

University College Dublin
An Coláiste Ollscoile Baile Átha Cliath

National University of Ireland, Dublin
Ollscoil na hÉireann, Baile Átha Cliath



Medicine

Session 2004/05

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Degrees in Medicine

Extract from the Statute of the University

The University may grant the following degrees to students who, under conditions laid down in the statutes and regulations, have completed approved courses of study, and have passed the prescribed examinations of the University and fulfilled all other prescribed conditions.

In the Faculty of Medicine and Health Sciences:

Bachelor of Medicine (MB), Bachelor of Surgery (BCh), Bachelor of Obstetrics (BAO)

Bachelor of Science (Nursing)*

Bachelor of Science (Physiotherapy)*

Bachelor of Science (Radiography)*

Bachelor of Medical Science (BMedSc)

Bachelor of Science (BSc) in Medical Subjects

Master of Surgery (MCh)

Master of Obstetrics (MAO)

Master of Public Health (MPH)

Master of Science (MSc)

Doctor of Medicine (MD)

Philosophiae Doctor (PhD)

The Degrees of MB, BCh and BAO shall be granted only at the same time. A student shall not be eligible to obtain these degrees unless he/she:

- (a) shall have completed the prescribed course of study in the Faculty of Medicine and Health Sciences, extending over a period of not less than five academic years from the date of his/her registration as a student of Medicine by a Medical Registration Authority established or recognised by law; and
- (b) shall have passed the prescribed examinations.

* For details, see separate booklets, Nursing and Midwifery, Physiotherapy, Radiography.

Undergraduate Degrees

Degrees of Bachelor of Medicine (MB), Bachelor of Surgery (BCh), Bachelor of Obstetrics (BAO)

Introductory Information

Note: Courses of study required for qualification to practice Medicine are controlled by law in a number of Acts relating to Medicine.

Admission Requirements

Information on the application procedure may be obtained from the Central Applications Office, Tower House, Eglinton Street, Galway; (telephone: +353-91-509800) information on admission requirements may be obtained from the Admissions Office, University College Dublin, Belfield, Dublin 4 (telephone: +353-1-716 1425/1426).

Candidates for admission will be required to pass a medical health assessment prior to admission and from time to time thereafter in accordance with the health policy of the Faculty of Medicine and Health Sciences. The assessment will be carried out by the University Student Health Service and will include testing for hepatitis B and tuberculosis.

Registration

On entry to Medicine the student is registered as a medical student at the Office of the Medical School and subsequently must pursue a period of five/six years' study, at the end of which, having passed the requisite examinations, he/she may become registered as a medical practitioner. Registration with the University is mandatory during all of the undergraduate years. Doctors who wish to practice in the Republic of Ireland must then register with the Irish Medical Council. To practice in Great Britain and Northern Ireland, registration with the General Medical Council is necessary.

Attention is particularly directed to the fact that graduates who have passed the final or qualifying examinations are not entitled to full registration until they have served for one year as resident medical officer at a hospital or hospitals recognised for the purpose. The University does not assume responsibility for these appointments for graduates. Before taking up such hospital appointments, provisional registration must be obtained from the Irish Medical Council.

Introductory Lecture for Medical Students

Advisory meetings will be held for students entering the Medical School. Students are strongly advised to attend these meetings, which are held before the Michaelmas term begins. Details will be sent to students early in Autumn.

Dates of Terms

The 2004/2005 medical lecture session is as follows:

*Michaelmas Term: Thursday 16 September 2004 – Wednesday 8 December 2004
(First Semester)*

*Hilary & Trinity Terms: Monday 10 January 2005 – Saturday 12 March, 2005
(Second Semester) Monday 4 April 2005 – Saturday 23 April, 2005*

Summary of Courses

Computer Aided Learning

The Medical Faculty has a large Computer Aided Learning facility (CAL), with one hundred high-end multimedia networked computers, with internet access. Computer aided learning is used to augment traditional methods in many subjects. Students are encouraged to use the facility for self-directed interactive learning. Online facilities include teaching packages for many subjects with self-evaluation modules. Students are encouraged to search for and utilise resources on the World Wide Web.

New Curriculum

Foundation Year of Medicine (New Curriculum)

The required courses of study for the Foundation Year of Medicine are Biology, Chemistry, Clinical Science, Experimental Physics.

Systems One – Human Biology

There are eight subjects in this course, which is given over three semesters, two semesters in First Year and one semester in Second Year.

First Medical Year – Semesters I and II

The subject of the first semester (Systems One) is
Basic Concepts

The subjects of the second semester (Systems One) are:

- Personal and Population Health 1
- Cardiovascular Biology
- Respiratory Biology
- Renal Biology

Second Medical Year – Semester 1

The subjects of the third semester (Systems One) are

- Personal and Population Health 2
- Gastrointestinal and Liver Biology
- Neurosciences/Locomotor Biology
- Endocrine/Reproductive Biology

Systems Two – taught in Semester 2 (Second Year) and Third Year.

Biology of Disease States

There are ten subjects in this course, which is given over two semesters, second semester of 2nd Medical Year and first semester of 3rd Medical Year.

Second Medical Year – Semester II

The subjects of Systems 2, Part 1 are:

Basic mechanisms of disease

Renal Diseases

Cardiovascular diseases

Respiratory diseases

Third Medical Year – Semester I

Endocrine and Reproductive Diseases

Gastrointestinal and Hepatobiliary Diseases

Central Nervous System/Locomotor/Skin Diseases

Foetus and Childhood

Haematology/Transplantation/Immunosuppression

Third Medical Year – Semester II

Clinical Science: A 6-week introductory course in clinical and procedural skills.

Resident year programme in Medicine and Surgery.

Public Health Medicine, Ethics, General Practice and Legal Medicine.

Fifth and Sixth Years of Medicine

During the fifth and sixth years, systematic instruction is given in Medicine with Therapeutics, Public Health Medicine and Epidemiology, General Practice, Legal Medicine, Surgery, Obstetrics and Gynaecology, Paediatrics, Psychiatry, Ophthalmology, Otolaryngology and Ethics.

From March of the fourth year of medicine and during the fifth and sixth years, the clinical courses at the teaching hospitals must be attended.

Examinations, Subjects and Courses of Instruction**

University Examination of the Foundation Year of Medicine

Candidates for admission to the Foundation Examination in Medicine must have attended the prescribed course of instruction. The subjects for examination are Biology, Chemistry, Clinical Science and Experimental Physics. A proportion of the examination marks in each subject may be allocated to the year's work. The examination is held in Summer and in Autumn, and must be passed before entering on the courses of the First Medical Year (New Curriculum).

** Published dates of examinations are in all cases subject to modification.

The Foundation Year of Medicine Examination must be passed within two years from the date of entering for the course.

First Medical Year Examination (New Curriculum) – Systems One Exam Part 1

The subjects for examination are Basic Concepts, Personal and Population Health 1, Cardiovascular Biology, Respiratory Biology, Renal Biology.

The examination is held in the summer with a repeat examination in the autumn. A further repeat examination may be held in the winter. Each subject will be examined by end of year written examination and by continuous assessment. Normally, the examination may be attempted only four times. Candidates for admission to the Examination must have attended the prescribed courses. In particular, satisfactory attendance is required at practical teaching sessions and tutorials. Candidates who fail the examination in both summer and autumn, are required to re-attend the respective courses in the following session before re-entering for the examination. However, a candidate who fails only one may carry it forward to the following winter examination. If still unsuccessful a candidate will have to withdraw from the Second Medical Year and repeat the subject and examination in the First Medical Year.

Second Medical Year Examinations (New Curriculum)

There are two examinations in the Second Medical Year:

(1) Systems One Examination Part II

The subjects for examination are Gastrointestinal and Liver Biology, Endocrine/Reproductive Biology, Neuroscience/Locomotor Biology and Personal and Population Health 2.

The examination is held in winter of the first semester with a repeat examination in the summer. A further repeat examination may be held in the autumn. Each subject will be examined by written examination and by continuous assessment. Normally, the examination may be attempted only four times. Candidates for admission to the Examination must have attended the prescribed courses. In particular, satisfactory attendance is required at practical teaching sessions and tutorials. The Systems One Examination must be passed before commencing the Third Medical Year. Candidates who fail Systems One Examination in the Second Medical year, must re-attend the respective Systems One subjects and examinations in the following year.

(2) Systems Two Examination Part I

The subjects for examination in Systems 2 for the Second Medical Year are Basic Mechanisms of Disease, Cardiovascular diseases, Respiratory Diseases and Renal Diseases. Each of the subjects of Systems 2 will be examined by a written paper at the end of the semester and by continuous assessment comprising practical, CAL and MCQ assessments. Repeat examinations will be held in the autumn and winter. CAL is not continuous assessment.

Systems Two Examination Part II

The subjects for examination in Systems 2 for the Third Medical Year are Endocrine and Reproductive Diseases; Gastrointestinal and Hepatobiliary Diseases; CNS/Locomotor/Skin Diseases; Foetus and Childhood; and Haematology/Transplantation/Immunosuppression. Each of the subjects of Systems II will be examined by a written paper and a practical/CAL exam at the end of the semester and by continuous assessment MCQ assessments. Repeat CAL examinations will be held in summer.

University Examination of the Fifth Year of Medicine

The courses of instruction and subjects of examination are: Public Health Medicine and Epidemiology, Legal Medicine, Ophthalmology, Otolaryngology, General Practice and Ethics. The examination is held in February with a repeat examination in the Summer.

The Fifth Year of Medicine must be passed before presenting for the Final Medical Examination, Part I, except in special circumstances and with the permission of the Faculty.

Final Examination for Degrees in Medicine

The courses of instruction and subjects of examination are: Medicine, Surgery, Obstetrics and Gynaecology, Paediatrics and Psychiatry.

The examination is divided into two parts: Part I – Obstetrics and Gynaecology, Paediatrics and Psychiatry, held in the Winter of the final year; and Part II – Medicine and Surgery, held in April of the final year. Part I must be presented for before Part II of the Final Medical Examination. Candidates for the Final Medical, Part II Examination must have completed three years of clinical study after the second medical year. A period of nine months must elapse between the Fifth Year of Medicine Examination and the Final Medical Part II Examination. All final medical subjects may be passed separately. An assessment of the nine-month junior clerkships in Medicine and Surgery will contribute towards the marks in the Final Medical Examination in those subjects.

Exemptions in all subjects will hold for a period of two years. *Candidates who fail in Medicine, Surgery or Obstetrics and Gynaecology are required to re-attend hospital courses in that particular subject for the term or terms before again presenting themselves for examination.* Candidates must pass the Final Medical Examination within three years of passing the Fifth Year of Medicine Examination. Exemption from this regulation will be granted only for grave reasons and with the permission of the Faculty.

Honours in the Final Medical Examination are only awarded when the subjects Medicine, Surgery, Obstetrics and Gynaecology, Psychiatry and Paediatrics are passed in their proper groupings and the total marks in these subjects reach the necessary level for First or Second Class Honours. In addition, honours (First and Second Class) may be awarded in the following individual subjects: Medicine, Surgery, Obstetrics and Gynaecology, Paediatrics and Psychiatry, provided that they are passed at the first attempt, the award to be classed as a pass degree.

Candidates who pass all the subjects of the Final Examination are eligible for *provisional registration*. It is absolutely essential to register with the appropriate body before taking

up a professional post. Registration for the Republic of Ireland can be carried out at the Medical Council, Portobello Court, Lower Rathmines Road, Dublin 6 (telephone: +353-1-496 5588).

