

## UNIVERSITY COLLEGE DUBLIN

## NATIONAL UNIVERSITY OF IRELAND, DUBLIN

# MEDICINE

SESSION 2001/2002

Medicine

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Medicine

## **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: 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 Medical Science (MMedSc) 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, 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.

The Senate shall not confer the Degrees of MB, BCh and BAO upon any person who has not pursued in the University, or in one or more of its constituent Colleges, during at least five semesters, the course of study prescribed for such degrees. The Senate may accept the periods of study pursued in any other University or School of Medicine recognised for the purpose by the Senate, equivalent in duration to not more than six terms, as equivalent to part of such approved course of study. The periods of study so accepted shall be deemed to have been terms kept within the meaning of the Statute.

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

#### 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 to Foundation Year of Medicine Courses - Session 2001-2002

Information on the application procedure may be obtained from the Central Applications Office, Tower House, Eglinton Street, Galway; (tel: 091-509 800) information on admission requirements may be obtained from the Admissions Office, University College Dublin, Belfield, Dublin 4 (tel: 01-716 1425/1426).

#### Admission Requirements - Session 2001-2002

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. The assessment will be carried out by the University Student Health Service and will include testing for hepatitis B and tuberculosis.

#### Registration

At the beginning of the foundation year of medicine, the student is registered as a medical student at the Office of the Medical School and subsequently must pursue a period of 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 Foundation Year of Medicine Students

Advisory meetings will be held for foundation year of medicine students. 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 2001/2002 medical session is as follows:Michaelmas Term:<br/>(First Semester)Monday, 17 September 2001 - Friday, 07 December 2001Hilary and Trinity Terms:<br/>(Second Semester)Monday, 07 January 2002 - Friday, 09 March 2002<br/>Monday, 2 April 2002 - Friday, 19 April 2002

#### 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.

#### Foundation Year of Medicine (New Curriculum)

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

#### First Year of Medicine (Old Curriculum)

The required courses of study for the First Year of Medicine are Anatomy, Biology, Chemistry, Clinical Science, Healthcare Informatics, Functional Histology, Experimental Physics.

#### **Second Year of Medicine**

The required courses of study for the Second Year of Medicine are Anatomy, Biochemistry, Functional Histology, Public Health Medicine and Epidemiology.

#### **Third Year of Medicine**

The required courses of study\* for the Third Year of Medicine are Clinical Skills, Physiology, Pharmacology and Pathology I (Mechanisms of Disease).

#### Fourth Year of Medicine

The required courses of study for the Fourth Year of Medicine are Medical Microbiology and Pathology II (Systematic Pathology).

\* Those students who were exempted from the courses and examinations in Physics, Chemistry and Biology in the First Year of Medicine are required to undertake the course and examination in Healthcare Informatics in the Third Year of 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, Oto-Laryngology 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 (New Curriculum)

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, Healthcare Informatics 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 Year of Medicine (New Curriculum).

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

#### University Examination of the First Year of Medicine (Old Curriculum)

Candidates for admission to the First Examination in Medicine must have attended the prescribed course of instruction. The subjects for examination are Anatomy I, Biology, Chemistry, Clinical Science, Healthcare Informatics, Experimental Physics and Functional Histology I. 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 Second Year of Medicine.

The First Year of Medicine Examination must be passed within two years from the date of entering for the course. Students who do not pass the First Examination in Medicine are required to re-attend the respective courses in the following session before re-entering for the examination, except in the case of Experimental Physics, Chemistry and Biology where permission has to be obtained from the relevant Departments.

#### University Examination of the Second Year of Medicine

Candidates for admission to the Second Examination in Medicine must have attended the prescribed course of instruction. The subjects for examination are Anatomy II, Biochemistry, Functional Histology II, Public Health Medicine and Epidemiology. In Anatomy II, Biochemistry and Functional Histology II, a proportion of the examination marks is allocated to the year's work. The examination is held in Summer and Autumn, and must be passed before entering on the courses of the Third Year of Medicine.

The Second Year of Medicine Examination must be passed within two years from the date of entering for the course. Students who do not pass the Second Examination in Medicine are required to re-attend the respective courses in the following session before re-entering for the examination.

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

#### University Examination of the Third Year of Medicine

Candidates for admission to the Third Examination in Medicine must have attended the prescribed course of instruction. The subjects for examination are Clinical Skills, Physiology, Pharmacology and Pathology I (Mechanisms of Disease). The examination is held in Summer and Autumn, and must be passed before entering on the courses of the Fourth Year of Medicine. As well as the final examination, continuous assessment of the student's progress in Physiology, which includes class examinations at the end of the first and second terms, is also carried out in the course of the year. In Pharmacology, continuous attendance including essays, a literature-based research project and multiple choice examination is carried on. The Clinical Skills course will be examined by continuous assessment and an MCQ paper at the end of the course.

Students who fail to complete the Third Year of Medicine Examination in the Autumn are required to re-attend the respective courses in the following session before re-entering for the examination. The Third Year of Medicine Examination must be passed within two years from the date of passing the Second Year of Medicine Examination.

#### University Examination of the Fourth Year of Medicine

The courses of instruction and subjects of examination are: Pathology II (Systematic Pathology) and Microbiology.

The examination is held in Spring of the fourth year, with a repeat examination in the Summer. Students who fail to complete the Fourth Year of Medicine Examination in the Summer are required to re-attend the respective courses in the following session before reentering for the examination. They must also cease their clinical clerkship in the hospitals.

In addition to attending during the fourth year the prescribed courses in preparation for the Fourth Examination, students attend courses during the Trinity term in preparation for the Fifth and Sixth Medical Examinations.

The Fourth Year of Medicine must be passed before registering for the Fifth Year of Medicine.

#### 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. The examination is held in February with a repeat examination in the Summer. A College examination in Ethics will be held in the February in conjunction with the Fifth Year of Medicine Examination. This examination must be passed before the conferring of the MB BCh BAO degrees.

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 Examination. 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.

Medical, Part II Examination. All final medical subjects may be passed separately.

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 (tel: 01-4965588).

#### **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 specialties 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.

## **EUROPEAN CREDIT TRANSFER SYSTEM (ECTS)**

## CREDIT SCHEME FOR MB, BCh, BAO DEGREE PROGRAMME

#### First Year of Medicine (New Curriculum)

Course No:	Course Title:	Credits:
1-MED-102-Biol	Biology	8
1-MED-103-Chem	Chemistry	19
1-MED-104-ExPh	Experimental Physics	19
1-MED-106-MdIn	Healthcare Informatics	10
1-MED-107-Epct	Clinical Science	<u>4</u>
		60

#### First Year of Medicine (Old Curriculum)

Course No:	Course Title:	Credits:
1-MED-101-Anat-I	Anatomy I	15
1-MED-102-Biol	Biology	5
1-MED-103-Chem	Chemistry	11
1-MED-104-ExPh	Experimental Physics	11
1-MED-105-Hist-I	Functional Histology I	9
1-MED-106-MdIn	Healthcare Informatics	6
1-MED-107-Epct	Clinical Science	<u>3</u>
		60

