Papers</td>
<td>6/11/95 - 17/11/95</td>
<td>4/8/95</td>
</tr>
<tr>
<td>Viva</td>
<td>Group Presentation</td>
<td>6/11/95 - 17/11/95</td>
<td>19/7/95 or 26/7/95</td>
</tr>
<tr>
<td>V</td>
<td>Medical Informatics</td>
<td>6/11/95 - 17/11/95</td>
<td>16/10/95 - 20/10/95</td>
</tr>
</tbody>
</table>

**Domain Task**

Group Task second assessments will be held in the period 6/11/95 - 17/11/95. Long Case second assessments will be held in the period 4/12/95 - 8/12/95.

**Final Assessment**

All final assessments will be held in the period 2/1/96 - 9/1/96 except for the Population Medicine Group Presentation which must be completed within one month of the first presentation.

Certification and the Population Medicine Group Report must be submitted by 2/1/96.

**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 each Block.

**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 summarizing the work they have done during the year. This will be followed by 5 minutes of discussion and question time.
Section Nine
Bachelor of Medicine Course and Subject Descriptions

2. Group Report
Each group will also be required to submit a report on their work during the year. This 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 contract) that they have undertaken the task satisfactorily must be submitted to the Faculty by the specified date.

3. Elective
Each student must submit a contract for an elective covering two 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 a report by the due date of the final assessment period will be deemed Not Satisfactory and will be required to re-submit a report by the final assessment date.

Students whose certification is submitted by the due date but is deemed Not Satisfactory will be required to repeat the process of certification so that it is Satisfactory by the final assessment period. The form of remediation and assessment will be determined by the Year Committee.

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 assessment 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, for one final assessment.

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

DOMAIN II

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

DOMAIN III

Students considered Not Satisfactory in the Domain III assessments will be required to undertake one final assessment of up to 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.

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

DOMAIN V

1. 48 Hour Task
Students who do not submit their report by the stipulated date and time will be deemed to be Not Satisfactory at first assessment, unless there are extenuating circumstances. Students will be required to undertake one new task as final assessment in the same form as the first assessment, to be conducted in the second or final assessment period.

Students wishing to undertake final assessment for the 48 hour task in the second assessment period must notify the Year Co-ordinator in writing at least one week prior to the commencement of the second assessment period.

Students who submit a Not Satisfactory report will be required to undertake one new task as final assessment, in the same format as the first assessment. No further assessment will be permitted.

2. 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 set date will be deemed Not Satisfactory at first assessment, unless there are extenuating circumstances. Students will be required to undertake final assessment to be completed by the date set by the Domain V Chair.

Students whose report is submitted by the due date but is deemed 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.

3. 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 only submit a contract and/or report which is Not Satisfactory will be asked to re-submit a new contract. 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 II KEY DATES, 1995

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>1/5/95</td>
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<tr>
<td></td>
<td>Block 4</td>
<td>7/5/95</td>
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<td></td>
<td>Block 5</td>
<td>17/5/95</td>
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<tr>
<td></td>
<td>Block 6</td>
<td>31/7/95</td>
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<tr>
<td></td>
<td>G.P. Attachment</td>
<td>6/11/95 - 17/11/95</td>
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<tr>
<td></td>
<td>Long Case</td>
<td>6/11/95 - 17/11/95</td>
</tr>
<tr>
<td></td>
<td>Task Book</td>
<td>31/7/95</td>
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<tr>
<td></td>
<td>(General Practice)</td>
<td>6/11/95 - 17/11/95</td>
</tr>
<tr>
<td>II</td>
<td>Written Assessment</td>
<td>6/11/95 - 17/11/95</td>
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<tr>
<td>III</td>
<td>Written Assessment</td>
<td>6/11/95 - 17/11/95</td>
</tr>
<tr>
<td>IV</td>
<td>Group Presentation</td>
<td>16/9/95</td>
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<td>Group Report</td>
<td>16/10/95</td>
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<td></td>
<td>Written Assessment</td>
<td>6/11/95 - 17/11/95</td>
</tr>
<tr>
<td>V</td>
<td>48 Hour Task</td>
<td>6/11/95 - 17/11/95</td>
</tr>
</tbody>
</table>

Second Assessment (Long Case only)

Long Case second assessments will be held in the period 6/12/95 - 8/12/95.

Final Assessment

Final assessments will be held in the period 2/1/96 - 7/1/96, except for:

(i) Extended Own Learning Task: Date to be set by the Chair, Domain V.
(ii) Population Medicine Group Presentation: to be completed within one month of the first presentation.
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 videocassettes during their second Newcastle Block.

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.

**DOMAINT II — CRITICAL REASONING**

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

**DOMAINT 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 (OSCs)

2. **Trauma Report**

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

3. **Chronic Disability Case**

   Students will be required to study 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 the case to a meeting including the General Practitioner in charge of the case and the other 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. Subsequently, the student must compose a written report of up to 1,000 words summarising their assessment of the case and incorporating any feedback or discussion that emerged from the oral presentation. This report must be signed by the GP in charge of the case to certify the validity and accuracy of the clinical and social information in the report. The certified report must be submitted to the Faculty assessors on the day of the short case assessments.

**DOMAINT IV — POPULATION MEDICINE**

   Each student will undertake a written paper of 90 minutes duration.

**DOMAINT 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.

**DOMAINT I**

1. **Certification**

   Students who do not submit the required certification by the due date will be required to submit the relevant certification by the final assessment period. The form of remediation and assessment will be determined by the Year Committee.

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 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 of 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 be required to submit the relevant certification by the final assessment period. Students whose certification is submitted by the due date but is deemed to be Not Satisfactory will be required to submit satisfactory certification by the final assessment period.
be required to submit satisfactory certification by the final assessment period.

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 III

1. Written Assessments

Students found Not Satisfactory in the Domain III written assessments will be required to undertake one final assessment of up to 18 hours, in the same format as first assessment.

2. Trauma Report

Students who do not submit the Trauma Report by the due date should refer to the General Summative Assessment Guidelines. A report based on a new patient must be submitted by the final assessment date. Students who submit the Trauma Report by the due date but are deemed Not Satisfactory in this assessment will be required to complete the task one final time in the same format as the first assessment and based on a new patient.

3. Chronic Disability Case

Students who do not present their case during the country term will be required to make their presentation at a time to be specified by the Year 3 Co-ordinator. This presentation will be in the same format as the first assessment (except that the presentation will be to a Faculty assessor(s), without an audience) but with a new patient. Students whose initial case certification is Not Satisfactory must complete the requirements for Satisfactory certification prior to submission of the written case report. Students found Not Satisfactory in the written report will be required to submit an amended report by the date specified for final assessment.

DOMAIN IV

Students found Not Satisfactory will be required to undertake final assessment 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 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, 1995

First Assessment

<table>
<thead>
<tr>
<th>Domain</th>
<th>Instrument</th>
<th>Due Date/Assessment Period</th>
</tr>
</thead>
<tbody>
<tr>
<td>Certification</td>
<td>14/7/95 or 8/9/95*</td>
<td></td>
</tr>
<tr>
<td>Specialities Procedures, Observations and Short Cases</td>
<td>14/7/95 or 8/9/95*</td>
<td></td>
</tr>
<tr>
<td>Country Term Logbook</td>
<td>14/7/95 or 8/9/95*</td>
<td></td>
</tr>
<tr>
<td>Discharge Summary, Referral letter</td>
<td>14/7/95 or 8/9/95*</td>
<td></td>
</tr>
<tr>
<td>Short Cases During Country Block</td>
<td>18/9/95 - 6/10/95</td>
<td></td>
</tr>
<tr>
<td>Long Case Certification</td>
<td>2/6/95 or 11/8/95*</td>
<td></td>
</tr>
<tr>
<td>Specific Counselling Interview</td>
<td>8/6/95 or 17/8/95*</td>
<td></td>
</tr>
</tbody>
</table>

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 by the deadline 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 interactional skills in Year 4. The content of these exercises will be available for assessment when these students are assessed in Doctor/Patient Interactions in Year 5.

2. Long Cases

Each student will undertake four long cases during the year. These cases will relate to the student's clinical attachments (Medicine, Surgery, Paediatrics and Reproductive Medicine). The first long case of the year will be published 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:

(i) Certification

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

(ii) 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
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) Short Essay Questions
(iv) Multiple Choice Questions (MCQs)
(v) Objective Structured Clinical Assessments (OSCA)
The summative assessment topics will be a reflection of topics covered throughout the year and include hands on such as the enabling objectives. They will not necessarily be identical, however, with formative assessment items or enabling objectives.

DOMAIN IV — POPULATION MEDICINE
Assessment will be by a twenty minute viva.

DOMAIN V — SELF-DIRECTED LEARNING
Babv in the Family Report
Students are required to submit a "Babv 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.

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.)
Medicine, Surgery, Paediatrics and Reproductive Medicine
Students who do not submit the required certifications by the due dates will be required to submit the relevant certifications by the final assessment period. The form of remediation and assessment will be determined by the Year Committee.

1.2 Doctor/Patient Interactions
Students are required to carry out the prescribed video tape exercises and attend tutorials. Tutors will certify to this effect on the appropriate form, found with the Clinical Supervisors Report forms. Students who do not submit this certification by the due date will be required to complete video tapes and discuss their content to the satisfaction of the Doctor's Chair (or nominee). This must be done before the final assessment period.

2. Long Cases
Students must be Satisfactory in the observed component of one long case. Once a student has been rated Satisfactory in this component he/she will not be rated summatively for history taking and physical examination in subsequent long cases. If a student is Not Satisfactory in the observed component at first attempt, a long case at the end of the next student term will be observed. This will be regarded as a Second Assessment. Any student who is still Not Satisfactory will have a final summative assessment at the end of the final term of the year. If a student is Not Satisfactory on all three summatively observed components no further assessments will be permitted.

A case write-up will be required as part of the first long case of the year. The format should be similar to a standard hospital admission and include history, physical examination, diagnosis, differential diagnosis and plan of investigation. A finding of the 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, differential diagnosis, case presentation, case discussion ± case write-up, if required. In the case of the observed long case the components are case presentation, case discussion ± 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 Supervisor's Reports into account, be required to undertake second, and if necessary, final assessment by long case in the discipline concerned. If the 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 at 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 (6).

(i) 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.

(ii) Case Summaries
Students who submit a case summary on time but are assessed as Not Satisfactory will be required to re-assess 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
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.

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
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 resubmit the amended Report by the date specified by the Year Co-ordinator.

HONOURS
All instruments will be considered for contribution to Honours.

MEDICINE IV — KEY DATES 1995
First Assessment
Domain Instrument Due Date/Assessment Period
I Certification 5 pm on the Monday following the end of each attachment
(i) C.S.R. 23/10/95
(ii) Doctor/Patient Interactions 24/4/95 - 28/4/95
(iii) Log Book 27/11/95 - 5/12/95
(iv) Written Assessments 13/11/95
(v) Viva 27/11/95 - 5/12/95
(vi) Baby in the Family Report Due 10 days prior to the end of the attachment

Second Assessment (Long Case only)
Long Case second assessment occurs during the year, as detailed in the guidelines. If a student is to undertake an additional Long Case as second assessment this will be conducted in the period 11/12/95 - 15/12/95.
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>Certifications (C.S.R.)</td>
<td>2/1/96</td>
</tr>
<tr>
<td></td>
<td>Doctor/Patient Interactions</td>
<td>2/1/96</td>
</tr>
<tr>
<td></td>
<td>Long Cases Psychiatry</td>
<td>2/1/96 - 9/1/96</td>
</tr>
<tr>
<td>II</td>
<td>Written assessment</td>
<td>2/1/96 - 9/1/96</td>
</tr>
<tr>
<td>III</td>
<td>Written assessment</td>
<td>2/1/96 - 9/1/96</td>
</tr>
<tr>
<td>IV</td>
<td>Viva</td>
<td>2/1/96 - 9/1/96</td>
</tr>
<tr>
<td>V</td>
<td>Baby in the Family Report</td>
<td>During the year, as set by the Year 4 Co-ordinator</td>
</tr>
</tbody>
</table>

MEDICINE V

DOMAIN I - PROFESSIONAL SKILLS

1. Certification

1.1 Clinical Supervisors' Reports (C.S.R.)

Students are required to submit clinical supervisors' reports on the forms provided for EACH clinical attachment. These forms must be submitted to the discipliners concerned by the due dates 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 Interpersonal 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 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

1. Written Assessment

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

(i) Modified Essay Questions (MEQs)
(ii) Short Answer Questions (SAQs)
(iii) Objective Structured Clinical Assessments (OSCA)
(iv) Short Essays

2. Health Law and Ethics Case Report

Students are required to submit a written report to the Health Law and Ethics Co-ordinator by the due date.

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 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 fall 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.

DOMA IN I

1. Certification

1.1 Clinical Supervisors' Reports (C.S.R.)

Students who do not submit the required certifications by the due dates will be required to submit the relevant certifications by the final assessment period.

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 will be required to remediate in a specific discipline in which they are Not Satisfactory 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 be required to submit the certification by the final assessment period.

Students who submit Not Satisfactory certifications will be required to complete further video tapes and discuss their content to the satisfaction of the Domain Chair (or nominee).

DOMA IN II

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.

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

DOMA IN III

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

DOMA IN IV

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

DOMA IN V

Students who do not submit an elective contract and/or report by the stipulated date 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 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 1995

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>Certifications (C.S.R.)</td>
<td>5 pm on the Monday following the end of each attachment</td>
</tr>
<tr>
<td></td>
<td>General Practice</td>
<td>Within 2 weeks of completion Supervisor's Report</td>
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<tr>
<td></td>
<td>(iii) Doctor/Patient Interactions</td>
<td>28/4/95</td>
</tr>
<tr>
<td></td>
<td>Long Case</td>
<td>4/9/95 - 15/9/95</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>8/5/95 - 12/5/95</td>
</tr>
<tr>
<td>II</td>
<td>Written Assessment</td>
<td>8/5/95 - 12/5/95</td>
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<tr>
<td>III</td>
<td>Written Assessment</td>
<td>4/9/95 - 15/9/95</td>
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<tr>
<td></td>
<td>HLE Case Report</td>
<td>As set by the HLE Co-ordinator</td>
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<tr>
<td>IV</td>
<td>Written Assessment</td>
<td>8/5/95 - 12/5/95</td>
</tr>
<tr>
<td>V</td>
<td>Elective: Contract Reports</td>
<td>28/8/95</td>
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<td></td>
<td>10/11/95</td>
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</tbody>
</table>
Second Assessment (Long Cases only)
Long Case second assessment and Psychiatry Long Case second assessment will be held in the period 18/9/95 - 22/9/95.

Final Assessment
All Final Assessments will be held in the period 20/11/95 - 24/11/95, except for:
Certification: C.S.R.s and Doctor/Patient Interactions: to be submitted by 20/11/95.
Elective: Contract due 11/9/95; reports due 17/11/95.

