

Coláiste an Leighis, an Altranais agus na nEolaíochtaí Sláinte

The College of Medicine, Nursing and Health Sciences

> Féilire 2019-20 Calendar 2019-20



# COLLEGE OF MEDICINE, NURSING & HEALTH SCIENCES

AN COLÁISTE LEIGHIS, ALTRANAIS AGUS EOLAÍOCHTAÍ SLÁINTE

**CALENDAR 2019-20** 

FÉILIRE 2019-20

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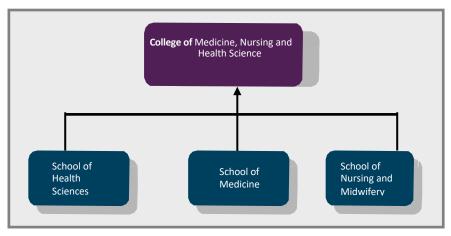
#### COLLEGE OF MEDICINE, NURSING & HEALTH SCIENCES

The College of Medicine, Nursing & Health Sciences welcomes students whose academic interests include Medicine, Midwifery, General Nursing, Psychiatric Nursing, Speech & Language Therapy, Podiatry and Occupational Therapy. We also a have a range of taught and research-based postgraduate masters and diplomas. Our goal is to equip graduates with the necessary knowledge, skills, and attitudes needed for a lifetime of learning and commitment to patients and society. We make full use of traditional and modern educational methods. College members are engaged in innovative research in many areas, with particular emphasis on cancer, gene and stem cell therapy, health services research, biomedical engineering science and health promotion.

Our College is currently expanding the undergraduate medical intake, and implementing an exciting new curriculum. In 2008 we commenced a 4-year Honours BSc programme in Podiatry, the only course of its kind in Ireland. We have developed Regional Academies for Teaching and Research at Sligo, Letterkenny, Mayo, and Ballinasloe. Our Nursing, Speech & Language, Podiatry, and Occupational Therapy courses are accommodated in Áras Moyola, which was opened in 2006. A new Medical Education Centre also opened in the hospital campus in 2007. The construction of a €40 million Human Biology building has commenced together with the completion of a €20 million clinical and translational research facility at the main hospital campus. This facility is jointly funded by the University, the Health Research Board and the Health Services Executive.

The mission of the College of Medicine, Nursing and Health Sciences is to enable 'Exemplary Learning and Leadership in Healthcare', our programmes, students and staff strive to deliver this mission every day.

The College of Medicine, Nursing & Health Sciences has emerged from the recent academic restructuring of the University and capitalizes on existing close harmony across the healthcare disciplines. It is constituted as follows:



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Mc Hugh, Ms Emer College Administrator

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Duffy Prof Gary Vice-Dean of Internationalisation Kelly Dr. Colette Vice-Dean of Graduate Studies

Geoghegan, Dr. Rosemary Vice-Dean of Learning, Teaching,& Assessment Vice-Dean Equality Diversity & Wellbeing

Kelly, Dr. Maureen Vice Dean for Civic Engagement

Laffey, Prof. John Vice-Dean of Research

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### Bacteriology (Baictéareolaíocht)

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Pharmacology &	& Therapeutics (	Cógaseolaíocht agus	Teiripe)
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Location: HBB / CSI / TRF

Location, HDD / COI / 11	Location: HDD / CDI / TRI			
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National Centre for Biomedical Engineering Science (An tIonad Náisiúnta um Eolaíocht Innealtóireachta Bithleighis

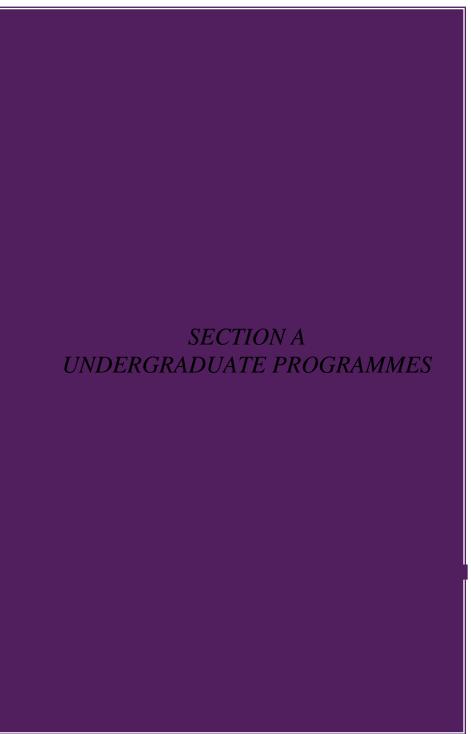
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#### SCHOOL OF HEALTH SCIENCES

# GENERAL REGULATIONS FOR THE UNDERGRADUATE DEGREES IN HEALTH SCIENCES

(NFQ Level 8 Ref; www.nfq.ie)

#### EXPLANATORY NOTE

The Undergraduate Degree Programmes of the School of Health Sciences at NUI Galway are four-year Honours Degrees, which award the Bachelor of Science in one of the following specialisms: Occupational Therapy, Podiatric Medicine, Speech and Language Therapy.

Regulations may be altered periodically. The regulations applying to students are generally those which applied to their programme at the time in which they commenced their studies, unless otherwise specified in the General Regulations hereunder.

These Regulations form a total, individual clauses may be conditioned or varied by the provision of other clauses and cannot be applied in isolation.

The Regulations may also be supported by, or refer to other publications such as the University Undergraduate Prospectus (available on request or by following on-line links for Future Students from

http://www.nuigalway.ie:84/undergrad/request\_prospectus.php), and the General Calendar of the University.

**I.** Entry to the Degree is limited and is based competitively on the results of the Irish Leaving Certificate examination or its equivalent. The minimum requirement is matriculation, as set out in the Undergraduate Prospectus. [Refer Matriculation requirements and Additional Requirements in the University Undergraduate Prospectus]. Requirements arising where the results being presented are from any examination other than the Irish Leaving Certificate are also set out in the Prospectus.

#### Note:

The competitive cut-off may be significantly higher than the Matriculation standard.

All Applications are processed through the Central Applications Office (www.cao.ie).

II. Candidates who do not meet the Ordinary Matriculation Requirements as set out in I above, may matriculate on grounds of Mature Years [refer Matriculation on Mature Years in the University Undergraduate Prospectus].

Note: All Applications are processed through the Central Applications Office (refer to www.cao.ie)

III. Before entering the Degree programme every student must furnish Garda

Clearance. This is organised through the Registration Office on entering the University. Failure to obtain clearance may result in the student being unable to access practice education placements which are a requirement of the programme.

