FACULTY OF MEDICINE

The University of
New South Wales

HANDBOOK 1962

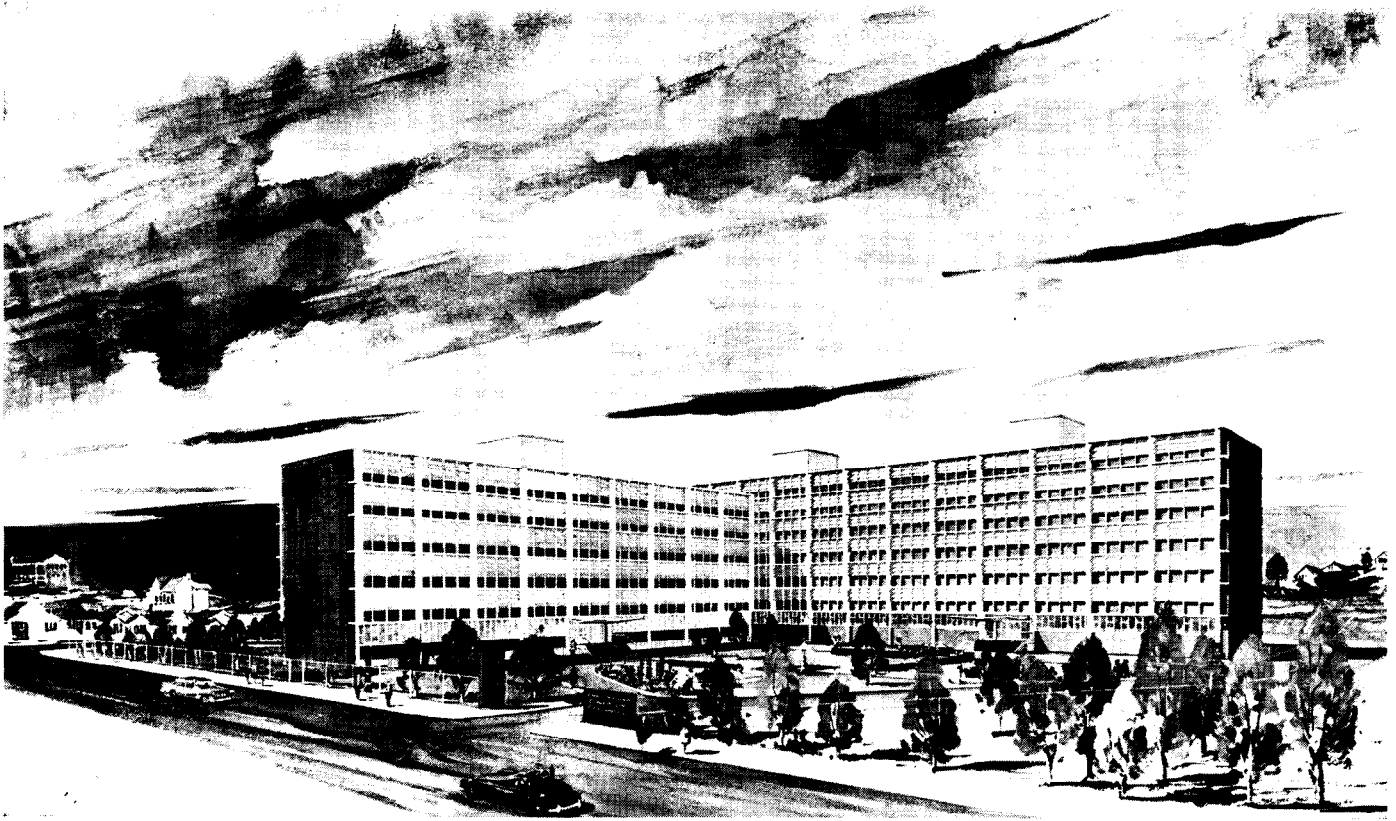
THE UNIVERSITY OF NEW SOUTH WALES

FACULTY OF MEDICINE

Handbook

1962

TABLE OF CONTENTS



ARTIST'S PERSPECTIVE OF THE MEDICAL SCHOOL
(UNDER CONSTRUCTION)

CALENDAR OF PRINCIPAL DATES

1962

February —

Monday 19	Enrolment Week commences for First Year students.
Thursday 22	Second Year Medical students re-enrol.
Monday 26	Lectures commence—Second Year Medicine.

March —

Monday 5	First term lectures commence—First Year courses.
Friday 30	Last day for acceptance of enrolments.

April —

Friday 20 to Monday 23	Easter holidays.
Wednesday 25	Anzac Day—Public Holiday.

May —

Saturday 12	First Term ends.
Monday 14 to Saturday 26	Vacation (2 weeks).
Monday 28	Second Term commences.

June —

Monday 4	Queen's Birthday—Public Holiday.

August —

Friday 3	Last day for acceptance of applications for examinations.
Saturday 4	Second Term ends.
Monday 6 to Saturday 25	Vacation (3 weeks).
Monday 27	Third Term commences.

October —

Monday 1 ..... Six Hour Day—Public Holiday.

November —

Saturday 3 ..... Lectures cease.

Saturday 10 ..... Annual examinations begin.

December —

Saturday 1 ..... Annual examinations end.

1963

February —

Monday 18 ..... Lectures commence—Third Year Medicine.

Monday 25 ..... Lectures commence—Second Year Medicine.

March —

Monday 4 ..... First Term lectures commence—First Year courses.

FACULTY OF MEDICINE

Dean: Professor F. F. RUNDLE, M.D., B.S., B.Sc.(Syd.), F.R.C.S., F.R.A.C.S., F.A.C.S.

MEDICAL SCHOOL

School of Anatomy

Professor of Anatomy:

M. J. BLUNT, M.B., B.S., Ph.D.(Lond.), L.M.S.S.A.(Lond.).

Associate Professor of Anatomy:

C. P. WENDELL-SMITH, M.B., B.S.(Lond.), D.R.C.O.G.

Senior Lecturers:

B. R. A. O'BRIEN, B.Sc., Ph.D.(Syd.).
N. J. B. PLOMLEY, B.Sc.(Syd.), M.Sc.(Tas.).

Demonstrators:

F. Y. W. KWOK, M.B., B.S.(Syd.).
R. G. WILLIAMS, M.B., B.S.(Syd.).

Curator of Anatomical Museum:

I. BRODSKY, M.B.(Syd.).

School of Medicine

Professor of Medicine:

R. B. BLACKET, M.D., B.S.(Syd.), F.R.A.C.P., M.R.C.P.

Associate Professor of Medicine:

A. W. STEINBECK, M.D., B.S.(Syd.), Ph.D.(Lond.), F.R.A.C.P., M.R.C.P.

**Associate Professor of Diagnostic Radiology*:

H B. L. WILLIAMS, M.A., M.D., B.Chir.(Cantab.), M.R.C.P., M.R.C.S., D.M.R.D.(Lond.), L.M.C.C., D.R.(Canada), M.C.R.A.