AWARD OF HONOURS, 1995/1996
(i.e. for students commencing Year 4 in 1995)
A. All Domains are treated equally for the calculation of Honours with Domain scores of 1, 2 and 3 reflecting pass, good and excellent performance in each.
B. The level at which Honours will be awarded will be decided by the Year 5 Committee at the end of the year with the following guidelines:
(i) A student will be ineligible if awarded an NS at first assessment in Year 4 or 5 in any instrument, with the exception of the following instruments which do not have model answers, in which case more than one NS per instrument would lead to ineligibility. An initial NS on the following instruments would not mean ineligibility for Honours:
- one Year 4 Long Case*
- Year 4 Baby in the Family Report
- Year 4 Population Medicine Viva
- Year 4 Psychiatry Log Book
- Year 4 Clinical Riddles Case Report
- Year 5 Clinical Ethics Case Report
- Year 5 Interpersonal Skills
- Year 5 Psychiatry Long Case
- Year 5 Long Case*
- Year 5 Elective*
* two or more NS results in Long Case assessments over Years 4 and 5 would mean ineligibility for Honours.
For any student found Not Satisfactory in the above instruments, the assessment score from the first assessment will be used in determining Honours and not that of a subsequent assessment.
(ii) Eligibility for Honours will require a minimum score of 10 with not more than one score of 3 over the five Domains.
C. Domain instruments contributing to Honours:
<table>
<thead>
<tr>
<th>Domain</th>
<th>Long Cases (Year 4)</th>
<th>25%</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Long Case (Year 5)</td>
<td>25%</td>
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<tr>
<td></td>
<td>Interpersonal Skills (Year 5)</td>
<td>25%</td>
</tr>
<tr>
<td></td>
<td>Psychiatry Long Case (Year 5)</td>
<td>25%</td>
</tr>
<tr>
<td>Domain II</td>
<td>Written Paper (Year 4)</td>
<td>50%</td>
</tr>
<tr>
<td></td>
<td>Written Paper (Year 5)</td>
<td>50%</td>
</tr>
</tbody>
</table>
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 appear under the most appropriate discipline and have been listed in two categories: standard and reference texts. In some cases, introductory texts are also listed.

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 purchasing introductory texts only if you have difficulty with the subject or find you have inadequate access to the introductory texts in 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.

First Year Students

In the first year of the course, a collection of approximately 40 books is provided on loan to each tutorial group. DO NOT purchase any books before the course commences.

Texts and Reference Books

ANATOMY

Standard Texts


Reference Texts


BEHAVIOURAL SCIENCE IN RELATION TO MEDICINE

Standard Texts


CARDIOLOGY


CLINICAL PHARMACOLOGY

Standard Text


Reference Texts


Gastroenterology

Standard Texts


Reference Texts


DERMATOLOGY


Ear, Nose and Throat


ENDOCRINOLOGY


ENVIRONMENTAL AND OCCUPATIONAL HEALTH

Standard Text


GERIATRIC MEDICINE

Standard Texts


GASTROENTEROLOGY

Standard Texts


Reference Texts


GENERAL PRACTICE

Standard Texts


GERIATRIC MEDICINE

Standard Texts


Reference Texts

|-----------------|----------------------------------------------------------------------|--------------------------------------------------|


**Pathy, M.S.J. and Finnancce, P. (eds.) 1989, Geriatric medicine: problems and practice, Springer.**

**Thompson, M.K. 1984, The Care of the elderly in general practice, Churchill Livingstone.**

**HAEMATOLOGY**

**Standard Text**


**Reference Texts**


**HEALTH, LAW AND ETHICS**

**Standard Texts**


**Reference Texts**


**HUMAN PHYSIOLOGY**

**Standard Texts**


**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.

**Microbiology/Infectious Diseases**

**Standard Texts**


**Neurology**

Section Nine
Bachelor of Medicine Course and Subject Descriptions

Woodward, A.A. et al. (ed.) 1992, Jones' Clinical paediatric surgery: diagnosis and management, by the staff of the Royal Children's Hospital, Melbourne, 4th edn, Blackwell Scientific.

PROFESSIONAL SKILLS

Standard Texts
Munro, J. et al. (ed.) 1990, Macleod's Clinical examination, 8th edn, Churchill Livingstone.

Reference Texts

PSYCHIATRY

Standard Texts

Reference Texts

RADIOLOGY

Standard Texts

RENAL MEDICINE

Standard Texts
*Available from: Dr. L. Luikin, Wickham House, Wickham Terrace, Brisbane, Qld, 4000.

Reference Texts

REPRODUCTIVE MEDICINE

Standard Texts

AND


Reference Texts

AND


ARD


OR


OR


RESPIRATORY MEDICINE

Standard Texts

RHEUMATOLOGY


SURGICAL SCIENCE

Standard Texts
Campbell, B. and Cooper, M. 1994, Surgical signs, Churchill Livingstone.
Devitt, P.G. and Williams, B.S. 1990, Multiple choice questions in surgery: questions for surgical examinations with answers and explanations, Prentice-Hall.

Reference Texts

TOBACCO, ALCOHOL AND OTHER DRUGS

Standard Texts
### Bachelor of Medicine Prizes

There are twelve Bachelor of Medicine prizes. Details follow.

<table>
<thead>
<tr>
<th>Prize</th>
<th>Value $</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australian Medical Association Prize</td>
<td>300</td>
</tr>
<tr>
<td>CIBA GEIGY Prize</td>
<td>CIBA Collection of Medical Illustrations</td>
</tr>
<tr>
<td>Hunter Medical Association Prize</td>
<td>Books donated to Anschutz Library</td>
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</tbody>
</table>

**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>
</tr>
</thead>
<tbody>
<tr>
<td>The Linda and John James Gentle Mother and Son Prize</td>
<td>Approx 350</td>
</tr>
<tr>
<td>The Steele Douglas Prize in Pathology</td>
<td>Approx 350</td>
</tr>
<tr>
<td>Margaret Auchmuty Prize for Women Medical Students</td>
<td>Approx 150</td>
</tr>
<tr>
<td>Andrew Lawson Memorial Prize in Oncology</td>
<td>Approx 500</td>
</tr>
<tr>
<td>NSW Department of Health Rural Health Bursary</td>
<td>1000</td>
</tr>
<tr>
<td>Carl Mason Memorial Prize</td>
<td>350</td>
</tr>
</tbody>
</table>

### 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) complete 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.

(b) complete 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.

(c) complete the best protocol for an elective project in Aboriginal health in either Block 10 of Medicine III or the elective attachment of Medicine V, if of sufficient merit.

(d) complete the best protocol for an elective project in Oncology in either Block 10 of Medicine III or the elective attachment of Medicine V, if of sufficient merit.

(e) complete 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.

(f) complete 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.

### Qualifications

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.

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**

<table>
<thead>
<tr>
<th>Prize</th>
<th>Value $</th>
<th>Qualifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australasian College of Occupational Medicine Prize in Occupational Health</td>
<td>200</td>
<td>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.</td>
</tr>
<tr>
<td>NSW Department of Health Rural Health Essay Prize</td>
<td>500</td>
<td>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.</td>
</tr>
<tr>
<td>Welch Allyn Diagnostic Set</td>
<td>Approx 500 in the form of a Welch Allyn 3.5 volt Halogen Diagnostic Set</td>
<td>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.</td>
</tr>
</tbody>
</table>

**1995 Academic Year Dates for the Bachelor of Medicine Program**

**YEAR ONE**

<table>
<thead>
<tr>
<th>Semester One</th>
<th>commences</th>
<th>Monday</th>
<th>27 February</th>
</tr>
</thead>
<tbody>
<tr>
<td>recess</td>
<td>Friday</td>
<td>14 April</td>
<td></td>
</tr>
<tr>
<td>to</td>
<td>Friday</td>
<td>21 April</td>
<td></td>
</tr>
<tr>
<td>resumes</td>
<td>Monday</td>
<td>24 April</td>
<td></td>
</tr>
<tr>
<td>concludes</td>
<td>Friday</td>
<td>30 June</td>
<td></td>
</tr>
</tbody>
</table>

**Semester Two**

| commences | Monday | 17 July |
| recess | Monday | 25 September |
| to | Friday | 6 October |
| resumes | Monday | 9 October |
| concludes | Friday | 3 November |

**Examinations**

| commence | Monday | 6 November |
| conclude | Friday | 17 November |

**Mini-Elective**

| commences | Monday | 20 November |
| concludes | Friday | 1 December |

**NOTE:** Semester One consists of Block One (10 weeks) and 7 weeks of Block Two. Semester Two consists of the remaining 3 weeks of Block Two, all of Block Three (10 weeks), and Stuvac (1 week).

**YEAR TWO**

<table>
<thead>
<tr>
<th>Semester One</th>
<th>commences</th>
<th>Monday</th>
<th>27 February</th>
</tr>
</thead>
<tbody>
<tr>
<td>recess</td>
<td>Friday</td>
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<td>to</td>
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</tr>
<tr>
<td>concludes</td>
<td>Friday</td>
<td>30 June</td>
<td></td>
</tr>
</tbody>
</table>

**Semester Two**

| commences | Monday | 17 July |
| recess | Monday | 25 September |
| to | Friday | 6 October |
| resumes | Monday | 9 October |
| concludes | Friday | 3 November |

**Examinations**

| commence | Monday | 6 November |
| conclude | Friday | 17 November |

**Mini-Elective**

| commences | Monday | 20 November |
| concludes | Friday | 1 December |

**NOTE:** Semester One consists of Block Four (10 weeks) and 7 weeks of Block Five. Semester Two consists of the remaining three weeks of Block Five, all of Block Six (10 weeks), and Stuvac (1 week).
YEAR THREE *

Block 7
6 February - 28 April
12 weeks: 11 week block
1 week AVCC/Easter vacation 14-21/4
8 weeks
2 weeks (AVCC common week)
9 weeks: 8 week block
1 week review

Stuvac
11 September - 15 September
1 week

Assessment
18 September - 6 October
3 weeks

Vacation
26 June - 7 July
1 week

Vacation
10 July - 8 September
1 week

Block 9
May - 23 June
1 week

Stuvac
11 September - 15 September
1 week

Assessment
18 September - 6 October
3 weeks

Vacation
26 June - 7 July
1 week

Vacation
10 July - 8 September
1 week

Block 10
10 July - 8 September
1 week

YEAR FOUR *

Clinical Attachment 1
30 January - 28 April
12 weeks: 11 week block
1 week AVCC/Easter vacation 14-21/4
8 weeks
2 weeks (AVCC common week)
9 weeks: 8 week block
1 week review

Stuvac
1 May - 23 June
1 week

Vacation
26 June - 7 July
1 week

Vacation
10 July - 8 September
1 week

Block 8
14-21/4
1 week

Clinical Atiachment 2
8 May - 28 July
1 week

Vacation
31 July - 11 August
1 week

Clinical Atiachment 3
14 August - 3 November
1 week

G.P. Period
6 November - 15 November
1 week

Stuvac
16 November - 24 November
1 week

Assessment
27 November - 5 December
1 week

YEAR FIVE *

Clinical Attachment 1
30 January - 17 March
7 weeks

Clinical Attachment 2
20 March - 5 May
7 weeks

Assessment
8 May - 12 May
1 week

Vacation
15 May - 19 May
1 week

Clinical Atiachment 3
22 May - 7 July
1 week

Clinical Atiachment 4
10 July - 25 August
1 week

Stuvac
28 August - 1 September
2 weeks

Assessment
4 September - 15 September
1 week

Second Assessment
18 September - 22 September
1 week

Elective Attachment
25 September - 17 November
1 week

Final Assessment
20 November - 24 November
1 week

* Years Three, Four and Five do not conform with the University of Newcastle's semester dates.

section ten

Bachelor of Medical Science
Course and Subject Details

Bachelor of Medical Science

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 enroll for this degree must have passed the subject Medicine III 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 the 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 authorized 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 enroll 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 20% 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.

Grants in aid are also available to students pursuing research in specific areas. Information about these grants is available from the Program Coordinator.

Further Information

For further information on enrolment procedures, students should contact the Faculty Office. Students wishing to discuss matters such as the suitability of research programs or the availability of projects should contact the Program Coordinator, Dr P. Hazel on 21.1270.

Bachelor of Medical Science in Community Health

This degree is a variation on the Bachelor of Medical Science. In this case rather than a pure research degree, there is a combined theoretical and practical experience in some aspect of public health. The purpose of this degree is to give students some insight into public health research. In some cases it is possible for students to gain this experience in the more conventional B.Med.Sc. degree. In many cases, however, conducting research in the community setting requires a long period of planning and liaison with the community. This may not be able to be achieved during the limited time available for the B.Med.Sc. Accordingly, this variation gives students formal training in both Clinical Epidemiology and Biostatistics and the opportunity for practical exposure to a public health issue. The nature of this will vary from student to student but may include Aboriginal health, rural general practice, or other options.

Program of Study

The program of study approved by the Faculty Board for the Bachelor of Medical Science (Community Health) is as follows:

Subject Credit Points
MED421 Epidemiology 20
MED431 Biostatistics 20
MED441 Health Initiative 40

Subject Descriptions

MED421 EPIDEMIOLOGY 20cp

An introduction to methods used in Clinical Epidemiology.

Content

Health indicators, research strategies, risk, cause and bias, epidemic investigation, critical appraisal, cross-sectional studies, case-control studies, randomised control trials, synthesis of research data.

Time Requirements: Approximately 60 hours of tutorial time

Assessment: Written assessment

Text


MED441 HEALTH INITIATIVE 40cp

Both a theoretical and practical experience in public health. The theoretical component will include a literature search and critical appraisal of a health topic relevant to the proposed community placement. The community placement will be approximately 8-10 weeks and will involve an attachment to a community so that relevant health and social issues can be explored in detail. Health Initiative will be tailored to the needs of individual students and will reflect the needs of the community. For example, a Health Initiative in Aboriginal Health might include a review of Aboriginal health and culture with a clinical attachment to either rural or urban Aboriginal communities (or both). Similarly a rural Health Initiative would involve an appropriate literature review combined with a clinical placement in a rural health setting.

Assessment: Written critical appraisal of literature review, oral presentation of experience in clinical placement and written report of field work

Further Information

Information on application and enrolment procedures is available from the Faculty Office. Intending applicants are invited to contact the Program Coordinator, Prof. R. Henry on 21.3658.
In order to adequately understand the whole health context and to work effectively within it, health professionals also need an appreciation of the structure and functions of the organisations, authorities and other components which make up the health care system at national, state and local levels. It follows that health professionals also require skill in designing studies to collect data which will inform health service provision, and in analysing and interpreting this data. Students will specialise in one of the three areas of study.

Primary Health Care

Primary Health Care addresses the fundamental aspects of good health for individuals and populations in society and is founded upon the philosophies of Health Care incorporated in the World Health Organisation Charters of Alma Ata (1978), Ottawa (1986) and Liverpool (1988). It is informed by a definition of health which emphasises quality of life within a human ecology framework. It focuses on holistic health issues and on policies concerning social changes which can alter behaviour patterns to improve health. The impact of health on policies and actions inside the health sector and how individuals and communities can be encouraged to alter their lifestyles to improve their own health is also addressed.

It examines the need for social justice as a prerequisite for optimum health care, the strengthening of community power, the development of skills of mediation and advocacy and the creation of supportive, stable, clean environments for health. Primary Health Care includes such considerations as communication patterns within society, the provision of community infrastructures, government policy formulation aimed at optimising public health care, and local council provision of health oriented services. In addition to the health sector, it addresses those concerned with food, industry, education, housing, town and city planning, public works, government structures and communications, examining their function and interrelationships.

It requires and promotes maximum community and individual self reliance and participation in the planning, organisation, operation and control of health care, making fullest use of local, national and other available resources; and to this end develops through appropriate education the ability of communities to participate.