Clinical Attendance

The attendance of students at clinical courses in the general and specialist hospitals affiliated to the University must be certified by the hospitals before proceeding to the relevant examinations. The relevant certification is:

- 1 Attendance at a general hospital as a Junior Clerk for nine months, rotating through the specialities of Medicine and Surgery and including a two week attachment in Gynaecology. (Fifth Year of Medicine Examinations)
- 2 Attendance at clinical instruction in the Ear, Nose and Throat Department of the affiliated hospital. (Fifth Year of Medicine Examinations)
- 3 Attendance at clinical instruction in Ophthalmology (Fifth Year of Medicine Examinations)
- 4 Attendance at a clinical attachment in General Practice (Fifth Year of Medicine Examinations).
- 5 Attendance at an eight-week clinical clerkship in Obstetrics and Gynaecology in the affiliated specialist hospitals (Final Medical Examination Part I).
- 6 Attendance at a two-month clinical clerkship in Paediatrics in the affiliated specialist hospitals (Final Medical Examination Part I).
- 7 Attendance at an eight-week clinical clerkship in Psychiatry in the affiliated specialist hospitals (Final Medical Examination Part I).
- 8 Attendance at an orthopaedic hospital (Final Medical Examination Part II).
- 9 Attendance at a general hospital as a senior clerk, rotating through medicine and surgery for four months prior to the Final Medical Examination Part II.

Note: Each hospital/department will issue guidelines with regards to appropriate student behaviour in each clinical setting in order to safeguard patient privacy and to ensure a policy of dignity and respect in clinical interactions involving students.

Examinations – General Regulations

A student failing to pass any of the above examinations within the specified period will be ineligible to proceed further with his/her medical studies in any NUI constituent university. Exemptions to this rule will be granted by the Academic Council, on the recommendation of the Medical Faculty, only for very serious reasons, such as prolonged illness.

Syllabus of Courses for the Degrees of MB, BCh, BAO

Foundation Year of Medicine Courses

Biology

BIOL 1003

Lectures: 26 hours; Practicals: 6 hours.

Introduction to vertebrates, invertebrates of medical importance, parasitology, comparative physiology, ecology, conservation, chemical pollutants, acid rain and their effects on health, genetics (including DNA), recombinants and their importance in medicine, aspects of anthropology.

Practicals: Invertebrates and parasitology.

Chemistry

CHEM 1006

Lectures: 64 hours; Practicals: 18 hours.

Three lectures and one practical class each week.

Lectures: Fundamentals of chemical theory. Atomic structure. Electronic theory of valency. Periodic classification. Basic physical chemistry. Co-ordination chemistry of medically important compounds. Elementary study of organic chemistry. Throughout the course, stress is laid on points of interest to students of Medicine.

Laboratory: Simple experiments to train students in correct handling of chemicals, measurement and observation of chemical changes. Gravimetric, volumetric and qualitative analysis.

Clinical Science

GPRS 1001

Lectures: 20 hours.

An introductory course in basic biological sciences illustrating clinical applications.

Molecular Biology

The Foundation Year Clinical Sciences Molecular Biology course provides an introduction to studies of gene expression, its regulation and application to human disease.

Human Genetics

The Human genetics course in the clinical science foundation year focuses on the practical clinical application of basic genetics, and how new genetic technology is used in the management of families with genetic disorders.

Experimental Physics

EXPH 1006

Lectures: 65 hours; Practicals: 20 hours.

1. Elementary kinematics. Motion in a circle. Statistics and dynamics. Levers. The centrifuge. Elementary hydrostatics and hemostatics. Measurement of pressure.
2. Elasticity. Surface tension. Fluid flow. Osmosis.
3. Heat. Temperature and expansion. Calorimetry. Change of state. Properties of gases and vapours. Heat transfer. Conservation of energy. Elementary kinetic theory.

4. Simple harmonic motion. Wave motion. Sound. Vibrations of strings and air columns. Musical sounds. Physics of speech and hearing. Ultrasound.
5. Light. Photometry. Reflection and refraction. Image formation by lenses and mirrors. Introduction to wave theory and wave phenomena. Optical instruments with special reference to the microscope and the physical properties of the eye. Infrared and ultra-violet radiation. Emission and absorption spectra. Lasers.
6. Elementary electrostatics. Properties of dielectrics. Current electricity. Electrolysis. Magnetic field of electric currents. Electric measuring instruments. Thermoelectric effects. Electro-magnetic induction. Alternating currents with special reference to high frequency currents.
7. The electron. Photoelectric and thermionic effects. Motion of charged particles in electric and magnetic fields. The oscilloscope and electrocardiograph. The electron microscope. Magnetic Resonance Imaging (MRI).
8. Atomic structure. Production and properties of X-rays. CAT scanning. Radioactivity. Nuclear radiations. Nuclear reactions. Production and use of radioisotopes. Interaction of nuclear radiations with matter. Health physics. Radiation dosage. Radiation protection and shielding.

Laboratory: Measurement of the physical quantities encountered in the lecture course.

First, Second & Third Medical Year Courses

Systems 1 – Normal Human Biology

**First Medical Year, Semesters 1&2
Second Medical Year, Semester 1**

Systems One – Human Biology

There are eight subjects in this course

1. Basic Concepts

MDRD 1002

This subject is designed to equip students with the necessary background information and general biological and informatics concepts to understand the systems-based subjects in the later semesters of the Systems 1 course.

The upper limb will serve as a model to provide illustrative and clinically relevant examples of important general principles. The core concepts are:

Biological Physics – Biomechanics, Physics of air and blood flow, Biophysics of membrane potential and action potential, Gas laws, diffusion and osmosis, Physics of heat, light and sound

Histology and physiology of the four primary tissues – Cell structure and cycle, Connective tissue, Epithelia and epithelial transport, Muscle and regulation of muscle contraction, Nerve and cell-to-cell communication.

Anatomy of the upper limb – Structure of skin, nerve, muscle and bone. Structure of blood vessels and lymphatics. *Biomechanics, principles of imaging.*

Cellular biochemistry – Enzymes and catalysis, Carbohydrate metabolism, TCA cycle, Oxidative phosphorylation, Lipid metabolism, Nitrogen metabolism: Transmission of genetic information.

Introduction to Embryology – Gametogenesis, Fertilization and implantation, Formation of the basic structure of the human body.

Clinical Science – Introduction to patients in their own environment (early patient contact)

Personal and Population Health – Introduction to the concept of the patient in the community.

Healthcare Informatics – Introduction to Healthcare Informatics, use of Information and Communication Technology (ICT) tools in sourcing, critically analysing, managing and presenting medical information. Legal issues in Medical ICT.

2. Personal and Population Health 1 and 2 **MDRD 1003 & MDRD 2004**

The subject explores health promotion and the prevention of disease and the organisation and delivery of health care. Behavioural aspects of the interaction between the individual and healthcare professions are examined. Elements of this subject are included with Basic Concepts and the Biology courses. It includes contributions from Public Health Medicine and Epidemiology, Healthcare Informatics, General Practice, Sociology and Psychology.

Topics include: Food and nutrition in health and disease; water and water-borne disease; air pollution and air-borne disease; disease transmitted by animals; the influence of the home and place of work on health; patterns of illness; accidents; health and personal behaviour; smoking, physical activity, alcohol, drugs, sexually transmitted disease. Measurements of health and disease; death rates.

The biological systems subjects 3-8 are taught in the second and third semester, with contributions from Anatomy, Physiology (including Functional Histology), Biochemistry, Clinical Science and Healthcare Informatics. The courses will include integrated community, primary care and hospital-based clinical, pathological and radiological illustrations and instruction in clinical skills.

3. Cardiovascular Biology **MDRD 1004**

Anatomy of the heart and mediastinum. Mechanical function of the heart as a pump. Electrocardiography.

Anatomy of carotid and abdominal and lower limb vasculature. Autonomic nervous system. Regulation of cardiac performance. Blood cells, blood biochemistry, endothelial function, haemostasis and fibrinolysis. Microcirculatory function. Control of blood pressure. Regulation of tissue blood flow. Analysis and presentation of material: Introduction to peer-reviewed medical sites. Making a presentation on cardiovascular medicine.

4. Respiratory Biology **MDRD 1005**

Anatomy of the respiratory tract and thorax. Functional histology of the respiratory tract. Muscles of the thoracic cage and mechanics of respiration. Oxygen transport. Haemoglobin. Carbon dioxide transport. Acid-base biochemistry. Pulmonary circulation and gas exchange. Presentation of material: making a multimedia presentation on respiratory medicine.

5. Renal Biology**MDRD 1006**

Anatomy of the kidney. Body fluid compartments. Physiological functions of the kidney. Renal regulation of water and electrolyte balance. Renal contribution to acid-base balance. Formation and excretion of urea and uric acid. Database use: management of a GU Database, use of databases in Medicine.

6. Gastrointestinal and Liver Biology**MDRD 2001**

Anatomy of the oral cavity, GI tract and peritoneum. Salivary glands and swallowing. Motility of GI tract and its control. Gastric secretion. Pancreas: structure and function. Liver: anatomy histology, physiological and metabolic function. Digestion and digestive enzymes, intestinal and biliary secretion. Absorption. Metabolic rate, control of food intake, obesity. Imaging technology. Imaging of the GI system.

7. Endocrine/Reproductive Biology**MDRD 2002**

Hormones and their classification: steroid, amine and peptide hormones. Molecular mechanisms of signal transduction. Hypothalamus and pituitary: anatomy and physiology. Structure and function of thyroid, parathyroid, thymus. Pancreas. Diabetes. Anatomy of adrenal glands and kidney. Adrenal function.

Anatomy of perineum and inguinal regions. Anatomy and histology of male and female reproductive systems. Reproductive hormones. Expert Systems/Decision Support Systems: use of an endocrine Decision Support System.

8. Neuroscience/Locomotor Biology**MDRD 2003**

Sensation and sensory pathways. Muscle tone. Medulla oblongata and cranial nerves. Pneumotaxic and cardiovascular centres. Pons and midbrain. Auditory system. Cerebral cortex. Diencephalon and thalamocortical projections. Sleep. Basal ganglia. Cerebellum. Visual system. Limbic system. Blood supply and venous drainage of brain and cord. Cerebral metabolism. Introduction to Psychology, the mind and behaviour.

Connective tissue of locomotor system. Collagen biochemistry. Skeletal muscle. Vertebral column and back muscles. Control of posture. Hip, knee and ankle joints. Muscles of the lower limb. Biomechanics of normal and abnormal gait. Neural control of locomotion. Artificial Neural Networks/Artificial Intelligence.

Systems 2 – Biology of Disease States

Second Medical Year, Semester 2
Third Medical Year, Semester 1

There are nine subjects in this course

1. Basic mechanisms **MDRD 2005**

The course, which is given in semester 2 of the second medical year, will focus on the core concepts involved in understanding infection, disease mechanisms and drug therapy. The core concepts to be taught include:

- Basic cellular pathology – Cell behaviour in disease
- Thrombosis, embolism and shock
- Inflammation – Acute and chronic inflammation, healing and repair
- Basic principles in pharmacology – Pharmacodynamics and pharmacokinetics, introduction to autonomic pharmacology, new drug development, toxicology
- Introduction to microorganisms and antimicrobial treatment – Introduction to the structure and replication of microorganisms, basic principles of chemotherapy, drug treatment of injections
- Immunology – Non-specific and specific immunity, infection transmission, pathological consequences of infection, hypersensitivity, autoimmunity, immunodeficiencies
- Introduction to neoplasia and anti-cancer treatment – Carcinogenesis, tumour classification and behaviour, molecular pathology, drug treatment of cancers
- Genetics – Human inheritance, molecular basis of genetic disorders, cytogenetic diagnosis and genetic counselling

2. Diseases affecting the cardiovascular system **MDRD 2006**

The pathological basis and drug treatment of atherosclerosis, coronary heart disease, hypertension, heart failure. The pathological and microbiological basis of valvular heart disease.

3. Diseases affecting the respiratory system **MDRD 2007**

Obstructive airways disease and its drug management, respiratory infections including tuberculosis, anti-tubercular drugs, interstitial lung disease, respiratory failure, tumours of the respiratory tract, drug toxicity.

4. Diseases affecting the renal system **MDRD 2008**

Microbiological basis and pathological consequences of urinary tract infections, drug treatment of urinary tract infections, calculi, glomerular nephritis, renal tract tumours, renal failure, renal function tests, diuretic agents, drug toxicity.