- **IV.** Students are required to participate in groupwork and experiential learning to practice skills which are essential for placement on each other.
  - **V.** The School of Health Sciences strongly recommends that students obtain the appropriate vaccinations (details available in programme handbooks). Placement providers stipulate that students must have the appropriate vaccinations before undertaking placements at their site. If students cannot provide evidence of vaccinations, placements may be refused.

**VI.**Registration is carried out by the University. Students must be registered in their Degree programme not later than fifteen days after the commencement of Programmes.

**VII.**To obtain the degrees of B.Sc. in the selected Specialism as set out in the Explanatory Note(above);

- (a) Students must pursue programmes of Study extending over a period of not less than four Academic Years and must pass the various Examinations prescribed below, meeting the requirements as set out elsewhere in these Regulations, in the Marks and Standards of the College and in Student Handbooks where necessary.
- (b) The Examinations are as follows:
  - (1) The First University Examination in their programme.
  - (2) The Second University Examinations in their programme.
  - (3) The Third University Examination in their programme.
  - (4) The Fourth University Examination, being the Final Examination in their programme.

#### Note:

- (i) The duration of the programme cannot be shortened; no part of the Final Examination may be taken before the end of 8 Semesters of professional education.
- (ii) There is a time-limit on the completion of the degree; while a student who fails their yearly examination in a particular year has the right to re-sit that/those examination(s) the following year [refer par. VII X below], the total time allowed for the successful completion of the four University Examinations is 6 years or 12 semesters in total.
- **VIII.** The First University Examination must be passed completely before a student can proceed to the Second Year.
- (a) To enter this Examination, the student must have satisfied the attendance requirements on the First Year Programme as outlined in the student handbooks, including completion of all coursework. Exceptions may only be permitted by the Head of School where it is recommended by the programme on professionally verified grounds of student ill-health, close family bereavement or of significant personal difficulties.

- (b) The Examination will be held before and during the Summer Examination session with repeat examinations, if necessary, held in the Autumn Examination session.
- (c) Failure of the Examination in full or in part at the repeat examination will require the student to re-attend the First Year programme and re-sit the Examination in the following year.
- (d) From September 2013 it will not be possible to compensate marks from one module to another for the purpose of passing failed modules by compensation in the First University Examination in the following programmes:

B.Sc. (Occupational Therapy) B.Sc.

(Podiatric Medicine)

B. Sc. (Speech and Language Therapy)

- (e) The First Year examination must be completed within two years of entering First Year, extensions may not be given as this will breach the overall time-limit for completing the programme as set out in Par. VI above.
- **IX.** The Second University Examination must be passed completely before a studentcan proceed to the Third Year.
- (a) To enter this Examination, the student must have satisfied the attendance requirements on the Second Year Programme, including completion of all coursework. Exceptions may only be permitted by the Head of School where it is recommended by the programme on professionally verified grounds of student ill-health, close family bereavement or of significant personal difficulties.
- (b) The Examination will be held before and during the Summer Examination session with repeat examinations, if necessary, held in the Autumn Examination session.
- (c) Failure of the Examination in full or in part at the repeat examination will require the student to re-attend the Second Year programme and re-sit the Examination in the following year, provided that this will not breach the overall time-limit as set out in Par VI above. In such a case the student will be unable to continue.
- (d) From September 2013 it will not be possible to compensate marks from one module to another for the purpose of passing failed modules by compensation in the Second University Examination in the following programmes:

B.Sc. (Occupational Therapy)

B.Sc. (Podiatric Medicine)

- B. Sc. (Speech and Language Therapy)
- (e) The Second Year examination must be completed within two years of entering Second Year, extensions may not be given as this will breach the overall time-limit for completing the programme as set out in Par. VI above.
- (f) From September 2016 marks in repeat examinations will be capped at 50%.
- X. The Third University Examination must be passed completely before a student

can proceed to the Fourth Year.

- (a) To enter this Examination, the student must have satisfied the attendance requirements on the Third Year Programme, including completion of all coursework. Exceptions may only be permitted by the Head of School where this is recommended by the programme on professionally verified grounds of student ill-health, close family bereavement or of significant personal difficulties.
- (b) The Examination will be held before and during the Summer Examination session with repeat examinations, if necessary, held in the Autumn Examination session.
- (c) Failure of the Examination in full or in part at the repeat examination will require the student to re-attend the Third Year programme and re-sit the Examination in the following year, provided that this will not breach the overall time-limit as set out in Par. VI above. In such a case the student will be unable to continue.
- (d) From September 2013 it will not be possible to compensate marks from one module to another for the purpose of passing failed modules by compensation in the Third University Examination in the following programmes:

B.Sc. (Occupational Therapy)

B.Sc. (Podiatric Medicine)

B. Sc. (Speech and Language Therapy)

- (e) The Third Year examination must be completed within two years of entering Third Year, extensions may not be given as this will breach the overall time-limit for completing the programme as set out in Par. VI above.
- (f) From September 2016 marks awarded in repeat examinations will be capped at 50%.
- **XI.** The Fourth and Final University Examination must be passed completely before a student can be awarded the B.Sc. Degree
- (a) To enter this Examination, the student must have satisfied the attendance requirements on t
- (b) The Final Year Programme, including completion of all coursework. Exceptions may only be permitted by the Head of School where this is recommended by the programme on professionally verified grounds of student ill- health, close family bereavement or of significant personal difficulties.
- (c) The Examination will be held before and during the summer examination session with repeat examinations, if necessary, held in the autumn examination session.
- (d) Failure of the Examination in full or in part at the repeat examination will require the student to re-attend the Final Year programme and re-sit the Examination in the following year, provided that this will not breach the overall time-limit as set out in Par. VI above. In such a case the student will be unable to complete the degree.
- (e) From September 2013 it will not be possible to compensate marks from one module to another for the purpose of passing failed modules by compensation in the Fourth and Final University Examination in the following programmes:

B.Sc. (Occupational Therapy)