Senior Lecturer:

*J. W. LANCE, M.D., B.S.(Syd.), M.R.C.P., M.R.A.C.P.

* Conjoint appointment with Prince Henry Hospital.

School of Pathology

Professor of Pathology:

D. L. WILHELM, M.D., B.S.(Adel.), Ph.D.(Lond.), M.C.P.A.

Senior Lecturer:

*R. J. BARTHOLOMEW, B.Sc.(Syd.), Ph.D.(Lond.), F.R.A.C.I.

School of Physiology

Professor of Physiology:

P. I. KORNER, M.D., B.S., M.Sc.(Syd.).

Associate Professor of Physiology:

I. DARIAN-SMITH, M.D., B.S.(Adel.).

Senior Lecturer:

R. D. RYAN, B.Sc., B.E.(Syd.).

School of Surgery

Professor of Surgery:

F. F. RUNDLE, M.D., B.S., B.Sc.(Syd.), F.R.C.S., F.R.A.C.S., F.A.C.S.

Associate Professor of Surgery:

G. D. TRACY, M.B., B.S.(Syd.), F.R.C.S., F.R.A.C.S.

**Associate Professor of Anaesthesia*:

C. S. JONES, M.B., Ch.B.(Capetown), M.S.(Minnesota).

**Associate Professor of Surgery (Cardiopulmonary)*:

J. B. JOHNSTON, M.B., Ch.B.(Aberdeen), M.S.(Minnesota), F.R.C.S.(Edin.).

**Associate Professor of Surgery (Urology)*:

G. F. MURNAGHAN, M.D., Ch.M.(Edin.), F.R.C.S., F.R.C.S.(Edin.).

* Conjoint appointment with Prince Henry Hospital.

HEADS OF SERVICING FACULTIES AND SCHOOLS

Faculty of Arts:

Professor M. S. BROWN, M.A., Dip.Ed.(Syd.), Ph.D.(Lond.), Dean.

Faculty of Science:

Professor J. F. CLARK, M.A., B.Sc., Dip.Ed.(Syd.), Ph.D.(Lond.), Dean.

School of Biological Sciences:

Professor B. J. RALPH, B.Sc.(Tas.), Ph.D.(Liv.), F.R.A.C.I.

School of Chemistry:

Professor D. P. MELLOR, D.Sc.(Tas.), F.R.A.C.I.

School of Mathematics:

Professor G. BOSSON, M.Sc.(Lond.).

School of Physics:

Professor C. J. MILNER, M.A., Ph.D.(Cantab.), F.Inst.P.

ADMINISTRATIVE OFFICERS

J. O. A. BOURKE, B.A.(Syd.), Bursar.

H. H. DICKINSON, LL.B.(Syd.), Chief Executive Officer, Prince Henry Hospital.

G. L. MACAULEY, B.Ec.(Syd.), Registrar.

INTRODUCTION

The report of the Murray Committee on Australian Universities recommended that a second medical school be established in New South Wales and that it might well be within the University of New South Wales (then known as the New South Wales University of Technology). In October, 1958, the New South Wales Parliament amended the University's Act of Incorporation to provide for the original name of the University to be altered to the University of New South Wales and for the inclusion of medicine in the courses offered by the University.

Initially, the Council created Foundation Chairs in Medicine, Surgery, Anatomy, Physiology and Pathology. Since their appointment the five Foundation Professors have been actively engaged in establishing their Schools. In this work they have received valuable help and advice from the medical schools of the various Australian Universities. In fact, the Medical School is being developed after discusion with authorities on medical education and research all over the world. Three additional Foundation Chairs have recently been created in Obstetrics and Gynaecology,Pediatrics and Psychiatry. Other positions, including a number of conjoint appointments with Prince Henry Hospital, have been filled or are currently being advertised.

At the present day, the basic and clinical sciences of medicine are rapidly advancing and it is certain that the new school will contribute to this advance. The Medical School and its teaching hospitals will provide an organisation for patient-care, teaching and research that conforms with the best modern concepts and standards.

In 1961 the first students in medicine were enrolled. The intensive training in the scientific disciplines of the first year of the course (chemistry, physics, mathematics and general biology) is intended to serve as a useful introduction to, and basis for, the study of the pre-clinical and clinical curriculum. A distinctive feature of the course will be concomitant instruction in the humanities and social sciences, giving medical students an opportunity to gain a broad education at University level.

The careers of graduates from the new school will take them into homes in their attendance on the sick; other graduates will become medical teachers, specialists, administrators and public health and medical research workers. The work of the new Medical School will have a widespread influence on community health and hospital services in New South Wales and other States.

MEDICAL SCHOOL AND HOSPITAL BUILDINGS

The establishment of the medical school of the University of New South Wales necessitates an extensive building programme, and this is well under way. Two buildings to house the medical and biological sciences are under construction at the eastern end of the University site overlooking the rest of the campus. The two buildings will be connected on six floors. An additional floor, the seventh, on the Biological Sciences Building, will provide accommodation for a common library. It will have 10,000 sq. ft. of floor space, and a substantial grant has been made by the New South Wales Government to furnish and stock it. This library will subscribe to over 500 medical journals as well as providing a good coverage of reference texts and monographs in all the subjects of the medical course and the related biological sciences. In addition to the library, the Biological Sciences Building will house the first year General Biology and the Departments of Biochemistry and Microbiology. The second building will accommodate the pre-clinical sciences, anatomy, physiology and pathology. Nearby, a separate block of lecture theatres will serve the needs of both buildings. These buildings will be named "The Wallace Wurth School of Medicine", after the first Chancellor of the University, who contributed so much to the establishment of the State's second medical school in the University of New South Wales.

The accommodation of the medical school has been planned throughout for a maximum annual intake of 200 students. It will be equipped with the most modern aids to teaching and research, and this equipment is being procured.

The medical school of the University of New South Wales will develop its clinical facilities in and around existing hospitals related to the campus. Two general hospitals will be chiefly concerned,

(i) a new University hospital to be built on the site of the Prince of Wales Hospital at Randwick, adjacent to the campus and pre-clinical schools, and

(ii) The Prince Henry Hospital, situated on the coast, five miles away.

The Prince Henry Hospital was formerly a very large infectious diseases hospital of approximately 750 beds. With advances in methods of controlling infections, it was largely empty of patients, and all but 100 beds (to be reserved for infectious diseases) are to be

made available for general medicine and surgery. The ward accommodation and that for nurses are adequate, but the auxiliary services of a general hospital, as well as teaching and research facilities must be built.