5. Diseases affecting the gastrointestinal/hepatobiliary system **MDRD 3002**

Upper G.I. tract, stomach, small and large bowel pathologic conditions. Drug treatment of hyperacidity, gastroenteritis and anti-diarrhoeal agents, acute and chronic hepatic injury, infectious agents and hepatitis, drug-induced liver damage, cirrhosis and liver failure, diseases of the biliary tree, gall bladder and pancreas, jaundice and liver function tests.

6. Diseases affecting the central nervous system, locomotion and skin**MDRD 3003**

Central nervous system - Brain trauma, strokes, neurodegenerative diseases and their treatment, neuromuscular diseases and their treatment, demyelinating diseases, infections in the CNS, brain tumours, drugs and the autonomic nervous system, drug treatment of psychiatric conditions, analgesics, general anaesthetic agents.

Locomotion – Arthritis, osteomyelitis, rheumatoid disease, ant-rheumatoid drugs and non-steroidal anti-inflammatory drugs. Metabolic bone disease: causes, consequences and treatment.

Skin - bone and soft tissue tumours, skin neoplasms and infections

7. Diseases affecting the endocrine/reproductive systems **MDRD 3001**

Endocrine system – Benign breast disease, breast cancer and its drug treatment, thyroid, pituitary and adrenal diseases and their treatments, investigation of endocrine disease, diabetes mellitus and its treatment.

Reproductive system – Pathology of sexually transmitted infections of male and female genital tracts, microbiology, pathology and treatment of HIV infection, contraception, anti-hormones and cancer

8. Foetus and childhood **MDRD 3004**

Pathology of neonatal period and childhood, congenital infections, teratogenesis, immunisation, management of poisoning events

9. Haematopathology/transplantation **MDRD 3005**

Anaemia and anti-anaemic agents, leukemias, myeloproliferative disease, myelomas, lymphomas, infectious agents in the immune-compromised host, systemic haematological infections, anti-malarial agents, bleeding and clotting disorders, anti-coagulants, immunohaematology and transplantation, immunosuppression.

Third Medical Year Semester II

- Clinical Science: A 6-week introductory course in clinical and procedural skills.
- Resident year programme in Medicine and Surgery
- Public Health Medicine, Ethics, General Practice and Legal Medicine

Fifth and Final Years of Medicine Courses**Public Health Medicine and Epidemiology** **PHME 5001**

Trinity term of Fourth Year; Michaelmas and Hilary terms of Fifth Year.

The course consists of formal lectures, small group teaching sessions and fifteen units of hospital teaching in the affiliated hospitals.

The course includes the following topics: The influence on health of the social and physical environment, with special emphasis on the preventive approach; epidemiology and statistics; international health agencies; the control of communicable disease; occupational

health; community services for vulnerable groups; the influence of heredity on health; the education of the public in health.

Case presentations in clinical epidemiology are held in the affiliated hospitals. The presentations demonstrate to students the importance of epidemiology and the medical and social aspects of disease. In addition, students are taught how to use health and other social services in relation to particular patients.

A multiple-choice examination is held in the Michaelmas term and marks gained in this examination contribute to the overall score in the University examination in Public Health Medicine and Epidemiology.

Hilary Term of Final Year

Four lectures are given to Final Year students in the Hilary term on current areas of Public Health Practice.

Legal Medicine

FMED 5001

Trinity term of Fourth Year; Michaelmas and Hilary terms of Fifth Year.

The course consists of thirty-five lectures in the areas of medical law, (including human rights medicine), clinical forensic medicine, thanatology and forensic pathology, prescribing law and toxicology. The aim of the course is to give the student doctor a working knowledge of medico-legal matters pertinent to present-day and future medical practice, including the legal obligations of registered medical practitioners.

The legal framework of the doctor's relationships with patients, colleagues, the Medical Council, employers, Government departments, the legal profession, the Courts and the Coroner will be examined and illustrated by relevant examples. The various statutes, possible reforms of the law in relation to medical negligence, and relevant cases from the Courts and European Union laws relating to these topics will be discussed.

The principles of clinical forensic medicine will be examined. These will include death certification, forensic psychiatry, medico-legal aspects of alcohol consumption, sexual crimes and genetic profiling. The study of thanatology and forensic pathology will include changes found after death, the doctor's role at the scene of death, forensic medical examination and the findings in suspicious deaths.

The general principles of poisoning and the toxicology of specific drugs and poisons will also be dealt with.

Medical Ethics

FMED 5002

Hilary and Trinity Terms of Fifth Year

The subject of Medical Ethics is concerned with the ethical dimension inherent to the practice of Medicine. The course is presented in a series of lectures addressing the basic ethical concepts and issues which all medical students are expected to know and to understand. One section of the course deals with the overall nature of ethical medicine, including sources, principles, professional responsibilities and norms, and the traits of character required of the good medical practitioner dedicated 'to cure and to care' for the sick. The other section of the course deals with particular ethical issues arising in various medical specialties. The course is taught by clinicians expert in the various fields as well as by medical ethicists. Consideration is given to medico-ethical codes and guidelines, which have governed the practice of medicine since its ancient scientific

origins. Knowledge of the subject is assessed by a written examination and by a written case-study project that each student has to submit.

Specific topics treated in the course are: The goals of medicine and the first principles of medical ethics. Ethical responsibility and understanding moral action and omission. Ethical features of the doctor-patient relationship. The patient's ethical right to refuse treatment. The medical concept of the human being at the beginning and at the end of life. Ethical criteria in evaluating medico-ethical situations. Also treated are central ethical issues arising in the fields of General Practice, Obstetrics and Gynaecology, Psychiatry, Palliative Medicine, Public Health, Medical Research, and Medical Genetics. Students are free to select any area of medical practice for consideration in their personal research case-study project.

Ophthalmology

OPHT 5001

The aims of the course are:

1. To familiarise the student with the diagnosis and treatment of those conditions which constitute the greater part of the affections of the eye met with in general practice, and investigations that can be carried out with the minimal employment of special equipment.
2. To instruct the student in the use of the ophthalmoscope.
3. To instruct the student in ocular signs and symptoms found in some systemic diseases and disorders.
4. To instruct the student in retinoscopy and in the correction of errors of refraction. Optics will be dealt with only in so far as an understanding of them is required for the examination of the eye and for the treatment of certain eye conditions.

Otolaryngology

OTOL 5001

This systematic course of lectures is intended as an introduction to the study of the diseases of the ear, nose and throat, with special reference to the practical aspects of this subject. Its aim is to help the student to diagnose and deal with the common diseases in this speciality that are met with in general practice; the rarer conditions are dealt with briefly.

Endoscopy is also included, as the student should be acquainted with the modern developments in bronchoscopy and oesophagoscopy, and should be cognisant of the indications for their use. The important points in clinical anatomy will be explained, as well as the physiology of the parts concerned. The fundamental facts of the major operations will be discussed and the minor surgical procedures will be described fully.

There is an oral clinical examination, at which the candidate must be able to use the head mirror and the electric auriscope.

Tropical Medicine

A course of lectures in Tropical Medicine is given in the Hilary term of the Final Medical Year.

General Practice

GPRS 5001

An introductory lecture course is held in the Trinity term covering organisational and clinical aspects of Irish general practice.

During the clinical attachment in general practice, each student takes part in small group seminars and lectures and has an attachment to a GP tutor. Clinical teaching is undertaken during this attachment together with project work and presentations. Students are introduced to aspects of consultation skills involved in general practice using video techniques, simulations and small group discussion. A principal aim of the clinical course is to introduce students to problem-solving techniques as important elements of patient management.

Psychiatry*

PSYC 5001

There are introductory seminars and lectures given in the teaching hospitals during the Second and Third Year of Medicine as part of the general introduction to clinical medicine in those hospitals.

In the Fifth/Sixth Year, there is a residency of eight weeks in clinical psychiatry; this is a full-time residency going on throughout the day with evening assignments and an opportunity to gain experience in overnight duty under supervision. The theoretical aspects of clinical psychiatry are also covered during this period. This theoretical course of instruction is amplified by the use of recorded tapes, video television, slides and other visual aids. However, these additions are considered no substitute for personal contact between teacher and student, or direct interaction between student and the patient.

Paediatrics*

PAED 5001

Paediatrics is introduced from the first medical year, with formal teaching during the Trinity term of the 5th year and Michaelmas term of the sixth year. The course is an 8-week residency in approved paediatric hospitals and consists of formal lectures but with an emphasis on clinical/bedside teaching. The course covers normal and abnormal physical and intellectual development and the main paediatric infections and disorders. Lectures in neonatology are given during the 8-week residency in paediatrics and neonatal clinical instruction is received during the obstetric clerkship.

Obstetrics and Gynaecology

OBGY 5001

Teaching in Obstetrics and Gynaecology commences with a two-week attachment in Gynaecology during the nine-month residency in the general hospital. It is then continued during the period 1 March to 1 December of the Fifth/Sixth Year. Students must complete eight weeks in residence in an approved maternity hospital before 1 November.

Sexually Transmitted Diseases

A course of instruction in Sexually Transmitted Diseases is organised in various years of the course.

* Residency bookings for these subjects are made through the Medical School Office, Earlsfort Terrace (telephone +353-1-7167454/7440).

Special Therapeutics (Fourth, Fifth and Sixth Years)

The course of lectures will consider individual diseases with particular reference to newer methods of treatment. Important points about the use of certain drugs, such as precautions in using them or common toxic reactions, will be dealt with in some detail. Physical methods of value in the treatment of disease will be considered.

The examination in Special Therapeutics will form part of the Final Examination in Medicine in the paper, clinics and orals.

Medicine and Surgery

MEDN 6001 and SURG 6001

In the teaching of Medicine and Surgery, the integration of all the pre-clinical and para-clinical subjects in the analysis of the aetiology, pathology, diagnosis and treatment of disease is attempted (vertical integration).

Second and Third Year of Medicine students will attend the general hospitals once a week for three terms for clinical demonstrations in Medicine and Surgery related to the academic teaching. Fourth Year students will attend a clinical programme of instruction in Medicine and Surgery once a week in the Michaelmas term and part of the Hilary term.

Formal instruction in Medicine and Surgery begins on 1 March of the Fourth Year and continues for the nine-month residency period. During this time, the students rotate through medical and surgical specialities.

Students return to the general hospital in the Hilary term of the Final Medical Year and are assigned to consultants for clinical training.

Textbooks Recommended for MB, BCh, BAO Courses

Every student is required to be provided with at least the ordinary textbooks of the following list in the subjects in which he/she is attending courses of study. Such books should be procured at the beginning of the course, and should be a recent edition.