It needs to be sustained by integrated, functional and mutually supportive referral systems, leading to the progressive improvement of comprehensive health care for all, and giving priority to those most in need.

The Graduate Diploma in Health Science (Primary Health Care) consists of not only the specific subjects of the Principles and Practice of Primary Health Care but also incorporates Health Ecology, the Health Care System, Health Research Design and Problem Solving Strategies in Health.

Areas covered within the course include: the Australian Health Care system, the politics of health, assessment of health needs and design and development of programs to meet these needs, community participation and development of health promotion, multidisciplinary and intersectoral health care team functioning and the development of effective interpersonal skills for Primary Health Care.

In addition the course covers applied research and evaluation skills in Primary Health Care.

Those people working in primary health care might include health surveyors, health promotion personnel, doctors, nurses, dental health therapists, the police, public housing authorities, public health authorities, geographers, welfare workers, family and community health workers, refuge workers, members of local, health authorities, community midwives, and hospital based health services.

APPROVED PROGRAM OF STUDY - PRIMARY HEALTH CARE

Subject Code/Name Subject Points
Year 1 HOLH531 Principles of Primary Health Care 10
HOLH501 Holistic Health 20
HOLH502 Health Research Design 10
Year 2 HOLH532 Primary Health Care Planning and Practice 30
HOLH533 Directed Study 10
or Approved 10
Elective 40

SUBJECT DESCRIPTIONS - Primary Health Care

Year 1

HOLH531 PRINCIPLES OF PRIMARY HEALTH CARE 10cp

Semester Offered Full Year

In this subject students will be provided with the opportunity to enhance their awareness of the values, beliefs and principles underlying the concept of Primary Health Care. This will be achieved by identifying factors that affect the development, orientation, structure and provision of health services at national and international levels. This process will be

section eleven

Graduate Diploma in Health Science/Master of Health Science

Course and subject details and descriptions

This section contains the course programs for the Graduate Diploma in Health Science and Master of Health Science in specialisations of Primary Health Care, Clinical Drug Dependence Studies and Women's Health.

Continuing Students should note that there have been amendments to subject codes for 1993. These are set out in the transition table after course entries.

GRADUATE DIPLOMA IN HEALTH SCIENCE

(Primary Health Care)
(Primary Health Care)
(Women's Health)
Duration 2 years part-time
Availability On campus
Total Credit Points 80
Course Coordinators
Dr Tom Bolten (Primary Health Care)
Mr Don Maxwell (Clinical Drug Dependence Studies)
Ms Sue Outram (Women's Health)

The Graduate Diploma in Health Science is a postgraduate program which follows a pattern of common core studies plus professional specialisations. The course is offered on a part-time basis over two years. The Graduate Diploma is based on an educational philosophy which advocates a focus on illness prevention and health promotion in the curricula of all health professionals. The common core addresses the need for health professionals and those from related disciplines to have access to studies which emphasize equally the problems of social risk imposition and individual risk taking, and commensurately health protection and prevention approaches. Additionally the core emphasizes education for multidisciplinary problem solving, clear specification of intended outcomes and the respective contribution of the different professions.
achieved by working in community settings and critically examining literature pertaining to the development of Primary Health Care including World Health Organisations reports, international declarations, regional and national health documents. Students will be working in teams which will provide the focus for discussion of issues, presentations and feedback.

HOLH501 HOLISTIC HEALTH 20cp
Semester Offered Full Year
This subject aims to better prepare health workers for holistic health practice within the framework of national health goals and priorities, by providing them with a multifactorial perspective on health, an appreciation of the total health system, and skill in problem solving at macro and micro levels. It consists of three separate but related units:
- Health Ecology, the Health System and Problem-Solving/Strategies for Change.

HOLH502 HEALTH RESEARCH DESIGN 10cp
Prerequisite Nil
Corequisite Nil
Hours 3 hours per week
Semester Offered Full Year
Lecturer A. Monaem
Examination Assessment components of the subject will include review of research articles, research design and final examination.

Content
The subject is designed to provide students an understanding of theory and practice of social research within the context of health care services. Students will also be introduced to the basic tools of research relevant to community based health programs. Issues related to quantitative and qualitative types of research will be introduced. The subject will provide opportunities for students to develop a range of research skills appropriate to their area of professional interest.

Year 2
HOLH532 PRIMARY HEALTH CARE PLANNING AND PRACTICE 10cp
Semester Offered Full Year
In this subject students will develop the skills to act as leader in the development, implementation and provision of primary health care services, and enable them to work towards the achievement of “Health for All by the Year 2000”. This will be achieved by providing students with ongoing community experience to enable integration of theory and practice. Students will continue to work in teams and small groups to carry out a major community-based project. Media techniques and technology will be incorporated in seminar presentations and the group project. Central to this subject is emphasis on continuous, autonomous self-assessment through a seminar program.

HOLH533 DIRECTED STUDY 10cp
Semester Offered Full Year
In recognition of their existing professional experience, students will be given the opportunity to undertake a directed study program or select an approved elective which will contribute to their professional development. Subject to availability, choices may be made from programs offered within University of Newcastle, or a course of self-directed study may be negotiated with staff members, such as a Reading Course, Seminar Program or a Skills Development course run by another approved institution. Options available in any year may be limited by staff resources.

Clinical Drug Dependence Studies
The Clinical Drug Dependence Studies Specialisation aims to identify and present a body of knowledge and skills common to a group of workers who come into the drug and alcohol field from a diversity of academic and experiential backgrounds and who will operate within it at different levels and in different capacities. Competent workers in the drug and alcohol field need to have basic knowledge of human physiology, pharmacology, psychology and sociology and they need in-depth knowledge of the etiology of dependence and of the principles of treatment. On the skills side, they need to be able to liaise with the many relevant facilities available, to act as competent counsellor therapists, and to clarify and assess their own personal values.

APPROVED PROGRAM OF STUDY - CLINICAL DRUG DEPENDENCE STUDIES

<table>
<thead>
<tr>
<th>Code</th>
<th>Name</th>
<th>Cp</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC575</td>
<td>Basic Processes in Dependence</td>
<td>10</td>
</tr>
<tr>
<td>PSYC575</td>
<td>Counseling Theory and Procedures</td>
<td>20</td>
</tr>
<tr>
<td>HOLH502</td>
<td>Health Research Design</td>
<td>10</td>
</tr>
</tbody>
</table>

Year 2
PSYC577 Treatment and Prevention for Dependences 10
PSYC578 Advanced Counselling for Dependences 10
HOLH501 Holistic Health 20

TRANSITION TABLE - CLINICAL DRUG DEPENDENCE STUDIES

<table>
<thead>
<tr>
<th>Year</th>
<th>Code</th>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>1: Introductory</td>
<td>PSYC575</td>
<td>Basic Processes in Dependence</td>
</tr>
<tr>
<td>2</td>
<td>PSYC577</td>
<td>Counseling Theory and Procedures</td>
</tr>
<tr>
<td>3</td>
<td>PSYC578</td>
<td>Treatment and Prevention for Dependences</td>
</tr>
<tr>
<td>4</td>
<td>PSYC578</td>
<td>Advanced Counselling for Dependences</td>
</tr>
</tbody>
</table>

SUBJECT DESCRIPTIONS - Clinical Drug Dependence Studies

Year 1
PSYC575 BASIC PROCESSES IN DEPENDENCIES 10cp
Prerequisite HS Chemistry or appropriate bridging course.
Corequisite Nil
Hours 56 hours in all
Semester Offered Full Year
Examination Two objective and/or essay style examinations
Content This subject consists of 2 units. Unit 1 includes: epidemiological issues, social and political perceptions of "the drug problem", historical development of attitudes and controls, mythology of drug use, etiology and process of drug use, models of addiction, and the addiction process. Unit 2 includes: neurophysiology, neurochemistry, and pharmacology of drug action.

Texts

References

PSYC572 COUNSELLING THEORY & PROCEDURES 20cp
Prerequisite Nil
Corequisite Nil
Hours 140 hours in all
Semester Offered Full Year
Examination Written assignments, group presentations, demonstration of professional skills and supervision of practical practice.

Content
There are three units:

Unit 1: Introductory Counselling: Considers various theoretical approaches to counselling, psycho-dynamic, client-centred, existential, cognitive and behavioural. Focus is on the development of techniques and skills in interviewing and consultation. Some discussion of the role of psychological testing will be included.

Unit 2: Group Dynamics: Group leadership. Includes participation as a "client" in a group experience. The aims are to experience at first hand the role of the "client" and to become more understanding of self and others in a way that will increase helping potential and provide a clearer understanding of theories about group dynamics.

Unit 3: Professional Practice: Is carried out under direct supervision, normally at the student's usual place of work. It involves the application of knowledge, skills and attitudes gained in the theoretical aspects of the course.

Texts To be advised
Section Eleven
Graduate Diploma in Health Science/Master of Health Sciences

Content
The subject is designed to provide students with an understanding of theory and practice of social research within the context of health care services. Students will also be introduced to the basic tools of research relevant to community-based health programs. Issues related to quantitative and qualitative types of research will be introduced. The subject will provide opportunities for students to develop a range of research skills appropriate to their area of professional interest.

Year 2

PSYC577 TREATMENT AND PREVENTION FOR DEPENDENCIES 10cp
Prerequisite PSYC578 Processes in Dependencies
Corequisite PSYC578 Advanced Counselling for Dependencies

Hours 2 hours per week
Semester Offered Full Year
Examination Based on completion of practical tasks, viva and written assignments and/or essay-type examinations.

Content
Treatment and Prevention: There are two units, dealing respectively with such theoretical aspects of treatment as assessment, referral, therapeutic goals and ethical issues; and with the principal strategies and goals in both drug education and legal control of drug use.

Texts To be advised

References

PSYC578 ADVANCED COUNSELLING FOR DEPENDENCIES 10cp
Prerequisite PSYC572 Counselling Theory and Procedures
Corequisites PSYC577 Treatment and Prevention for Dependencies

Hours Semester Offered Full Year
Examination
Content
This subject consists of three units:
Family Therapy: an in-depth analysis of theories and techniques of family therapy, and the development of appropriate clinical skills; Advanced Individual Counselling - practice-oriented examination of a variety of aspects of drug and alcohol counselling practice including confrontation, early intervention, withdrawal techniques, maintenance, rehabilitation strategies and after care. Counsellor problems and burnout are also discussed; Professional Practice issues are also considered.

Text To be advised

HOLH501 HOLISTIC HEALTH 20cp
Semester Offered Full Year
This subject aims to better prepare health workers for holistic health practice within the framework of national health goals and priorities, by providing them with a multifactorial perspective on health, an appreciation of the total health system, and skill in problem solving at macro and micro levels. It consists of three separate but related units:
Health Ecology, the Health System and Problem-Solving/Strategies for Change.

Women's Health
The Women's Health specialisation pays particular attention to the social health perspective, where women's health is seen as the result of a complex interaction of biological and environmental influences. Some of the issues addressed include reproductive health and sexuality, health of ageing women, women's emotional and mental health, occupational health and safety and the health needs of carers.
The course aims to produce graduates who will be able to practice in a variety of settings in roles such as nurse practitioner; education; researcher, manager; medical practitioner or policy maker.

Approved Program of Study

Women's Health

Year 1

HOLH509 Holistic Health 10cp
HOLH502 Health Research Design 10cp
SOCAS504 Foundation Studies in Women's Health 10cp
Elective 10

Year 2

HOLH503 Professional Issues in Women's Health 10cp
HOLH506 Women's Health: Contemporary Issues 10cp
HOLH504 Mini Dissertation 20

Course Total 80 credit points
Suggested Electives for Women's Health specialisation:
IRES501 Applied Moral Theory 10

Subject Descriptions

Year 1

HOLH509 HOLISTIC HEALTH 10cp
Semester Offered Semester 1

Content
This subject aims to better prepare health workers for holistic health practice within the framework of national health goals and priorities, by providing them with a multifactorial perspective on health, an appreciation of the total health system, and skill in problem solving at macro and micro levels.

It consists of 2 separate but related units; Health Ecology and The Health System.

HOLH502 HEALTH RESEARCH DESIGN 10cp
Prerequisite Nil
Corequisite Nil

Hours 3 hours per week
Semester Offered Full Year
Lecturer A Macedon

Examination Assessment components of the subject will include review of research articles, research design and final examination.

Content
The subject is designed to provide students with an understanding of theory and practice of social research within the context of health care services. Students will also be introduced to the basic tools of research relevant to community based health programs. Issues related to quantitative and qualitative types of research will be introduced. The subject will provide opportunities for students to develop a range of research skills appropriate to their area of professional interest.

SOCAS504 FOUNDATION STUDIES IN WOMEN'S HEALTH 10cp

Prerequisite Nil
Corequisite Nil

Hours 2 hours per week
Semester Offered Full Year
Examination/Assessment Book review, tutorial presentation/report, essay

Content
This subject examines the historical and theoretical perspectives which are relevant for a sociological analysis of women's health. These include an evaluation of different approaches to the history of women's health; an investigation into the social, political and economic position of women in Australia; and an analysis of feminist critiques or science and medicine.

Texts No set Text

References

Year 2

HOLH503 PROFESSIONAL ISSUES IN WOMEN'S HEALTH 10cp
Prerequisite Nil
Corequisite HOLH506 - Women's Health: Contemporary Issues

Hours 2 per week
Semester Offered Full Year
Lecturer Sue Outram

Examination/assessment Assessment is based on group presentations and demonstration of professional skill.
HOLS06 WOMEN'S HEALTH: CONTEMPORARY ISSUES 10cp

Prerequisite SOCAS04 - Foundation Studies in Women's Health

Corequisite HOLS03 - Professional Issues in Women's Health

Semester Offered Full Year

Hours 4 hours per week

Lecturer Sue Outram

Examination/Assessment A combination of assignments and examinations.

Content

This course develops from knowledge gained in Foundations in Women's Health. It will look at specific women's health issues and problems from a multidisciplinary perspective. Strategies to improve the health of women at an individual, group and community level will be explored. It will complement and be integrated with the concurrent subject, Professional Issues.

HOLS04 MINI DISSERTATION 20cp

Prerequisite SOCAS04 - Foundation Studies in Women's Health, HOLS02 - Health Research Design

Corequisite HOLS03 - Professional Issues in Women's Health, HOLS06 - Women's Health: Contemporary Issues

Hours 4 hours per week

Lecturer Sue Outram

Examination/Assessment A report or thesis will be submitted for examination.

Content

Students will be expected to apply the knowledge/skills gained in previous subjects to their practice and further their expertise in a chosen area within women's health. This may be in areas such as health education, community development, policy formulation or literature review for those continuing to a Masters degree by research. A report or thesis will be submitted for examination.

MASTER OF HEALTH SCIENCE

(Primary Health Care)

(Women's Health)

These programs are a logical academic extension of the aligned Graduate Diploma in Health Science programs (see above). The Graduate Diploma program is normally attempted over two part-time years.

The degree has a wide range of activities, a multi-professional core of health subjects and a longer, guided period for development and completion of its research projects than most Honours programs.