The New South Wales Government has indicated that it will provide the finance necessary for psychiatric accommodation, additional operation theatres, and the auxiliary services such as pathology, radiology, central supply, recovery and intensive therapy, occupation and rehabilitation services, etc. The most urgent building requirements, costing £1.6 million, are already under way.

With the anticipated clinical entry of 150-200 students per annum, full use of both the Prince Henry Hospital and the new Hospital on the Prince of Wales site will be essential. The University Hospital to be built at Randwick will include, in its first stage, modern multi-storey accommodation for 350 patients, together with all auxiliary services, and teaching and research facilities. The new hospital will provide for the acute physicaly-ill. Existing hospital buildings on the site will be used for those with long-term physical illnesses and the mentally ill. A single new Out-patients Department on the Prince of Wales site services both this hospital and the Prince Henry Hospital. In the same area, a new Children's Hospital will be built. This will include teaching and research facilities for the professor of pediatrics and his staff.

The clinical facilities of the new medical school will thus be provided in an integrated system of hospitals centred on the medical school. Also included in the group will be special hospitals for the teaching of obstetrics and gynaecology; the foundation professor of obstetrics and gynaecology will have his headquarters in the Royal Hospital for Women. Many other excellent hospitals further removed from the campus, e.g., the Mater Misericordiae, Lewisham, Sutherland and Royal Newcastle Hospitals, may be associated with the teaching and training programmes. Students will receive their early clinical training in the Prince of Wales and Prince Henry Hospitals. Later in the course, they will rotate in groups through other teaching hospitals.

A new feature of the Prince Henry, Prince of Wales, and Sick Children's Hospitals will be the appointment of clinical professors in the medical school as heads of the corresponding services in the teaching hospitals. Full-time heads of the various sub-departments will be appointed and large part-time (honorary) staffs will also be appointed in the various clinical departments.

There will be instituted, in the teaching hospitals, planned graduate training programmes in medicine, surgery and the other specialities. The young graduate will, for example, be able to apply for a residency

training programme in surgery. If accepted he will enter a course extending over several years and in which he will learn, if he satisfies the requirements for promotion, to master the established techniques of major general surgery, or of one of the specialities.

In the two general teaching hospitals there will be provision for all categories of sick people:

(i) the acutely physically ill,

(ii) the mentally ill,

(iii) those with long-term illnesses, including the aged sick, and

(iv) hostel-type patients with social problems necessitating institutional care.

The foundation professor of psychiatry will have his teaching headquarters at the Prince Henry Hospital.

In the past, patients in categories (ii), (iii) and (iv) have usually been segregated in institutions widely separated from the main teaching hospitals. The latter have largely confined their work to short-term physicaly ill patients.

The new arrangement in the teaching hospitals of the University of New South Wales will ensure that students, faculty members and research workers will be confronted with the whole task of medicine. the acceptance of patients in categories (ii), (iii) and (iv), with their heavy dependence on rehabilitation services and continuing after-care, will weave the activities of the clinical schools into those of the social and health services in the community outside.

The teaching hospitals will also provide accommodation for intermediate and private patients according to their needs. In general they will be admitted to the same ward units as other patients in their disease category, though, of course, to intermediate or private accommodation in these ward units. They will also be involved in the teaching programme. This new arrangement will ensure that the students will have opportunities of gaining experience with the widest possible range of patients.

THE CURRICULUM

The curriculum will aim to train future medical practitioners. The course of instruction will also provide a sound foundation for future scientists, teachers and public health workers in medicine.

The design of the course will accord fully with the recommendations of the General Medical Council (1957). It will extend over six years and will lead to the double qualification of M.B., B.S. It will comprise:

(i) One year of pre-medical studies,

(ii) Two years of pre-clinical studies,

(iii) Three years of clinical studies.

Throughout the curriculum there will be an emphasis on co-ordination and integration of teaching, both between the various pre-clinical subjects and between the pre-clinical and the clinical subjects. Classes will, where possible, be kept to small groups, and teaching methods will place great reliance on group tutorial teaching, both in the laboratories and at the bedside.

PRE-MEDICAL YEAR

Pre-medical students will take the common first year science course of the University in the compulsory subjects of Physics I, Chemistry I and Mathematics I, and, together with other students in the Faculties of Science and Applied Science, will take General Biology as their fourth subject.

Students are referred to the regulations governing the admission of students to the second year of the course, set out on page 34.

Medical Course

First Year

(30 weeks day course)

		Hours per week for 3 Terms		
		Lec.		Lab./Tut.
1.001	Physics I	3	—	3
2.001	Chemistry I	3	—	3
10.001	Mathematics I	4	—	2
17.001	General Biology	2	—	4
		12	—	12

Subjects of the first (pre-medical) year

1.001 Physics I

Mechanics.—Particle kinematics. Vectors. Particle dynamics. Conservation of momentum and energy. Statics of rigid bodies. Hydrostatics. Rotational motion about a fixed axis. Simple harmonic motion.

Wave Motion, Sound and Light.—Progressive waves. Velocity in various media. Interference, diffraction, Doppler effect. Stationary waves, resonance, beats. Electromagnetic spectrum. Reflection, refraction, spherical mirrors, lenses. Optical instruments. Dispersion. Spectra. Polarisation.

Heat.—Temperature. Thermal expansion. Specific heat. Gas laws. Heat transfer. First law of thermodynamics. Elementary kinetic theory of gases. Hygrometry. Change of phase, latent heats, triple point.

Electricity and Magnetism.—Electrostatics. Electric charge and atomic structure. Electric field and potential. Capacitance. Energy stored in a capacitator D.C. circuits. Ohm's law. Joule's law. Measuring instruments. Measuring circuits. Magnetism. Force on a current in a magnetic field. Motion of charged particles in electric and magnetic fields. Magnetic field of currents. Eletcromagnetic induction. Self and mutual inductance.

Properties of Matter.—Elasticity. Elastic moduli. Fluid mechanics. Viscosity. Surface tension. Gravitation.

Textbook

Resnick and Halliday—*Physics for Students of Science and Engineering.* (Volumes I and II or combined volume. This text is particularly recommended for students with a good background in Physics and Mathematics).

OR

Ference, Lemon and Stephenson—*Analytical Experimental Physics.*

OR

Champion—*University Physics.*

2.001 Chemistry I

Classification of matter. Weight relations in chemical reactions. Atomic and molecular structure. Kinetic theory of matter. Properties of molecular, electrolytic and colloidal solutions. Structure of the

periodic table and the chemistry of selected elements of groups of the periodic table. Qualitative and quantitative analysis. Chemical equilibria. Introduction to organic chemistry.