Textbooks for Foundation Year

Mueller and Young *Emery's Elements of medical genetics*, 11th edition

Textbooks for Systems 1 Curriculum

Anatomy

Slaby, McClune and Summers: *Gross Anatomy in the Practice of Medicine*

or

Moore: *Clinical Anatomy*

For reference:

Henry Gray: *Anatomy*

Grant: *Atlas of Anatomy*

Nolte: *The Human Brain*

Martin: *Neuroscience, neuroanatomy text and atlas*

Personal & Population Health

C Dowrick (ed): *Medicine in Society: Behavioural Sciences for Medical Students*, Arnold; 2001

For reference:

- C Kelleher, J Solan, D McKeown: *Lecture Notes on Public Health Medicine in Ireland*, 3rd edition, Department of Health Promotion, National University of Ireland, Galway; 2001
- L Daly, G Bourke *Interpretation & Uses of Medical Statistics*, 5th edition, Blackwell; 2000

Neuroanatomy

- Crossman and Neary: *Neuroanatomy. An Illustrated Colour Text*

Embryology

- Langman: *Medical Embryology*
MacLachlan: *Medical Embryology*

For reference:

- Larsen: *Human Embryology*

Functional Histology

- Junqueira, Carneiro & Kelly (Lange): *Basic Histology*
and
Fox (WCB Publications): *Human Physiology*

Practical Work Booklist

- HG Burkett, B Young, JW Heata(Churchill Livingstone): *Wheater's Functional Histology*

Textbooks for Systems 2 Curriculum

Recommended Textbooks for Student Purchase

- Sherris Medical Microbiology (An introduction to Infectious Diseases)* Ryan and Ray (Eds) McGraw Hill International edition.
- Microbiology in Clinical Practice:* Shanson. BH, 3rd Edition
- Medical Microbiology:* Mims, Playfair, Toitt, Wakelin & Williams. Mosby, 2nd Edition.
- Robins Basic Pathology:* Kumar, Cotran & Robbins (eds). Saunders 7th Edition
- Pharmacology:* Rang HP, Dale MM, Ritter JM and Moore PK. Churchill Livingstone (5th Edition)

Supplemental Reference Textbooks

Medical Microbiology

- Medical Microbiology,* Greenwood, Slack & Peutherer. Livingstone 16th Edition
- Medical Microbiology made memorable* Myint, Lilvington, Maggs & Swan, Churchill Livingstone.
- Immunology* DM Weir, Livingstone, 8th Edition (revision reading)
- Principles and Practice of Clinical Virology*Zuckerman, Banatvala & Pattison, Wiley 4th Edition. (major reference for virology).
- Notes on Medical Microbiology,* Timbury, McCartney, Thakker & Ward, Livingstone, 2002 Edition (revision reading).

Pathology

Robbins Pathologic Basis of Disease Vinay Kumar (Editor), James A Perkins (Illustrator), Ramzi S. Cotran (Editor), Stanley L. Robbins (Editor)
7th edition. (Reference only)

Clinical Chemistry in Diagnosis and Treatment PD Mayne, 6th Edition 1994.

Mind Maps in Pathology Dervan & Harrison. First Edition 2002 (Revision)

Pharmacology:

Basic and Clinical Pharmacology Katzung BG: (9th Edition)

Clinical Pharmacology Bennett & Brown, Churchill, Livingstone, (9th Edition)

Integrated Pharmacology Page, Sutter, Walker & Hoffman. Mosby, (2nd Edition.)

Medical Pharmacology at a Glance Neal, Blackwell Science 4th (Edition), (revision reading)

Medical Pharmacology Winstanley & Walley. Churchill Livingstone, (2nd Edition) (revision reading)

Fifth and Final Years

Therapeutics

Alstead, Girdwood and MacGregor: *Textbook of Medical Treatment.*

Laurence, D.R: *Clinical Pharmacology. The Manual of Therapeutics (Washington University).*

For Reference:

Goodman and Gilman: *The Pharmacological Basis of Therapeutics.*

Martindale: *Extra Pharmacopoeia. (Vol. I).*

Modell: *Drugs of Choice.*

Packman: *Manual of Medical Therapeutics.*

Drugs and Therapeutic Bulletin.

Adverse Reactions Bulletin.

Public Health Medicine and Epidemiology

Required Reading:

R Beaglehole, R Bonita, T Kjellstrom: *Basic Epidemiology* (Published by World Health Organisation, Geneva 1993)

C Kelleher, J Solan, D McKeown: *Lecture Notes on Public Health Medicine in Ireland* (3rd edition, Department of Health Promotion, National University of Ireland, Galway 2001)

Additional Reading:

L Daly, G Bourke: *Interpretation & Uses of Medical Statistics* (5th Edition, Blackwell 2000)

Legal Medicine

Textbooks Recommended:

- Gee and Watson: *Lecture Notes on Forensic Medicine* (5th ed., 1989).
Knight: *Legal Aspects of Medical Practice* (5th ed., 1992).
The Medical Council: *A Guide to Ethical Conduct and Behaviour* (November, 1998).
Simpson and Knight: *Forensic Medicine* (10th ed., 1991).

For Reference:

- Cusack (ed): *Medico-Legal Journal of Ireland*
Brazier: *Medicine, Patients and the Law* (2nd ed., 1992).
Gresham: *A Colour Atlas of Forensic Pathology* (1975).
Kennedy and Grubb: *Medical Law: Text and Materials* (2nd ed., 1994).
Mason and McCall Smith: *Law and Medical Ethics* (3rd ed., 1991).
Polson, Green and Lee: *Clinical Toxicology* (3rd ed., 1983).
Annual Reports and Relevant Literature of the Medical Defence Union and Medical Protection Society.
Relevant European Union Law.
Relevant Statutes of the Oireachtas and Ministerial Regulations.

Medical Ethics

Basic Guiding Texts

A Guide to Ethical Conduct, The Medical Council of Ireland, 1998 (5th Edition).
Medical Ethics: Course Source Pack (provided yearly by course director). Contains an outline of the main topics of the course; includes longer essays on the course themes and a longer bibliography. Available from the Departmental Office.

Four Basic Textbooks

Principles of Biomedical Ethics, by T L Beauchamp and J F Childress, OUP, 1994. Comprehensive. A classic in the field. A large substantial text. Approaches the subject from theoretical principles and their application to medical cases.

Pathways in Medical Ethics, by Alan G Johnson, Hodder & Stoughton, London, 1990. Basic and accessible textbook containing the elements of a first course. The author is professor of surgery at the University of Sheffield where he teaches medical ethics.

Ethical Dimensions in the Health Professions, by Ruth Purtillo, Saunders, Philadelphia, 1999. Basic and accessible textbook. Very good survey of ethical perspectives. It is helpful particularly in approaching concrete ethical problems and the making of decisions. Abundant number of cases.

Life and Death in Healthcare Ethics: A short introduction, by Helen Watt, Roudledge, London 2000. An introductory textbook. A clear and very accessible book in size and content. Ideal as an introductory text for students in medical ethics.

Reference Texts

Life, Liberty and the Defence of Dignity: The Challenge of Bioethics (San Francisco, 2002) and *Towards a More Natural Science* (Chicago 1985) both texts by Leon R Kass MD, Free Press, Macmillan, Chicago, 1985. Excellent collections of essays on medical ethics written

by a scientist and medical doctor as well as a philosopher, also author of *Human Cloning* (1998).

Law, Ethics and Medicine, Peter Skegg, Clarendon, Oxford, 1984. Basic in the field. A primary for the treatment of the relationship between medical ethics and law.

General Practice

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| Stephenson A: | <i>A textbook of General Practice</i> |
| Fraser R: | <i>Clinical Method – A General Practice Approach</i> |
| McWhinney I: | <i>A textbook of Family Medicine</i> |
| Sackett D et al. | <i>Evidence Based medicine: How to Practice and Teach EBM</i> |
| Greenhalgh T L: | <i>How to read a paper</i> |
| Skrabanek O and McCormick J: | <i>Follies and Fallacies in Medicine</i> |
| Doyle D: | <i>Domiciliary Palliative Care – a Guide for the Primary Care Team</i> |
| Grainger C: | <i>Stress Survival Guide</i> |

Consultation Skills

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| Pendleton D et al: | <i>The Consultation – an Approach to Learning and Teaching</i> |
| Tate P: | <i>The Doctor's Communication Handbook.</i> |

Psychiatry

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| Puri, Laking, Treasador: | <i>Textbook of Psychiatry</i> |
| Barracough Gill Clear: | <i>Hughes' Outline of Modern Psychiatry</i> |
| Rees, Lipsedge, Ball: | <i>Textbook of Psychiatry</i> |
| Katona, Robertson: | <i>Psychiatry at a Glance</i> |
| Elkin: | <i>Introduction to Clinical Psychiatry</i> |
| Graham: | <i>Child Psychiatry – a Developmental Approach</i> |

Standard Reference Books: (Available in University and Hospital Libraries)

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| <i>Gelder, Gath, Mayou and Cowen (3rd Edition):</i> | <i>The Oxford Textbook of Psychiatry</i> |
| <i>Kaplan, Sadock:</i> | <i>Concise Textbook of Clinical Psychiatry</i> |
| <i>Kendell, Zealey:</i> | <i>A Companion to Psychiatric Studies</i> |

Ophthalmology

Neame, H. and F.O. Williamson-Noble: *A Handbook of Ophthalmology* (Churchill).

Otolaryngology

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|-------------------------------|--|
| Bull, PD (Blackwell Science): | <i>Lecture notes on Diseases of the Nose, Throat and Ear.</i> |
| Dhillon RS and East, CA: | <i>An Illustrated Colour Text Ear, Nose and Throat and Head and Neck Surgery</i> |
| Colman BH: | <i>Diseases of the Nose, Throat and Ear and Head and Neck, Churchill and Livingstone</i> |

Obstetrics and Gynaecology

- Beischer and Mackay: *Obstetrics and the Newborn.*
Mackay, Beischer, Cox and Wood: *Illustrated Textbook of Gynaecology.*
O'Driscoll and Meagher: *Active Management of Labour.*
Jenkins: *Listening to Gynaecological Patients' Problems.*
Symonds: *Essentials of Obstetrics and Gynaecology.*
Chamberlin: *ABC of Antenatal Care*
Impey: *Obstetrics and Gynaecology*

Paediatrics

- Lissauer and Clayden: *Illustrated Textbook of Paediatrics*
Waterston, Helms and Ward-Platt: *Paediatrics – Understanding Child Health*
Hull and Johnston: *Essential Paediatrics*
Olver et al: *Core Paediatrics and Child Health*

Other Texts:

- Gill and O'Brien: *Paediatric Clinical Examination*
Loftus: *Pathways in Paediatrics*
Oski: *Principles and Practices of Paediatrics*
Behrman, Kliegman and Arvin: *Nelson Textbook of Paediatrics*
Forfar and Arneil: *Textbook of Paediatrics*

General Interest Medicine

- Harrison's *Principles of Internal Medicine*, 15th edition
Oxford Textbook of Medicine
Kumar and Clarke (eds) *Clinical Medicine*
Talley and O'Connor (Eds): *A Guide to Clinical Examination*
Baliga (ed): *MCQs in Clinical Medicine*

Cardiology

- E Braunwald (ed): *Heart Disease*, 5th edition
JR Hampton (ed): *ECGs Made Easy*

Rheumatology

- Klippel JH: *Rheumatology*
Kelley et al (eds): *Textbook of Rheumatology*

Infectious Diseases

- G Mandell (ed): *Principles and Practice of Infectious Diseases*

Endocrinology

- De Grost (ed): *Endocrinology*

Nephrology

- Brenner BM (ed): *The Kidney*, 5th edition
Brady HR and Wilcox CS (eds): *Therapy in Nephrology and Hypertension*

Haematology

- Textbook of Haematology*

Neurology

Adams and Victor (eds): *Principles of Neurology*, 6th edition

Gastroenterology

Sleisenger and Fordtran (eds): *Gastrointestinal Disease*

Inherited Diseases/Genetics

Scriver et al (eds): *The Metabolism and Molecular Basis of Inherited Disease*

Oncology

Holland et al: *Cancer Medicine*

De Vita Jnr et al (eds): *Cancer: Principles and Practice of Oncology*

Surgery

Textbook of Surgery: The Biological Basis of Modern Surgical Practice:

Courtney M. Townsend, Beauchamp R. Daniel, B. Mark Evers, Kenneth L. Mattox. 16th ed. WB Saunders, 31st October 2000 Published in USA

Bailey and Love's Short Practice of Surgery: R.C.G. Russell, N.S. Williams, C.J.K. Bulstrode. 23rd ed. Arnold, 25 Apr, 2000. Published in UK

Hamilton Bailey's Demonstration of Physical Signs in Clinical Surgery

J.S.P. Lumley. 18th ed. Arnold, 8 May 2000. Published in UK

An Introduction to the Symptoms and Signs of Surgical Disease: Norman Browse. 3rd ed. Arnold, 1997. Published in UK

Principles and Practice of Surgery: A.P.M. Forrest, D.C. Carter, I.B. Macleod. 3rd ed. Churchill Livingstone, 1995 Published in UK

Essential Surgical Practice: Basic Surgical Training: Vol 1:

A. Cuschieri, R.J. Steele, A.R. Moossa. 5th ed, Arnold, 30th March 2001. Published in the UK

Current Surgical Diagnosis and Treatment:

Lawrence W. Way. 11th ed. Appleton and Lange, Oct, 2002. Published in the UK

Degree of Bachelor of Science (BSc) in Medical Subjects

- 1 The Degree of BSc with Honours in medical subjects may be conferred in any one of the following subjects:
 - (a) Anatomy;
 - (b) Biochemistry;
 - (c) Medical Microbiology;
 - (d) Pathology;
 - (e) Pharmacology;
 - (f) Physiology.