Under normal admission, candidates will enter the second full-time equivalent year of the Masters program (the research thesis year). Those who have completed this University's associated Graduate Diploma in Health Science will be given credit for the first full-time equivalent year of the Masters degree program:

APPROVED PROGRAM OF STUDY

(One year full-time or equival. part-time) Credit Points

Year 1 30cp

Year 2 80cp

Year 3 80cp

As for related Graduate Diploma in Health Science (see program above)

Credit Points

A student enrolled as a candidate for the Masters degree, who is permitted to withdraw, may be permitted by the Faculty Board to enrol as a candidate for the related Graduate Diploma.

In such cases, a student who wishes to enrol as a candidate for the Graduate Diploma shall apply in writing to the Registrar for permission to do so. Any subjects passed while enrolled as a candidate for the Masters degree shall be counted towards the Graduate Diploma.
section twelve

Health Services Management

GRADUATE DIPLOMA AND MASTERS IN HEALTH SERVICES MANAGEMENT

Credit (Advanced Standing)

Undergraduates

The Board of Studies in Health Services Management may grant credit to a candidate on such conditions as it may determine, in respect of work undertaken by the candidate towards an incomplete qualification at this or another tertiary institution recognized by the Board of Studies. Credit shall not normally be granted for more than half of the program (calculated in terms of credit points).

Graduates

A candidate will not be permitted to enrol in any subject which is substantially equivalent to work completed by the candidate towards a completed tertiary qualification, in this or any other institution. In such cases the candidate will be required to undertake alternative coursework as prescribed by the Board of Studies in Health Services Management.

Transfer from Graduate Diploma to Masters Degree

A person permitted to enrol as a candidate for the Master of Health Services Management after completion of the Graduate Diploma in Health Services Management, shall be granted credit in all subjects completed in that Graduate Diploma.

Transfer from Masters Degree to Graduate Diploma

A student enrolled as a candidate for the Master of Health Services Management who is permitted to withdraw from the degree course may be permitted to enrol as a candidate for the Graduate Diploma in Health Services Management.

Students wishing to do so shall apply in writing to the Registrar for permission to do so. Any subjects passed while enrolled as a candidate for the Masters degree shall be counted towards the Graduate Diploma.

Course and Subject Details and Description

Duration 2 years part time or 1 year full time (Graduate Diploma) — 80 cp
3 years part time or 1.5 years full time (Masters) — 120 cp

The Graduate Diploma and Masters in Health Services Management aim to prepare health service professionals for responsible leadership and management roles in a dynamic health environment. Both courses promote the development of analytical and innovative approaches to the use of scarce health resources at local, state and national levels. The Masters Program emphasises the enhancement of skills of senior managers in the areas of organisation analysis, management of change, quality improvements and health service evaluation. The courses have been accredited by the Australian College of Health Service Executives.

There has been one amendment to a subject code in 1995. See Transition Table below.

APPROVED PROGRAM OF STUDY

Year 1 (Part-Time)  

<table>
<thead>
<tr>
<th>Subject Code</th>
<th>Subject Name</th>
<th>Cp</th>
</tr>
</thead>
<tbody>
<tr>
<td>HOLM561</td>
<td>Health Care Systems</td>
<td>10</td>
</tr>
<tr>
<td>MED632</td>
<td>Health Economics</td>
<td>10</td>
</tr>
<tr>
<td>COMM506</td>
<td>Management</td>
<td>10</td>
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<tr>
<td>MNGT555</td>
<td>Introduction to Management</td>
<td>10</td>
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</tbody>
</table>

Year 2 (Part-Time)  

<table>
<thead>
<tr>
<th>Subject Code</th>
<th>Subject Name</th>
<th>Cp</th>
</tr>
</thead>
<tbody>
<tr>
<td>MED618</td>
<td>Basic Biostatistics</td>
<td>10</td>
</tr>
<tr>
<td>LAWS520</td>
<td>Health Service Law</td>
<td>10</td>
</tr>
<tr>
<td>HOLM562</td>
<td>Health Services Management</td>
<td>10</td>
</tr>
<tr>
<td>ECON503</td>
<td>Employment Relations</td>
<td>10</td>
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<tr>
<td>INF0505</td>
<td>Management Information Systems</td>
<td>10</td>
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Year 3 (Masters Students)  

<table>
<thead>
<tr>
<th>Subject Code</th>
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<th>Cp</th>
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</thead>
<tbody>
<tr>
<td>SOCA503</td>
<td>Social and Ethical Issues in Health</td>
<td>10</td>
</tr>
<tr>
<td>HOLM602</td>
<td>Evaluation of Health Services</td>
<td>10</td>
</tr>
<tr>
<td>or</td>
<td>Elective x2</td>
<td>20</td>
</tr>
<tr>
<td>or</td>
<td>HEALTH SERVICES MANAGEMENT Research Project</td>
<td>20</td>
</tr>
<tr>
<td>HOLM663</td>
<td>Health Service Management</td>
<td>40</td>
</tr>
</tbody>
</table>

Full time students will enrol in their first year in the equivalent Years 1 and 2 part-time listed above. Year Two for full time students will consist of 40 credit points only.

TRANSITION TABLE - HEALTH SERVICES MANAGEMENT

<table>
<thead>
<tr>
<th>New Code</th>
<th>Name</th>
<th>Equivalent to</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOCA503</td>
<td>Social and Ethical Issues in Health</td>
<td>PSBS661 Social and Ethical Issues</td>
</tr>
</tbody>
</table>

SUBJECT DESCRIPTION

Year 1

HOLM561 HEALTH CARE SYSTEMS 10cp

Prerequisite Nil

Corequisite Nil

Hours 2 hours per week for 14 weeks

Semester Offered Semester 1

Examination 2 assignments (10% each), 2 exams (40% each)

Content

The aim of this subject is to provide an understanding of the structure, functions, and financial arrangements of the Australian Health Care system; and to introduce health policies and current issues associated with the provision of health services in Australia.

Texts


MED632 HEALTH ECONOMICS 10cp

Prerequisite Nil

Corequisite Nil

Hours 2 hours seminar/tutorial per week

Semester Offered Semester 2

Lecturer Robert Kemp

Examination/Assessment 2 assignments (10% each), 2 exams (40% each)

Content

The microeconomics of the provision and utilisation of health care services is studied. The economic consequences of decisions made by physicians, consumers, and managers of health service institutions are analysed. The use and diffusion of technology in the medical sector is emphasised. The factors contributing to the cost of delivery and to the distribution of health care services are discussed. Fellows will be able to demonstrate the use of some basic tools of economic analysis in the understanding of the provision of health care.
Topics include:
- The institutional economics and microeconomics of the provision of health care services.
- Medical markets and the degree of competition in the provision of health care services.
- The welfare economics of medical care.
- Medical insurance and third party payment
- Health care, health and economic development
- The physician as economic agent
- The supply of physicians
- The use of diffusion of technology in the medical sectors
- Preventive care and health promotion
- Measuring hospital costs and outputs
- The regulation of health care services
- Evaluating the equity of distribution of health care services
- Economic and health policy: asking the appropriate questions

**COMM505 MANAGEMENT ACCOUNTING 10cp**
Prerequisite Nil
Corequisite Nil
Hours 2 hours per week
Semester Offered Semester 1

Content
This subject introduces students to the basic financial accounting statements and records, double entry accounting and the fundamental concepts underlying accounting methods. Additional topics include cost behaviour, profitability planning, and the renewed debate over 'full cost' accounting systems.

Text To be advised

**MNGT555 INTRODUCTION TO MANAGEMENT 10cp**
Prerequisite Nil
Corequisite Nil
Hours 2 hours per week
Semester Offered Semester 1

Content
This subject represents foundation principles that are most relevant to modern day organisations. The subject does not attempt however to prescribe a "one best way" approach to management and in this sense, presents the material for critical and practical evaluation and application.


Year 2

**MED618 INTRODUCTION TO EPIDEMIOLOGY AND BIOSTATISTICS 10cp**
Prerequisite Nil
Corequisite Nil
Hours Semester Offered Semester 1

Examination/Assessment Assignments and 'in class' examination

Content
The aim of this subject is to enhance critical appraisal skills with respect to the understanding of the statistical methods used by the authors and the interpretation of the results systems. At the completion of the subject, the students should be able to critique the statistical methods used and draw their own conclusions about the quality of the evidence presented in the article.

References

**LAW520 HEALTH SERVICES LAW 10cp**
Prerequisite Nil
Corequisite Nil
Hours 2 hours per week
Semester Offered Semester 1

Examination/Assessment Progressive Assessment

Content
This subject will attempt to introduce students to legal method and the way in which the legal system affects the provision of health services.

The course will be divided into two parts. The first part will consider general legal topics, but with a health perspective.

The examples used in presentation of material will be carefully chosen to include a health related theme.

The second part of the course will deal with health regulation.

The examples employed will be particular health-related legislation that has been introduced to overcome or regulate problem area. The list under this part below is not exhaustive and not all of the listed examples would be able to be covered.

The approach would be to take those topics that are of interest to the students or are subject to current popular debate.

References


**HOLH562 HEALTH SERVICES MANAGEMENT 10cp**
Prerequisite MNTG555 - Introduction to Management
Corequisite Nil
Hours 2 hours per week for 14 weeks
Semester Offered Semester 2

Examination/Assessment

Content
This subject is designed to introduce students, in a very broad way, to the main features of Employment Relations in Australia. The initial focus is on industrial conflict and then attention is devoted to the main institutions concerned with its generation and regulation; i.e. trade unions, employers, industrial tribunals and other forms of state intervention. Finally some of the contemporary issues such as award restructuring, enterprise bargaining, occupational health and safety and disadvantaged groups are considered.

**INF505 MANAGEMENT INFORMATION SYSTEMS 10cp**
(Alias MNTG511)
Prerequisite Nil
Corequisite Nil
Hours To be advised
Semester Offered Semester 2

Content
This course is designed to expose potential managers to the variety of management information systems available today. The aim is to emphasise the role of the computer in the planning function, rather than simply in the day-to-day transaction based operational systems. Specific topics covered will include: structure of the MIS, decision making, strategic planning, the role of the microcomputer, decision support systems, expert systems, security and privacy implications.

Texts There is no specific prescribed Text

References To be advised

Year 3

**SOCA503 SOCIAL AND ETHICAL ISSUES 10cp**
Semester Offered Semester 1

Examination of health care issues from sociological and ethical perspectives.
HOLH662 EVALUATION OF HEALTH SERVICES 10cp
Prerequisite MNTG555, HOLH561, HOLH562, MED613
Hours 2 hours per week for 14 weeks
Semester Offered Semester 1
Content
Review of health services management functions and structures including total quality management

HOLH663 HEALTH SERVICES MANAGEMENT RESEARCH PROJECT 20cp
Prerequisite MNTG555, HOLH561, HOLH562, MED613
Semester Offered Semester 1 or 2
Content
This research project will require students to engage in a "change" activity. The aim of this activity is to improve aspects of organisation function and understanding of:
(i) the social, political and economic circumstances affecting health service delivery,
(ii) management requirements and,
(iii) the change process
Texts To be advised

Section thirteen
Medical Statistics
Subject Descriptions

Course Description
Medical Statistics involves the use of statistical methods to investigate problems in health and medicine. Statistics has been defined as turning data into information. Typically, this involves aggregating data about individual people to obtain a population perspective on health issues. Students wishing to pursue this program will enrol in either the Graduate Diploma in Medical Statistics or the Master of Medical Statistics. The Graduate Diploma consists of a series of subjects totaling 80 credit points taken over one year of full-time study or two years of part-time study. Students enrolling in the Master degree are required to complete the subjects comprising the program of study for the Graduate Diploma, and in addition, complete a major thesis or minor thesis (plus elective subjects) taking at least one further year of full-time study or equivalent.

Entry requirements for the Graduate Diploma in Medical Statistics are a bachelor's degree in a relevant discipline. For the Master of Medical Statistics, a Bachelor of Mathematics (Honours Class I or II) or equivalent with a major in Statistics or a Graduate Diploma in Medical Statistics is required. Admission to the Master degree program from a Graduate Diploma in Medical Statistics requires that grades of Credit or better were obtained for at least 30 credit points from Level 400 STAT subjects. Candidates who entered the Master degree program without a Postgraduate Diploma in Medical Statistics are required to obtain grades of Credit or better for at least 30 credit points of Level 400 STAT subjects to continue onto the research component.

All fellows are required to select 80 credit points from the subjects listed below in accordance with the following rules:

POLICIES ON CREDIT, PROGRESS

1. Credit
A person permitted to enrol as a candidate for the Master degree after completion of the Graduate Diploma shall be granted credit in all subjects comprising the Diploma 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 before 1993 and who has completed the requirements for the award of the related Diploma more than eight years prior to enrolment for the Master degree; or
3. Admission to Candidature After Completion of Graduate Diploma in Medical Statistics

Person 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 totaling 40 credit points during the Diploma course.

### APPROVED PROGRAM - GRADUATE DIPLOMA IN MEDICAL STATISTICS

#### Compulsory

<table>
<thead>
<tr>
<th>Subject Code</th>
<th>Subject Name</th>
<th>Credit Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>MED106</td>
<td>Epidemiology A - Basic Methods</td>
<td>10 cp</td>
</tr>
<tr>
<td>MED107</td>
<td>Epidemiology B - Research or Design</td>
<td>10 cp</td>
</tr>
<tr>
<td>MED108</td>
<td>Biostatistics C</td>
<td>10 cp</td>
</tr>
<tr>
<td>MED109</td>
<td>Short Data Analysis Project or MED109 Examining</td>
<td>10 cp</td>
</tr>
<tr>
<td>MED110</td>
<td>Long Data Analysis Project</td>
<td>10 cp</td>
</tr>
<tr>
<td>MED111</td>
<td>Design &amp; Analysis of Experiments and Surveys</td>
<td>10 cp</td>
</tr>
<tr>
<td>MED112</td>
<td>Statistical Inference</td>
<td>10 cp</td>
</tr>
<tr>
<td>MED113</td>
<td>Generalised Linear Models</td>
<td>10 cp</td>
</tr>
<tr>
<td>MED114</td>
<td>Time Series Analysis</td>
<td>10 cp</td>
</tr>
<tr>
<td>MED115</td>
<td>Probability Theory</td>
<td>10 cp</td>
</tr>
<tr>
<td>MED116</td>
<td>Analysis of Categorical Data</td>
<td>10 cp</td>
</tr>
<tr>
<td>MED117</td>
<td>Demography and Survival Analysis</td>
<td>10 cp</td>
</tr>
<tr>
<td>MED118</td>
<td>Statistical Consulting</td>
<td>10 cp</td>
</tr>
<tr>
<td>MED119</td>
<td>Methods for Quality Improvement</td>
<td>10 cp</td>
</tr>
<tr>
<td>MED120</td>
<td>Advanced Topics in Statistics</td>
<td>10 cp</td>
</tr>
<tr>
<td>MED121</td>
<td>Computer - Intensive Nonparametric Methods</td>
<td>10 cp</td>
</tr>
</tbody>
</table>

### Electives

The remaining 30 or 40 credit points to be selected from the subjects listed below:

<table>
<thead>
<tr>
<th>Subject Code</th>
<th>Subject Name</th>
<th>Credit Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>STAT201</td>
<td>Mathematical Statistics</td>
<td>10 cp</td>
</tr>
<tr>
<td>STAT202</td>
<td>Regression Analysis</td>
<td>10 cp</td>
</tr>
<tr>
<td>STAT206</td>
<td>Design &amp; Analysis of Experiments and Surveys</td>
<td>10 cp</td>
</tr>
<tr>
<td>STAT301</td>
<td>Statistical Inference</td>
<td>10 cp</td>
</tr>
<tr>
<td>STAT303</td>
<td>Generalised Linear Models</td>
<td>10 cp</td>
</tr>
<tr>
<td>STAT304</td>
<td>Time Series Analysis</td>
<td>10 cp</td>
</tr>
<tr>
<td>STAT305</td>
<td>Probability Theory</td>
<td>10 cp</td>
</tr>
<tr>
<td>STAT306</td>
<td>Analysis of Categorical Data</td>
<td>10 cp</td>
</tr>
<tr>
<td>STAT307</td>
<td>Demography and Survival Analysis</td>
<td>10 cp</td>
</tr>
<tr>
<td>STAT308</td>
<td>Statistical Consulting</td>
<td>10 cp</td>
</tr>
<tr>
<td>STAT309</td>
<td>Methods for Quality Improvement</td>
<td>10 cp</td>
</tr>
<tr>
<td>STAT310</td>
<td>Advanced Topics in Statistics</td>
<td>10 cp</td>
</tr>
<tr>
<td>STAT311</td>
<td>Computer - Intensive Nonparametric Methods</td>
<td>10 cp</td>
</tr>
</tbody>
</table>

### Corequisite

For credit of better in Level 400 STAT subjects totaling 40 credit points during the Diploma course.