- B.Sc. (Podiatric Medicine)
- B. Sc. (Speech and Language Therapy)
- (f) The Final Year examination must be completed within two years of entering Final Year, extensions may not be given as this will breach the overall time for completing the programme as set out in Par. VI above.
- (g) From September 2016 marks awarded in repeat examinations will be capped at 50%.
- **XII** (a) The Award of the B.Sc. Degree will require successful completion of all years of the Undergraduate Programme as set out in Rules V to X (inclusive) above. (b) The calculation of the overall degree results awarded, including the calculation of Honours (if any), will be based on the proportion of the overall marks attained across the years of the programme as set-out in the Marks and Standards and recorded in the student handbook for each programme:
- XIII. Any student failing to pass the Examination indicated in Rules VI, to XI (inclusive) above within the specified intervals will be ineligible to proceed further with his/her studies. Exemptions to this rule will be granted by the Academic Council, on the recommendation of the College of Medicine, Nursing and Health Sciences, only for very serious reasons.
  - **XIV.** Re-attendance may be required from any student whose attendance is considered to have been unsatisfactory, or who has not attained a sufficient standard of knowledge as judged by examination or progressive assessment. Satisfactory attendance is generally regarded as attendance and participation in not less than 75% of all of the taught sessions provided. This is calculated on an individual module basis and is not based on overall attendance across modules. There are additional attendance requirements which are specific to particular modules which must be adhered to. Students who have not achieved satisfactory attendance may be refused admission to examinations.
  - XV. Given that these programmes award a professional qualification and lead to professional registration, there are specific requirements for the completion of clinical education and training components of the programme, which include also a prescription on the number of opportunities allowed to repeat /re-sit these components. In some cases, these are determined by the professional bodies (refer to each programme handbook for more specific rules which apply in each Therapy specialism). When students have not successfully completed these clinical components of their degree programme, in total or in part, including their practice education, clinical theory, or other such components as are required, and have exhausted all repeat /re-sit options for so doing, they are not eligible for the award of the B.Sc. in their designated Therapy specialism, but may, subject to the decision of the Head of School on the recommendation of the programme, transfer to complete the non-clinical degree, the B.Sc. (Health Studies) as outlined in the Paragraph XV below.

**XVI.** Students who are rendered ineligible for the award of the B.Sc. in their

designated Therapy specialism by the provisions of Paragraph XIV above,, may be offered the option of transferring to complete the non-clinical award of the B.Sc. (Health Studies). This programme, also an Honours (NFQ level 8 award) will include all of the modules of the BSc in their original Therapy specialism except the practice placement, and or clinical/practice education modules. These will be substituted by independent study module(s) in years 3 and 4 which will constitute a non-clinical degree route. In the independent study module(s) students will be required to demonstrate independent and critical thinking through appropriate assignment(s). Students may be transferred either in their Third Year or their Final Year as may be deemed appropriate. The decision to transfer must be approved by the Head of School on the recommendation of the programme, only in the circumstances described in Paragraph XIV above.

# BACHELOR OF SCIENCE IN OCCUPATIONAL THERAPY (B.SC. IN OCCUPATIONAL THERAPY)

## Refer to General regulations for the Undergraduate Degree in the Clinical Therapies (NFQ Level 8 Ref: <a href="www.nfq.ie">www.nfq.ie</a>)

Occupational Therapy is the treatment of people with physical and psychiatric illness or disability through selected occupation with the aim of enabling individuals to reach their maximum level of function and independence in all aspects of life. The occupational therapist assesses the physical, psychological and social functions of the individual, identifies areas of dysfunction and involves the individual in a structured programme of occupation to overcome the problems identified. The occupations selected relate to the persons personal, social, cultural and economic needs and include the environmental factors which govern his/her lifestyle.

To prepare students to meet the professional requirements of CORU (the
regulating body) and the Association of Occupational Therapists in Ireland
(AOTI) on behalf of the World Federation of Occupational Therapists (WFOT).
To prepare students to work effectively as occupational therapists in current and
changing health care contexts and environments.
To produce competent occupational therapists who can deliver interventions to
a broad range of clients, carers, colleagues and the community at large.
To produce graduate occupational therapists who have knowledge and
understanding of the processes involved in evidence based practice and are able
to apply these appropriately.
To produce graduates who are able to identify appropriate research questions

questions.
 To facilitate the education of therapists who are ethical practitioners, analytical thinkers and effective communicators.

and have the appropriate skills to design and carry out research to address these

#### OBJECTIVES OF THE PROGRAMME

AIMS OF THE PROGRAMME

The	student will:
	Achieve an understanding of the concept of occupational performance and its
	application in the practice of occupational therapy;
	Develop clinical reasoning skills which promote the appropriate selection of
	assessment methods and treatment programmes for clients treated by

assessment methods and treatment programmes for clients treated by occupational therapists;

Understand the central role of occupation in occupational therapy;

_	enderstand the central role of occupation in occupational therapy,
	Demonstrate an understanding of research principles and methods in promoting
	evidence based practice;
	Read professional and scientific literature critically and use and apply the results
	Select, develop and present ideas in an acceptable academic manner;

Recognise the right of clients to participate in decision making about their therapy:

Know the structure and functions of major government departments and other organisations relevant to the work of occupational therapists.

#### PROGRAMME CONTENT

This is a full-time undergraduate programme over four years or eight academic semesters. The course explores how difficulties in relation to physical or mental health can affect occupation (i.e. daily activities in relation to areas such as self-care, work, leisure, play etc.) in all groups of people - children, adolescents, adults and older adults. The modules studied in the four years are described briefly below.

#### YEAR 1 HUMAN BODY STRUCTURE

This module introduces students to the fundamental principles of biological science and to the basic organisation, form and structure of the human body. Students develop knowledge and understanding of the structure and functional aspects of the musculoskeletal system of the body and support knowledge in Physiology. An understanding of the musculoskeletal system forms part of the knowledge required to understand the performance components (motor/sensory, cognitive and affective) of occupation.

#### HUMAN BODY FUNCTION

This course covers the physiology of the major body systems with the exception of the central nervous system which will be addressed in Year 2. Students develop knowledge and understanding of the physiological processes in the body associated with a normal, healthy, functional state. It is designed to underpin subsequent development of modules related to Occupational Therapy practice.

#### PSYCHOLOGY

This module introduces students to areas of psychology relevant to their professional activities. The main areas covered are Social Psychology, Clinical Abnormal and Forensic Psychology, Developmental Psychology and Cognitive Psychology. The module helps to underpin some of the material encountered in Occupational Therapy modules.

#### PRINCIPLES FOR PRACTICE / FUNDAMENTALS 1

This module is aimed at enabling the students to develop an understanding of themselves as occupational beings. Students will be introduced to the way in which occupation is conceptualised within occupational therapy and will learn how to conduct an occupational analysis. Students will also learn about roles, habit and routines and explore the nature of occupation and form.