At the discretion of the Professors concerned, special instruction in related subjects may be arranged.

- 2 Students who have passed the appropriate University examination in Medicine in the corresponding subjects at a standard of at least Second Class Honours are eligible to take the BSc Degree in that subject.
- 3 To be eligible to pursue the Degree of BSc in Biochemistry, students must have passed the First Medical Examination with Honours and must also have passed the Second Medical Examination.
- 4 Candidates who hold the Degrees of MB, BCh and BAO may be recommended by the Faculty of Science for admittance to the Honours Degree courses in any one of the subjects (a) to (f).
- 5 For admission to the Honours Degree Examination in subjects (a) to (f), candidates must have attended the prescribed courses for at least three terms.

The following are the prescribed courses:

Anatomy and Physical Anthropology

To be eligible to pursue the Degree of BSc in Anatomy, students must have passed the Foundation year of Medicine, First year of Medicine and Second Year of Medicine to include systems 1 and systems 11 courses. Students must attain an overall Second Class Honours in Systems 1.

The course extends over one academic year and consists of lectures and practicals in Advanced Anatomy, including Morphology, Embryology and Physical Anthropology. Students are also required to pursue a research project during the year.

Biochemistry

Courses extend over one year and consist of lectures, seminars and practical work in Biochemistry devoted to more advanced aspects of the subject. Students are also required to pursue a research topic.

Medical Microbiology

Courses extend over one year and are directed to more advanced aspects of the subject.

Pathology

Courses extend over one year and are directed to more advanced aspects of the subject.

Pharmacology

Courses extend over one year and are directed to more advanced aspects of the subject. Courses consist of lectures/tutorials, research seminars, discussion sessions on articles from the literature and practical work.

Students are also required to pursue a research project and present a thesis on this work as part of the examination.

Physiology

Courses extend over one year and consist of lectures and/or assigned reading, seminars and practical work in physiology devoted to more advanced aspects of the subject.

Students are also required to pursue a research project.

Degree of Bachelor of Medical Science (BMedSc)

The Bachelor of Medical Science may be awarded to students who have passed the relevant University examinations, having satisfactorily attended courses in the first four years of the medical course. Where, because of qualifications, degrees or other proven academic achievement on entry to the medical course, a student is granted exemption from subjects of this course, the BMedSc may be awarded on satisfactory completion of the non-exempted subjects and on passing the relevant University examinations in these subjects.

To be eligible for the award of the degree, candidates must present a thesis of between 8,000 and 10,000 words, excluding references, on an assigned topic agreed with the relevant department of one of the following subjects: Anatomy, Biochemistry, Medical Microbiology, Pathology, Pharmacology, Physiology, Public Health Medicine and Epidemiology or applied clinical aspects of these subjects. The degree may be awarded with honours.

The degree will be available ordinarily to students completing the Fourth Year of Medicine in the current academic year and to those who meet the above requirements but have left the Medical School without attaining the degrees of MB BCH BAO. The degree may also be made available to others who meet the above requirements, subject to Faculty of Medicine and Health Sciences approval.

Postgraduate Degrees

Postgraduate Degrees

Degree of Master of Science (Basic Medical Subjects)

Anatomy, Biochemistry, Healthcare Informatics, Medical Microbiology, Pathology & Physiology

Degree of Master of Science

- General Practice
- Community Child Health
- Sports Physiotherapy
- Psychotherapy

Degree of Master of Obstetrics

Degree of Master of Public Health

Degree of Master of Surgery

Degree of Doctor of Medicine

Degree of Doctor of Philosophy

Diplomas

Higher Diploma in Child Health

Higher Diploma in Medicine (Forensic Medicine)

Higher Diploma in Healthcare (Informatics)

Higher Diploma in Healthcare (Risk Management)

Higher Diploma in Medicine (Dermatology)

Higher Diploma in Occupational Health

Higher Diploma in Community Ophthalmology

Diploma in Emergency Medical Technology

Certificates

Certificate in Healthcare Informatics

Degree of Master of Science (MSc) Basic Medical Subjects

A candidate who has obtained the Degrees of MB BCh BAO, BSc (Physiotherapy), BSc (Radiography) or BSc (Nursing) from the National University of Ireland, or other primary degree or other qualification deemed equivalent by the Faculty of Medicine and Health Sciences, and who wishes to obtain further postgraduate training in their chosen branch of Medicine or allied subjects related to Medicine, with particular reference to the academic and research aspects, shall be eligible to enter for the Degree of MSc. The Degree may be obtained by thesis (Mode I) or by examination (Mode II).

MSc Degree by Thesis (Mode I)

Candidates must attend for at least three terms and carry out research under the direction of the professor (or university lecturer) in the subject concerned. The thesis presented by the candidate is to embody the results of this research. The Faculty may approve of the work being carried out elsewhere under the direction of the professor (or university lecturer) in the subject concerned.

Candidates may be required to pass an oral examination in the subject matter of the thesis if the examiners so decide. Three copies of the thesis must be lodged with the Supervisor of Examinations, University College Dublin, on or before the date fixed by the university.

MSc Degree by Examination and Thesis (Mode II)

The course is full-time covering twelve months. The course can also be taken on a part-time basis over at least two years. It will be divided into Section A and Section B. Section A will be aimed at that aspect of Medicine, or the allied subject related to Medicine, and will be directed by the relevant department. The student will follow the teaching programme made available, including lecture demonstrations in research techniques and will take part in the teaching of undergraduate students. The examinations for Section A are normally held in May. Section B will consist of a research project and thesis. The thesis must be presented before November of the year in which the examinations are taken.

Degree of Master of Science (MSc) (General Practice)

MDMXP0001

This is a two-year part time course leading to the MSc (General Practice) degree and is designed to cater for the educational needs of general practitioners. The course provides the theoretical framework in critical appraisal, communication skills, ethics and changing or new areas of clinical practice and also the opportunity for general practitioners to be involved in research and audit.

Entry Requirements

Applicants must be registered medical practitioners and either a) have spent at least four years in full-time General Practice, (or its part-time equivalent); or b) have completed vocational training for General Practice and hold the MICGP or equivalent qualification.

Course Description

Year 1

- Academic Basis of General Practice
- Teaching and learning in General Practice
- Research in General Practice
- Prevention

Year 2

Four units to be selected from the following:

- Immediate Care
- Rational Prescribing
- Palliative Care
- Ophthalmology
- Minor Surgery

Examination

There is a written examination in the summer of First Year, and in Winter of Second Year. Continuous assessment takes place throughout the course. Each candidate must prepare a thesis, which must be submitted by the summer of Second Year.

Further particulars may be obtained from the

Department of General Practice
Coombe Healthcare Centre
Dolphin's Barn Street
Dublin 8

Telephone: +353-1-473 0895
Fax +353-1-473 2791

Degree of Master of Science (Child Health) (MSc)

MDMXP0032

Course description

Full details of this course are on our website: <http://phm.ucd.ie/>

The course is a unique truly multi-disciplinary course in child health, delivered one day a week, in both semesters over two years. You will work and study with other professionals in assigned groups on a range of theoretical and applied topics relevant to child health, including research methods, child development, child health, and the organisation of child health services. Then you will complete a thesis on a topic relevant to their professional interests, and carry out a series of intensive attachments with child health service providers. The result, an academically rigorous, practically grounded training in inter-disciplinary child health.

Course Syllabus

Course Structure

A key objective of this course is to facilitate group working between professionals. For this reason students will be assigned to groups at the start of the course. Each group will contain as far as possible, people from different disciplines and backgrounds. Many of the assessments, require both a group report and individual reports. The group report is a report on a specific topic. The individual reflective reports are personal reflections on how the work of doing the group report has affected or changed the individual student's professional practice or personal understanding of the topic studied by the group. Students will remain in these groups throughout the course.

Core Modules

There are four core modules, delivered two in the first semester, two in the second semester of the first year: -

Research Methods

Principles of research; Design of research studies in child health; Principles of statistics; Methods in quantitative research; Methods in qualitative research; Family studies; Clinical trials; Evidence based practice; Methods of health promotion.

Child Development

History of childhood; Developmental thinking; Modes of development; Psychological health; Social development; Language acquisition; Psychological development; Developmental screening; Educational development; Adolescence; Development and understanding of health; Child mental health.

Child Health

Ideas of health; Biological health; Biological development; Growth; Maintenance of health in childhood; Threats to child health – developing countries; Child welfare and protection; Families and health; Family support, Health promotion; Vaccination and Immunisation; Child Health screening; Vision and Hearing

Organisation and Provision of Child Health Services

Organisation of child health services; Child welfare and services; Integration of child services; Child health services in developing countries; International agencies and child health; The voluntary sector and child health; Legal issues in child health; Children – a rights perspective:

Service and Clinical Attachments Module

There is one double module delivered in the first and second semesters of the second year. This is a series of attachments of groups of students to elements of the child health and welfare services. Students will complete three attachments during this module. Each attachment will be in two halves. The first half will be observation of the service in action. The second half will be based on a simple project. This will be something of relevance to the work of the host agency.

Thesis

There is an individual thesis from 10,000 to 20,000 words in length, which must be submitted at the end of the second semester of the second year. This thesis must represent the report of a significant piece of research on a topic in child health. The topic must be agreed with an academic supervisor working in UCD. Students will also be required to attend some teaching sessions at the start of the second year on the structure, writing an presentation of their thesis and to present their work twice during the year, once at the end of the first semester and once at the end of the second semester. It is anticipated, though not a requirement, that this topic will relate to the professional employment of the candidates. The thesis is a requirement for students who wish to receive a master's degree.

Entry Requirements

Candidates should ordinarily have a primary degree, and should ordinarily be engaged in work with children in which child health forms a significant component. Some examples of such work would include paediatrics, primary care, public health, social service, family support, community development, mental health services, and adolescent services.

Application Procedures

Applications should be made to:

The Course Director, MSc in Child Health
Department of Public Health Medicine and Epidemiology
University College Dublin
Earlsfort Terrace, Dublin 2

Applicants must satisfy the medical faculty requirements for evidence of proficiency in both spoken and written English. Applicants should send a full curriculum vitae, two colour passport photographs, documentary evidence of academic and professional qualifications used to support their application, details of their current employment, and a short explanation (maximum 500 words) of how attending this course will help them to improve the services provided to children. Application may be submitted from the first of January in the year of entry, however early application is advised as suitable candidates will be offered places as their applications are received.

Degree of Master of Science (Sports Physiotherapy) (MSc)**MDMXP0007**

This is a part-time modular postgraduate course held over two years. The course is suitable both for those practising general physiotherapy and for those with an interest in Sports Physiotherapy as a full-time career.

Applicants must hold the Degree of BSc (Physiotherapy) (NUI) or other primary degree or other qualification deemed equivalent by the Faculty of Medicine and Health Sciences, with two years' post qualification experience.

The aim of the course is to provide detailed training in the various disciplines related to Sports Physiotherapy.

There will be four 75-hour modules (i.e. 300 hours). Each module will run over 15 weeks and will involve one half-day (4 hours) per week and occasional Saturday sessions. Each candidate will be expected to attach themselves to a sporting entity of their choice and as part of their dissertation to present a log of their involvement (in an appendix) with relevant case studies and statistical analysis in the body of the work to support their dissertation topic.