### Subject Descriptions

The subjects covered in the Diploma in Medical Statistics include:

- **Health Social Science I**
- **Social Psychiatry**
- **Sociocultural Studies I**
- **Sociocultural Studies II**
- **Clinical Economics**
- **Epidemiology B**
- **Health Economics 10cp**
- **Methods in Pharmacoeconomics**
- **Pharmacoeconomics**
- **Cultural and Behavioural Themes**
- **Pharmacoeconomics**
- **Policy and Economic Issues**
- **General Practice - Research Methods**
- **General Practice - Clinical Epidemiology**
- **Community Paediatrics A**
- **Community Paediatrics B**
- **Research Protocol Design**
- **Health Promotion Project**
- **Health Promotion Protocol**
- **Introduction to Health Promotion**
- **Mathematical Statistics**
- **Regression Analysis**
- **Design & Analysis of Experiments & Surveys**
- **Statistical Inference**
- **Generalised Linear Models**
- **Time Series Analysis**

### Other Requirements

- **Statute Credit**: A student must obtain grades of Credit or better in Level 400 STAT subjects totaling 30 credit points during the Diploma course.
- **Thesis**: The thesis must involve a similar range of topics to those outlined for the Graduate Diploma in Medical Statistics. The thesis may involve: primary data collection and analysis; secondary analysis; statistical issues and mathematical investigation. These topics are suggested for guidance only and are not intended to be prescriptive.

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### APPROVED PROGRAM - MASTER OF MEDICAL STATISTICS

This degree consists of the coursework (80 cp) specified above for the Graduate Diploma plus either:

- **Option 1**: 80 cp
- **Option 2**: 40 cp

#### Electives may be chosen from the following list:

<table>
<thead>
<tr>
<th>Subject Code</th>
<th>Subject Name</th>
<th>Credit Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>MED121</td>
<td>Health Social Science I</td>
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</tr>
<tr>
<td>MED122</td>
<td>Health Social Science II</td>
<td>10 cp</td>
</tr>
<tr>
<td>MED124</td>
<td>Social Psychiatry</td>
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<tr>
<td>MED126</td>
<td>Sociocultural Studies I</td>
<td>10 cp</td>
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<td>MED127</td>
<td>Sociocultural Studies II</td>
<td>10 cp</td>
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<tr>
<td>MED131</td>
<td>Clinical Economics</td>
<td>10 cp</td>
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<td>MED132</td>
<td>Health Economics 10cp</td>
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<tr>
<td>MED145</td>
<td>Methods in Pharmacoeconomics</td>
<td>10 cp</td>
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<tr>
<td>MED146</td>
<td>Pharmacoeconomics 10cp</td>
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</tr>
<tr>
<td>MED147</td>
<td>Cultural and Behavioural Themes</td>
<td>10 cp</td>
</tr>
<tr>
<td>MED148</td>
<td>Pharmacoeconomics 10cp</td>
<td></td>
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<tr>
<td>MED154</td>
<td>General Practice 10cp</td>
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<tr>
<td>MED153</td>
<td>General Practice 10cp</td>
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<tr>
<td>MED155</td>
<td>Community Paediatrics A</td>
<td>10 cp</td>
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<tr>
<td>MED156</td>
<td>Community Paediatrics B</td>
<td>10 cp</td>
</tr>
<tr>
<td>MED161</td>
<td>Research Protocol Design</td>
<td>10 cp</td>
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<tr>
<td>MED164</td>
<td>Health Promotion Project</td>
<td>10 cp</td>
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<tr>
<td>MED165</td>
<td>Health Promotion Protocol</td>
<td>10 cp</td>
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<tr>
<td>MED173</td>
<td>Introduction to Health Promotion</td>
<td>10 cp</td>
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<tr>
<td>MED174</td>
<td>Health Promotion Programme Development and Evaluation</td>
<td>10 cp</td>
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<tr>
<td>MED175</td>
<td>Community Health Promotion</td>
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<tr>
<td>MED176</td>
<td>Health Agency Attachment</td>
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<tr>
<td>MED177</td>
<td>Health Economics 10cp</td>
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<td>STAT201</td>
<td>Mathematical Statistics</td>
<td>10 cp</td>
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<tr>
<td>STAT202</td>
<td>Regression Analysis</td>
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<tr>
<td>STAT206</td>
<td>Design &amp; Analysis of Experiments &amp; Surveys</td>
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<tr>
<td>STAT301</td>
<td>Statistical Inference</td>
<td>10 cp</td>
</tr>
<tr>
<td>STAT303</td>
<td>Generalised Linear Models</td>
<td>10 cp</td>
</tr>
<tr>
<td>STAT304</td>
<td>Time Series Analysis</td>
<td>10 cp</td>
</tr>
</tbody>
</table>

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### Subject Descriptions

Subject descriptions for the subjects with MED codes can be found in the Handbook (Health Promotion, Health Social Science, Epidemiology).

### MED681 MINOR THESIS

Prerequisite to MED608 Short Data Analysis Project or MED609 Long Data Analysis Project with a grade at the level of Credit or better (for Master of Medical Statistics students)

Corequisite: Nil

Semester Offered: Semester 1 or 2 or Full Year

Content

The thesis may involve a similar range of topics to those outlined for MED682 Major Thesis but required about half the amount of work. Nevertheless, it may be suitable for publication and the thesis may reflect this structure and style.

Examination

The results of the project undertaken are to be reported in a thesis of up to 100 pages or a manuscript suitable for publication (possibly with supporting material). The thesis will be assessed independently by two appropriately qualified staff of the University not directly involved with supervision of the candidate.

### MED682 MAJOR THESIS

40cp

Prerequisite: MED608 Short Data Analysis Project or MED609 Long Data Analysis Project with a grade at the level of Credit or better (for Master of Medical Statistics students)

Corequisite: Nil

Semester Offered: Full Year

Content

The project may be on either an applied or theoretical Statistics topic. It may involve: primary data collection and analysis; secondary analysis; statistical issues in research design; mathematical investigation. These topics are suggested for guidance only and are not intended to be prescriptive.
Examination

- Held with small groups of students and staff with a range of
disciplinary backgrounds during the stage of developing the
research plan. Minitab will be the primary statistical computing
software used, and SAS will also be used.

Text

- To be advised.

References

  Wiley.
  Regression Analysis*, 2nd edn, Wiley.
- Ryan, B.F., Joiner, B.L. and Ryan, T.A. 1985, *MINITAB
  SAS Inst, Cary NC.

**STAT201**  **MATHEMATICAL STATISTICS**  **10cp**

**Prerequisite**: 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

Semester Offered  Semester 1

- Content
  - The following concepts, definitions and uses of, are covered:
    - Random variables, probability, density and distribution functions, expectation, the characteristic function, modes of
    - Linear regression
    - Alternative to least squares and non linear regression
    - MINITAB will be the primary statistical computing package that it uses; SAS will also be used.

Text

- To be advised.

References

  Wiley.
  Regression Analysis*, 2nd edn, Wiley.
- Ryan, B.F., Joiner, B.L. and Ryan, T.A. 1985, *MINITAB
  SAS Inst, Cary NC.

**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

Semester Offered  Semesters 2

- Content
  - This course covers the practical and theoretical aspects of
    multiple regression analysis. Emphasis is placed upon
    diagnostics and remedial measures to be taken when the
    assumptions are not met, transformations, selection of
    regessors, alternatives to least squares and non linear
    regression. MINITAB will be the primary statistical computing
    package that it uses, SAS will also be used.

Text

- To be advised.

References

  Wiley.
  Regression Analysis*, 2nd edn, Wiley.
  Statistical Models*, 3rd edn, Irwin.

**STAT301**  **STATISTICAL INFERENCE**  **10cp**

**Prerequisite**: Either MATH103 or STAT201 and MATH112 (or a level of mathematics equivalent to MATH112, 1st year mathematics and Statistics and STAT202)

- Hours 3 hours per week for one semester

Semester Offered  Semester 1

- Content
  - Statistical inference is the drawing of conclusions from data
  and this course is concerned with the theory and practice of
  that process. The main emphasis is on likelihood based
  methods of estimation and hypothesis testing, but other
  topics to be covered may include: special distributions,
  transformed variables, some re-sampling and other computer-
  based techniques.

References

- Kalbfleisch, J.G. 1979, *Probability and Statistical Inference*
  Springer.
  Brooks Cole.
- Larson, H.J. *Introduction to Probability Theory and Statistical
  Inference*, 3rd edn, Wiley.
  Arnold.
  and Hall.

**STAT303**  **GENERALISED LINEAR MODELS**  **10cp**

**Prerequisite**: Either MATH103 or STAT201 and MATH112 (or equivalent)

- Hours 3 hours per week for one semester

Semester Offered  Semester 2

- Content
  - This 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 for 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
  GLIM.

Text

- Dobson, A.J. 1990, *An Introduction to Generalised Linear
  Modelling*, Chapman & Hall.

References

  Chapman & Hall.
  Science Publications.

**STAT304**  **TIME SERIES ANALYSIS**  **10cp**

**Prerequisite**: Either MATH103 or STAT201 and MATH112 (or a level of mathematics equivalent to MATH112, 1st year mathematics and Statistics and STAT202)

- Hours 3 hours per week for one semester

Semester Offered  Semester 1

- Content
  - 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

  Chapman & Hall.

References

  and Control*, Holden Day.
- Fuller, W.A. 1976, *Introduction to Statistical Time Series*,
  Wiley.
  Wadsworth & Brooks/Cole.

**STAT401**  **PROBABILITY THEORY**  **10cp**

Semester Offered  Semester 1

- 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.

STAT402 ANALYSIS OF CATEGORICAL DATA 10cp
Semester Offered Semester 1
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
Semester Offered Semester 2
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


STAT405 STATISTICAL CONSULTING 10cp
Semester Offered Semester 2
The aim of this course is to develop both the statistical and nonstatistical skills required for a successful consultant. The course includes a study of the consulting literature, a review of commonly-used statistical procedures, problem formulation and solving, analysis of data sets, report writing and oral presentation, and consulting with actual clients.

References

STAT406 METHODS FOR QUALITY IMPROVEMENT 10cp
Semester Offered Semester 2
The course will cover the concepts of total quality management, the Deming philosophy and relevant statistical techniques. Simple methods such as flow charts and Pareto diagrams will be covered, in addition to the various types of control charts and process capability analysis. Modern experimental design techniques for optimising process performance will be included. The course is a practical one, and the issues involved in actually implementing a quality and productivity improvement program in an organisation will be addressed.

Course readings provided.

STAT407 ADVANCED TOPICS IN STATISTICS 10cp
Semester Offered Semester 1
This course consists of three modules on:
Sample size estimation, meta-analysis and demography.

STAT414 COMPUTER-INTENSIVE NONPARAMETRIC METHODS 10cp
Prerequisite STAT301 Statistical Inference
Semester Offered Semester 1
Contents
The aim of this subject is to provide students with an introduction to the wide range of nonparametric methods of statistical inference which rely on extensive computations for their use in practice.
Topics include:
2. The naive bootstrap; confidence intervals. Variety of applications.
3. Refinements of the bootstrap; the role of Monte Carlo simulation.
4. Edgeworth expansions and the connection with the bootstrap.
5. Improvements based on Edgeworth expansions; importance of pivoting for confidence regions.
6. Bootstrap iteration
7. Applications
8. Relationship with other methods of inference and estimation; smoothing, empirical likelihood.
HEALTH PROMOTION, HEALTH SOCIAL SCIENCE, EPIDEMIOLOGY

Graduate Diploma in Health Promotion
Graduate Diploma in Health Social Science
Graduate Diploma in Epidemiology
Master of Medical Science
- Health Promotion
- Health Social Science
- Epidemiology

In each case, the Graduate Diploma consists of a series of subjects (core program plus electives) totalling 80 credit points taken over one full-time year of study or the part-time equivalent. Students enrolling in the Master degree are required to complete the subjects comprising the program of study for the Graduate Diploma, and in addition, complete a major thesis or minor thesis (plus electives), taking one further year of full-time study or equivalent.

POLICIES ON CREDIT, PROGRESS

1. Credit
   A person admitted to enrol as a candidate for the Master degree after completion of the Graduate Diploma shall be granted credit in all subjects comprising the Diploma 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 before 1993 and who has completed the requirements for the award of the related Diploma more than 8 years prior to enrolment for the Master degree; or
      (b) is admitted to candidature in the Master degree program in 1993 or after and who has completed the requirements for the award of the related Diploma more than five years prior to enrolment for the Master degree.
   (ii) 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 Diploma coursework component of the Master degree course subject to the condition that upon completion of the requirement for admission to the degree, they will surrender the Diploma testamur to the University.

Upon completion of the requirements for admission to the degree, the candidate will be requested in writing to return the Diploma testamur to the University for destruction.