#### MENTAL HEALTH I AND II

These modules will provide the students with some of the knowledge, understanding and skills needed to work as an occupational therapist in a mental health setting. The lectures focus on the aetiology, course, prognosis and management of various mental health conditions. The seminars and workshops will introduce and expand on the occupational therapy role, with emphasis on enabling people with mental health problems to engage in occupation.

#### **ENABLING OCCUPATION - PHYSICAL DISABILITY**

Students will be introduced to a variety of clinical conditions commonly encountered by occupational therapists in practice. Case studies used in seminars and workshops

will be organised using the format of an occupational therapy model. Case studies will also reflect culture and gender diversity. Students will have the opportunity to develop skills, knowledge and understanding with regard to treatment approaches used inpractice.

#### GROUPWORK AND PROFESSIONAL SKILLS

This module prepares students to engage patients/clients through a range of seminars and workshops designed to develop professional skills in dyadic and group situations. Students learn the principles of effective communication and effective teamwork and in addition to this, this module aims to encourage student's reflection on their personal and professional development.

#### YEAR 2

#### **NEUROANATOMY**

This module runs concurrently with the module in neurophysiology and includes the fundamentals of neuroanatomy and functional neuroanatomy. It will underpin several applied occupational therapy modules. An understanding of neuroanatomy forms part of the knowledge required to understand the performance components (motor/sensory, cognitive and affective) of occupation.

#### NEUROPHYSIOLOGY

This module runs concurrently with the module in neuroanatomy and includes the fundamentals of neurophysiology. It will underpin several applied occupational Therapy modules. An understanding of neurophysiology forms part of the knowledge required to understand the performance components (motor/sensory, cognitive and affective) of occupation.

#### HEALTH PSYCHOLOGY

This module provides students with an introduction to health psychology. Students are introduced to the main areas of sickness and health and the application of psychological theories to the prevention of ill health and the promotion of health across the lifespan.

#### **ENABLING OCCUPATION – PAEDIATRICS**

This module introduces students to the knowledge and skills necessary to work effectively with children and adolescents with physical or intellectual disability or mental health problems.

#### **ENABLING OCCUPATION - INTELLECTUAL DISABILITY**

In this module, students become familiar with the specific issues and needs of adults with intellectual disability. This is a growing population and in this module issues such as advocacy, ageing, personal relationships and culture will be explored.

#### FUNDAMENTALS OF OCCUPATIONAL THERAPY 2

This module underpins the theoretical basis of occupational therapy. Students will develop a thorough understanding of occupational therapy and will identity and

understand the occupational therapy process. They will reflect on client-centered practice and on outcomes for intervention and will study the code of ethics and discuss the various intervention methods of occupational therapists. They explore client narratives and professional behaviour and reasoning, the therapeutic relationship and develop knowledge, understanding and skills regarding models of practice and occupational therapy.

#### OCCUPATIONAL SCIENCE

This module is the fourth in a series. In this module, students are introduced to the concepts and theory of occupational science. They examine the relationship between occupation and issues such as health and quality of life. They also explore the effects of occupational imbalance, deprivation and alienation and will develop knowledge and understanding and skills in the promotion of social justice.

#### SOCIAL POLICY

This module examines the legislation and policy which underpins practice including the knowledge of employment and equality of opportunity.

#### COMMUNICATION FOR PRACTICE

The aim of this module is to build on the knowledge, skills and attitudes regarding communication introduced in year one and develop the key personal, professional, and inter-professional communication skills essential for occupational therapy practice. There are two components to this module. Part one focusses on interprofessional learning and communication, person centred care and team working. Part two focusses on the communication skills for occupational therapy practice.

#### PRACTICE EDUCATION 1

This eight-week placement in a work setting provides students with the first opportunity to participate in the delivery of occupational therapy services with the aim of developing the competencies required to be an occupational therapist. A named qualified occupational therapist/s, called a practice educator, will supervise students. An individual learning contract will be negotiated and agreed between the student and the practice educator to guide students learning on placement. Formal supervision should be provided weekly. Informal feedback should be given regularly. The student's progress will be monitored by telephone, videoconference and/or in a placement visit by the practice education coordinator. Students are assessed by the practice educator for practice competence. Students are expected to complete a portfolio to evidence key aspects of their learning on placement.

#### PRACTICE EDUCATION - CASE STUDY 1

This module provides the student with a first opportunity to produce a written case study report on a service user with whom they are currently working during Practice Education. The case is a typical service user of the practice education site and is chosen in collaboration by the practice educator. The service user selected should be a straightforward and typical of this practice context, with no complexities or challenges. The case study should reflect the knowledge, skills, and attitudes of a second-year beginning level student. Guidelines for the case study are provided to the student. The student is expected to apply their learning from their previous modules that includes the application of theory, to deliver a beginning level report that describes practice thinking

and decision making. The student may present the case study to the practice education site team towards the end of their placement for formative feedback. This is negotiated between student and practice educator.

#### YEAR 3

#### EVIDENCE BASED PRACTICE

In this module, students learn to explore and appraise critically the best available evidence from systematic research and to apply and integrate this into clinical practice. Students are required to make use of evidence to guide professional judgement about the effectiveness of specific interventions for individual clients.

#### STANDARDISED TESTING

With increasing need for evidence, audit and clinical effectiveness, quantifiable measures of effectiveness are essential. In order to engage in and develop evidence based practice, occupational therapists need to be familiar with and competent in administering, scoring and interpreting the results of standardised tests. This module introduces the students to a range of standardised assessments used in Occupational Therapy and links with the module of evidence based practice.

#### ENABLING OCCUPATION – COMMUNITY PRACTICE

In this module, students explore the policies and trends for care in the community and implications for Occupational Therapy practice. The diversity of service users within the community is a key theme and will include all ages, cultures and conditions e.g. primary care, health promotion, equipment provision, community mental health etc. This module enables students to develop the knowledge and skills to work with individuals and groups in the community.

#### ENABLING OCCUPATION - OLDER ADULTS

This module prepares the student to work with older adults (>65 years) and considers the complexity of the interrelationships between normal aging, role change and pathology and the subsequent effect on occupational functioning.

#### RESEARCH METHODS

This module introduces the student to methods of scientific enquiry focusing on research and design. Both quantitative and qualitative methodologies will be introduced and the module includes both theoretical aspects and practical skills such as data analysis and statistics.