Textbooks

(One book frrom Group A, plus books B and C, together with one book from Group D)

A. Hildebrand and Powell—*Principles of Chemistry.* 6th Edition bound with Latimer and Hildebrand—*Reference Book of Inorganic Chemistry.*

OR

Sienko and Plane—*Chemistry.*

OR

Pauling—*General Chemistry.*

OR

Quagliano—*Chemistry.*

B. Brown—*A Simple Guide to Modern Valency Theory.*

C. Vogel—*Textbook of Qualitative Analysis.*

D. Fieser and Fieser—*Organic Chemistry Course.*

OR

Getchell—*Organic Chemistry: A Brief Course.*

10.001 Mathematics I

Calculus and analysis. Co-ordinate geometry. Algebra and theory of equations. Dynamics.

Textbooks

Birkhoff and MacLane—*A Brief Survey of Modern Algebra.*

Keane and Senior—*Complementary Mathematics.*

Thomas—*Calculus and Analytic Geometry, Part I.*

17.001 General Biology

General biological principles. Properties of living matter. Cell structure. Comparison of plants and animals. Basic classification of plant and animal kingdoms. The elements of plant and animal histology. Anatomy and life histories of selected types of animals and

plants. Autotrophic and heterotrophic nutrition. Aspects of elementary plant and animal physiology. An introduction to genetics, evolution, cytology and ecology.

Practical work to illustrate the lecture course.

At least two obligatory field excursions are held during the year.

Textbooks

Murray—*Biology*. 2nd Edition.

Robbins, Weier and Stocking—*Botany. An Introduction to Plant Science.*

Buchsbaum—*Animals Without Backbones.*

Besly and Meyer—*Field Work in Animal Biology.*

THE PRE-CLINICAL AND CLINICAL YEARS

After enrolment in the second year students will receive full-time professional instruction in the subjects of the pre-clinical and clinical courses. During the first five terms courses will be provided in anatomy, physiology, biochemistry and medical statistics. The rapid growth in knowledge of medical "function" as opposed to "form" necessitates a corresponding shift of emphasis in teaching. Relatively more time will therefore be devoted to physiology and biochemistry and to the functional aspects of anatomy than has been traditional in undergraduate teaching, and courses of instruction will be co-ordinated as closely as possible.

In the sixth and final term of the pre-clinical course instruction will be commenced in pharmacology, microbiology, human genetics and pathology, and the teaching of these subjects will be continued into the clinical part of the course. This term will thus be used as a bridge between the clinical and pre-clinical subjects. During the clinical years, further integration between clinical and pre-clinical studies will help the student to retain his knowledge of the basic medical sciences and will do much to prune redundancies in teaching.

During these years students will also complete courses of instruction in the humanities and social sciences provided by the Faculty of Arts. This is in conformity with the University's policy that in the scientific faculties each year beyond the first year should include instruction in subjects from the humanities (English, history, or philosophy) or the social sciences (e.g., sociology, psychology, economics, political science).

Medical Course

Second Year

(31 weeks day course)

		Hours per week								
		Term 1*			Term 2			Term 3		
		Lec.	Lab./ Tut.	D.R.	Lec.	Lab./ Tut.	D.R.	Lec.	Lab./ Tut.	
10.391	Medical Statistics	0	— 0 —	0	2	— 0 —	0	1	— 0	
17.121	Biochemistry	1	— 0 —	0	2	— 3 —	0	3	— 8	
50.011	English	2	— 0 —	0	2	— 0 —	0	2	— 0	
70.111	Human Anatomy	5	— 3 —	15†	4	— 3½ —	9†	2	— 0	
73.111	Medical Physiology	0	— 0 —	0	2	— 1 —	0	2	— 11	
		8	— 3 —	15	12	— 7½ —	9	10	— 19	

* With the exception of English (10 weeks), subjects taught during Term 1 will extend over 11 weeks, commencing one week in advance of other undergraduate courses.

† This period includes dissecting room instruction, demonstrations and tutorial classes in topographical, living and radiological anatomy.

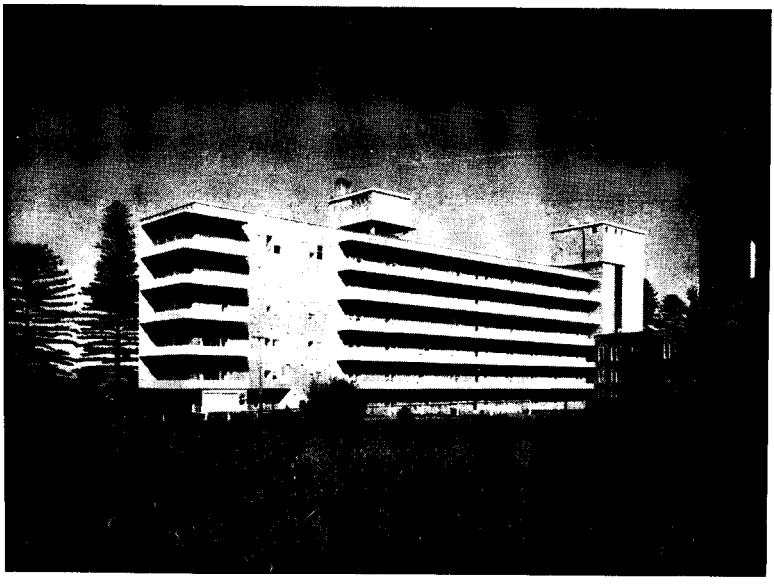
Subjects of the pre-clinical (second and third) years

70.111 Human Anatomy

(5 Terms)

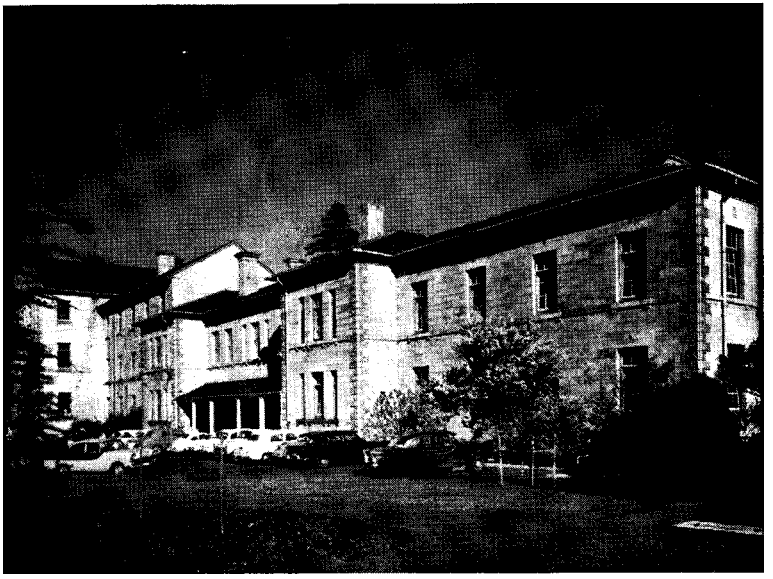
The course of instruction in human anatomy includes embryology, neurological anatomy, microscopical anatomy (histology), radiological anatomy, the anatomy of the living subject, and topographical anatomy.