2. Policy with Respect to Admission to Candidature or Arts Graduates
   Persons who have satisfied the requirements for admission to the degree of Bachelor of Arts in the University of Newcastle or to an equivalent degree in another University approved for the purpose of admission to candidature, shall only be eligible for admission to candidature in the Master of Medical Science degree program in Health Social Science if their Arts degree is with Honours Class I or Class II in the Disciplines of Sociology or Psychology, or if they have completed the requirements for the related Graduate Diploma.
| APPROVED PROGRAM - GRADUATE DIPLOMA IN HEALTH SOCIAL SCIENCE | | APPROVED PROGRAM - MASTER OF MEDICAL SCIENCE |
|-------------------------------------------------------------|-------------------------------------------------|
| **Compulsory**                                               | **Candidates will be required to complete one full-time year (or part-time equivalent) of coursework, as per the program of the related Graduate Diploma** |
| MED605 Epidemiology A - Basic Methods                        | - For the Master of Medical Science (Epidemiology) - Graduate Diploma in Epidemiology |
| MED607 Epidemiology B - Research Design                       | - For the Master of Medical Science (Health Promotion) - Graduate Diploma in Epidemiology |
| MED614 Biostatistics A                                        | - For the Master of Medical Science (Health Social Science) - Graduate Diploma in Health Social Science. |
| MED615 Biostatistics B                                        | The second full-time year (or part-time equivalent) of the degree will again be coursework in one of two options: |
| MED622 Health Social Science I                                | (i) a major thesis (80 cp) or |
| MED626 Health Social Science II                               | (ii) a minor thesis (60 cp) plus electives (40 cp) |
| MED627 Sociocultural Studies I                                | All candidates must complete either MED651 Research Protocol Design or MED605 Health Promotion Research Protocol. |
| Electives                                                    | Additionally, candidates undertaking the Health Promotion specialisation, must have completed: |
| Subjects to the value of                                      | (a) MED615 Biostatistics B, to pursue option (i) i.e. a major thesis |
| Total                                                        | (b) MED676 Health Promotion Agency Attachment and Health Economics and MED604 Health Promotion Project. |

**Electives may be chosen from the following list:**

| MED604 Clinical Epidemiology                                  |
| MED615 Biostatistics B                                       |
| MED621 Health Social Science I                               |
| MED622 Health Social Science II                              |
| MED624 Social Psychiatry                                     |
| MED626 Sociocultural Studies I                               |
| MED627 Sociocultural Studies II                              |
| MED631 Economic Epidemiology                                 |
| MED632 Health Economics                                      |
| MED645 Methods in Pharmacoepidemiology                       |
| MED646 Pharmacoepidemiology: Cultural and Behavioural Themes |
| MED647 Pharmacoepidemiology: Policy and Economic Issues      |
| MED654 General Practice - Research Methods                  |
| MED653 General Practice - Clinical Epidemiology              |
| MED655 Community Paediatrics A                               |
| MED656 Community Paediatrics B                               |
| MED661 Research Protocol Design                              |
| MED654 Health Promotion Project                              |
| MED656 Health Promotion Protocol                             |
| MED673 Introduction to Health Promotion                      |
| MED674 Health Promotion Programme Development and Evaluation |
| MED675 Community Health Promotion                            |
| MED676 Health Agency Attachment and Health Economics         |
| STAT201 Mathematical Statistics                              |
| STAT202 Regression Analysis                                  |
| STAT206 Design & Analysis of Experiments & Surveys           |
| STAT301 Statistical Inference                                |
| STAT303 Generalised Linear Models                            |
| STAT304 Time Series Analysis                                 |
| STAT401 Probability Theory                                   |
| STAT402 Analysis of Categorical Data                        |
| STAT403 Demography and Survival Analysis                     |
| STAT405 Statistical Consulting                              |
| STAT406 Methods for Quality Improvement                     |
| STAT407 Advanced Topics in Statistics                       |
| STAT414 Computer-Intensive Nonparametric Methods             |

**SUBJECT DESCRIPTIONS**

**MED604 CLINICAL EPIDEMIOLOGY**

**Semester Offered:** Semester 1

**Content**
This subject is based on the concept of self-directed learning. Each module contains information, references to textbooks, self-assessment exercises and marked assignments.

**Text**

**MED614 BIOSTATISTICS A**

**Semester Offered:** Semester 1

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

**Text**

**MED615 BIOSTATISTICS B**

**Semester 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.

**Text**

**MED621 HEALTH SOCIAL SCIENCE I**

**Semester Offered:** Full Year

An introduction to Health Social Science and Behaviour Change.
Content

Social, cultural, and psychological determinants of disease

The subject comprises 6 modules which are:

1. Social Psychiatry
2. Epidemiology of Psychiatric Disorder
3. Social Determinants of Psychiatric Disorder
4. Developmental Influences and Theories of Stress
5. Life Events and Psychiatric Illness
6. Social Consequences of Psychiatric Disorder
7. Services for the Psychiatrically Ill
8. Management of Psychiatric Disorders
9. Prevention
10. Evaluation of Psychiatric Services

Examination: Critical appraisal exercise, written and/or assessments

Text


**MED622** HEALTH SOCIAL SCIENCE II 10cp

**Semester Offered:** Full Year

**Content**

1. The following topics from Health Social Science I:
   - Social, cultural and psychological determinants of disease
   - Social, cultural and psychological determinants of health behaviour
   - The use of qualitative field methods in questionnaire design

**Questionnaire construction**

1. The following topics from Clinical Economics:
   - Introduction to clinical economics
   - Cost of illness, including economic costs and discounting
   - Cost analysis
   - Cost minimisation analysis
   - Cost effectiveness analysis

**Time Requirement:** Approximately 30 hours

**Assessment:** Small group research project

**MED624** SOCIAL PSYCHIATRY 10cp

**Semester Offered:** Semester 2

**Content**

The subject Social Psychiatry consists of the following Modules:

1. Social Psychiatry
2. Epidemiology of Psychiatric Disorder
3. Social Determinants of Psychiatric Disorder
4. Developmental Influences and Theories of Stress
5. Life Events and Psychiatric Illness
6. Social Consequences of Psychiatric Disorder
7. Services for the Psychiatrically Ill
8. Management of Psychiatric Disorders
9. Prevention
10. Evaluation of Psychiatric Services

Examination: Critical appraisal exercise, written and/or assessments

Text


**MED625** SOCIOCULTURAL STUDIES I 10cp

**Semester Offered:** Semester 1

**Content**

Foundations of a Transdisciplinary Perspective in Health Social Science

**Topics covered include:**

1. The Transdisciplinary Perspective
   - Definition, rationale and need for transdisciplinary research
   - Construction a transdisciplinary framework
   - Examples of transdisciplinary thinking
   - The transdisciplinary team and creation of knowledge

2. Transdisciplinary Perspectives of Selected Problems
   - Heart disease
   - Political economy of pharmaceutical use in developing countries
   - Anthropology and social psychology of pharmaceutical misuse
   - AIDS

Part III: Transdisciplinary Perspectives of Research Methods

1. Triangulation of methods
2. Critique of survey methods
3. Demographic and health transition
4. Formulation of International Health Policy
5. Risk appraisal and social marketing
6. Health cities

7. Epidemiology of Psychiatric Disorder
8. Life Events and Psychiatric Illness
9. Social Consequences of Psychiatric Disorder
10. Services for the Psychiatrically Ill
11. Management of Psychiatric Disorders
12. Prevention
13. Evaluation of Psychiatric Services

**MED627** SOCIOCULTURAL STUDIES II 10cp

**Semester Offered:** Semester 2

**Content**

Techniques and applications of transdisciplinary research in Health Social Science.

**Topics covered include:**

- Essentials for performing transdisciplinary research
- Qualitative case control and contrasting groups framework
- Qualitative longitudinal design
- Reliability and factor analysis of questionnaire data
- Strengthening cross-sectional studies through qualitative methods and cognitive laboratory techniques
- Extended case study as a method
- Analysis of qualitative data
- Social inequality
- Intensive methods and interventions

**MED631** CLINICAL ECONOMICS 10cp

**Semester Offered:** Semester 2

**Content**

An introduction to Clinical Economics

**Topics include:**

- The institutional economics and microeconomics of the provision of health care services.
- Medical markets and the degree of competition in the provision of health care services.
- The welfare economics of medical care.
- Medical insurance and third party payment.
- Health care, health and economic development.
- The physician as economic agent.
- The supply of physicians.
- The use of diffusion of technology in the medical sectors.
- Preventive care and health promotion.
- Measuring hospital care services.
- The regulation of health care services.
- Evaluating the equity of distribution of health care services.
- Economics and health policy: asking the appropriate questions.

**MED645** METHODS IN PHARMAOEPIDEMILOGY 10cp

**Semester Offered:** Semester 1

**Content**

This subject provides intensive training in appropriate methods for students specializing in pharmacoepidemiology and provides insight for non-specialists into methodological issues in studies of drug utilisation and effects.

The subject comprises 6 modules which are:

1. Introduction to pharmacoepidemiology
2. Voluntary reporting systems
3. Case-control studies
4. Cohort studies
5. Automated Databases
6. Meta-Analysis

**Examination:** Several written assignments

**MED646** PHARMAOEPIDEMILOGY: CULTURAL AND BEHAVIOURAL THEMES 10cp

**Semester Offered:** Full Year

**Content**

The microeconomics of the provision and utilisation of health care services is studied. The economic consequences of decisions made by physicians, consumers, and managers of health service institutions are examined. The use and diffusion of technology in the medical sector is emphasised. The factors contributing to the cost of delivery and to the distribution of health care services are discussed. Fellows will be able to demonstrate the use of some basic tools of economic analysis in the understanding of the provision of health care.
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### Examination

**Written assignments**

- Examination Written assignments

**Content**

- Examination Written assignments

**Texts**


**MED654 GENERAL PRACTICE - RESEARCH METHODS**

- Semester Offered: Semester 1

**Content**

- The purpose of this subject is to present the principles of basic epidemiological methods in the context of General Practice-based research.

- There are seven modules all specifically tailored to the General Practice setting. These are:
  1. Setting the scene
  2. Health indicators
  3. Research strategies
  4. Risk, cause and bias
  5. Epidemic investigation
  6. Critical appraisal
  7. Information Technology

**Examination**

- Two assignments during the semester and open book written examination at the end of the semester.

**MED655 COMMUNITY PAEDIATRICS A**

- Semester Offered: Semester 1

**Content**

- This subject provides an overview of normal and abnormal child and adolescent health and development.

- At the end of the course students will have an understanding of:
  - Historical trends in mortality and morbidity
  - The history of the concept of childhood
  - The evolution of contemporary families
  - An evolving concept of health

**MED656 COMMUNITY PAEDIATRICS B**

- Semester Offered: Semester 2

**Content**

- The international context
  - UN Convention on the Rights of the Child
  - The national context
    - Australia's plan of action, national policies for children and families, child health policy development, goals and targets for child and youth health
    - Children and families within the Australian health system
    - Child health services
      - Interfaces between different components of the system - clinical medicine (primary, secondary, tertiary) and public health services, health and other human services
      - Primary health care for children and families
children with chronic illness
- Personal health records
- Management information systems
- Tools for health education
- Consultation, liaison and networking
- Consumer participation
- Advocacy

Examination: Two assignments during the semester and open book written examination at the end of the semester.

MED661 RESEARCH PROTOCOL DESIGN 10cp
Semester Offered: Full Year
Protocol Development

Objectives
To learn to develop a protocol (from a more general idea) which can be used for the following purposes:
1. to seek funding
2. to use as the base for actually performing the study

Designing a Research Study

1. Preliminaries
   a) Decide on the general problem to be research and assemble relevant existing data.
   b) State the hypothesis to be tested, define the objectives, draw up the final table, decide on most appropriate type of survey and on collaborators.
   c) Determine the list of variables to be measured, how to measure them and the criteria for defining the disease being studied.
   d) Choose the population, method of sampling and sample size.
   e) Consider problems of ethics and confidentiality.
   f) Write a protocol including an outline table of the final results.

2. Pilot Study

3. Performing the Study
   a) Final choice of study design, size and observational method; design and print questionnaire.
   b) Appoint staff, approach population.
   c) Train and test observers.
   d) Perform fieldwork. Check quality control and non-response.

4. Data Handling
   a) Code forms, enter data onto a computer, check, and edit data.
   b) Analyse data
   c) Feedback to individual participants.
   d) Prepare report.

Examination: Protocol (100%). The research protocol is a 10 credit points subject on which you are expected to design, write up, and orally present a research project to answer one or more research questions of interest to you.

MED664 HEALTH PROMOTION PROJECT 10cp
Semester Offered: Full Year
Content
In this subject, fellows integrate the skills they have acquired to develop a health promotion project. Fellows will work on an individual basis with a designated supervisor to develop a health promotion project in an area of their own interest. Fellows will design the project following the steps outlined by the Staged Approach to Health Promotion. Stages in project development include:
1. Rational for selecting the target behaviour
2. Programme for selecting specific barriers and access points
3. Programme materials and pretesting strategy
4. Results of pilot testing
5. Planned process evaluation
6. Planned outcome evaluation
7. Planned cost effectiveness evaluation

A prepared module is provided to guide fellows through this exercise. Fellows will identify an appropriate supervisor who will advise the fellow on project development. The Health Promotion project will be developed through a series of tasks (outlines in the module) which will be submitted for review and feedback. Review and feedback will be provided during four round table sessions when fellows present and discuss their project with academic staff and other fellows.

Examination: The project will be assessed by an independent assessor using a rating scale. This contributes 100% of the final grade.

MED665 HEALTH PROMOTION RESEARCH PROTOCOL 10cp
Semester Offered: Full Year
Content
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 this subject, students will have developed a research protocol suitable for implementation in the following year. The protocol will include description of the steps in designing and pilot testing the health promotion programme as well as strategies for evaluating its implementation, outcome and cost effectiveness. Students will work on an individual basis with a designated supervisor from Behavioural Science to develop a research protocol to evaluate a health promotion programme in an area of their own interest.

Stages in Protocol Development include:
1. Forming the research ideas
2. Choosing an appropriate research design
3. Choosing an appropriate sample
4. Choosing an appropriate statistical analysis
5. Developing reliable and valid measures
6. Preparing a research protocol

Examination: Assessment of the Protocol will contribute 100% of the final grade.

MED673 INTRODUCTION TO HEALTH PROMOTION 10cp
Semester Offered: Semester 1

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;
- critically appraise existing health promotion programs.

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 programs. A prepared module consisting of objectives, exercises, references and assessment is provided for each of the four major topic areas.

MED674 HEALTH PROMOTION PROGRAMME DEVELOPMENT AND EVALUATION 10cp
Semester Offered: Semester 1

Content
The subject Health Promotion Programme Development and Evaluation provides students with skills in the development and evaluation of health promotion programs. At the end of the subject students will be able to establish existing rates of health behaviour in a defined group; explore the barriers to performing health behaviour; present health promotion materials; design and interpret an evaluation of a health promotion programme and develop programs for use with health care providers and in the workplace.

The subject consists of the following Modules:
2. Pretesting Techniques
3. Designing and Implementing a Programme to Modify Health Care Providers' Health Promotion Practices
4. Work-based Programmes
5. Evaluating Health Promotion Programmes

MED675 COMMUNITY HEALTH PROMOTION 10cp
Semester Offered: Semester 2

The subject Community Health Promotion provides students with skills in undertaking community wide health promotion programmes. At the completion of the subject students will be able to develop, and have some skills in implementing programmes based on the following strategies: community action; mass media; legislative change; modifying the availability of a health related product; and adapting a programme for use by a disadvantaged group.

The subject consists of five modules addressing programmes based on five different techniques for modifying health behaviour at the community level. Within each module, the efficacy and effectiveness of the strategy will be examined and students will be required to undertake an exercise designed to provide them with skills in the relevant strategies:

The subject Community Health Promotion consists of the following Modules:
1. Community Action
2. Mass Media
3. Lobbying for Legislative Change
4. Modifying the Availability of a Health Related Product
5. Adapting a Programme for Use by a Disadvantaged Group

MED676 HEALTH AGENCY ATTACHMENT AND HEALTH ECONOMICS 10cp
Semester Offered: Semester 2

Content
This subject aims to provide students with an understanding
of the operation of health promotion agencies and to develop
skills in critically appraising the work of such agencies.
Students are required to spend 20 hours attached to a health
promotion agency and to critically evaluate the agency in
terms of its structure, policies, objectives, planning processes
and management techniques. A series of seminar sessions
covering agency management are run in parallel with the
attachment. The course is also designed to provide students
with basic skills in health economics. At the completion of
the course, students will be able to: critically explain the
relevance of economics to health; calculate the cost of a
disease or condition; critically explain the methods, strengths
and weaknesses of cost-effectiveness analysis; calculate
Quality Adjusted Life Years.