### Second Year of Medicine

Course No:	Course Title:	Credits:
2-MED-207-Anat-II	Anatomy II	18
2-MED-208-Bioc	Biochemistry	24
2-MED-209-Hist-II	Functional Histology II	12
2-MED-210-PHME-I	Public Health Medicine and Epidemiology I	6
		60

#### Third Year of Medicine Course Title: Course No: Credits: 3-MED-311-Path-I Pathology I 9 3-MED-312-Phar Pharmacology 24 3-MED-313-Phys Physiology 24 Clinical Skills 3-MED-314-Clsk 3 60

#### Fourth Year of Medicine

Course No:	Course Title:	Credits:
4-MED-414-MeMi	Medical Microbiology	14
4-MED-415-Path-II	Pathology II	20
4-MED-416-GP-I	General Practice	4
4-MED-417-LMed-I	Legal Medicine I	4
4-MED-418-Med-I	Medicine I	7
4-MED-419-PHME-II	Public Health Medicine and Epidemiology II	4
4-MED-420-Surg-I	Surgery I	7
		60

#### **Fifth Year of Medicine** Course No: Course Title: Credits: 5-MED-521-GP-II General Practice 4 Legal Medicine II 2 5-MED-522-LMed-II 5-MED-523-MEth Medical Ethics 2 7 5-MED-524-Med-II Medicine II Obstetrics and Gynaecology\*\* 13 5-MED-525-ObGy-I 5-MED-526-Opht Ophthalmology 5 Otolaryngology 5 5-MED-527-OtoL 5-MED-528-Paed-I Paediatrics\*\* 13 5-MED-529-Psych-I Psychiatry\*\* 13 Public Health Medicine and Epidemiology III 2 5-MED-530-PHME-III $\frac{7}{60}$ 5-MED-531-Surg-II Surgery II

\*\* Only two of these three subjects may be taken in the year.

#### Sixth Year of Medicine

Course No:	Course Title:	Credits:
6-MED-632-Med-III	Medicine III	22
6-MED-633-Surg-III	Surgery III	22
6-MED-634-PHME-IV	Public Health Medicine and Epidemiology IV	3
6-MED-635-ObGy-II	Obstetrics and Gynaecology*	13
6-MED-636-Paed-II	Paediatrics*	13
6-MED-637-Psyc-II	Psychiatry*	<u>13</u>
		60

\* Only one of these three subjects may be taken in the year.

### SYLLABUS OF COURSES FOR THE DEGREES OF MB, BCh, BAO

#### FOUNDATION YEAR OF MEDICINE COURSES (New Curriculum)

#### 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. Coordination 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: 4 hours; small group seminars: 6 hours; home visits to patients: 3 hours

The course provides students with their first contact with patients with chronic diseases in a community setting and with clinical doctors. It aims to give students insight into the experience and meaning of illness at an early stage in their medical education. Students will have the opportunity to meet a patient in their own home. They will also spend time in a variety of clinical settings with different health care providers.

The lectures and seminars will provide an introduction to concepts of health and disease, cultural and social aspects of illness and disease management and the doctor-patient relationship. Guest lecturers will speak to the students about their own experiences of illness.

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#### Healthcare Informatics (HCIN 1001)

Lectures: 24 hours; Practicals: 54 hours.

Basics of computer technology; computer architecture; hardware and software; operating systems. Information systems; database; knowledge-based systems. Communications and networks. Applications of computing in medicine. Generic software packages.

Laboratory: Practical exercises designed to develop familiarity with generic software packages.

#### **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.
- 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. Infra-red and ultraviolet radiation. Emission and absorption spectra. Lasers.
- 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).
- 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 YEAR OF MEDICINE COURSES (Old Curriculum)

#### Anatomy I (ANAT 1001) (Old Curriculum)

Lectures, dissections and tutorials for three terms.

The course is designed to give each student a good general knowledge of the structure of the body. Instruction is given in topographical anatomy, embryology, radiological anatomy, surface anatomy (on the living model) and clinical and applied anatomy.

The course is arranged in units devoted to the upper limb, lower limb and thorax. In studying each region, the various aspects of anatomy are presented in an integrated manner.

Students dissect the prescribed regions of the body. Tutorials are held weekly. Throughout the year, students attend clinics in the general hospitals relating to the teaching programme. Term examinations are held at the end of the Michaelmas and Hilary terms. Marks from these examinations contribute to the end of year university examinations.

#### **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. Coordination 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.

#### Healthcare Informatics (HCIN 1001)

Lectures: 24 hours; Practicals: 54 hours.

Basics of computer technology; computer architecture; hardware and software; operating systems. Information systems; database; knowledge-based systems. Communications and networks. Applications of computing in medicine. Generic software packages.

Laboratory: Practical exercises designed to develop familiarity with generic software packages.

#### Clinical Science (GPRS 1001)

Lectures: 4 hours; small group seminars: 6 hours; home visits to patients: 3 hours

The course provides students with their first contact with patients with chronic diseases in a community setting and with clinical doctors. It aims to give students insight into the experience and meaning of illness at an early stage in their medical education. Students will have the opportunity to meet a patient in their own home. They will also spend time in a variety of clinical settings with different health care providers.

The lectures and seminars will provide an introduction to concepts of health and disease, cultural and social aspects of illness and disease management and the doctor-patient relationship. Guest lecturers will speak to the students about their own experiences of illness.

#### **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. Infra-red and ultraviolet radiation. Emission and absorption spectra. Lasers.
- 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).
- 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

#### Functional Histology I (PHYS 1001) (Old Curriculum)

Lectures: 33 hours; Practicals: 18 hours.

The course will consist of lectures and practical classes in Histology and an introductory course of lectures in Physiology will be given. Emphasis will be placed on the relationship of microscopic structure and function of the primary tissues of the body and the thoracic organs (heart and lungs). Each student will be expected to prepare topics from the course for presentation to small student groups under the direction of a seminar instructor.

#### SECOND YEAR OF MEDICINE COURSES

#### Anatomy II (ANAT 2001)

Lectures, dissections and tutorials for three terms.

The course begun in the First Year of Medicine continues with the study of the abdomen, pelvis, central nervous system and head and neck. In studying each region, the various aspects of anatomy are presented in an integrated manner. Instruction is given in topographical anatomy, embryology, radiological anatomy, surface anatomy (on the living model) and clinical and applied anatomy.

Students dissect the prescribed regions of the body. Tutorials are held weekly. Throughout the year, students attend clinics in the general hospitals relating to the teaching programme.

Term examinations are held at the end of the Michaelmas and Hilary terms. Marks from these examinations contribute to the end of year University examinations. The end of year and term examinations assess the subject matter taught during the Second Year of Medicine.

#### **Biochemistry (BIOC 2005)**

Lectures: Three lectures each week for two semesters (Mon., Wed., Fri. - 9.00 a.m.) Practicals: Three hour sessions in alternate weeks.

The course extends over two semesters and will provide a general introduction to biochemical processes, with an emphasis on human biology. Topics covered include structure and function of proteins, carbohydrates, lipids and nucleic acids, enzymes, blood biochemistry, brain biochemistry and neurotransmitters, ion-transport, hormones and cell signaling, control of gene expression and recombinant DNA technology.