#### COMMUNITY ENGAGEMENT

Using Service Learning, this module provides students with the opportunity to work in collaboration with community organisations to develop and implement occupational therapy programs which meet identified occupational therapy need(s) of the organisation. Students engage in community based learning, during which they collaborate with community organizations under the supervision of academic staff.

#### COGNITIVE NEUROPSYCHOLOGY

Cognitive neuropsychology is an approach for investigating and theorizing about cognitive

processes by examining patterns of impairment following brain injury. This module reviews the ways in which neuropsychological data have been used in models and ideas about the nature of brain processes and systems involved in core cognitive (and related) processes including: perception, memory, language and attention. This is an interdisciplinary module taken together with speech and language therapy and denominated psychology students.

#### NEUROLOGY

**This** interdisciplinary module introduces students to the more common neurological conditions encountered in practice. Together with the modules on neuropsychology, standardised testing and evidence based practice students will be introduced to a coordinated concept of neurological disorders presented from the aspects of pathology, impairment, activity limitation and lack of participation and will be able to consider a variety of therapeutic approaches to address such issues.

#### PRACTICE EDUCATION 2

This eight-week placement in a work setting provides a second opportunity for students to participate in the delivery of occupational therapy services with the aim of developing the competencies required to be an occupational therapist. A named qualified occupational therapist/s, called a practice educator, will supervise students. An individual learning contract will be negotiated and agreed between the student and the practice educator to guide students learning on placement. Formal supervision should be provided weekly. Informal feedback should be given regularly. The student's progress will be monitored by telephone, videoconference and/or in a placement visit by the practice education coordinator. Students are assessed by the practice educator for practice competence. Students are expected to complete a portfolio to evidence key aspects of their learning on placement.

#### PRACTICE EDUCATION - CASE STUDY 2

This module provides the student with a second opportunity to produce a written case study report on a service user with whom they are currently working during Practice Education. The case is a typical service user of the practice education site and is chosen in collaboration by the practice educator. The service user selected should be typical of this practice context, with some level of complexity or challenge. The case study should reflect the knowledge, skills, and attitudes of a third-year consolidating student. Guidelines for the case study are provided to the student. The student is expected to apply their learning from their previous modules, to deliver a proficient level report that includes the application of theory and evidence-based practice and guided practice thinking and decision making. The student may present the case study to the practice education site team towards the end of their placement for formative feedback. This is negotiated between student and practice educator.

#### YEAR 4

#### PRACTICE EDUCATION 3 & 4

This eight-week placement in a work setting provides a third and fourth opportunity for students to participate and lead under supervision in the delivery of occupational therapy services with the aim of developing and evidencing the competencies required to be an occupational therapist. A named qualified occupational therapist/s, called a practice

educator, will supervise students. An individual learning contract will be negotiated and agreed between the student and the practice educator to guide students learning on placement. Formal supervision should be provided weekly. Informal feedback should be given regularly. The student's progress will be monitored by telephone, videoconference and/or in a placement visit by the practice education co-ordinator. Students are assessed by the practice educator for practice competence. Students are expected to complete a portfolio to evidence key aspects of their learning on placement.

#### PRACTICE EDUCATION – CASE STUDY 3 & 4

This provides the student with a third and fourth opportunity to produce a written case study report on a service user with whom they are currently working during Practice Education. The case is a typical service user of the practice education and is chosen in collaboration with the practice educator but has complexities or challenges. The case study should reflect the knowledge, skills and attitudes of a fourth year student who is competent to graduate. Guidelines for the case study are provided to the student by the University. The student is expected to apply their learning from their previous modules to deliver an advanced report that includes the application of theory, evidence-based practice and independent practice thinking and decision making. The student may present the case study to the practice education site team towards the end of their placement for formative feedback. This is negotiated between student and practice educator.

#### RESEARCH PROJECT

This module gives the student the opportunity to plan and conduct an original piece of research in a scientific and organised manner under supervision. Project guidelines are given to students. Supervision will be given by an academic supervisor. Students will write a 10-15,000 word dissertation and give a conference presentation.

#### MANAGEMENT

In this module students are introduced to basic management and leadership styles. The skills are relevant to their practice as staff grade occupational therapists. Current health and social service policies and proposed developments are also addressed and the importance of being aware of and acting upon changes in policy where appropriate stressed.

#### PREPARATION FOR PRACTICE

This module provides a synthesis and an update of the learning acquired to date. Students will review current health care strategies and policies and will learn about continuing professional development and draw up a curriculum vitae and practice interview skills.

# BACHELOR OF SCIENCE IN PODIATRIC MEDICINE B.Sc. in Podiatric Medicine

# Refer to General Regulations for the Undergraduate Degree in the Clinical Therapies (NFQ Level 8 Ref: <a href="www.nfq.ie">www.nfq.ie</a>)

Podiatric Medicine is a healthcare profession that specialises in the management of disease and disorder of the lower limb and foot. The foot is a highly complex structure, which can develop problems affecting the overall health and quality of life of the patient. Podiatric Medicine can significantly improve peoples' quality of life by promoting and maintaining mobility. Podiatrists are educated in diagnosis and in planning and implementing interventions for all age groups. Podiatrists work as autonomous practitioners demonstrating expertise in assessing, diagnosing and managing lower limb and foot related problems. As such, the Podiatrist works in a variety of health-care settings including public sector services such as the HSE in primary care and hospital settings, the commercial and private sectors, in education, research and in industry. Podiatrists are an integral part of the health care team augmenting the physician and surgeon in treating foot disease and preventing, where possible, the onset of foot disease. Podiatrists may work in single-handed practice or as a member of the wider multi-disciplinary team working in collaboration with other health professionals including nurses, physiotherapists and orthotists.

#### PHILOSOPHY AND AIMS OF THE PROGRAMME

The B.Sc. Podiatric Medicine programme is designed to educate and train those who wish to pursue a professional career in Podiatric Medicine, as a health care professional, who specialises in the management of disease and disorder of the lower limb and foot. The Discipline is committed to providing a comprehensive education for podiatrists and the curriculum is based on best available evidence in relation to both theory and practice. The course aims to ensure that students achieve the academic and practitioner standards as laid out by regulatory and professional bodies in Ireland and the United Kingdom.

The B.Sc. Podiatric Medicine extends over four years or eight academic semesters. The structure of the degree programme introduces, in a defined manner, interprofessional learning in both academic and clinical modules. It has, as its central focus, the integration of theory with clinical practice with opportunities for interprofessional learning with other health care professionals. The overall goal of this programme is to prepare competent, flexible, accountable practitioners, who are capable of lifelong learning. Preparing students to be flexible and self-directed in learning is considered to be a key outcome of the degree programme as it is recognised that the current rapid pace of change in the health services means the skills of tomorrow will be different from those of today. It is therefore fundamental that graduates "learn how to learn".