Topographical anatomy is taught by a course of dissections, supplemented by tutorial classes and demonstrations. The other subjects comprising the course are taught by lectures and practical instruction. Stress will be laid on those aspects of the subject which have special bearing in a course for medical students, and there will be emphasis on the functional implications of gross and microscopic structure.

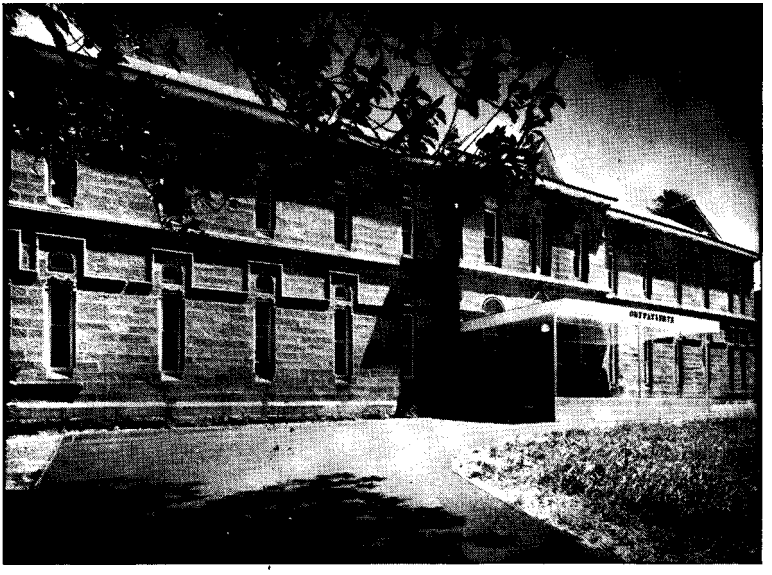


New Nurses' Home, Prince Henry Hospital

Part of Prince Henry Hospital



Prince of Wales Hospital, Randwick



Outpatients Department of Prince Henry and Prince of Wales Hospitals, Randwick

—Photographs by MAX DUPAIN

Textbooks

1. Boileau Grant, J. C.—*A Handbook for Dissectors*. 5th Edition, 1959. Balliere, Tindall and Cox, London.

2. Gardner, E., Gray, D. J., and O'Rahilly, R.—*Anatomy, a Regional Study of Human Structure*. 1960. W. B. Saunders, Philadelphia.

OR

Johnston, T. B., Davies, D. V., and Davies F. (Editors)—*Gray's Anatomy*. 32nd Edition, 1958. Longmans, Green & Co., London.

3. Harrison, R. G.—*A Textbook of Human Embryology*. 1959. Blackwell, Oxford.

4. Hamilton, W. J., and Simon, G.—*Surface and Radiological Anatomy*. 4th Edition, 1958. Heffer, Cambridge.

5. Truex, R. C. (Editor)—*Strong and Elwyn's Human Neuroanatomy*. 1959. Balliere, Tindall & Cox, London.

6. Ham, A. W.—*Histology*. 3rd Edition, 1957. Pitman, London.

Essential Equipment

1. Three (3) long white coats exclusively for use in School of Anatomy.

2. Instruments—(a) Two (2) pairs of 5 in. dissecting forceps;

   (b) One forged steel scalpel;

   (c) One Swann-Morton scalpel and No. 22 blades.

3. One disarticulated half-skeleton. This may be purchased through the School of Anatomy by arrangement.

73.111 Medical Physiology

(5 Terms)

Physiology is the science of function of normal living organisms. The borderline between normal and abnormal function is somewhat artificial and a study of normal regulating processes is therefore essential in the study of disease processes. For this reason the course in medical physiology illustrates the principles of the subject by select-

ing topics and methods of investigation of particular relevance to the student's subsequent clinical studies.

The detailed topics covered by the course are given below:

Introductory Physiology.—Physico-chemical basis of homeostasis and survey of physiological regulating mechanisms.

Cardiopulmonary Physiology. — Elementary haemodynamics. Mechanical and electrical properties of the heart and regulation of cardiac output. Role of local factors and autonomic nervous system in the control of the circulation. Physiology of heart failure. Gas transport by the blood. Mechanics of respiration. Function of the lung: ventilation, gas distribution, diffusion, pulmonary circulation. Regulation of respiration. Hypoxia. Muscular exercise. Regulation of energy exchange.

Body Fluids and Kidney.—Ionic composition and volume of body water compartments. Vascular and interstitial fluid exchanges. Mechanisms of renal filtration, realsorption and excretion. Regulation of volume and osmolal concentration of extracellular fluid. Role of kidney in acid-base regulation. Physiology of oedema formation. Micturition.

Blood.—Functions of cellular elements and plasma; control of blood volume; blood group; blood coagulation. Physiological changes in anaemia.

Neurophysiology.—Properties of skeletal and smooth muscle; neuromuscular transmission; conduction in nerve. The spinal reflexes and synaptic transmission. Supraspinal regulation of motoneurone activity. Physiology of posture and movement. The autonomic nervous system. The sensory systems, perception. The somatic sensory system and the problem of pain sensation; the neural basis of hearing; the visual system. The recticular formation of the brain stem. Mechanics of formation of cerebro spinal fluid.

The Endocrine System.—The characterisation of hormone action. Function of the thyroid; iodide concentrating mechanism. The adrenal gland, medullary and cortical hormonal secretions. The hypophysis and its regulating action on other endocrine glands. Insulin; its physiological action. The parathyroid glands and calcium metabolism. The physiology of reproduction. The interaction of the nervous and endocrine systems.

Digestive Tract.—Digestion; the part played by the stomach. Small and large intestine. The liver, biliary system and pancreas.

Textbook

Ruch, T. C., and Fulton, J. F.—*Medical Physiology and Biophysics.* 18th Edition. W. B. Saunders.

17.121 Biochemistry

(5 Terms)

Instruction in biochemistry will be integrated with that of clinical biochemistry later in the course; wherever possible, it will also be co-ordinated with the teaching of physiology. The principal topics to be covered are as follows:

Physico-chemical phenomena of important biological systems. Physical and chemical properties of the principal biological constituents. Catalysis in biological systems. Metabolism of the principal cell constituents. The molecular anatomy of cells. Multicellular organisation. The biochemistry of body fluids and specialised tissues. Intermediary metabolism in man. Regulation of metabolic processes. Nutrition.

Practical work to illustrate the lecture course.

Textbook

White, Handler, Smith and Stetton—*Principles of Biochemistry.* Latest Edition.