Topics covered:

Exercise Physiology, Functional Human Anatomy, Human Biomechanics, Sports Nutrition, Sports Psychology, Informatics, Research Methodology & Statistics, Clinical Examination, Screening, Manual & Exercise Physiotherapy,

Examinations:

Examination by in-course assessment during the first and second year by written and practical/oral exams in the first and second year (Summer). The MSc requires completion of a minor dissertation.

The course will be administered by the UCD School of Physiotherapy

Degree of Master of Obstetrics (MAO)

MDMRP0005

A candidate who has obtained the Degrees of MB BCh BAO from the National University of Ireland or Licentiate of the Royal College of Surgeons in Ireland shall be eligible to obtain the Degree of MAO. Graduates of any other University or students of advanced standing who possess a medical qualification deemed to be equivalent to the primary degree of Medicine of the University, and who shall have fulfilled all other prescribed conditions as to the manner in which such Degree of Master of Obstetrics may be obtained, shall be eligible to obtain the Degree of MAO, provided that they are working in a recognised teaching hospital or in a department of the University under the direction of the Head of the Department or of a Professor of the University.

Regulations

- 1 The candidate shall apply to the Faculty for permission to present for the Degree of Master of Obstetrics by thesis at least twelve months before presentation of the thesis for examination.
- 2 The application, which should be in triplicate, should be accompanied by:
 - A detailed outline of the proposed area of research and its aims;
 - Details of experience in the subject chosen;
 - Information on the facilities available for carrying out the research and the methods to be used;
 - A statement from the Head of the Department in which the work is to be carried out, or from an appropriate referee, as to the applicant's suitability to undertake the work and to confirm that the research has been approved by the appropriate body.
- 3 A period of not less than three years shall have elapsed from the time the candidate obtained the Degrees of MB BCh BAO or Licentiate of the Royal College of Surgeons in Ireland, not less than four years of which shall have been spent in the practice of obstetrics and gynaecology at a level approved by the Faculty.
- 4 The candidate must have passed a preliminary clinical examination in obstetrics and gynaecology; exemption from this examination may be granted if the Faculty considers that the candidate holds a suitable obstetrical and gynaecological qualification acquired by examination.
- 5 The candidate must present a thesis, the work for which has been carried out over a period of not less than one year in the Department of Obstetrics and Gynaecology in the University under the direction of the Professors of Obstetrics and Gynaecology. The Faculty may approve of the work being carried out elsewhere.
- 6 Candidates must register with the University and pay the appropriate fee for the academic terms during which the research is undertaken.

The following further conditions for the award of the degree must be fulfilled:

- (a) The thesis shall embody original observations on the subject chosen and shall contain material that in the opinion of the examiners will ordinarily be suitable for publication in prestigious international peer-reviewed journals.
- (b) Candidates must produce evidence of having been substantially involved in carrying out research work over a period of one year before lodging the thesis for examination.
- (c) If the work is conducted elsewhere than in the Department of Obstetrics and Gynaecology in the University, the candidate shall supply a statement from the Head of the Department, or from an appropriate referee, indicating that the material in the thesis is the result of the candidate's personal effort, when the thesis is being lodged for examination.
- (d) Excellence in the standard of presentation is required and the recommendations concerning presentation must be adhered to.
- (e) Candidates shall advise the Faculty of Medicine and Health Sciences of their intention to lodge the thesis approximately six months in advance of submission. A brief summary of the work should also be supplied.
- (f) A thesis may not be lodged for examination until a period of at least twelve months has elapsed from the date of Faculty approval and registration with the University.
- (g) Four copies of the thesis must be lodged in the Examinations Office, University College Dublin, Belfield, Dublin 4. Judgement will be made as soon as possible.
- (h) The candidate may be required to satisfy the examiners in an oral examination on the subject matter of the thesis.

Application Procedure

Application forms are available from the

Faculty of Medicine and Health Sciences Office
University College Dublin
Earlsfort Terrace
Dublin 2

Telephone: +353-1-716 7454/7440

E-mail: Faculty.Medicine@ucd.ie

Completed applications must be accompanied by a non-refundable deposit of €150.

Degree of Master of Public Health (MPH)

MDMXF0012/MDMXP0013

Entry Requirements:

The Degree of Master of Public Health may be granted to medical and dental practitioners and to those with professional backgrounds in health or health care provision, who hold an appropriate primary degree or equivalent qualification. Candidates may be required to undertake an interview prior to acceptance for the course. Candidates must complete the approved course of study and pass the prescribed examination. A period of not less than two years must normally elapse from the date of obtaining primary qualification and admission to the course for the Degree of Master of Public Health. Overseas students applying to undertake this course must provide proof of proficiency in English.

Course Description:

The full-time course for the Master of Public Health Degree extends over one academic year of study; alternatively a part-time course may be offered extending over two academic years. The course will not be held unless there is a minimum of ten suitable applicants.

Course Content:

Block: *Name of Module:*

Block 1 Methodology 1

– (*Qualitative, Quantitative*)

Evidence-Based Medicine

General Computing Skills

Aetiology of Disease 1

Screening

– (*Core Principles, Applied*)

Block 2 Social & Behavioural Sciences

– (*Psychology, Sociology, Social Policy*)

Public Health Practice

Block 3 Methodology 2

– (*Biostatistics, Statistical Computing, Demography*)

Aetiology of Disease 2

Social Epidemiology

Other Specialist Modules in Epidemiology

– (*Genetic, Nutritional, Environmental, Applied Clinical*)

Block 4 Management

– (*Core Principles, Applied, Health Economics*)

Specialist Practice

– (*International Health, Health Promotion, Environmental Health, Irish Specialist Practice*)

Thesis:

Each candidate must present a thesis on a subject allocated by the Department of Public Health Medicine and Epidemiology, which shall embody a detailed critical review of the literature and/or original work on the topic. The thesis should be of publishable standard and must conform to Departmental requirements.

Examination:

For candidates taking the full-time course, the examination for the Degree of Master of Public Health is held in the Summer only. It will include written and oral sections in the subjects of the curriculum. A candidate will not be admitted to the examination until he/she has completed the course of instruction to the satisfaction of the University. For candidates taking the two-year, part-time course, an examination will be held at the end of each year in the relevant subjects.

Further particulars may be obtained from the
Department of Public Health Medicine and Epidemiology
University College Dublin
Earlsfort Terrace
Dublin 2

Telephone: +353-1-716 7345
Fax: +353-1-716 7407
Email: public.health@ucd.ie

Degree of Master of Surgery (MCh)

MDMRF0003
MDMRP0006

A candidate who has obtained the Degrees of MB BCh BAO from the National University of Ireland or Licentiates of the Royal College of Surgeons in Ireland shall be eligible to obtain the Degree of Master of Surgery (MCh). Graduates of any other University or students of advanced standing who possess a medical qualification deemed to be equivalent to the primary degree of Medicine of the University, and who shall have fulfilled all other prescribed conditions as to the manner in which such a degree of Master of Surgery may be obtained, shall be eligible to obtain the degree MCh provided that they are working in a recognised teaching hospital or in a department of the University under the direction of the Head of Department or of a Professor of the University. A period of not less than three years shall have elapsed from the time the candidate obtained the Degrees of MB BCh BAO or Licentiate of the Royal College of Surgeons in Ireland.

Regulations

- 1 The candidate shall apply to the Faculty for permission to present for the Degree of Master of Surgery (MCh) by thesis at least twelve months before presenting the thesis for examination.
- 2 The application, which should be in triplicate, should be accompanied by:
 - A detailed outline of the proposed area of research and its aims;
 - Details of experience in the subject chosen;
 - Information on the facilities available for carrying out the research and the methods to be used;
 - A statement from the Head of the Department in which the work is to be carried out, or from an appropriate referee, as to the applicant's suitability to undertake the work and to confirm that the research has been approved by the appropriate body.
 - Candidates may not submit proposals based on research previously used to gain membership of a Faculty.
- 3 The candidate must present a thesis for research work carried out in the Department of Surgery in the University under the direction of the Professors of Surgery. The minimum time required in the conduct of the research should be equivalent to at least one year's full-time research. The Faculty may approve of the work being carried out elsewhere.
- 4 Candidates are required to be registered with the University and pay the appropriate fee.

The following further conditions for the award of the degree must be fulfilled:

- (a) The thesis shall embody original observations on the subject chosen and shall contain material that in the opinion of the examiners will ordinarily be suitable for publication in prestigious international peer-reviewed journals.
- (b) Candidates must produce evidence of having been involved in carrying out research work over a period equivalent to one year's full-time research before lodging the thesis for examination.
- (c) If the work is conducted elsewhere than in the Department of Surgery in the University, the candidate shall supply a statement from the Head of the Department, or from an appropriate referee, indicating that the material in the thesis is the result of the candidate's personal effort when the thesis is being lodged for examination.
- (d) Excellence in the standard of presentation is required and the recommendations concerning presentation must be adhered to.
- (e) Candidates shall advise the Faculty of Medicine and Health Sciences of their intention to lodge the thesis approximately six months in advance of submission. A brief summary of the work should also be supplied.
- (f) A thesis may not be lodged for examination until a period of at least twelve months has elapsed from the date of Faculty approval and registration with the University.
- (g) Four copies of the thesis must be lodged in the Examinations Office, University College Dublin, Belfield, Dublin 4. Judgement will be made as soon as possible.
- (h) The candidate may be required to satisfy the examiners in an oral examination on the subject matter of the thesis.

Application Procedure

Application forms are available from the

Faculty of Medicine and Health Sciences Office
University College Dublin
Earlsfort Terrace
Dublin 2

Telephone: +353-1-716 7454/7440

E-Mail: Faculty.Medicine@ucd.ie

Completed applications must be accompanied by a non-refundable deposit of €150.

Degree of Doctor of Medicine (MD)

MDDRF0001

I

Subject to the provisions of the University Statute, a candidate shall be eligible to obtain the Degree of Doctor of Medicine fifteen terms after obtaining the Degree of Bachelor of Medicine.

A candidate shall be eligible to obtain the Degree of Doctor of Medicine

- (a) by thesis; or
- (b) by presenting published work embodying the results of personal observations or original research that, in the judgement of the examiners, is considered worthy of recognition by such degree.
- (c) A period of not less than 3 years shall have elapsed from the time the candidate obtained the Degrees of MB MCh BAO.

The University may grant the Degree of Doctor of Medicine to graduates of the University or Licentiates of the Royal College of Surgeons in Ireland who shall have fulfilled all prescribed conditions as to the manner in which such Degree of Doctor may be obtained. Graduates of any other University or students of advanced standing who possess a medical qualification deemed to be equivalent to the primary degree in Medicine of the University, and who shall have fulfilled all other prescribed conditions as to the manner in which such Degree of Doctor may be obtained, shall be eligible to obtain the Degree of Doctor of Medicine provided that they are working in a recognised teaching hospital or in a department of the University under the direction of the Head of the Department or of a Statutory Professor of the University. The Faculty, if satisfied that a *prima facie* case has been made, may appoint one or more of its members to advise on the work and preparation of the thesis.

II

Regulations

- 1 The candidate shall apply to the Faculty for permission to present for the Degree of Doctor of Medicine by thesis at least two years before presentation of the thesis for examination.
- 2 The application, which should be in triplicate, should be accompanied by:
 - A detailed outline of the proposed area of research and its aims;
 - Details of experience in the subject chosen;
 - Information on the facilities available for carrying out the research and the methods to be used;
 - A statement from the Head of the Department in which the work is to be carried out, or from an appropriate referee, as to the applicant's suitability to undertake the work, detailing the percentage of protected research time devoted to the project on an annual basis, and confirming that the research has been approved by the appropriate body.

- Candidates may not submit proposals based on research previously used to gain membership of a Faculty.