Lifelong learning is a continually supportive process, which stimulates and empowers individuals to acquire the knowledge, values, skills and understanding they will require throughout their lifetime and develop the capacity to apply these with confidence.

#### Our mission statement is:

"To develop caring, patient-centric, highly skilled honours graduates who are knowledgeable, innovative, autonomous and competent practitioners who apply a scientific and evidence-based approach to podiatric medicine."

# The B.Sc. (Hons.) Podiatric Medicine programme aims to:

Prepare students for the demands of a career in podiatric medicine and the rapidly changing nature of podiatric practice.
Allow students to develop a high level of clinical competence, enabling them to
meet the requirements of CORU and be eligible for registration and membership
of the professional body in Ireland.
Equip students with the necessary knowledge and clinical skills to meet
international standards for overseas recognition of the B.Sc. Podiatric Medicine degree in those countries where the B.Sc. is the national standard.
Provide a comprehensive, excellent, academic and clinical teaching programme with integration of theory into the clinical practice setting.
Provide clinical placements that span the spectrum of podiatric medicine. The
clinical teaching programme involves experience with patients from various
medical/surgical disciplines; this ensures a high level of quality practice education
for students.
Provide a range of clinical placement opportunities within the public and private
sectors, offering over 1,000 hours of high quality clinical placements.
Provide a student-centred supportive environment in which the students'
knowledge, understanding, skills and attitudes are developed and enhanced to a
high level of clinical competence.
Allow opportunities to explore, analyse and critically assess the practice and the
role of Podiatric Medicine within local, national and international inter-
professional healthcare settings. This will ensure that the experiences and
opportunities in the learning environment are relevant to their future careers and
personal development.
Prepare students to anticipate, adapt, influence and respond to future changes in
service delivery and encourage them to become future educators and leaders in
the profession. This preparation is achieved through research strategies, financial,
political, professional and knowledge of management.
Produce graduates who are reflective practitioners and have a strong ethos for
continuous professional development and a firm commitment to life-long learning

#### PROGRAMME STRUCTURE

The programme is outlined below:

#### Year 1

- Podiatric Medicine 1
- Podiatric Dermatology
- Human BodyStructure
- Gross Anatomy of the LowerLimb
- Human Body Function
- Professional Development
- Redefining Health and Wellbeing
- Lower Limb Kinematics

#### Year 2

- Podiatric Medicine 2
- Lower Extremity Wounds
- Health Promotion
- Functional Anatomyand Biomechanics
- Evidence-based Practice
- Applied Pathophysiology
- Endocrinology
- Microbiology

#### Year 3

- Podiatric Medicine 3
- Medicine and Surgery
- Pharmacology in Health and Disease
- Research Methods & Design
- Podopaediatrics
- Orthopaedics
- Health Promotion in Podiatry
- Biostatistics

#### Year 4

- Podiatric Medicine 4
- Skills for Practice
- Working with Vulnerable Adults
- Research Dissertation
- Contemporary Practice
- High Risk Limb

#### PROGRAMME CONTENT

Central to the curriculum are the podiatric medicine modules. These modules extend throughout the programme building from year one to integrate and articulate with the theoretical learning. In the first year the students are introduced to clinical protocols and pre-clinical skills, they then develop and acquire the essential psychomotor and communication skills required for podiatric practice. Various aspects of management planning skills are introduced at each stage. Ultimately the students acquire assessment and diagnostic skills and increasing competence leads to a comprehensive podiatric patient management, which requires increasing cognitive and psychomotor skills to affect safe and efficient patient care.

The theoretic components of the programme underpin the clinical podiatric management of patients. The framework provides vertical and horizontal integration for the subject areas that impact on podiatric practice. These include physiology, anatomy, pathophysiology, pharmacology, medicine and surgery, health promotion and core podiatric medicine. The modules build sequentially with the 1st year modules dealing mainly with normal structure and function. This allows time to absorb and reflect on normal function and structure prior to progressing to abnormal structure and disease states.

Evidence-Based Practice informs the student of the importance of audit, research and evidence based care. Therefore the importance of evidence-based practice will be integrated throughout all modules within the curriculum. Students are encouraged to develop the necessary skills to understand critique and apply research-based evidence in practice. Research approaches and methodologies are covered within years 2 and 3 of the programme ensuring students receive grounding in research methods and biostatistics before they apply this knowledge through their dissertation in year 4.

A variety of approaches to learning and teaching are integrated throughout the curriculum including lectures, tutorials, work-shops, seminars and problem-based learning.

#### PRACTICE EDUCATION

Practice education is a process of work- based learning which involves a partnership between the practice educator and the student in the practice setting. All students are required to complete a minimum of 1,000 hours of practice education successfully under the supervision of qualified Podiatrists. Practice education will be undertaken each year. The majority of practice education takes place at Merlin Park Podiatry Clinic, Merlin Park University Hospital, Galway. This state of the art facility provides a service to patients with a wide variety of medical and surgical conditions, children, sports injuries and patients requiring soft tissue surgery.

Practice education aims to introduce the students to the culture of the profession. It facilitates the development and application of the knowledge, attitudes, values and skills needed for the execution of appropriate professional behaviours. It also

gives the opportunity to practice under supervision, and be assessed on professional standards and behaviours, ethical practice and inter professional partnership.

The	main aims of practice education are:
	to integrate theory, practice, ethics and values of podiatric medicine
	to apply knowledge, professional reasoning and professional behaviours within practice
	to promote professional competence
	to work as an effective team member
	to promote professional confidence
	to provide opportunities for students to integrate theoretical and practical
	learning
	to facilitate consolidation of student's previous learning

#### ASSESSMENT

A wide variety of assessment strategies are employed at stages throughout the programme in order to cater for a diversity of learning needs. The range and diversity of assessments allows the varying strengths of individual students to be demonstrated. All assessments throughout the programme are designed to assess students' theoretical knowledge and clinical practical skills to ensure students meet the necessary competencies for professional practice. Assessment strategies that are employed include clinical practical examinations, continuous assessment and end of year examinations.

#### Pass Standard

The pass mark is 50%.

# Compensation

Compensation is NOT allowed in academic or clinical modules.