10.391 Medical Statistics

(3 Terms)

Probability; distribution and sampling distributions; statistical estimation; tests of significance; regression; experimental design and analysis of variance.

Textbooks

Kozelka—*Elements of Statistical Inference.*

Steel, R. G. D., and Torrie, J. H.—*Principles and Procedures of Statistics.*

50.011 English

(3 Terms)

Language (30 lectures)

An introduction to the nature and uses of language, including a

study of (a) the growth and development of English; (b) contemporary problems of usage; (c) the principles of literary analysis.

Textbooks

Potter, S.—*Our Language*. Penguin.

Muir, K. (Editor)—*Elizabethan and Jacobean Prose 1550-1620* (Pelican Book of English Prose I).

Literature (30 lectures)

An introduction to the study of prose fiction (both short-stories and novels) and drama.

Textbooks

Hadfield, J. (Editor)—*Modern Short Stories*. Everyman.

Swift, Jonathan—*Gulliver's Travels*. Any complete edition.

Twain, Mark—*Huckleberry Finn*. Any complete edition.

Crane, Stephen—*The Red Badge of Courage*. Any complete edition.

Richardson, Henry Handel—*Australia Felix*. Heinemann.

Hemingway, Ernest—*The Sun Also Rises* (*Fiesta*). Any edition.

Huxley, Aldous—*Brave New World*. Penguin.

Sheridan, R. B.—*The School for Scandal*. Any complete edition.

Shaw, G. B.—*Three Plays for Puritans*. Penguin.

Miller, Arthur—*Death of a Salesman*. Penguin.

Instruction in pharmacology, microbiology and pathology will commence in the final (sixth) term of the 3rd year. Brief outlines of these subjects are given below.

A course of instruction of approximately 40 hours' duration in normal psychology will also be given, probably in the sixth term of the pre-clinical course.

Pharmacology

A course of approximately 120 hours will be given during the final term of the third year and during fourth year. The course will emphasise the mechanisms of drug action and will serve as the basis for instruction in clinical therapeutics.

Microbiology

Teaching of microbiology will be given in the last term of the third year, and, subsequently, during the clinical years.

The first part (in the sixth pre-clinical term) will be given by the Department of Microbiology and will consist of three overlapping and equal parts—the first to illustrate general principles, and to introduce the student to a limited number of organisms, and the second to teach systematic microbiology, and the third, immunology.

Not more than one-third of the course will be devoted to systematic bacteriology. Methods of collecting clinical specimens for bacteriological examination, and the identification of the organisms commonly encountered in clinical practice, will be stressed.

Pathology

Pathology is the scientific study of the dynamics of disease, and the course will begin with a systematic examination of both the causation of diseases and the evolution of their distinctive lesions, as well as their effects on structure and function. Teaching of general pathology, rather than systematic pathology, will be a feature of the course; and general pathology will be taught in the final term of the pre-clinical years, and, at an increased tempo, in the first term of the fourth year. Thereafter, systematic pathology and all branches of clinical pathology will be taught at the steady pace. Thus, students will be encouraged to regard pathology as an integral part of clinical practice and not merely as a laboratory service.

CLINICAL YEARS (FOURTH, FIFTH AND SIXTH YEARS)

There will be courses of instruction, and examinations, in general medicine and surgery, obstetrics and gynaecology, pediatrics, psychiatry, pathology, social and preventive medicine, forensic medicine and the legal and ethical obligations of registered medical practitioners.

These subjects will be taught (almost exclusively) in the clinical schools of the University. Reliance will be placed chiefly on bedside teaching and tutorials. Active student participation will be ensured

by arranging that all serve as clinical clerks for a period of some two years. The approach to teaching in the clinical subjects may be illustrated by reference to:

General Medicine

There will be an introductory course in history-taking and physical diagnosis, after which students will begin clinical clerking. In the second and third years of their clinical course students will form, as far as possible, an integral part of the various medical units. Through participation in the daily activities of the wards they will be constantly exposed to the educational influence of the resident, full-time and honorary staff, who will supervise their activities.

Clinical clerking will be supplemented by lectures, seminars and conferences throughout the course. Particular emphasis will be placed on the clinical application of the more basic disciplines—anatomy, physiology, biochemistry and pathology. Where possible disease will be studied in a multi-disciplinary way, rather than in fragments in different departments.

A course in clinical laboratory medicine will strengthen the bonds between clinical pathology and clinical practice and will enable students to use laboratory techniques themselves in the study of their own patients.

There will be a continued emphasis on the use of the scientific method in the clinical field, particularly in therapeutics. Students will be encouraged to participate, if only in a small way, in the experimental work of the department and so acquire some understanding of the methods and fruits of clinical research.

Psychosomatic medicine and dermatology, which form a considerable part of the daily work of practising doctors, will also be given due weight in medical teaching.

Although it will be necessary for the student to acquire a great deal of factual knowledge in the study of internal medicine, the importance of principles and mechanisms of disease will be held constantly in mind. A course in internal medicine can do no more than lay the foundation for continued self-education in the post-graduate period.

General Surgery

In surgery the chief stress in teaching will be on the study and treatment of acute injuries, including wounds, fractures, dislocations and burns. The general and local effects of loss of body fluids,

haemorrhage and shock, of surgical infections, and of operative trauma will be studied and the principles of management will be emphasised.

The acute abdomen, hernia, newgrowths and regional surgery will be dealt with from the viewpoint of early diagnosis and first steps in management rather than the techniques of the operations that might be involved.

To this end, chief stress throughout will be on giving the student a sound knowledge and understanding of the common surgical conditions and how they present. and on inculcating skills in history-taking, physical examination, and the interpretation of simple ward and laboratory tests.

MATRICULATION REQUIREMENTS

Candidates may qualify for entry to undergraduate courses by complying with the matriculation requirements set out below at the Leaving Certificate Examination held by the Department of Education, or the Matriculation Examination conducted by the University of Sydney, or the Qualifying or Qualifying (Deferred) Examination of the Department of Technical Education.

The Leaving Certificate Examination is usually held in November, and entries must be lodged with the Department of Education during August.

The Matriculation Examination is held in February, and applications must be lodged at the University of Sydney during the first ten days of January except by candidates who have taken the Leaving Certificate Examination in the previous November. The closing date for such candidates will be announced when the Leaving Certificate results are published.

The Qualifying Examination is conducted by the Department of Technical Education in November-December for students attending Qualifying and Matriculation courses conducted by the Department of Technical Education. The Qualifying (Deferred), an open examination, is held in February. Entries must be lodged at the Technical College, Broadway, or other participating technical colleges throughout the State for the Qualifying (Deferred) Examination before the middle of January.