Examination
Assessment of the attachment consists of the preparation of a
2,500 word essay addressing the health economic implications
of an aging population. Specifically the essay involves a
cost comparison between the implementation of primary/
secondary preventive strategies and tertiary preventive
strategies.

MED561 MINOR THESIS
40cp
Prerequisite: MED661 Research Protocol Design, MED664
Health Promotion Research Project or MED665 Health
Promotion Research Protocol (for Master of Medical Science
students)
Corequisite: Nil
Semester Offered: Semester 1 or 2
Content
The thesis may involve a similar range of topics to those
calculated for MED652 Major Thesis but required about half
the amount of work. Nevertheless, it may be suitable for
publication and the thesis may reflect this structure and style.
Examination
The results of the project undertaken are to be reported in a
thesis of up to 150 pages or as a manuscript suitable for submission to a
journal (possibly with supporting material).

STAT201 MATHEMATICAL STATISTICS 10cp
Prerequisite: 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
Semester Offered: Semester 1
Content
The following concepts, definitions and uses of, are covered:
Random variables, probability, density and distribution
functions, expectation, likelihood, point and interval
estimation, and tests of significance.
Text
Hogg, R.V. and Tanis, E.A. 1994, Probability and
Statistical Inference, Macmillan.

References
Freund, J.E. and Walpole, R.E. Mathematical Statistics, various
dns, Prentice Hall.
Kalbfleish, J.G. 1985, Probability and Statistical Inference
Larson, R.J. and Marx, M.L. 1986, An Introduction to

STAT202 REGRESSION ANALYSIS 10cp
Prerequisite: STAT201 or STAT101 and MATH112 (or equivalent)
Hours: 2 lecture Hours, 1 laboratory and 1 tutorial hour per week for one semester
Semester Offered: Semester 2

Content
This course covers the practical and theoretical aspects of
multiple regression analysis. Emphasis is placed upon
diagnostic methods and remedial measures to be taken when
the assumptions are not met, transformations, selection of
regressors, alternatives to least squares and non-linear
regression. MINITAB will be the primary statistical computing
package that it used; SAS will also be used.

Text
To be advised.

References
Draper, N.R. and Smith, H. 1981, Applied Regression Analysis,
Wiley.
Montgomery, D.C. and Peck, E. 1992, Introduction to Linear
Regression Analysis, 2nd ed, Wiley.
Statistical Models, 2nd edn, Irwin.
Ryan, B.F., Joiner, B.L. and Ryan, T.A. 1985, MINITAB
SAS Institute Inc. 1985, SAS Introductory Guide, 3rd edn,
SAS Inst, Cary NC.

STAT205 DESIGN AND ANALYSIS OF EXPERIMENTS AND SURVEYS 10cp
Prerequisite: STAT201
Hours: 4 hours per week for one semester
Semester Offered: Semester 2
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
estimation. Class projects are used to illustrate practical
problems and the statistical packages Minitab and SAS are used to carry out analyses.
Text
Montgomery, D.C. 1984, Design and Analysis of Experiments,
2nd edn, Wiley.
Barnett, V. 1988, Elements of Sampling Theory, Hodder and
Stoughton.
framework. Topics include the exponential family of distributions, maximum likelihood estimation, sampling distributions for 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 GLIM.

Text

References

STAT304 TIME SERIES ANALYSIS 10cp
Prerequisite STAT201 Mathematical Statistics and STAT202 Regression Analysis

Advisory Corequisite STAT301
Hours 3 hours per week for one semester
Semester Offered Semester 1

Content
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.

Text

References

STAT401 PROBABILITY THEORY 10cp
Semester Offered Semester 1

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.

STAT402 ANALYSIS OF CATEGORICAL DATA 10cp
Semester Offered Semester 1

The course will discuss the analysis of categorical data. It will begin with a thorough coverage of 2 x 2 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
Semester Offered Semester 2

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


STAT405 STATISTICAL CONSULTING 10cp
Semester Offered Semester 2

The aim of this course is to develop both the statistical and nonstatistical skills required for a successful consultant. The course includes a study of the consulting literature, a review of commonly-used statistical procedures, problem formulation and solving, analysis of data sets, report writing and oral presentation, role-playing and consulting with actual clients.

STAT406 METHODS FOR QUALITY IMPROVEMENT 10cp
Semester Offered Semester 2

The course will cover the concepts of total quality management, the Deming philosophy and relevant statistical techniques. Simple methods such as flowcharts and Pareto diagrams will be covered, in addition to the various types of control charts and process capability analysis. Modern experimental design techniques for optimising process performance will be included. The course is a practical one, and the issues involved in actually implementing a quality and productivity improvement program in an organisation will be addressed.

Course readings provided.

STAT407 ADVANCED TOPICS IN STATISTICS 10cp
Semester Offered Semester 1

This course consists of three modules on: Sample size estimation, meta-analysis and demography.

STAT414 COMPUTER-INTENSIVE NONPARAMETRIC METHODS 10cp
Semester Offered Semester 1

Contents
The aim of this subject is to provide students with an introduction to the wide range of nonparametric methods of statistical inference which rely on extensive computations for their use in practice.
section fifteen

Musculoskeletal Medicine

GRADUATE DIPLOMA IN MUSCULOSKELETAL MEDICINE

Course and Subject Description

Course Length: 3 years of part-time study
Course Coordinator: Professor Nicolai Bogduk
Total Credit Points: 80 credit points
Availability: On campus. This is a fee-paying course (1995 course fee is proposed to be $10,000).

The Graduate Diploma in Musculoskeletal Medicine will be introduced in 1995. This postgraduate program, to be taken over 3 part-time years of study, has been developed to meet the demand for formal education in musculoskeletal medicine, prompted by the Australian Association of Musculoskeletal Medicine.

Program Construction

Candidates will pursue a course of didactic instruction, interactive tutorials, self-directed learning and clinical experience, covering principles and details of basic sciences, epidemiology, critical reasoning, physical examination, radiographic and other investigations, pharmacology and therapeutics, as they pertain to Musculoskeletal Medicine. The general and specific objectives of the program are those outlined in the syllabus of the Australian Association of Musculoskeletal Medicine (attachment 1).

Students will enrol in a single subject in each of the three (part-time) years of the course. In Year 1 students will enrol in Musculoskeletal Medicine I, in Year 2 in Musculoskeletal Medicine II and in Year 3 in Musculoskeletal Medicine II. Final results will not be awarded until completion of all three years (refer to Assessment, below).

The course of instruction will be divided into residencies and assignments over a period of three years. The residencies will be of two weeks in January/February, one week in June/July and one week in October/November of each year of the course. The residencies will be used for didactic lectures, laboratory classes in Anatomy and in physical examination, interactive tutorials, training and experience in library techniques and information science, and to allocate and discuss assignments.

Didactic lectures will address topics of magnitude or difficulty that cannot reasonably be addressed simply by self-directed learning. Interactive tutorials will be used to derive a sensible, efficient but intellectually justified and responsible clinical approach to regional problems of the musculoskeletal system. The will address the propriety and justification of decisions taken and prescriptions offered in the course of dealing with a patient's presentation. The objective is not only to have candidates familiar with existing knowledge and skills but also to render them accountable in terms of the validity, utility and economies of diagnostic and therapeutic decisions and the morbidity and outcome measures of treatment based on these decisions.

Assignments will be designed to provide training and experience in harvesting information pertinent to particular types of problems and topics in Musculoskeletal Medicine, and in reporting such information verbally and in written form. The objective is to render the candidates able to identify deficiencies in knowledge (be it their own or of Medicine at large) and how to address an omen with these deficiencies, up to and including identifying the need for research projects.

Clinical experience will be provided in the form of supervised tutorials on volunteer patients, by way of allocation to clinical units in the Newcastle area, and by way of a log-book of professional skills. The log-book will prescribe a variety of surgical, medical and radiological procedures that candidates will be required to witness, analyse, evaluate and upon which they will be required to report critically. The objective of this clinical experience is to illustrate and to consolidate the application of the skills whose theoretical basis and execution candidates will address during the residencies.

In addition to these instruments, candidates will be required to undertake an audit of their own clinical experience to demonstrate the ability to apply and recording outcome measures in Musculoskeletal Medicine and the appraisal of these observations. Assessment

Both written assessment and continual assessment will be used.

For each residency, a written entry examination will be administered to establish the base-line knowledge of candidates individually and of the candidates on average. A similar examination will be administered at the conclusion of each residency to measure the degree of behavioural change in terms of the objectives of the syllabus. This pattern of assessment will provide a basis for quality assurance. Each exit examination will constitute 5% of the total assessment.

The log-book of professional skills will be assessed for diligence and responsibility with respect to insight as to the indications, utility and morbidity of the procedures studied. The log-book will nominally constitute 10% of the total assessment but a satisfactory grading must be achieved in order to qualify for the diploma.

The audit of personal experience will be assessed for rigour and subsequent analytical insight and will nominally constitute 10% of the total assessment but a satisfactory grading must be achieved in order to qualify for the diploma.

A final, written exit examination will nominally constitute 40% of the total assessment and will be conducted at the close of the final residency. The assessment will consist of three essays, or two essays and one viva voice examination, each addressing comprehensively the assessment and management of an archetypal problem in Musculoskeletal Medicine and the critical justification of each step in the management described. The assessment will be conducted using an innovative instrument - an examination booklet with parallel left and right pages such that the prescribed management is outlined on the left-sided pages only while the justifications are outlined in parallel on the right-sided pages.

The objectives of the course are to have candidates acquire knowledge and behaviours as described by the syllabus. The assessment instruments are designed to have candidates document their relevant clinical experience; demonstrate application of the precepts studied in the course; demonstrate recall of factual knowledge; demonstrate the ability to analyse a patient's presentation and the problems posed by this presentation; demonstrate an ability to formulate a plan of management but also to evaluate critically the options in such a plan and to defend the options selected. Since medical practice requires, in the first instance, immediate competence in knowledge and performance, open questions in written assessments will be used to test this competence. Otherwise, medical practice also requires an ability to pursue information once the patient has been seen. The assignments will be used to test this ability.

At the end of Years 1 and 2 students will be awarded a "(Year)" grade, indicating approval of ongoing enrolment as part of normal progression in the program. (The year in which the final grade will be determined is indicated within the brackets following the letter "(T)". To progress from Year to Year students must be progressing satisfactorily in each of the assessments.)
APPROVED PROGRAM - GRADUATE DIPLOMA IN MUSCULOSKELETAL MEDICINE

Year 1
MED530 Musculoskeletal Medicine I 25 cp
Year 2
MED531 Musculoskeletal Medicine II 25 cp
Year 3
MED532 Musculoskeletal Medicine III 30 cp
Total 80 cp
February - April

Subject Descriptions

MED530 MUSCULOSKELETAL MEDICINE I 25 cp

Prerequisite Nil
Corequisite Nil
Semester Offered Full Year

Structure and Content

January - February Residency, two weeks
Concepts of Basic Sciences and Physical Examination
Analysis and design of a hypothetical but archetypical joint
The design requirements and actual structure of bone, cartilage, ligaments and muscles
Proprioception and nociception
Biomechanics of a static and moving joint
How to render a joint system abnormal
Pathology of articular tissues
Critical appraisal of orthodox and competing models of musculoskeletal pathology; trigger points, spasm, muscle imbalance, instability
Systematic examination and investigation of a hypothetical joint system
Descriptive statistics and agreement as illustrated in the musculoskeletal system
Tutorials on the statistics of agreement
Allocation of assignments on "the shoulder"-extensive and epigrammatic summaries of conventional knowledge

on classical and exotic disorders of the shoulder region.
The definition of truth and the reliability of sources of knowledge
The training in library techniques and contemporary information resources; the book, the journal, indices, CD-ROM, internet

Tutorials on controversial problems of rheumatoid arthritis using the hand as the model
Interactive tutorials to develop an algorithm for the management of elbow and hand problems that lack a definitive, conventional diagnosis; reformulating a patient's problem into a rehabilitation model of impairment, disability and handicap in physical, psychological, vocational and social domains; exploring the opportunities for intervention and assistance in this model
Consideration of outcome measures as they apply to problems of the shoulder
Allocation of assignments for "elbow/ hand"

July-August
Completion and submission of assignments on the elbow/hand
Pursuit of clinical skills as directed by log book
Feedback on assignments by post

September-October
Correction and completion of assignments
Pursuit of clinical skills as directed by log book

October
Residency, one week

MED531 MUSCULOSKELETAL MEDICINE II 25 cp

Prerequisite MED530 Musculoskeletal Medicine I
Corequisite Nil
Semester Offered Full Year

Structure and Content

January - February Residency, two weeks

Didactic lectures on the design, structure and biomechanics of the shoulder region
Didactic lectures on the reliability of diagnostic techniques
Collation and distribution of assignments in lieu of "course notes" on conventional disorders of the shoulder. Discussion of the propriety, reliability and utility of this data.
Tutorials on controversial problems of the shoulder - frozen shoulder, capsulitis, impingement syndromes

Demonstration of patients who exhibit examples of shoulder problems
Interactive tutorials on therapeutic options
Didactic lectures on orthotics, surgery of the shoulder and post-surgical management
Interactive tutorials to develop an algorithm for the management of shoulder problems that lack a definitive, conventional diagnosis; reformulating a patient's problem into a rehabilitation model of impairment, disability and handicap in physical, psychological, vocational and social domains; exploring the opportunities for intervention and assistance in this model
Consideration of outcome measures as they apply to problems of the shoulder
Allocation of assignments for "shoulder/ arm"

April-May
Completion and submission of assignments on the shoulder
Pursuit of clinical skills as directed by log book
Feedback on assignments by post

June

September-October
Correction and completion of assignments
Pursuit of clinical skills as directed by log book

October
Residency, one week

MED532 MUSCULOSKELETAL MEDICINE III 20 cp

Prerequisite MED531 Musculoskeletal Medicine II
Corequisite Nil
Semester Offered Full Year

Structure and Content

January - February Residency, two weeks

Didactic lectures on the design, structure and biomechanics of the elbow, forearm and hand
Demonstration and practical instruction on physical examination of the elbow, forearm and hand, accomplished by use of anatomical specimens of this region
Pursuit of clinical skills as directed by log book
Feedback on assignments by post

July-August
Completion and submission of assignments on the elbow/hand
Pursuit of clinical skills as directed by log book
Feedback on assignments by post

September-October
Correction and completion of assignments
Pursuit of clinical skills as directed by log book

October
Residency, one week

Demonstration of patients who exhibit examples of elbow problems
Interactive tutorials on orthotics, surgery of the elbow and post-surgical management
Interactive tutorials to develop an algorithm for the management of elbow and hand problems that lack a definitive, conventional diagnosis; reformulating a patient's problem into a rehabilitation model of impairment, disability and handicap in physical, psychological, vocational and social domains; exploring the opportunities for intervention and assistance in this model
Consideration of outcome measures as they apply to problems of the elbow and hand
Allocation of assignments for "elbow/ hand"
Interactive tutorials on the reliability of these diagnostic techniques
Allocation, completion, collation and distribution of assignments in lieu of "course notes" on conventional disorders of the lumbar spine. Discussion of the propriety, reliability and utility of this data.