# BACHELOR OF SCIENCE IN SPEECH AND LANGUAGE THERAPY

**B.Sc. in Speech and Language Therapy** 

# Refer to General Regulations for the Undergraduate Degree in the Clinical Therapies (NFQ Level 8 Ref: www.nfq.ie)

Speech and Language Therapy is the health care profession specifically concerned with the assessment, diagnosis, and management of communication and swallowing disorders. Speech and language therapists enable people with communication disorders to achieve their maximum potential to communicate. Having assessed the individual and established a diagnosis, the speech and language therapist plans and implements an intervention programme with the client. This may involve direct work with the client and family. It may also involve indirect work with significant others in the individual's environment to overcome barriers to communication, thus enabling the individual to function as independently as possible. Speech and language therapists also play an important role in the prevention of communication difficulties through health promotion and education programmes. Speech and language therapists work closely with other health care and education professionals e.g. doctors, psychologists, occupational therapists, physiotherapists, public health nurses, paediatricians, ear nose and throat consultants, teachers, educational psychologists and resource and learning support teachers. Speech and language therapists work in a range of settings including: community clinics/health centres, hospitals, rehabilitation centres, child development centres, mainstream and special schools, language classes, people's homes and private practice.

#### AIMS OF THE PROGRAMME

The overall goal of the BSc (Speech and Language Therapy) degree programme is to prepare competent, flexible, accountable practitioners, who are capable of lifelong learning. Preparing students to be flexible and self-directed in learning is considered key because it is recognised that the current rapid pace of change in speech and language therapy practice means the skills of tomorrow may be different from those of today. It is therefore fundamental that graduates "learn how to learn". The course aims to ensure that students achieve the academic and practitioner standards as laid out by regulatory and professional bodies in Ireland. This programme has, as its central focus, the integration of theory with clinical practice and evidence-based practice. It is firmly centred on the core area of disorders of communication, dysphagia and professional development (including interprofessional learning), as reflected in the fact that all years contain substantial proportions of time devoted to these topics. The major ancillary disciplines of linguistics, biological sciences, and psychology are integrated at appropriate times in the curriculum to promote horizontal and vertical integration. In the practice education strand of the curriculum, speech and language therapy students are required to obtain experience in assessing, diagnosing, and treating communication and swallowing disorders in both children and adults in a variety of settings. The mission

statement of the programme is:

"To prepare speech and language therapists in training to become competent clinicians and independent lifelong learners, by providing a supportive learning environment to explore relevant theory and apply it to clinical practice, with an emphasis on lived experiences and evidence-based practice."

# The aims of the programme are:

- To produce graduates of a high standard who meet the specifications of the Irish Association of Speech and Language Therapists (IASLT) and CORU (the statutory registration Board for Health and Social Care Professionals).
- To enable students to gain knowledge and core theoretical underpinnings of communication disorders and dysphagia.
- To enable students to develop effective interpersonal and clinical skills.
- To enable students to develop a professional identity and ethos, with awareness of the scope and limits of the role of the speech and language therapist.
- To encourage students to be flexible and responsive practitioners, prepared for the workplace and changing patterns of service delivery.
- To provide opportunities for self-monitoring and personal development for the formation of reflective practitioners, capable of effective, critical evaluation and analysis thereby promoting continuing professional development and lifelong learning.
- To develop practitioners who appreciate their role in contributing to the knowledge and understanding of communication disorders, and who implement evidence-based approaches in intervention.

### PROGRAMME STRUCTURE AND CONTENT

The BSc (Speech and Language Therapy) is a four year programme with eight academic semesters. Placements take place in each year of the programme and may be located anywhere in Ireland. Students are expected to travel to placements and undertake placements at their own expense.

#### Year 1

# Psychology 1

This module contains three components, including: an introduction to the main theoretical perspectives in Developmental Psychology with a focus on the lifespan perspective on development; the theory and practice of Cognitive Psychology; and theoretical perspectives in the Psychology of Learning from a behaviour analytic perspective.

#### **Human Body Structure**

The aim of this module is to introduce students to the fundamental principles of biological science and the basic organization, form and structure of the human body. It will develop concepts which have particular relevance in the understanding of the anatomical basis of speech production.

# **Human Body Function**

This module introduces students to the fundamental principles of human body function which underpin speech and language.

#### **Practice Education 1**

This module introduces students to observation and reflection as learning and assessment tools. It will provide students with opportunities to develop observation and communication skills in a placement in a primary- school setting.

#### Professional Studies 1

This module will facilitate students to begin to develop key knowledge, skills, and attitudes for speech and language therapy practice. It will provide opportunities for students to integrate knowledge, skills, and attitudes from other modules.

# Linguistics 1

This module introduces students to key concepts in linguistics and to the development of communication across the lifespan.

# **Phonetics & Phonology**

This module aims to equip students with an understanding of how speech is produced and to provide grounding in the descriptive and transcriptional conventions for transcribing speech sounds. It provides an overview of the procedures in carrying out a basic phonological analysis and to develop listening and transcription skills.

# Communication Impairments and Dysphagia 1

This module aims to introduce students to classification systems, as well as the types, nature and etiology of developmental and acquired communication and swallowing impairments.

#### Year 2

#### Psychology 2

This module has two components. It introduces students to theoretical aspects of health and social psychology, as well as applications from these aspects of psychology to speech and language therapy practice.

#### Neuroanatomy

This module aims to facilitate understanding of the neuroanatomical functions of the body and how components of the central nervous system work together. Through neuroscience tutorials and cases with occupational therapy students, students will learn about the role of neuroanatomical functions in communication and swallowing impairments.

# Neurophysiology

The aim of this module is to facilitate understanding of the neurophysiological functions of the body and how components of the central nervous system work together. Through neuroscience tutorials, students will learn about the relevance of neurophysiological functions in communication and swallowing impairments.

#### **Practice Education 2**

This module aims to orientate students to the professional role of a speech and language therapist. This module will prepare students to work in clinical settings. It will facilitate their active participation in the speech and language therapy process and application of theory with practice while on clinical placement.

#### **Professional Studies 2**

The aim of this module is to build on the learning of key knowledge, skills and attitudes underpinning speech and language therapy practice from year one. Students will learn about personal and professional practice and key knowledge and skills for the identification and management of clients with relatively straight forward communication impairments. Students will integrate knowledge, skills and experiences from other modules 'off-line' through provided cases with guidance.

# Research Methodology 2

The aim of this module is to develop the student's knowledge of research to enable them to design their own research project by posing feasible research questions and setting hypotheses. The module introduces students to research methods as a set of multiple systematic strategies derived from both the quantitative and qualitative paradigms.