Candidates who have satisfactorily met the matriculation requirements of the University of Sydney, but who have not obtained the requisite pass in Mathematics as prescribed for entrance to the University of New South Wales, will be permitted to complete their qualifications to enter the University of New South Wales by passing in Mathematics only, at a subsequent Matriculation, Leaving Certificate, Qualifying or Qualifying (Deferred) Examination.

The following matriculation requirements operate from 1st January, 1961, but candidates will be permitted to qualify for entry under the requirements which were current in 1960 until March, 1964; these requirements are set out below the new requirements.

NEW REQUIREMENTS

(To operate from 1st January, 1961)

1. (i) A candidate for any first degree of the University must satisfy the conditions for admission set out hereunder before entering upon the prescribed course for a degree. Compliance with these conditions does not in itself entitle a student to enter upon a course.

(ii) A candidate who has satisfactorily met the conditions for admission and has been accepted by the University shall be classed as a "matriculated student" of the University after enrolment.

(iii) A person who has satisfactorily met the conditions for admission may on the payment of the prescribed matriculation fee be provided with a statement to that effect.

2. (i) For the purpose of matriculation approved subjects* are grouped as follows:—

A. English.

B. Latin, Greek, French, German, Italian, Hebrew, Chinese, Japanese, Russian, Dutch, Geography, Ancient History, Modern History, Economics.

C. Mathematics I, Mathematics II, General Mathematics.**

D. Agriculture, Applied Mathematics, Biology, Botany, Chemistry, Physics, Geology, Physics and Chemistry, Physiology, Zoology.

E. Accountancy, Art, Descriptive Geometry and Drawing, Music, Theory and Practice of Music.

(ii) In order to satisfy the conditions for admission to undergraduate courses leading to a degree, candidates must pass the New South Wales Leaving Certificate Examination conducted by the Department of Education, or the University of Sydney Matriculation Examination, or the Qualifying or

* It should be noted that certain subjects taken for the Leaving Certificate are not approved subjects for admission to the University of New South Wales.

** As from 1st July, 1962, consequent upon the introduction of Mathematics III and the adoption of the revised syllabus for General Mathematics, Mathematics III will be placed in Group C and General Mathematics in Group D. However, *provisional* matriculation status may be granted to candidates who pass in General Mathematics at the 1962 Leaving Certificate Examination.

Qualifying (Deferred) Examinations of the Department of Technical Education in at least five approved subjects at the one examination; provided that:—

I. either—

(a) the five subjects include English and at least one subject from each of Groups B and C, but do not include more than one subject from Group E, except that candidates may qualify for admission to the Faculty of Arts only, by passing in one subject from Group D in lieu of the subject from Group C.

or (b) the five subjects include English, and at least one subject from either Group B or Group C, but do not include more than one subject from Group E, and provided further that the five passes include either one first class Honours and two A's or two Honours of which one is first class,

and:—

II. (a) neither Physics nor Chemistry is offered with the combined subject Physics and Chemistry;

(b) neither Botany nor Zoology is offered with Biology;

(c) neither Botany nor Zoology nor Biology is offered with Physiology;

*(d) neither Mathematics I nor Mathematics II is offered with General Mathematics;

(e) Mathematics I or Mathematics II may be counted as an approved subject only if the candidate presented himself for examination in both Mathematics I and Mathematics II;

(f) Theory and Practice of Music is accepted only in cases where the pass was obtained at an examination in 1946 or subsequent years;

---

* As from 1st July, 1962, sub-paragraph (d) will read—

"neither Mathematics I nor Mathematics II nor Mathematics III is offered with General Mathematics."

A new paragraph will be inserted—

"(e) neither Mathematics I nor Mathematics II is offered with Mathematics III."

and the remaining sub-paragraphs consecutively re-lettered.

(g) Ancient History is accepted only in cases where the pass was obtained at an examination held in 1945 or subsequent years; and further, both Modern History and Ancient History may be offered as qualifying subjects at the examinations held at the end of 1951 and subsequent years;

(h) Agriculture is accepted only in cases where the pass was obtained at an examination held in 1945 or subsequent years;

(i) Economics is accepted only in cases where the pass was obtained at an examination held in 1947 or subsequent years;

(j) Descriptive Geometry and Drawing is accepted only in cases where the pass was obtained at an examination held in 1954 or subsequent years.

(iii) Candidates who have satisfactorily met the matriculation requirements of the University of Sydney, but who have not obtained the requisite pass in Mathematics where prescribed for entrance to the University of New South Wales, will be permitted to complete their qualifications to enter the University of New South Wales by passing only in a Mathematics subject from Group C, at a subsequent Leaving Certificate, Matriculation, Qualifying or Qualifying (Deferred) Examination.

OLD REQUIREMENTS

(Current to March, 1964)

Compliance with these requirements will qualify for entry to the University until March, 1964.

I. Applicants for entry to undergraduate courses leading to a degree may satisfy entrance requirements by passing the New South Wales Leaving Certificate or equivalent examination, in at least five subjects*, of which one must be English and one other must be Mathematics I, or Mathematics II, or General Mathematics**, three other

* It should be noted that certain subjects taken for the Leaving Certificate are not approved subjects for admission to the University of New South Wales.

** As from 1st July, 1962, consequent upon the introduction of Mathematics III and the adoption of the revised syllabus for General Mathematics, General Mathematics will be deleted from this clause and replaced by Mathematics III. However, *provisional* matriculation status may be granted to candidates who pass in General Mathematics at the 1962 Leaving Certificate Examination.

subjects being chosen from the following groups, at least one of the three being from Group A:—

Group A.—Latin, French, Greek, German, Italian, Hebrew, Chinese, Japanese, Russian, Dutch, Geology, Geography, Agriculture, Economics, Modern History, Ancient History, Combined Physics and Chemistry, Physics, Chemistry, Physiology, Biology, Botany or Zoology.

***Group B.—Applied Mathematics, Music, Theory and Practice of Music, General Mathematics, Mathematics I, Mathematics II, or Descriptive Geometry and Drawing.

II. Candidates who have presented themselves for the Leaving Certificate or equavilent examination in five or six subjects selected in accordance with the requirements prescribed in I and who have passed in English and a Mathematics and two other of the subjects may be granted admission provided that they have been awarded A passes or passes with Honours in at least three of these four subjects.

The other provisions set out in the new requirements above also apply.

***As from 1st July, 1962, Mathematics III will be included in Group B.

ADMISSION OF STUDENTS TO THE MEDICAL COURSE

1. Students are admitted to the medical course of the University of New South Wales provisionally, and until otherwise provided, the conditions upon which they are so admitted and the methods by which students shall be selected for the second year of the medical course are set out in the following rules.

2. Students desiring to proceed to the degrees of Bachelor of Medicine and Bachelor of Surgery must first satisfy the matriculation requirements of the University laid down for admission to the medical course.