Demonstration of patients who exhibit examples of lumbar spine problems
Didactic lectures on orthotics, surgery of the lumbar spine and post-surgical management

Interactive tutorials to develop an algorithm for the management of lumbar spine problems that lack a definitive, conventional diagnosis; reformulating a patient's problem into a rehabilitation model of impairment, disability and handicap in physical, psychological, vocational and social domains; exploring the opportunities for intervention and assistance in this model
Consideration of outcome measures as they apply to problems of the lumbar spine

Correction and completion of assignments
Pursuit of clinical skills as directed by log-book
Residency, one week

June
Didactic lectures on the design, structure and biomechanics of the cervical spine
Demonstrations and practical instruction on physical examination of the cervical spine, accompanied by use of anatomical specimens of the region
Interactive tutorials on the source and mechanism of symptoms stemming from the cervical spine
Interactive tutorials on the assessment of hypothetical patients with problems of the cervical spine, with the objective of establishing a universally acceptable algorithm
Collation and distribution of assignments in lieu of "course notes" on conventional disorders of the cervical spine. Discussion of the propriety, reliability and utility of this data.
Didactic lectures on the radiology of the cervical spine and other investigative techniques such as joint blocks, discography, transforaminal blocks and MRI
Interactive tutorials on the reliability of these diagnostic techniques
Demonstration of patients who exhibit examples of cervical spine problems

July-August
Didactic lectures on the design, structure and biomechanics of the pelvic region and hip
Demonstration and practical instruction on physical examination of the pelvic region and hip, accompanied by use of anatomical specimens of these regions
Interactive tutorials on the assessment of hypothetical patients with hip problems, with the objective of establishing a universally acceptable algorithm
Didactic tutorials on the nature and utility of decision trees
Didactic lectures on the radiology of the pelvic region and hip
Interactive tutorials on the reliability of these diagnostic techniques
Collation and distribution of assignments in lieu of "course notes" on conventional disorders of the hip. Discussion of the propriety, reliability and utility of this data.
Tutorials on controversial problems of the hip - pelvic instability, groin pain
Demonstration on patients who exhibit examples of hip problems
Didactic lectures on orthotics, surgery of the hip and post-surgical management
Interactive tutorials to develop an algorithm for the management of hip problems that lack a definitive, conventional diagnosis; reformulating a patient's problem into a rehabilitation model of impairment, disability and handicap in physical, psychological, vocational and social domains; exploring the opportunities for intervention and assistance in this model
Consideration of outcome measures as they apply to problems of the hip

Allocation of assignments for "knee, leg, foot"

Meds 32 MUSCULOSKELETAL MEDICINE III
Prerequisite Meds 531 Musculoskeletal Medicine II
Corequisite Nil
Semester: Offered: Full Year
Structure and Content

January - February
Residency, two weeks

Didactic lectures on the design, structure and biomechanics of the knee, leg and foot
Demonstrations and practical instruction on physical examination of the knee, leg and foot accompanied by use of anatomical specimens of these regions
Interactive tutorials on the assessment of hypothetical patients with problems of the knee, leg and foot, with the objective of establishing a universally acceptable algorithm
Didactic lectures on the radiology of the knee, leg and foot
Interactive tutorials on the reliability of these diagnostic techniques
Collation and distribution of assignments in lieu of "course notes" on conventional disorders of the knee, leg and foot. Discussion of the propriety, reliability and utility of this data.
Tutorials on controversial problems of the knee, leg and foot
Demonstration on patients who exhibit examples of knee, leg or foot problems
Didactic lectures on orthotics, surgery of the knee, leg and foot accompanied by use of anatomical specimens of these regions
Interactive tutorials on the reliability of these diagnostic techniques
Collation and distribution of assignments in lieu of "course notes" on conventional disorders of the knee, leg and foot. Discussion of the propriety, reliability and utility of this data.
Demonstration of patients who exhibit examples of knee, leg or foot problems
April - May

Interactive tutorials on therapeutic options

Didactic lectures on orthotics, surgery of the knee, leg and foot, and post-surgical management

Interactive tutorials to develop an algorithm for the management of knee, leg or foot problems that lack a definitive, conventional diagnosis; reformulating a patient’s problem into a rehabilitation model of impairment, disability and handicap in physical, psychological, vocational and social domains; exploring the opportunities for intervention and assistance in this model

Consideration of outcome measures as they apply to problems of the knee, leg or foot

Pursuit of clinical skills as directed by log-book

June

Residency, one week

Didactic lectures on gait and ergonomics

Advanced study of biomechanics on the dynamics of function of the upper and lower limbs and the vertebral column

Interactive tutorials on the epidemiology, sociology and pathology of RSI and its management

Tutorials on the critical appraisal of syndromes of the lower limb such as iliotibial band syndrome and hyperpronation syndromes

Research Methodology

Interactive tutorials on the nature of research questions arising out of musculoskeletal practice

Interactive tutorials on intuitive plans and how such problems might be addressed

Modification of intuitive plans according to contemporary principles of clinical epidemiology and statistics

Discussion of candidates’ personal audits

July-August

Completion and submission of assignments on pain management

Pursuit of clinical skills as directed by log-book

Feedback on assignments by post

August-September

Correction and completion of assignments

Pursuit of clinical skills as directed by log-book

October

Residency, one week

Discussion of assignments on pain management

Didactic lectures on the psychological dimensions of pain management

Interactive tutorials on the principles of pain management and how these might relate to musculoskeletal medicine

Interactive tutorials on medicolegal assessment, considering reliability of clinical assessment and investigations

how to compose a report

how to be witness

Final Assessment

GRADUATE DIPLOMA IN GENETIC COUNSELLING

MASTER OF GENETIC COUNSELLING

The Faculty of Medicine and Health Sciences will introduce these two new postgraduate courses in 1995.

Both courses are proposed as fee-paying postgraduate courses, requiring the payment of a set course fee (students are therefore not RECS liable).

Course Coordinator: Professor Gillian Turner

Course Duration

Graduate Diploma – 1 year full-time

Masters – one additional year of full-time study (or equivalent)

Total Credit Points

Graduate Diploma – 80

Masters – 160 (80 + 80)

Availability: On campus

Course Aims

The aims of the Diploma program are to provide a candidate with the knowledge, skills and attitudes for a career in genetic counselling. Upon satisfying the requirements for the award of the Graduate Diploma, the candidate should:

• meet the academic accreditation standards of the HGSA
• be able to function as contributing member of a multidisciplinary clinical genetics team
• gradually assume increasing responsibility for counselling independently.

The objectives are that a graduate, the candidate will have a clear understanding of:

• basic genetic mechanisms including the genetic code, the organisation of the gene, mutation, cytogenetics and classic Mendelian inheritance
• how these mechanisms can be studied and observed in man
• how this knowledge is used and applied in the practice of clinical genetics
The candidate will also have:
- a working knowledge of a wide variety of genetic diseases and conditions and how these are diagnosed and the burden they offer to the affected individual and families
- an understanding of the acute and chronic psychosocial reactions of individuals and families to genetic disease of all kinds
- a working knowledge of the general structure of hospital and community services and the networks of social support
- a knowledge of the medicolegal and ethical issues raised by the practice of clinical genetics.

The aims and objectives of the Masters program are the same as those for the Diploma but, in addition, that the candidate will learn research methods by both didactic instruction and direct participation in a project in clinical genetics or genetic counselling.

The two courses in Human Genetics are designed to provide the student with a firm understanding of the scientific substratum of clinical genetics. The two courses in Clinical Genetics are designed to show how the knowledge, understanding and principles of human genetics are applied to clinical problems in practice. The course in Counselling provides the student with an understanding of the aims, objectives, methods, strengths and limitations of the counselling process. The Practicum will be a series of field placements enabling the student to see how clinical genetics and genetic counselling are carried out in the workplace. The Project/Research essay will encourage the student to explore an individual case or clinical genetic problem in depth using current methods of clinical investigation, library resources and interdisciplinary consultations. More details about individual subjects are given in the Appendix.

For the Masters degree, the Project/Research essay might well be the basis for the subsequent thesis. The thesis will be project involving the collection and analysis of data, the testing of a hypothesis, a formal discussion and the distillation of the thesis into a paper in a format suitable for publication.

The minimum time for the Graduate Diploma would be one year of full-time residence. The program is designed so that it can be taken in two semesters (Human Genetics 1, Counselling and Clinical Genetics 1 in the first semester and the remaining subjects in the second) but it should be stipulated that these two halves are separated by not more than three years.

**ASSESSMENT**

The style of instruction throughout is for small group sessions, seminars, workshops and problem solving; didactic instruction will be kept to a minimum. There will be a heavy emphasis on self-learning both within and without the formal curriculum. Each student will be assigned a tutor or mentor (who will deal with no more than two students from any one year) and reports from this individual will form part of the assessment. Students will be marked on presentations at workshops or seminars and in individual assignments. There will be a formal examination at the end of the semester for each of the first five courses listed above: for the Practicum the students will be expected to write a report of their experiences, which will be marked, and reports will be sought from supervisors. The Project/Research essay will be marked individually.

Assessment is intended to assess not only how much knowledge of human and clinical genetics has been acquired but also how this is applied to both specific and generic medical problems. Particular attention will be paid to skills developed in interviewing and counselling individuals and families with at least one "real" mock interview marked by an outside examiner. A log book of cases will be kept by each student and will form part of the assessment.

**CURRICULUM**

During the courses in Clinical Genetics the students will have daily contact with the staff of the Regional Medical Genetics Unit of the Hunter Area Health Service. This is a flourishing unit which provides a comprehensive clinical genetics service second to none in Australia. Each of the three staff specialists have their own individual clinical research interests and projects. There is close association between the clinical service and the cytogenetic and molecular genetic services at the John Hunter Hospital both of which are engaged in current research. It is almost impossible to practice this clinical discipline without understanding current research since, quite literally, research carried out in the past six months leads to clinical tests in the next six months. The atmosphere in the Regional Medical Genetics Unit is such that a main concern is to control the amount of current research the students are exposed to in order to ensure they first understand the basic facts and principles presented by the formal course.

There is an increasing trend for medical genetics to leave the ivory towers of the teaching hospital clinics and get out into the community. Ever since the Regional Medical Genetics Service second to none in Australia. Each of the three staff specialists have their own individual clinical research interests and projects. There is close association between the clinical service and the cytogenetic and molecular genetic services at the John Hunter Hospital both of which are engaged in current research. It is almost impossible to practice this clinical discipline without understanding current research since, quite literally, research carried out in the past six months leads to clinical tests in the next six months. The atmosphere in the Regional Medical Genetics Unit is such that a main concern is to control the amount of current research the students are exposed to in order to ensure they first understand the basic facts and principles presented by the formal course.

Part 1 starts with a review of the basic structure and functions of the cell, the chromosome and the gene, mitosis, meiosis and Mendelian and non-Mendelian patterns of inheritance. This is followed by an overview of human embryology and development and a more detailed study of cytogenetics and the genetics of quantitative traits.

Part 2 pays attention to biochemical and molecular genetics, the genetics of the immune system and cancer, eugenetics with a brief discussion of population and evolutionary genetics.

**APPROVED PROGRAM - GRADUATE DIPLOMA IN GENETIC COUNSELLING**

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<td>MED901</td>
<td>Human Genetics 1</td>
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<td>MED902</td>
<td>Human Genetics 2</td>
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<tr>
<td>SWK513</td>
<td>Professional Counselling Skills</td>
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<tr>
<td>MED93</td>
<td>Clinical Genetics 1</td>
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<td>MED94</td>
<td>Clinical Genetics 2</td>
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<td>MED95</td>
<td>Practicum</td>
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<tr>
<td>MED96</td>
<td>Project/Research Essay</td>
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<th>Subject Descriptions</th>
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<td>MED901 HUMAN GENETICS 1</td>
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<td>Semester Offered Semester 1</td>
<td>MED901 Semester 1, MED902 Semester 2</td>
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<td>Semester Offered Semester 2</td>
<td>MED93 Semester 1, MED94 Semester 2</td>
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<td>MED93 CLINICAL GENETICS 1</td>
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<td>MED903 Semester 1, MED904 Semester 2</td>
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<td>Semester Offered Semester 2</td>
<td>MED93 Semester 1, MED94 Semester 2</td>
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| Part 2 starts with a study of the major categories of genetic disease (single gene, chromosomal, malformations, multifactorial). This is followed by various aspects of genetic counselling including the recognition and delineation of a clinical problem, the nature benefits and costs of genetic counselling, reproductive options and prenatal diagnosis. Prenatal screening will be discussed in some detail together with the ethical issues this kind of screening, prenatal diagnosis and genetic treatments raise. |
|-------------|--------------|---------------|
| Semester Offered Semester 2 | MED95 PRACTICUM | 10 cp |

This consists of field placements of two weeks each in three different localities. There will be two students to each placement. The field placements are made in the second semester.

| Outreach Clinics | Students will visit, observe and participate in one of three outreach clinics under the supervision of the locally based genetic counsellor. These counsellors are part of the NSW Clinical Genetics Service, have had considerable practical experience in running outreach genetics services and most, if not all, are HSVGA accredited. Such clinics include those held in Tamworth, Lismore, Coffs Harbour and Goulburn.
|-------------|--------------|---------------|
| The Hospital | Two students will rotate through each of three attachments. The first will be in the Prenatal Diagnostic Clinic at the John Hunter Hospital, the second is the Genetic Cytogenetics Laboratory and the third the Molecular Genetics Laboratory. In the Prenatal Diagnostic Clinic the aim is to demonstrate students the main methods of prenatal diagnosis (ultrasound, chorionic villi biopsy and amniocentesis) and understand these from the perspective of the patient. The laboratory experience should convey to the student the costs, benefits and limitations of the common genetic investigations.
|-------------|--------------|---------------|
| Genetics Clinics | There will be three rotations: 1) the Genetic Counselling Clinic, 2) the Stockton Centre, and 3) subspecialty clinics such as the Neurofibromatosis Clinic, the Cleft Lip and Palate Clinic, the Spina Bifida Clinic.
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<td>The aim is to expose the student to a number of common diseases or disorders with genetic components and to observe genetic counselling at first hand. For this latter role playing, mock interviews and real interviews will be used.</td>
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<td>MED956 PROJECT/RESEARCH ESSAY</td>
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<td>Semester Offered Semester 2</td>
<td>This is carried out in the second semester. Each student will select of be assigned a family to study in depth. Individual students preferences and experience will be accommodated.</td>
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in the choice of the genetic problem in the family. Out of this a project (eg. the collection of other families with the same particular problem) or an essay (describing the genetic and psychosocial problems and issues encountered) will be carried out.

For those proceeding to a Masters degree, the project of topic chosen could well be the beginning of the Masters thesis.

SWRK513 PROFESSIONAL COUNSELLING SKILLS 20cp
Semester Offered  Semester 1
This subject consists of a series of skills workshops designed to develop counselling skills for professional people engaged in Clinical or Medical Genetics. It presumes detailed knowledge or co-study of the specialty but does not presume previous counselling experience.

APPROVED PROGRAM - MASTER OF GENETIC COUNSELLING

Year One
As per the coursework for the Graduate Diploma in Genetic Counselling  80 cp

Year Two
Research Thesis  80 cp
The Research Thesis embodies a substantial piece of original research work under the guidance of an appointed supervisor.