The practical course will allow "hands-on" experience of general techniques in clinical biochemistry, such as determination of blood protein concentration, glucose concentration, lipid concentration, haemoglobin AIC concentration, acid and ammonium concentration in urine, lipid content of amniotic fluid and measurement of immunoglobulin concentration via ELISA.

Clinical sessions: Students will attend clinics in the teaching hospitals relating to the teaching programme.

Assessment: Continuous assessment of practical work is made throughout the year. There will be MCQ tests in December and March to examine understanding of both the lecture and practical content of the course. All assessments will be taken into account in conjunction with a written paper (Summer/Autumn exam) to give a final mark for the year.

#### **Emeregency Care**

A course of lectures on the principles of first aid is given in the Hilary term of the Second Year of Medicine.

#### Functional Histology II (PHYS 2001)

Lectures: 32 hours; Practicals: 22 hours.

The course begun in the First Year of Medicine continues with the study of the functional histology and basic physiology of the main organ systems of the body. Emphasis will be placed on the relationship of microscopic structure and function. Each student will be expected to prepare topics from the course for presentation to small student groups under the direction of a Seminar Instructor.

The end of year examination and in-course assessment will be on the subject matter taught during the Second Year of Medicine.

#### Public Health Medicine and Epidemiology (PHME 2001)

Lectures: One lecture each week for three terms.

Public Health Medicine is concerned with the health of the total population. The present course explores in broad outline health promotion and the prevention of disease. The initial nine lectures are concerned with important aspects of the environment and personal behaviour relating to patterns of disease in society. Methods of measuring health and ill-health and the principles and practical application of statistics in medicine are also discussed, and an introductory account of the Irish Health Services concludes the course of lectures.

#### The Environment and Health Promotion

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; accidents; health and personal behaviour; smoking, physical activity, alcohol, drugs, sexually transmitted disease.

#### Statistics in Medicine

Topics include: Measurements of health and disease; death rates; sampling; principles and practical application of statistics; procedures for deriving correct conclusions from numerical data in medical research.

#### Health Care

Topics include: Organisation of medical care; structure of medical services.

#### THIRD YEAR OF MEDICINE COURSES\*

#### Clinical Skills (CLSK 3001)

Students attend seven two-hour sessions based at the Clinical Skills Centre, one of which is devoted to communication skills and six to systems-based clinical teaching. Assessment of this course takes place in February

\* Those students who were exempted from the courses and examinations in Physics (EXPH 1006), Chemistry (CHEM 1006) and Biology(BIOL 1003) in the First Year of Medicine are required to undertake the course and examination in Healthcare Informatics (HCIN 1001) in the Third Year of Medicine (see under 'First Year' for course details).

#### Physiology (PHYS 3001)

Lectures: Five lectures each week for three terms. Practicals (including demonstrations, seminars and tutorials): Two periods each week for two terms and one period each week for one term.

The course in Physiology in the second year is designed to give the student an insight into the fundamental reactions of the living organism, particularly the human.

The lectures deal with nerve-muscle, neurophysiology including the special senses, blood and body fluids, heart and circulation, kidney, respiration, digestion and absorption of foodstuffs, nutrition, energy metabolism, temperature regulation and endocrinology. In addition, certain selected topics in applied physiology are considered. In the laboratory course, emphasis is placed on human physiology, the student being trained in observing and recording physiological changes and their biological variation.

Each student will be expected to prepare topics from the course for presentation to small student groups under the direction of a seminar instructor. Tutorial classes will also be held. Students attend clinics in general hospitals relating to the teaching programme throughout the year.

#### Pharmacology (PHAR 3007)

Lectures and Tutorials.

The lecture course extends over three terms and the chief topics covered are: Drug classification and basic mechanisms including receptor theory; pharmacokinetics;

chemotherapeutic agents including antimicrobial and anti-cancer drugs; autonomic nervous system and central nervous system pharmacology; drugs affecting the heart; immunopharmacology; autocoids; endocrine pharmacology; drugs affecting blood and clotting systems; renal and electrolyte pharmacology; principles and evaluation of toxicity; pharmaceutical formulations in prescribing.

Tutorials/demonstrations are given in key subject areas when the relevant series of lectures have been completed. Review lectures are given at the end of the course.

Students attend clinics in the general hospitals based on the teaching programme throughout the year. These sessions are conducted jointly by a clinician and a pharmacologist.

Multiple-choice question examinations are held at the end of the Michaelmas and Hilary terms. Marks from these examinations contribute to the end of year University examination.

#### Pathology I (Mechanisms of Disease) (PATH 3001)

Lectures:Two lectures per week for two terms.Practicals:One practical per week for two terms.

The lecture course extends over the first two terms and the chief topics covered are:

Cell injury and death; acute inflammation; chronic inflammation; healing and repair; thrombosis; embolism; infarction; chemical pathology (introduction); atrophy; hypertrophy; hyperplasia; neoplasia: definition and classification; neoplasia: aetiology and molecular basis; biological behaviour of tumours; shock; overview of the immune system; B cells and immunoglobulins; T cells and MHC; immunoregulation; immune mechanisms of injury; autoimmune diseases: mechanisms; immunology of infection and immunodeficiency; AIDS; transplantation; molecular genetics; cytogenetics.

### FOURTH YEAR OF MEDICINE COURSES

#### Microbiology (MEMI 4001)

This course extends from the Michaelmas term to February of the Fourth Year in conjunction with Pathology. It consists of lectures, tutorials, practicals and demonstrations. The clinical aspects of the subject are emphasised and stress is laid on the investigation and prevention of the spread of disease caused by micro-organisms. Hospital classes are organised in which clinical teachers take part, the purpose of the course being to acquaint the student with the importance of micro-organisms in present-day medicine.

#### Pathology II (Systematic Pathology) (PATH 4001)

The Fourth Medical Pathology course is designed to provide students with an understanding of the pathologic and pathophysiologic basis of disease. The course comprises the following modules:

- 1. Lectures (approx. 100 hours) to cover: (a) general pathology/mechanisms of disease, and (b) systemic (organ-specific) pathology.
- 2. Tutorial-based problem-solving exercises. Application of pathology and laboratory medicine to clinical problems.
- 3. Hospital demonstrations. Post mortems, macroscopic and microscopic pathology.
- 4. Computerised interactive videodisk self-instruction.
- 5. Museum-based demonstrations.
- 6. Histopathology (microscopy) practicals.

In addition to the above, the clinical departments in both hospitals give weekly clinical case demonstrations. Where possible, these complement the weekly pathology topics.

## 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 about thirty formal lectures and fifteen units of hospital teaching in the affiliated hospitals.

The formal lecture course covers 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.

*Trinity Term of Final Year* Six lectures are given to Final Year students in the Hilary term.

#### Legal Medicine (FMED 5001)

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

The course consists of thirty lectures in the areas of medical law, 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. Visits to the Four Courts and Coroner's Court may be arranged.

#### Ethics (FMED 5002)

A course of lectures in ethics for medical students will be given and a College Examination will be held in conjunction with the Fifth Year of Medicine Examination.