3. Students admitted to the first year of the medical course are admitted provisionally only to the medical course. On admission to the second year of the medical course, the enrolment of such students in the Faculty of Medicine will be confirmed subject to their satisfying all other requirements.

4. Admissions to the second year of the medical course will be determined, in accordance with the conditions set out below, by the Admissions Committee of the Faculty of Medicine, hereinafter referred to as the "Committee", consisting of the Dean of the Faculty of Medicine, who shall be the Chairman, the Dean of the Faculty of Science, the Registrar, and three members of the Faculty of Medicine elected by the Faculty.

5. Applicants for admission to the second year shall—

(i) except as otherwise provided, have enrolled in and attended the course of instruction and passed in the examinations in Physics I, Chemistry I, Mathematics I and General Biology in the first year of the medical course; and

(ii) have applied in writing to the Registrar for admission to the second year of the course not later than the thirtieth day of November in the year preceding the year in which they desire to be admitted.

6. In determining applications for admission to the second year of the medical course, the Committee will receive for consideration applications from the following:—

(i) applicants who have qualified either as full-time or part-students at their first attempt in the final examinations of the subjects of the first year of the medical course;

(ii) applicants who have qualified in the final examinations of the first year of the medical course, but not at their first attempt;

(iii) applicants who have otherwise qualified in all subjects of the first year of the medical course, or have completed and passed examinations in a course of study deemed by the Professorial Board to be equivalent to the first year of the medical course.

7. The Committee may require any applicant for admission to the second year of the medical course to attend before them to be interviewed.

8. The Committee, in determining the order of admission to the second year of the medical course, shall take into account—

(i) the mark gained by each applicant in each subject of the first year of the medical course; for this purpose such mark shall be a mark determined by converting the actual marks awarded to the applicant to a standard score in such manner as may from time to time be followed by the Committee.

(ii) any other factors deemed by the Committee to be relevant to the academic performance of the applicant.

9. The Committee may admit to any portion of the medical course at their discretion students who do not intend to proceed to a degree in the Faculty, but such students shall not thereby acquire any right to admission to any other portion of the course, and shall have no standing in the course or Faculty.

10. The Council of the University reserves the right to revoke or alter any of the foregoing rules at any time.

ENROLMENT

ENROLMENT PROCEDURE FOR NEW STUDENTS—1962

Students wishing to enrol in the medical course must have satisfied the matriculation requirements of the University (pages 29-33). In general, admission to the course is competitive on the basis of results obtained at New South Wales qualifying examinations.

Application for enrolment in 1962 must, wherever possible, be made in person to the Student Enrolment Bureau, First Floor, Building "F", Kensington, as soon as the results of the Leaving Certificate or other qualifying examination are published, but in any event not later than 31st January.

Country residents who wish to enrol in the course in 1962, but find it impracticable to lodge their applications by the required date, should write to the Registrar, P.O. Box 1, Kensington, for a form on which to make their preliminary application. This form must be returned at the latest by 31st January.

Applicants seeking to enrol in the medical course will be notified by the University whether their applications have been successful or not. Successful applicants should then report with the letter of acceptance to the Enrolment Bureau at the time stated in this letter.

Complete details of enrolment procedure are set out in the booklet "Advice to New Students on Enrolment Procedure". Students should also obtain a copy of "General Rules and Information for Students".

Owing to the number of students seeking to enrol in medical courses in relation to the facilities available, admission to the second year of the medical course will be competitive. Accordingly, first year students are provisionally enrolled in Medicine, confirmation of standing in the course depending on completion of the first year and being selected for admisison to the second. Students passing in the examinations at the end of the first year, but at too low a standard to qualify for admission to the second year of the medical course, may receive credit for all four subjects towards the degree of Bachelor of Science and, for Physics I, Chemistry I and Mathematics I, towards a degree in Engineering or Applied Science.

Students should note that it is therefore necessary to apply for admission to second year of the medical course. This application should be lodged with the Registrar not later than 30th November of the year in which the student expects to complete the requirements of the first year.

ENROLMENT PROCEDURE FOR 2nd YEAR STUDENTS IN MEDICINE

Students whose applications for admission to the second year of the medical course have been successful will be officially advised by the University. Lectures commence on Monday, 26th February, 1962.

To complete their enrolment in 2nd year, approved students will be required to attend in Room 117, First Floor, Main Building, Kensington, on Thursday, 22nd February, 1962, from 2 p.m. to 5 p.m. A late fee of £1 is payable by students who fail to attend for enrolment on the prescribed date or to complete enrolment by the payment of fees not later than Friday, 9th March, 1962. This fee increases to £2 if fees are paid during or later than the week commencing 26th March, 1962.

Complete details regarding enrolment procedure (including the payment of fees) are set out in a booklet, "Enrolment Procedure for Students Re-enrolling for the 1962 Academic Year". Students should also obtain a copy of "General Rules and Information for Students".

FEES

Fees for the first two years of the medical course are set out below. Details of fees for the remaining years of the course will be provided as they become available.

Full-time Course Fee—£120 per annum, or three payments of £40 per term.*

Part-time Course Fee (applicable only to the pre-medical course, i.e., common first year only)—£60 per annum or £20 per term

Library Fee—£5 per annum (compulsory for all registered students).

Matriculation Fee, payable with first year fees—£3.

Graduation Fee—£3.

University of New South Wales Students' Union: Annual subscription —£2 (compulsory for all registered students).

University of New South Wales Sports Association: Annual subscription—£1 (compulsory for all registered students).

University of New South Wales Union—£6 per annum (compulsory for all registered students).

* The fee for first and second year is at this rate.

SCHOLARSHIPS

Commonwealth Scholarships

Students enrolling in the medical course are eligible to apply for the award of a Commonwealth Scholarship in accordance with the rules laid down under the Commonwealth Scholarship Scheme. Benefits include payment of all tuition fees and other compulsory fees; a living allowance is also payable if the applicant satisfies a means test. The closing date for applications is 30th November in the year immediately preceding that for which the scholarship is desired. Applications for renewal of scholarships must be made before 31st October each year. Full particulars and application forms may be obtained from the Officer-in-Charge, University Branch Office, Department of Education, University Grounds, University of Sydney. (Telephone, 68-2911.)

Scholarships in Medicine

Students who enrol provisionally in the medical course (first year) may apply for a Scholarship in Medicine. The award is tenable concurrently with a Commonwealth Scholarship and provides for the payment of £200 per annum throughout the duration of the course, subject to the maintenance of a high standard of performance.

RESIDENTIAL COLLEGE FACILITIES

BASSER COLLEGE

Accommodation for male students (local as well as interstate and overseas) is available at the University's residential college—Basser College—which is on the Kensington campus. Details may be obtained from the Master, Dr. Malcolm Mackay, Basser College, The University of New South Wales, Kensington, N.S.W., Australia.