The following further conditions for the award of the degree must be fulfilled:

- (a) The thesis shall embody original observations on the subject chosen and shall contain material that in the opinion of the examiners will ordinarily be suitable for publication in prestigious international peer-reviewed journals.
- (b) Candidates must produce evidence of having been substantially involved in carrying out research work over a period of two years before lodging the thesis for examination.
- (c) The candidate shall supply a statement from the Head of the Department, or from an appropriate referee, indicating that the material in the thesis is the result of the candidate's personal effort when the thesis is being lodged for examination.
- (d) Excellence in the standard of presentation is required and the recommendations concerning presentation must be adhered to.
- (e) Candidates must register with the University for a minimum period of two years and pay the appropriate fee for the academic terms during which the research is undertaken.
- (f) Candidates shall advise the Faculty of Medicine and Health Sciences of their intention to lodge the thesis approximately six months in advance of submission. A brief summary of the work should also be supplied.
- (g) A thesis may not be lodged for examination until a period of at least two years has elapsed from the date of Faculty approval and registration with the University.
- (h) Four copies of the thesis must be lodged in the Examinations Office, University College Dublin, Belfield, Dublin 4. Judgement will be made as soon as possible.
- (i) The candidate may be required to satisfy the examiners in an oral examination on the subject matter of the thesis.

Application Procedure

Application forms are available from the

Faculty of Medicine and Health Sciences Office
University College Dublin
Earlsfort Terrace
Dublin 2

Telephone: +353-1-716 7454/7440

Email: Faculty.Medicine@ucd.ie

Completed applications must be accompanied by a non-refundable deposit of €150.

Degree of Doctor of Philosophy (PhD)

Candidates for this degree are required to be admitted by the Faculty on the recommendation of the Professor; their admission must then be confirmed by the Academic Council. Candidates who have not graduated in this University may be admitted if suitably qualified.

No candidate can be allowed to enter on a course of study and research for the Degree of PhD unless he/she has reached a high honours standard at the examination for the primary degree or presented such other evidence as will satisfy the Professor and the Faculty of his/her fitness.

The candidates shall pursue research for a period of nine terms but the Academic Council may accept a period of six terms in the case of a graduate whose attainments justify such shorter course.

The thesis must normally be prepared under the supervision of the Professor, but the Faculty may, on the recommendation of the Professor, assign another member of the staff to supervise the candidate's research, under the Professor's general direction. The thesis must be prepared in the University, unless permission is given to the candidate to work elsewhere under the Professor's general direction. Such permission will only be given to candidates who have attended courses in the University for twelve terms before admission to the course for the PhD.

Candidates may enter for examination in January of the year in which their work is to be examined; the time of examination to be arranged as may be convenient to the candidates and the examiners. If the thesis is not presented before the 1st February following, the candidate must re-enter.

Candidates will be required to take an oral examination on the subject matter of their thesis.

This degree will not be awarded unless the examiners report that the work is worthy of publication, as a whole or in part.

Candidates for the PhD Degree will be allowed six years from the date of registration in which to complete their degree. If they have not done so within that period, they must re-register for registration.

Diplomas**Higher Diploma in Child Health (HDipCH)****MDHDP0007****Entry Regulations for EU Medical Graduates**

Candidates must have passed their Final Medical Examination not less than eighteen months before the examination for the Diploma. In addition to any experience gained during the intern year prior to full registration, candidates must produce evidence of:

Either

having been a resident medical officer in a recognised children's hospital or in a recognised children's department of a general hospital for six months. Residence as a postgraduate student for one month in a recognised obstetric hospital will be accepted as equivalent to residence for one of the six months above;

Or

having had a clinical attachment in a recognised children's hospital or in a recognised children's department of a general hospital with certified attendance of at least nine hours weekly for twelve months.

Entry Regulations for Non-EU Medical Graduates

The Diploma is open to medical graduates of overseas colleges who are recommended by the Health Department of the country of origin, or by the head of their hospital or university department, or, in the case of those already accepted in Great Britain, by the head of the paediatric department of the hospital to which they were attached.

Candidates must have passed their Final Medical Examination not less than two years before the examination for the Diploma. In addition to any experience gained during the intern year prior to full registration, candidates must produce evidence of:

Either

having been a resident medical officer in a recognised children's hospital or in a recognised children's department of a general hospital for twelve months. Residence as a postgraduate student for two months in a recognised obstetric hospital will be accepted as equivalent to residence for two of the twelve months above;

Or

having had a clinical attachment in a recognised children's hospital or in a recognised children's department of a general hospital with certified attendance of at least nine hours weekly for two years.

Candidates are also required to pass an English proficiency test.

Course Structure

Compulsory attendance at an evening course of lectures in the University and its affiliated hospitals is required of all candidates. Candidates are expected to have adequate clinical instruction during their paediatric residency. The course lasts for one week and is held in May each year. However, for candidates who require additional clinical exposure, an optional two-week course will be provided, including up to ten hours of bedside tutorials, clinical demonstrations and/or clinical attachments. Lectures will be given on all aspects paediatrics, including child welfare, school medical service, neonatal diseases, infectious diseases, child psychiatry, social paediatrics and dietetics. The course will not be held unless there are a minimum number of suitable applicants.

Examinations

The examination for the Higher Diploma in Child Health will consist of the following:

One written examination in Paediatric Medicine and Surgery, including neo-natal disorders, Child Psychiatry, Social Paediatrics and the normal child.

A clinical and oral examination.

The examination is held in the first fortnight of June.

Application Procedure

Application forms may be obtained from the

Faculty of Medicine and Health Sciences Office
University College Dublin
Earlsfort Terrace
Dublin 2

Telephone: +353-1-716 7454/7440)

Email: Faculty.Medicine@ucd.ie

Higher Diploma in Medicine (Forensic Medicine) MDHDP0047

Entry Requirements

The course is open to registered medical practitioners who hold higher professional training or qualifications or specialist accreditation in a speciality relevant to forensic medicine (e.g. general practice, general or emergency medicine, obstetrics and gynaecology or psychiatry) and who have at least one year of experience of medical, legal or forensic practice or experience requiring the practical application of criminal and/or civil law to a degree unusual in routine normal medical practice.

Course Description and Aims

The course will provide training for doctors working in the field of forensic medicine leading to the award of a postgraduate Diploma. The course will provide the basic skills for the practice of forensic medicine. It will be an appropriate qualification for doctors

practising forensic medicine, in addition to, or as part of, their work in another speciality or wishing to work towards a higher qualification in forensic medicine.

Initially the Diploma course will only be open to medical practitioners. Subsequently the course will become multi-disciplinary and is likely to be of interest to nurses, lawyers, coroners, scientists and law enforcement officers.

Course Structure

The course will be part-time over one academic year with lectures and self-directed learning with feedback and discussions in small groups. There will be workshops in practical skills including the preparation of statements and courtroom skills. Course members will prepare personal learning portfolios to plan, implement and assess their learning. They will prepare a casebook with commentaries and write a dissertation.

Course Content

Areas for study on the course will include:

History and future of forensic medicine; the use of libraries and IT resources; medical and legal investigative research skills; introduction to law and legislation; ethical aspects of medical practice; the judicial system and courts; law enforcement agencies; custody medicine; substance misuse; mental health; deaths; injuries; scenes of crime and investigation; forensic sciences; coroners; traffic medicine; drugs and alcohol; adult sexual offences; children and abuse; domestic violence; vulnerable witnesses; major incidents; employment, finance and practice management; occupational and public health; infectious diseases. There will be workshops covering records, statements and reports; expert witness and courtroom skills. Course members will prepare learning portfolios and present casebook and a dissertation.

Examinations

The examination will consist of:

- (1) A written examination at the conclusion of the taught course
- (2) An assessment based on the students learning portfolio.
- (3) An oral examination that will include the discussion of the student's casebook for presentation of a dissertation on a subject to be agreed during the first semester of the course.
- (4) Presentation of a dissertation of a subject to be agreed during the first semester of the course.

Application Procedure

Further details and application forms may be obtained from the

Academic Secretary
Division of Legal Medicine
University College Dublin
Earlsfort Terrace
Dublin 2

Higher Diploma in Healthcare (Informatics)

MDHDP0010

This is a part-time, distance education postgraduate course utilising the World Wide Web. The course is designed to develop Informatics Skills in Medicine, Nursing, Radiology, Pathology, Health Management and other related areas. The Faculty of Medicine and Health Sciences and the Institute for Healthcare Informatics in the Mater Hospital are partners in the development of this Diploma with the University of Derby and the Derbyshire Royal Infirmary in establishing Virtual Study Centres by utilising the World Wide Web. A modular course has been developed with modules being offered and validated by different institutions.

Entry Requirements

Applicants will normally hold a primary degree or post-professional qualification in either Computer Science or in a profession allied to medicine, together with relevant experience of Healthcare or Informatics or both. Students will also be considered with an appropriate qualification together with two years' experience, or with five years' experience in an appropriate area. Students will also be required to produce a 1,000-word essay, which will be used to profile their writing style for quality assurance purposes.

Course

The student must study a number of core modules as well as whichever optional modules he/she wishes, depending on individual research interests.

Course Summary

Healthcare Informatics covering research methods, understanding the need for information in the healthcare environment, information management in healthcare, healthcare information systems evaluation, design and implementation, and understanding the impact of change and of Information Systems on both individuals and organisations.

Module 1: Research Methods

Research implementation, study design and data handling. Basic principles of statistical testing and interpretation of results. Statistical hypothesis testing, literature searching, clinical trial design, ethical issues and structuring a protocol. Questionnaires, structured interviews and observation forms. Qualitative vs quantitative research methods and the option of problem-based selection. Types of data and elementary descriptive statistics including measures of central tendency: mean, median, mode and percentiles.

Sampling distributions; estimation and hypothesis testing; non-parametric and parametric statistical tests.

Module 2: Management of Change

The process of change: characteristics of the change process, the effects of change on organisations, sub-organisations, groups and individuals. Organisational activity types and their effect on change. The effect of organisational culture on change. Strategies for change: responses of individuals and organisations to the change process. Models of change and responses to the change process. The relevance of power, leadership, commitment and resistance to change. Procedures for the change process: decision making and the effect of participative decision-making.

Planning strategic change. Outside agencies. Techniques for implementing change: assuming effective change. Mechanisms and tools for facilitating effective change. Team building. The influence of communication.

Module 3: Information as a Corporate Resource

Corporate uses of healthcare information in a healthcare institution. This will cover such topics as audit, patient-focused care and clinical effectiveness.

Module 4: Introduction to Medical Systems or Introduction to Programming in M together with Implementing Healthcare Information Systems

Creating and implementing an information strategy; requirements/needs analysis; systems analysis and design; system development methodologies.

Examination

The examination will be partly by continuous assessment and partly by a final examination in each module on the World Wide Web.

Application Procedure

Further information is available from

Centre for Healthcare Informatics
University College Dublin
Earlsfort Terrace
Dublin 2

Telephone: +353-1-716 7225

Fax: +353-1-716 7380

email: healthinf@ucd.ie

Higher Diploma in Healthcare (Risk Management)

MDHDP0009

Entry Requirements

The course is open to doctors, dentists, nurses, physiotherapists and radiographers with a minimum of three years' post-qualification experience and to other healthcare personnel and professionals with a basic qualification in one of the health sciences or who hold such other qualifications and have a minimum of three years' clinical or healthcare managerial experience as approved by the Medical Faculty.

Course Description and Aims

The course will provide training for clinical and managerial healthcare professionals in the area of healthcare risk management leading to the award of a postgraduate UCD Diploma. The skills learned will provide the basis for participation in healthcare management and risk management committees and for further training as a risk manager. The knowledge acquired will be applied to the improvement of patient care, to the prevention and management of legal claims and to healthcare delivery in general.

Course Structure

The course will be part-time over one academic year and will consist of lectures and seminars of real and simulated case scenarios. It will provide teaching and training in the necessary background information in relation to the healthcare system, medico-legal aspects of healthcare, the risk management process and its application to both clinical and non-clinical patient and staff care areas. The emphasis will be on the practical application of this knowledge and training in the risk management process to the day-to-day workings of hospitals, clinics and health board institutions.