#### **Ophthalmology (OPHT 5001)**

The aims of the course are:

- (i) 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 which can be carried out with the minimal employment of special equipment.
- (ii) To instruct the student in the use of the ophthalmoscope.
- (iii) To instruct the student in ocular signs and symptoms found in some systemic diseases and disorders.
- (iv) 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.

\* Residency bookings for these subjects are made through the Medical School Office, Earlsfort Terrace (tel 01-716 7454/7440).

#### Paediatrics\* (PAED 5001)

University lectures are given in the Trinity term of the Fifth Year and the Michaelmas term of the Sixth Year. Normal physical and mental development and infant nutrition are described, together with the deficiency disorders. A systematic course covering the main disorders and infections follows. Instruction in neonatal disorders is given during the obstetric clerkship and an organised programme of instruction is given during the paediatric 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.

#### 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 (MEDN 6001) and Surgery (SURG 6001)

In the teaching of Medicine and Surgery, the integration of all the pre-clinical and paraclinical 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.

\* Residency bookings for these subjects are made through the Medical School Office, Earlsfort Terrace (tel 01-716 7454/7440).

### **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.

#### FIRST AND SECOND YEARS

#### Anatomy

Slaby, McClune and Summers : Moore :

For reference : Henry Gray : Grant:

#### Neuroanatomy

Crossman and Neary:

For reference: Nolte : Martin:

#### Embryology

Langman : MacLachlan :

For reference : Larsen : Gross Anatomy in the Practice of Medicine Clinical Anatomy

Anatomy Atlas of Anatomy

Neuroanatomy. An Illustrated Colour Text

The Human Brain Neuroscience

Medical Embryology Medical Embryology

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

Medicine

#### THIRD YEAR

#### Pharmacology

Rang HP, Dale MM, Ritter JM : *Pharmacology* (4<sup>th</sup> edition) Katzung BG : *Basic & Clinical Pharmacology* (7<sup>th</sup> edition)

#### FOURTH, 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 (3<sup>rd</sup> edition, Department of Health Promotion, National University of Ireland, Galway 2001)

Additional Reading:

L Daly, G Bourke: Interpretation & Uses of Medical Statistics (5<sup>th</sup> 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.

#### **General Practice**

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

#### **Consultation Skills**

Pendleton D et al : *The Consultation - an Approach to Learning and Teaching* Tate P : *The Doctor's Communication Handbook.* 

#### Psychiatry

Puri, Laking, Treasadon : *Textbook of Psychiatry* Barraclough Gill Clear : Hughes' *Outline of Modern Psychiatry* Rees, Lipsedge, Ball : *Textbook of Psychiatry* Katona, Robertson : *Psychiatry at a Glance* Elkin : *Introduction to Clinical Psychiatry* Graham : *Child Psychiatry – a Developmental Approach* 

**Standard Reference Books** : (Available in University and Hospital Libraries) Gelder, Gath, Mayou and Cowen (3<sup>rd</sup> Edition) : *The Oxford Textbook of Psychiatry* Kaplan, Sadock : *Concise Textbook of Clinical Psychiatry* Kendell, Zealey : *A Companion to Psychiatric Studies* 

#### **Ophthalmology**

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

#### Otolaryngology

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

#### **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: Waterston, Helms and Ward-Platt: Hull and Johnston. Olver et al.

Other Texts: Gill and O'Brien: Loftus: Oski: Behrman, Kliegman and Arvin: Forfar and Arneil:

Illustrated Textbook of Paediatrics Paediatrics – Understanding Child Health Essential Paediatrics Core Paediatrics and Child Health

Paediatric Clinical Examination Pathways in Paediatrics Principles and Practices of Paediatrics Nelson Textbook of Paediatrics 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) : MCOs in Clinical Medicine

#### Cardiology

E Braunwald (ed) : Heart Disease, 5<sup>th</sup> edition JR Hampton (ed) : ECGs Made Easy

#### Rheumatology

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

Medicine

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

**Endocrinology** De Grost (ed) : *Endocrinology* 

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

Haematology Textbook of Haematology

**Neurology** Adams and Victor (eds) : *Principles of Neurology*, 6<sup>th</sup> edition

**Gastroenterology** Sleisenger and Fordtran (eds) : *Gastrointestinal Disease* 

**Inherited Diseases/Geriatrics** 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* 

TIMETAI	TIMETABLES FOR MB BCh BAO COURSES	BCh BAO C	OURSES				
FOUNDATION (Lecture	FOUNDATION YEAR OF MEDICINE (New Curriculum) (Lectures in Belfield and Earlsfort Terrace*)	DICINE (Ne d Earlsfort T	w Curricu errace*)	(un)			
	Mon.	Tues.		Wed.	Thurs.	Fri.	
Biology: Lectures	0.00	10.00				12.00*	
	-			9-11			
Chemistry: Lectures	10.00	9.00				14.00	
				11-1	10-11		
Introduction to Healthcare Informatics	12.00						
Practicals					11-1	9-11	
Physics: Lectures	11.00	12.00			9.00		
Practicals				9-11		9-11	
Clinical Science				2-6	l		
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Anatomy: Lectures	10*	9*/12*	*		*11+	10*	
Practicals/Tutorials	2	15 00*/16 00*	200*	14 00*	15 00*/16 00*	00* 11*	
Functional History. Lectures	-	12**/14 00**	**00		14 00**		
Practicals		15 00**/16 00**	\$ 00**		15 00**/16 00**		
Biochemistry: Lectures	6		0000	6			
Practicals	3 hours					3 hours	
Public Health Medicine & Epidemiology					10†		
				11.30	·		
T	THIRD YEAR OF MEDICINE	F MEDICIN	E				
	Mon.	Tues.	Wed.	Thurs.	Fri.		
Pharmacology (Theory)		11	12	10	12	Mich., Hil., Trin.	
		12*					
Pharmacology (Practicals and Demonstrtions)		3 hours	-	14.00-17.00 15.00-17.00	15.00-17.00		
Physiology (Theory)		6		6	9/14.00	Mich., Hil., Trin.	
Physiology (Practical)	4 hours				15.00-17.00	Mich., Hil.,	
Mechanisms of Disease			01-6	14.00-16.00			
Hospital Clinic				11.30			
*First Semester: **Second Semester. †Lectures tak	Thectures take place in Belfield	ld					

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Clinics (alternating with Pathology)		10.30			10.30		10.30			10.30					
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Legal Medicine															4
General Practice															0
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Legal Medicine		I			4	4		4		4					
Ophthalmology							2-4		2-4						
E.N.T							2-4		2-4						
Ethics					0	0		0		7					
Obstetrics and Gynaecology														0	
General Practice					2										
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Obstetrics and Gynaecology				0											
Medicine and Therapeutics										, 4 4					
Public Health Medicine and Epidemiology										ŝ					
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## 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

The course extends over one 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 approval.