Course Content

The course will include study of the following topics:

Structure and organisation of the healthcare system, healthcare finance and personnel, the legal system, the legal framework of the healthcare provider-patient relationship, EU legislation, medical records, patient consent, medical negligence, ethical issues, medico-legal reports and court evidence, definition of risk, risk identification, risk analysis, risk management committee, risk manager, management of clinical risks (general and applied to specialities and departments), management of non-clinical risks, safety at work legislation, risk insurance and indemnity, claims investigation and management, implementation of the risk management process.

Examinations

The examination will consist of:

- (1) A written examination at the conclusion of the course.
- (2) A written project chosen by each candidate during the first semester
- (3) Presentation of the written project.

Application Procedure

Further details and application forms may be obtained from the

Director, Division of Legal Medicine
University College Dublin
Earlsfort Terrace
Dublin 2

Telephone: +353-1-716 7235
E-mail: legal.medicine@ucd.ie

Higher Diploma in Medicine (Dermatology)**MDHDP0005**

This is a part-time postgraduate course for doctors in general practice.

Entry Regulations

Applicants must be registered medical practitioners and must have obtained their primary medical degree not less than three years before the examination for the Higher Diploma in Medicine (Dermatology).

Course Structure

The course comprises four modules: lectures, practicals, home study and clinical exposure, and will take place in Dublin teaching hospitals. Practical case demonstration and case presentation of patients seen in hospital and practice will form an important part of the course. Home study will include weekly detailed review of CME dermatology articles. Evaluation of progress will take place during the course by response to multiple-choice questions. Additional clinical exposure will be arranged with five days' placement in Dermatology Departments.

Examination

A written/oral/clinical examination will be held following which successful candidates will be awarded a Higher Diploma in Medicine (Dermatology) by the National University of Ireland.

Application Procedure

Application forms may be obtained from the

Faculty of Medicine and Health Sciences Office
University College Dublin
Earlsfort Terrace
Dublin 2

Telephone: +353-1-716 7454/7440

Email: Faculty.Medicine@ucd.ie

Higher Diploma in Occupational Health (HDipOccH)

MDHDP0008

Entry Requirements

This course is open to registered medical practitioners. A period of not less than three years must elapse between the date on which a practitioner is fully registered and the date on which he/she becomes eligible to present for admission to the examination for the Higher Diploma. The course will not normally be held unless there is a minimum of ten suitable applicants.

Course Content & Structure

The course will be part-time over the academic terms of two consecutive years. It is designed for medical doctors who are working, or who wish to work, as medical officers in industry either full-time or part-time.

The course includes the study of the following subjects: Occupational Health, Epidemiology and Statistics, Industrial Psychiatry, Ergonomics, Industrial Psychology, Occupational Hygiene, Respiratory Medicine, Occupational Skin Disease, Occupational Cancers, Occupational Otolaryngology, Occupational Ophthalmology, Hazards in Agriculture, Accidents and Trauma, Toxicology.

Examinations

The Higher Diploma Examination will be held in the Summer of the second year with a repeat examination in the Autumn of that year.

Each candidate must present a dissertation on a topic relevant to occupational health that will embody a detailed review of the literature and/or original work on the topic

Application Procedure

Further particulars and application forms may be obtained from the

Department of Public Health Medicine and Epidemiology
University College Dublin
Earlsfort Terrace
Dublin 2

Telephone: +353-1-716 7345
Fax: +353-1-716 7407
Email: public.health@ucd.ie

Higher Diploma in Community Ophthalmology**MDHDP0040**

This is a two-year postgraduate course for Community Ophthalmologists.

Entry Requirements

Applicants must be registered medical practitioners who have undertaken at least two years hospital training in Ophthalmology in the N.C.H.D. grade.

Course Structure

The course will be offered in eight modules. Each module will involve a weekend traditional teaching programme followed by a distance-learning component delivered by the Centre for Healthcare Informatics.

Examination

A written/oral examination will be held at the end of the first four modules and again on completion.

Application Procedure

Application forms may be obtained from the

Faculty of Medicine and Health Sciences Office
University College Dublin
Earlsfort Terrace
Dublin 2

Telephone: +353-1-716 7454/7440

Email: Faculty.Medicine@ucd.ie

Diploma in Emergency Medical Technology (DipEMT)**MDDPP0002****Introduction**

This course prepares candidates for the examination for the College Diploma in Emergency Medical Technology; Successful candidates will also receive the NQEMT award and registration with the Pre-Hospital Emergency Care Council. It is offered in collaboration with the national Ambulance Training School and represents the initial component of more advanced training.

Admission Requirements

Applicants should have adequate educational qualifications to enable them to successfully undertake the work of the course; an interview board will be established to review applications and shortlist applicants.

Applicants from within the statutory ambulance services who have successfully completed the existing general and cardiac training courses may be granted a credit for these

courses. Credits will also be given for up to a maximum of two years of full-time service to allow applicants to complete the Diploma course with 480 hours of clinical internship.

Course Summary

The course will consist of a seven week full-time training course, carried out at the National Ambulance Training School; and a twenty-six week clinical internship which will include supervised clinical practice, speciality rotations, tutorials and a distance learning programme.

Course Subjects

- (1) Introduction to the Ambulance Services: Organisation and management.
- (2) Health and safety at work.
- (3) The management of illness and injury.
- (4) Special clinical situations (such as psychiatric and paediatric care).
- (5) Communication skills (involving patients, co-workers, record-keeping and technical procedures).
- (6) Special procedures (such as major incidents).
- (7) Human structure and function (distance learning).
- (8) Supervised clinical practice (clinical internship).
- (9) Clinical and service attachments (Emergency Department, CCU, theatre, other emergency services etc.).

Examinations

Continuous assessment will occur during the full-time training period, with written and OSCE examinations at the end of the course. During the clinical internship, students will be assessed on the basis of their performance in the programme and distance learning.

The PHECC NQEMT examination includes MCQ and OSCE (Objective Structured Clinical Exam) components and constitutes the exit examination from the course.

Application

Application should be made in the first instance to:

Ms Orla Curtis

National Ambulance Training School

St. Mary's Hospital

Phoenix Park, Dublin 7

Tel: +353-1-671 5187/671

Fax: +353-1-677 8274

Email: nats@indigo.ie

For registration of graduation application should be made to:

Ms Deirdre Feeney

UCD Department of General Practice

Coombe Healthcare Centre

Dolphin's Barn Street, Dublin 8

Tel: +353-1-473 0895

Fax: +353-1-473 2791

Email: Deirdre.Feeney@ucd.ie

Certificates

Certificate in Healthcare Informatics

MDCTP0001

The course is designed for doctors to enable them to use computers and related technology in their practice. It will be run on a part-time basis. Students will spend one-week intensive training in the Computer Aided Learning facility followed by half-day sessions to complete the course. The one-week courses will be run outside the undergraduate semester time.

The aim of this course is to give students an understanding of information and communication technology and its importance in medicine and to develop competence in the use of a PC and standard software packages.

Entry Requirements

Applicants will normally hold the degrees of MB BCh BAO or equivalent. Other University graduates may be accepted.

Course

The course comprises an introduction to the basic concepts of IT and the PC, word processing, Networks/Internet/E-mail, Graphics/Imaging, Presentation, Databases, Spreadsheets, Expert systems/artificial intelligence/Information systems, security/law.

Examination

Examination will be by continuous assessment of practical skills and by theory. The course is oriented towards the practical application of information technology and the examination system will reflect this. In the practical examinations for each application students will be required to perform a number of tasks. The theory paper will examine students' understanding of concepts covered in the course. The Certificate may be awarded with honours.

Application Procedure

Applicants should apply directly to

The Director, Centre for Healthcare Informatics
Faculty of Medicine and Health Sciences
University College
Earlsfort Terrace
Dublin 2

Telephone: +353-1-7167225

Interfaculty Courses

Degrees

Degree of Bachelor of Science (BSc) Sports Studies Management*

Degree of Master of Science*

Disability Management*

Psychotherapy*

Rehabilitation Studies*

Diplomas

Higher Diploma in Social and Vocational Rehabilitation Studies*

Higher Diploma in Developmental Disability Studies*

Higher Diploma in Child Art Psychotherapy*

Diploma in Sports Management

Certificates

Certificate in Injury Management and Fitness in Sport

* Details on asterisked courses are available from the Faculty of Interdisciplinary Studies Booklet.

Diploma in Sports Management

IFDPP0005

This is an inter-faculty, two-year, part-time undergraduate course leading to a Diploma in Sports Management. The course relates to the principles of organisation, management and administration of modern sport and the leisure industry.

Aim of the Course

The aim of the course is to equip the student with a comprehensive knowledge of sports management in all its facets, with particular emphasis on the continuing expansion of this multi-disciplinary activity.

Entry Qualifications

Matriculation standard or its equivalent together with a background in sport which would typically be a top-level competitor, an administrator in a sporting organisation or a manager/employee in the leisure industry. Interviews may be held to assess applicants and their aptitude for pursuing the course.

Course

The course will comprise eight taught modules of 36 hours each. There will be four modules in Year 1 and four modules in Year 2. There will also be practical work and field activities.

- Module 1* Organisation and Policy in Sport.
- Module 2* Financial Management
- Module 3* Information Technology
- Module 4* Management of Services Organisations.
- Module 5* Sociology of Sport.
- Module 6* Applied Biology of Sport and Exercise.
- Module 7* Sports Marketing.
- Module 8* Event and Facility Management.

Examination

There is a written and oral examination (where appropriate) in each module at the end of a semester or at the end of each year. In addition, there will be a dissertation and an oral examination at the end of the course.

Candidates must pass the examination in the four modules taught in Year 1 before commencing Year 2. Repeat examinations, if required, will be held in the autumn.

Application Procedure

Further particulars and application forms may be obtained from:
Continuing Professional Education Office
University Industry Programme, University College Dublin
Belfield, Dublin 4. (Telephone: +353-1-716 7893/8712)

Certificate in Injury Management and Fitness in Sport

IFCTP0005

The aim of this course is to provide participants with a thorough broad-based knowledge in areas relevant to understanding how the body functions during exercise and how to help athletes to prepare for exercise and recover from injury. The course is ideal for people with no formal medical training or experience who have an interest in sports medicine.

Requirements

A good level of secondary education.

Course Description

Lectures and tutorials will take place one evening per week for 24 weeks during the academic year. Each session will comprise two lectures and a tutorial. Prepared notes will be available at all sessions.

Course Content

The syllabus will cover the following topics:

Exercise Physiology – the way the body functions in exercise.

Human Anatomy – the major bones, joints, muscles, ligaments, tendons, nerves, blood vessels and organs of the body.

Human Biomechanics – the way we walk, run and perform specific sports techniques; how biomechanics can contribute to injury.

Injury Prevention – warm-up, stretching, proper rehabilitation of previous injuries, protective equipment etc.

Musculoskeletal Injuries – the common injuries of bones and soft tissue; the RICE regime.

Medical Conditions and Emergencies – cardiopulmonary resuscitation, neck injuries, swallowing of the tongue, major trauma, medical conditions (asthma, diabetes etc.).

First Aid Techniques – wounds, strapping, RICE, splints, patient transport; the first aid kit.

Introducing the Physiotherapist- the role of the Physiotherapist.

Looking after Yourself – lifting techniques, organising medical cover at events, protection against infection, legal considerations.

Specific Sports – the specific demands and injuries of different sports.

Sports Nutrition – guidelines for dietary requirements of athletes.

Sport Psychology – an introduction to psychological aspects of performance and injury.

Examination

There will be a multiple choice type paper at the end of each term (three terms). The end-of-year examination will comprise a written paper and a practical/oral assessment.

Application Procedure

Further particulars and application form may be obtained from the

Continuing Professional Education Office
University Industry Programme
UCD
Belfield
Dublin 4

Telephone: +353-1-716 7893/8712