# **POSTGRADUATE DEGREES**

DEGREE OF MASTER OF SCIENCE General Practice Sports and Exercise Medicine 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 GYNAECOLOGY AND OBSTETRICS HIGHER DIPLOMA IN HEALTHCARE (INFORMATICS) HIGHER DIPLOMA IN HEALTHCARE (RISK MANAGEMENT) HIGHER DIPLOMA IN LEARNING DISABILITY STUDIES HIGHER DIPLOMA IN MEDICINE 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

CERTIFICATE IN INJURY MANAGEMENT AND FITNESS IN SPORT

# **DEGREE OF MASTER OF SCIENCE (MSc)**

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 who wish 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 (Mode II)

The course will be full-time, covering twelve months, or 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 allied subjects 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. Section B will consist of a research project and thesis. The examination for Section A may be held in June or September.

# DEGREE OF MASTER OF SCIENCE (MSc) (GENERAL PRACTICE)

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 examinations 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. (Tel: 01-4730895, Fax 4732791).

# DEGREE OF MASTER OF SCIENCE (SPORTS AND EXERCISE MEDICINE) (MSc)

This is a part-time modular postgraduate course held over two years. The course is suitable both for general practitioners and for doctors with an interest in Sports Medicine as a fulltime career.

# **Entry Requirements**

Applicants must be registered medical practitioners. Non-EU applicants must demonstrate proficiency in English.

# Aim

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

# Course

The course will be delivered on a part-time, modular basis over two years. There will be four 75 hour modules (i.e. 300 hours), each running over fifteen weeks and will involve one half-day (four hours) per week and occasional Saturday sessions. Candidates will have the option of completing the course over two, three or four years.

*Module 1* Sports Biomechanics , Exercise Physiology and Research Methods. *(SMED P011)* 

*Module 2* Sports Psychology and Medical Problems Related to Exercise Particiation (*SMED P012*)

*Module 3* Musculoskeletal Injuries 1 (Upper Limb and Groin), Sports Radiology I (SMED P013)

Module 4Musculoskeletal Injuries 2 (Head, Spine, Sacro-Iliac Joint and Lower Limb),<br/>(SMED P014)Sports Radiology 2

# Module 1 - (SMED P011)

Fundamentals of biomechanics; kinetics; kinematics; biomechanics of bone and soft tissues; biomechanical models of sports performance.

Cardiorespiratory and muscle physiology; responses to exercise and training; adaptation to environmental stresses (temperature / pressure / travel); fatigue; considerations for specific groups (young / old / female / pregnancy)

Fundamentals of statistics; design of experiments / surveys; data analysis; critical appraisal of literature

# Module 2 - (SMED P012)

Psychological determinants of sports performance; psychological strategies to improve performance; the injured athlete; exercise addiction.

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Exercise and disease (cardiovascular / respiratory / metabolic); exercise prescription; substance abuse in athletes; principles of immediate care

# **Module 3** – *(SMED P013)*

Principles of assessment and management of musculoskeletal injuries; adverse neural tension; muscle balance theory and practice; upper limb and groin injuries; functional anatomy

Introduction to radiology; imaging techniques; regional imaging of upper limb and groin injuries

## **Module 4** – *(SMED P014)*

Head, spine, sacro-iliac joint and lower limb injuries; functional anatomy; physiotherapy techniques; manipulative therapy techniques; strapping and taping; injection techniques. Regional imaging of head, spine, sacro-iliac and lower limb injuries

# **Dissertation** (SMED P015)

A project involving original research to be completed over the years of the course

## Examination

Each module will be independently examined; there will be two examinations per year. To qualify for the degree, candidates must pass all modules. The examination will consist of a written examination, an MCQ, a practical/oral/clinical session and a dissertation.

# **Application Procedure**

Further particulars and application forms may be obtained from the University Industry Programme, UCD, Belfield, Dublin 4 (tel: 01-716 1676).

# **DEGREE OF MASTER OF SCIENCE** (SPORTS PHYSIOTHERAPY) (MSc)

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, 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, Medical Problems, Strapping and Taping Techniques, Informatics, Statistics, Research Methods, "Alternative Medicine", Injuries, Special Groups, Specific Sports, Manipulative Procedures (Manual Therapy).

The course will be jointly administered by the UCD School of Physiotherapy and the University Industry Programme.

# DEGREE OF MASTER OF SCIENCE (PSYCHOTHERAPY) (MSc)

This is an inter-faculty Master's Degree in Psychotherapy.

#### **Course Description**

The MSc (Psychotherapy) is a two year course consisting of lectures, exercises in personal Psychotherapy and the supervised practice of Psychotherapy. The lectures and exercises may extend outside the usual lecture terms. Due progress in all areas must be made throughout the course. There will be a final written and oral examination. Candidates will also be required to present a project of 5,000-10,000 words on a topic in Psychotherapy. The final degree examination will be held in the Autumn of the second year.

## **Admission Requirements**

Applicants must hold an honours primary degree in a relevant area or its equivalent and have relevant experience.

#### **Admission Procedure**

Application forms and further information may be obtained from either the Director of the School of Psychotherapy, St Vincent's Hospital, Elm Park, Dublin 4 (tel: 01-209 4577) or the Director of Family Therapy Training, Department of Child and Family Psychiatry, Mater Misericordiae Hospital, North Circular Road, Dublin 7.

Completed application forms should be returned to the relevant Director on or before 1 April in the year in which a course starts. At present the course begins only in years of even number.

Shortlisted candidates will be interviewed for suitability for psychotherapy training.

# **DEGREE OF MASTER OF OBSTETRICS (MAO)**

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 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 five 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 which 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 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 Office, University College Dublin, Earlsfort Terrace, Dublin 2 (tel: 01-716 7454/7440). Completed applications must be accompanied by a non-refundable deposit of IR£100 (€126.97).

# DEGREE OF MASTER OF PUBLIC HEALTH (MPH)

## **Entry Requirements**

The Degree of Master of Public Health may be granted to registered 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 the primary qualification and admission to the course for the Degree of Master of Public Health.

#### **Course Description**

The full-time course for the Master of Public Health Degree extends over an 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**

The course includes the study of the following subjects:

- (a) The quantitative sciences appropriate to the study of community health, including medical statistics, epidemiology and medical computing.
- (b) The behavioural sciences as applied to community health; the scientific study of human behaviour, including the health education of the public and the psychological and social factors in community organisation and in health services utilisation.
- (c) Genetic and environmental (including microbiological) factors in health and disease; methods of prevention and control as applied to physical and mental disease.
- (d) Health services organisation, including the ascertainment of the health needs of the population; the provision, deployment and evaluation of health services; the economics, staffing and utilisation of health services and the principles of administration and management.

# 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.

## 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. A candidate must pass the whole of the examination at one time. 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 (tel: 01-716 7345).

# **DEGREE OF MASTER OF SURGERY (MCh)**

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 five 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 surgery and surgical science at a level approved by the Faculty.

# 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.
- 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 which 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 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 Office, University College Dublin, Earlsfort Terrace, Dublin 2 (tel: 01-716 7454/7440). Completed applications must be accompanied by a non-refundable deposit of IR£100 (€126.97).

# **DEGREE OF DOCTOR OF MEDICINE (MD)**

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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 which, in the judgement of the examiners, is considered worthy of recognition by such degree.

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.

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# 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.

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 which 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 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 twelve months 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 Office, University College Dublin, Earlsfort Terrace, Dublin 2 (tel: 01-716 7454/7440). Completed applications must be accompanied by a non-refundable deposit of IR£100 (€126.97).

# 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 may 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 reapply for registration.

# HIGHER DIPLOMA IN CHILD HEALTH (HDipCH)

## **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 attendances 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 attendances 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 peadiatrics and dietetics. The course will not be held unless there is a minimum number of suitable applicants.

## Examinations

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

- (1) One written examination in Paediatric Medicine and Surgery, including neo-natal disorders, Child Psychiatry, Sociat Paediatrics and the normal child.
- (2) A clinical and oral examination.

The examination is held in the first fortnight of June.

## **Application Procedure**

Application forms may be obtained from the Dean of the Faculty of Medicine, University College Dublin, Earlsfort Terrace, Dublin 2 (tel: 01-716 7454/7440).

# HIGHER DIPLOMA IN GYNAECOLOGY AND OBSTETRICS (HDipGO)

# **Entry Regulations for EU Medical Graduates**

Candidates must have obtained their primary medical degree not less than two years before the examination for the Higher Diploma in Gynaecology and Obstetrics. In addition to any experience gained during the internship year, prior to full registration, candidates must produce evidence of:

# Either

having been a resident as a full-time medical officer in a recognised obstetric and gynaecological unit for a continuous period of six months;

Or

having acted as a clinical or sessional assistant in a recognised hospital unit or clinic in the field of reproductive medicine for at least nine hours weekly for two years.

# Entry Regulations for Medical Graduates of Overseas Colleges

A candidate must have obtained their primary medical degree not less than two years before the examination for the Higher Diploma in Gynaecology and Obstetrics. In addition to any experience gained during the intern year prior to full registration, candidates must produce evidence of:

# Either

having acted as a full-time resident Medical Officer in a recognised obstetric or gynaecological unit for a period of twelve months;

Or

having acted as a clinical or sessional assistant in a recognised hospital unit or clinic in the field of reproductive medicine for at least nine hours weekly for two years.

Candidates are required to produce evidence of having passed a proficiency test in English.

# **Course Structure**

Compulsory attendance at the course of lectures and demonstrations held on two evenings each week in University College Dublin and its affiliated hospitals is a requirement of all candidates. Clinical instruction is not provided for in the course and candidates are expected to have adequate clinical experience in the field of gynaecology and obstetrics. The course extends over a twenty-week period from October to March each year. Lectures will be given on all aspects of reproduction medicine, including applied reproductive anatomy and physiology, normal and abnormal obstetrics, psychological influences on reproduction, perinatal and maternal vital statistics, benign and malignant gynaecological disorders from childhood to senescence, fertility control and women's health screening together with aspects of research methodology, epidemiology and statistics.

## Examinations

The examination for the Higher Diploma in Gynaecology and Obstetrics will consist of the following:

- (1) A written examination on aspects of the course, including a multiple choice questionnaire.
- (2) A clinical and oral examination.
- (3) A dissertation of approximately 5,000 words on a selected aspect of reproductive medicine.

# **Application Procedure**

Application forms may be obtained from the University Department, National Maternity Hospital, Holles Street, Dublin 2 (tel: 353-1-6373216)

# HIGHER DIPLOMA IN HEALTHCARE (INFORMATICS)

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 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 The Institute for Healthcare Informatics, Mater Misericordiae Hospital, Eccles Street, Dublin 7 (telL 01-8032000).

# HIGHER DIPLOMA IN HEALTHCARE (RISK MANAGEMENT)

## **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) Presentation of a written project allocated to each candidate during the first semester.

### **Application Procedure**

Further details and application forms may be obtained from the Director, Division of Legal Medicine, University College Dublin, Earlsfort Terrace, Dublin 2 (tel: 01-716 7235/7464)

# HIGHER DIPLOMA IN LEARNING DISABILITY STUDIES\*

This part-time postgraduate diploma will be presented in the Centre for the Study of Developmental Disabilities. The course will be held over one year. Successful students will be awarded a Higher Diploma of the National University of Ireland under the auspices of the Faculties of Medicine, Commerce, Engineering and Architecture, Philosophy and Sociology.

## Aim of the Course

This multi-disciplinary course is intended for graduate professionals who are members of the modern clinical team working to support people with learning disability, their families and other carers, and for professionals who may in the future work with people with learning disabilities. The course is intended to empower professionals to be, in their daily work, leaders towards the goal of inclusion and independence for individuals with learning disability. The course will take a multi-disciplinary life-span approach to the clinical support needs of people with learning disability.

# **Entry Requirements**

Applicants must hold a primary degree or equivalent in one of the following disciplines: Medicine, Nursing, Physiotherapy, Clinical Engineering, Education, Nutrition, Occupational Therapy, Psychology, Social Work and Speech Therapy. Before admission to the programme, candidates will be expected to show, at interview, an interest in and an understanding of the needs of people with learning disability and an openness to the ideals of independence and inclusion for people with learning disability.

# Course

The course subjects will cover the following areas:

- 1. Lifespan Development Issues
- 2. Philosophies and Models of Care and Support
- 3. Legislation and Policy
- 4. Teamwork and Partnership
- 5. Assistive Technology
- 6. Research Practice and Utilisation
- 7. Secondary Handicap

## Examination

Each area will be examined individually by end-of-year written examinations. There will also be term project assignments and a specialisation project (to include oral examination).

# **Application Procedure**

Details and application forms are available from the Centre for Developmental Disabilities, Roebuck Castle, UCD, Belfield, Dublin 4 (tel: 01-716 8702).

\* The term *Learning Disability* is used to refer to the disability previously known as Mental Handicap.

# HIGHER DIPLOMA IN MEDICINE

#### **Entry Regulations**

A candidate who has obtained the Degrees of MB, BCh, BAO or other primary degree or other qualification deemed equivalent by the Faculty of Medicine is eligible to enter for this Higher Diploma.

The Diploma will normally be taken on a part-time basis and the course undertaken will be in the specific fields of Medicine chosen or in disciplines allied to Medicine.

# HIGHER DIPLOMA IN MEDICINE (DERMATOLOGY)

This is an eight month, 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 Dean of the Faculty of Medicine, University College Dublin, Earlsfort Terrace, Dublin 2 (tel: 01-716 7454/7440).

# HIGHER DIPLOMA IN OCCUPATIONAL HEALTH (HDipOccH)

## **Entry Requirements**

This course will be 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 Diploma. The course will not be held unless there are a minimum of ten suitable applicants.

## **Course Structure**

The course will be part-time over 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. It will include instruction on specific health problems in industry both physical and psychological, the organisation of occupational and other health services, and the monitoring and assessment of environmental hazards. Visits to the workplace and clinical experience in the hospital setting will be arranged for participants. The main emphasis of the course is on prevention.

## **Course Content**

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

### Examinations

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

Each candidate must present a dissertation on a topic allocated by the Department of Public Health Medicine and Epidemiology which 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 (01-716 7345).

# HIGHER DIPLOMA IN COMMUNITY OPHTHALMOLOGY

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 Dean of the Faculty of Medicine, University College Dublin, Earlsfort Terrace, Dublin 2 (tel: 716 7454/7440).

# DIPLOMA IN EMERGENCY MEDICAL TECHNOLOGY (DipEMT)

# Introduction

This course prepares candidates for the examination for the University Diploma in Emergency Medical Technology; successful candidates will also receive the National Ambulance Advisory Council's EMT-B qualification. 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 may shortlist applicants.

Applicants from within the statutory ambulance services may have completed existing general and cardiac training courses. Credit may be granted for successful completion of these courses and for a maximum of two years of full-time service to allow applicants to complete the Diploma course with 480 hours of clinical internship (principally the distance learning component).

# **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.
- 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 (A&E, 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.

# Application

Application should be made to the UCD Department of General Practice, Coombe Healthcare Centre, Dolphin's Barn Street, Dublin 8 (tel: 01-4730895).

# CERTIFICATE IN HEALTHCARE INFORMATICS

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, University College, Earlsfort Terrace, Dublin 2 (tel: 01-716 7225).

# CERTIFICATE IN INJURY MANAGEMENT AND FITNESS IN SPORT

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-ofyear examination will comprise a written paper and a practical/oral assessment.

### **Application Procedure**

Further particulars and application form may be obtained from the University Industry Programme, UCD, Belfield, Dublin 4 (tel: 01-716 7893/8712).

# **INTERFACULTY COURSES**

# **DEGREES**

DEGREE OF BACHELOR OF SCIENCE (BSC) Sports Studies Management

> DEGREE OF MASTER OF SCIENCE Disability Management Rehabilitation Studies

# **DIPLOMAS**

HIGHER DIPLOMA IN SOCIAL AND VOCATIONAL REHABILITATION STUDIES

HIGHER DIPLOMA IN VISUAL PSYCHOTHERAPY

DIPLOMA IN SPORTS MANAGEMENT

# DEGREE OF BACHELOR OF SCIENCE (BSc) (SPORTS MANAGEMENT)

The Degree of BSc (Sports Management) is an innovative full-time three-year interfaculty degree programme which recognises the increasing significance of Sport at local, regional, national and international levels. The nature of Sport and the sports industry is changing dramatically and will be offering increasing numbers of challenging opportunities in the future. The development of management skills will be a critical part of this development and this degree programme is designed to provide students with the knowledge and skills necessary to choose a wide range of careers in the sports industry.

# **Admission Requirements**

Entry will be by:

- 1. CAO designated entry. All students entering the programme should meet the matriculation standard and have achieved B3 in ordinary level mathematics in the Leaving Certificate or equivalent.
- 2. Matriculation on grounds of mature years
- 3. Holders of the Diploma in Sports Management at distinction level may be admitted to Year 2 of the programme with the approval of the Board of the Centre for Sports Studies on the recommendation of the Academic Director.

# **Course Structure**

The course is delivered on a full-time basis over three years (six semesters). There are a total of 24 modules comprising 21 taught courses, an elective, a work placement and a dissertation.

# **COURSE DETAILS**

# Year 1

1) Organisation and Policy in Sport

This module focuses on the organisation, delivery and legislative framework of sport in Ireland and includes comparisons with other sporting nations.

# 2) Financial Management

The focus of this module is on the role of accounting, auditing and financial management on the day-to-day running of sports organisations.

3) Information Technology I

This module focuses on the basics of computing and familiarisation with computer software used in the Sports Industry.

# 4) Sports Management

This module addresses the main functions of business and management activities and the manner in which they apply to the sporting industry. Subjects to be addressed include strategic planning, leadership and the theories of motivation and organisational behaviour.

# 5) Sports Marketing I

With both a theoretical and practical approach, this module introduces the student to the marketing process, the business of marketing and its application to sporting events and organisations.

# 6) Sports Science 1

The student is introduced to the fundamentals of Sports Science including anatomy, biomechanics and physiology and will be provided with an underlying knowledge of the movement of the human body.

# 7) Sociology of Sport

This module identifies the role of sport in present-day culture and will investigate the socioeconomic aspects of modern sport and recreation. Consideration will be given to the history of Sport and to sociological, ethical and drugs-related issues in Sport.

# 8) Coaching

Students are introduced to the principles of coaching and will obtain NCTC Level 1 coaching certification in an appropriate sport.

# Year 2

9) Legislation of Sport

This module explores the relationship between Sport and the Law. It will focus on the aspects of legislation which relate to the world of sport, including the legal responsibilities of those involved in the management of sport.

# 10) Sporting Facility Management 1

This module focuses on the management of both indoor and outdoor sports facilities. Consideration will be given to the design, construction and organisation of such facilities as well as to the practical aspects of their management.

# 11) Event Management

The module examines the requirements of managing sporting events from both a practical and theoretical perspective. Topics to be addressed includes bidding, planning, organisation, resource allocation, staffing, logistics and marketing of local, national and international events.

# 12) Sports Marketing 2

This module develops concepts introduced in the Sports Marketing 1 Module. Particular focus will be given to the area of sports sponsorship.

# 13) Sports Tourism

This module considers the development, scope and social and economic importance of the travel and tourism industry and examines its relationship to the sports industry in Ireland.

# 14) Research Methodology

This module provides an overview of project design and organisation, and of the different methods of data acquisition, analysis and presentation available to the sports industry.

# 15) Sports Science 2

Building upon some of the concepts encountered in the Sports Science 1 Module, this module provides the foundation for an understanding of nutrition, exercise physiology and training and of the concepts and application of sports psychology.

# 16) Elective

Students undertake an elective in one of a number of topic areas which permits them to develop a greater understanding of that particular sector of the sports industry.

# 17) Work Placement

Students undertake a three-month work placement within the sports industry.

# Year 3

# 18) Human Resources Management

This module addresses the management skills that are necessary for successful personnel and organisation management within the sports and recreation industry and focuses on relevant industrial relations and human resource issues.

# 19) Facility Management 2

This module develops and expand issues raised in the Sports Facility Management 1 Module, dealing with both indoor and outdoor facilities.

## 20) Enterprise and Development

This module focuses on the establishment of business in the corporate world. It provides an insight into effective management skills, issues in personal development, as well as innovation and new ventures in the sports industry.

# 21) Health and Safety Management

This module is an introduction to a range of issues relating to health and safety in the workplace with particular reference to the sports industry.

# 22) Sports Science 3

This module builds on the previous Sports Science modules and deals with exercise prescription, occupational first aid and looks at the basics of Sports Injuries Management.

# 23) Communications and Media in Sport

This module investigates how the print, radio and television media have influenced the development of sport and examines the effect of the corporate world on the business of sport. Students gain an understanding of the value of effective public relations and of the practical skills involved.

# 24) Dissertation

Students produce a dissertation of approximately 10,000-15,000 words on a topic in the student's area of choice selected in consultation with the Academic Director.

# Assessment

Students are assessed by means of written assignments examination papers and a minor dissertation based on individual research projects.

# DEGREE OF MASTER OF SCIENCE (DISABILITY MANAGEMENT) (MSc)

The MSc (Disability Management) is an interfaculty programme designed to assist rehabilitation professionals to develop a specialisation and expertise in areas crucial to the economic and social integration of people with disabilities. Candidates for admission to the course must have obtained an Honours Higher Diploma in Social and Vocational Rehabilitation or an equivalent grade in a similar postgraduate diploma in another university.

# **Entry Requirements**

Entry to the programme is subject to: (a) submission of a dissertation proposal supported by an academic supervisor who has been approved by UCD; and (b) acceptance by the Academic Council. Candidates will not usually be full-time students.

# **Course Programme**

The MSc is heavily research driven and focuses on a broad range of multidisciplinary issues which impact on disability policy and in society.

The programme includes:

- 1. Introduction to research practice.
- Seminars in specific areas relevant to the field including: Legislation and Policy, Disability Management, Disability Awareness.
- 3. Supervision of introductory proposal(s) by students and the requirement to present a significant paper on this to the candidate group and others.
- 4. Where candidates do not have enough practical experience in the area, there will be a requirement to complete an internship with a recognised and accredited service provider in an area appropriate to their dissertation.
- 5. Dissertations will focus on the requirement to develop better management practice in the field and therefore, of necessity, will involve the application of new technology, organisational structures and approaches to human resource management. A dissertation could also include the development of small or medium sized enterprises which are regarded as an important current strategy in the field of vocational integration of people with disabilities.

# **Application Procedure**

Further details and application forms may be obtained from: The Director MSc (Disability Management) Graduate School of Business University College Dublin Blackrock

# MASTER OF SCIENCE IN REHABILITATION STUDIES MSc (REHABILITATION STUDIES)

This course is a two-year part-time programme of study leading to the award of an MSc (Rehabilitation Studies). The programme is comprised of both theoretical and practical elements and aims to impart the core knowledge, skills and attitudes required for the effective delivery of rehabilitation services within the community.

## **Course Structure and Syllabus**

The course is as follows:

- 1. Rehabilitation Management
- 2. Disability Awareness/Learning & Development
- 3. Legislation and Policy
- 4. Contours of Employment
- 5. Research Course
- 6. Inter personal Skills
- 7. Rehabilitation Practice 1
- 8. Rehabilitation Practice 2

# **Examination Regulations**

Students are assessed by means of written assignments, placement portfolio, examination papers and a minor thesis based on an individual empirical research project.

### **Entry Requirements**

The course is open to graduates working in all areas of rehabilitation and to recent graduates with an honours degree in a relevant area. Students of the Higher Diploma in Social and Vocational Rehabilitation, who achieve high honours in the first year of the Diploma, can apply to be upgraded to the Masters programme in the second year. Where it is appropriate, the results of the test of English as a Foreign Language (TOEFL) will be considered in the application procedure.

# **Application Procedure**

For additional information and application forms please contact: Rehabilitation Studies, UCD, Blackrock Campus, Carysfort Avenue, Blackrock, Co Dublin. Tel: (01) 7168865, Fax: (01) 2831911, E-mail: <u>Socvocre@ucd.ie</u>

# HIGHER DIPLOMA IN SOCIAL AND VOCATIONAL REHABILITATION STUDIES

The Higher Diploma in Social and Vocational Rehabilitation aims to provide for those working in all areas of Social and Vocational Rehabilitation, and for others who may wish to make a career in the field, a thorough professional understanding and experience of the range and scope of organised activity in the sector. The programme is designed to enhance the skills and knowledge of those in professional, executive and administrative positions in order to provide a continually improving service to the community.

# **Course Programme**

The programme is offered on a two-year part-time basis. Schedules are designed to facilitate participants with work commitments.

The programme combines academic coursework with practical projects which are designed to develop and enhance skills in a wide range of relevant areas including:

- Rehabilitation Management
- Rehabilitation Practice
- Disability Awareness
- Learning and Development
- Research
- Legislation and Policy
- Contours of Employment
- Interpersonal Skills

## **Entry Requirements**

Prospective candidates are required to hold an honours primary degree or relevant professional qualification. Applicants without these academic or professional qualifications but who have significant work experience in the field may be considered following an interview process.

Students who obtain a sufficiently high standard in the Higher Diploma may proceed to a further course of study at Masters level.

## **Application Procedure**

Further details and application forms may be obtained from:

The Course Director, Rehabilitation Studies Programme, UCD, Blackrock Campus, Carysfort Avenue, Blackrock, Co Dublin. Tel 01 7168865 Fax: 01 2831911. Email: <u>Socvocre@ucd.ie</u>

# HIGHER DIPLOMA IN VISUAL PSYCHOTHERAPY

The Postgraduate Diploma in Visual Psychotherapy is a two year, part-time course designed for professionals already in possession of a core training, who wish to specialise in using images in a psychotherapeutic context to understand the inner world of the child.

# **Course Syllabus**

Menu of courses in each year of study:

- Child Art Psychotherapy Training Groups
- Theory and Practice of Psychotherapy and Child Art Psychotherapy
- Seminars in Theory of Pictorial Thinking
- Clinical Theory (Child Development, Psychotherapy, and Clinical Approaches in Child Mental Health)
- Research
- Clinical Practice
- Supervision

# **Course Content**

Unit 1: Child Art Psychotherapy Training Groups Unit 2: Theory and Practice of Psychotherapy and Child Art Psychotherapy (Lectures/Seminars/Case Presentations) Unit 3: Theory of Pictorial Thinking (Seminars) Unit 4: Clinical Theory a. Psychopathology b. Child Development c. Clinical Approaches in Child Mental Health

Unit 5: Research

Unit 6: Clinical Practice

# Supervision

Regular supervision will be provided by a senior member of the clinical team to support the trainee in his/her ongoing clinical work. On alternative weeks, the trainee will receive supervision from a course tutor with reference to issues of developing therapeutic skills in Child Art Psychotherapy. There will be weekly case presentations by all trainees for the group, with supervision given by the course leader and other senior members of the multidisciplinary teams.

Units 1 and 6 commence at the start of the course and are ongoing for its duration.

Units 2, 3, 4 and 5 are taught sequentially over the two-year period as self-contained study units of limited duration.

## **Course Structure and Examination Regulations**

This two-year part-time course will involve 150 hours per year of theory and 150 hours per week of clinical practice, which includes Child Art Psychotherapy training and supervision.

## Assessment

Assessment will consist of six parts: an ongoing observation of the student's progress on the course as well as five written pieces of work. The first one is a long case study of about 8000-10000 words, to be submitted by the end of the first year. The second one is a special study of about 8000-10000 words on a theoretical issue which has arisen from the student's clinical practice, together with the third one, a research protocol of about 1500-5000 words, both to be finished by the end of the second academic year. Finally, at the end of the second year there will be two, two-hour examination papers to be sat. The examination will test the candidate's knowledge of basic concepts of Child Psychiatry and Child Psychology with would be relevant in the assessment of a patient's suitability for Child Art Psychotherapy, followed by an oral examination (viva voce) as part of the externally moderated assessment for the award of the Diploma.

## **Application Procedure**

Contact name and address for further information The Director, Department of Child and Family Psychiatry, Mater Misericordiae Hospital Dublin 7. Tel: 01 803 4793.

# **DIPLOMA IN SPORTS MANAGEMENT**

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. Applied Biology of Sport and Exercise. Module 6 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. (Tel: 01-716 7893/8712)