# Linguistics 2

The aim of this module is to build on the knowledge and skills gained from Linguistics 1 and to focus specifically on the morphological, syntactic, semantic and pragmatic analyses of clinical data. This module aims to develop students with linguistic analytical skills which they will use in clinical practice.

#### Communication Impairments and Dysphagia 2

This module introduces students to the core clinical aspects of the management of relatively straight-forward communication and swallowing disorders e.g. specific aspects of assessment, characteristics of sub-types of communication and swallowing disorders, assessment, differential diagnosis, and management of cases.

#### Year 3

## Psychology 3

This module introduces students to cognitive neuropsychology and builds on their knowledge from previous modules in cognitive psychology and neuroscience. This module reviews the ways in which neuropsychological data has been used in models and ideas about the nature of brain processes and systems involved in core cognitive (and related) processes including: perception, memory, language and attention.

#### **Practice Education 3**

This module prepares students for increasingly independent work in clinical contexts. Students will have clinical placements where they will apply theory to practice in the management of complex cases.

#### **Professional Studies 3**

This module will build on the learning of key knowledge, skills and attitudes underpinning speech and language therapy practice from years 1 and 2. Students will learn about personal and professional practice and key knowledge and skills for the identification and management of clients with complex communication and swallowing impairments, with an emphasis on evidence-based practice. Students will integrate knowledge and skills from other modules. There will also be an emphasis on the wider sociocultural context and specialist service provision.

### Research Methodology 3

This module broadens knowledge about research methodology by enabling students to understand and critically appraise existing research and to plan for their final year thesis.

### Linguistics 3

This module equips students with core knowledge and skills in the areas of theories of bilingualism, narrative analysis and discourse analysis. This module also introduces students to a variety of instrumental techniques applied in experimental phonetics and speech and language therapy clinical practice with an emphasis on basic skills in the use of instrumentation in speech and voice analysis.

#### Communication Impairments and Dysphagia 3

The aim of this module is to develop knowledge of the specific aspects of assessment, diagnostic features, assessment and treatment of complex cases. This module focuses on controversies in theoretical perspectives on communication and swallowing disorders, critical thinking and evidence-based practice.

#### Year 4

# **Practice Education 4**

The aim of this module is to facilitate students to consolidate their clinical skills, integrate theory and practice, and apply knowledge and resources to new clinical situations. It will prepare them to enter the workforce and smooth the transition to professional practice.

#### **Professional Studies 4**

This module will facilitate students to further develop personal and professional practice and key knowledge and skills for the identification and management of all clients with communication and swallowing impairments. There will also be an emphasis on prevention, organisational structures, service planning, quality systems and professional development.

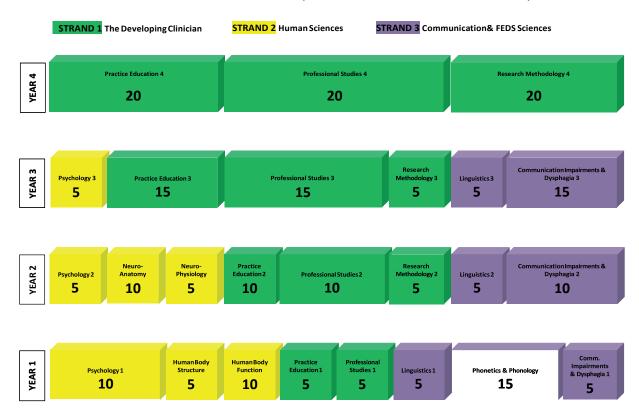
### Research Methodology 4

In this module students will conduct a semi-independent piece of research under the supervision of a member of staff.

# TEACHING, LEARNING, AND ASSESSMENT

A wide variety of teaching, learning and assessment strategies are employed throughout the programme in order to cater for a diversity of learning needs. Students are expected to engage in a range of teaching and learning activities, which includes practical skill development through practicing on and with peers. The range and diversity of assessments allows the varying strengths of individual students to be demonstrated. All assessments throughout the programme are designed to assess students' theoretical knowledge and clinical practical skills to ensure students meet the necessary competencies for professional practice. Assessment strategies that are employed include clinical practical examinations, continuous assessment and end of year examinations.

# THE OVERALL STRUCTURE AND ECTS IN THE BSC (SPEECH AND LANGUAGE THERAPY)



# BACHELOR OF ARTS- SOCIAL CARE

(NFO LEVEL 8 REF WWW.NFO.IE)

This programme leads to the award of Bachelor of Arts – Social Care (under the programme regulations of the College of Medicine, Nursing and Health Sciences).

#### PROGRAMME STRUCTURE.

The Bachelor of Arts (Social Care) provides teaching of theoretical concepts applied to social care practice. It was developed in response to the continuing educational needs of social care workers in the context of the professionalisation of social care work and includes both theoretical and practice components. It is designed to meet the needs of adult students returning to education and to enable those working in the social care field to further develop and enhance their understanding, knowledge and skills. The programme aim is to provide students with a professional education and training in the principles and practice of social care in line with CORU requirements.

The first year provides a general introduction to the field of social care work through three course components: course modules, a seminar and competencies based work placement. Students receive interactive materials for home study and attend a workshop for each module. Students also attend a seminar in NUI Galway, which normally takes place in mid-November. In addition, students complete supervised work placement in a social care setting. Students who successfully complete these course components may leave the programme at the end of this first year and be awarded a Certificate in Social Care or they may continue to the second year of the programme.

Year 2 is delivered through workshops, home study, a seminar and work placement. This second year develops the skills gained in year 1, as well as developing on the theoretical ideas that underpin social care practice and service provision. On successful completion of year 2 students may leave the programme and graduate with a Diploma in Arts (Social Care).

Year 3 builds on years 1 and 2 with further theoretical exploration of social care work and service provision through workshops and work placement. The core competencies required for working in the social care field are further developed and linked to their application in a workplace setting.

This final year of the BA in Social Care is similarly comprised of workshops, work placement and self-directed study components. In addition, learners complete a dissertation on a particular area of social care work, with the support of a named individual supervisor.

#### PROGRAMME CONTENT

Year One: Certificate in Social Care	
Module	ECTS
Introduction to integrated and experiential learning	5
Introduction to social care practice and care skills	5

Introduction to legal, ethical and professional practice in social care	10
Health and health promotion in the social care context	5
Introduction to communication skills for social care	5
Social and health services: history, systems and context	5
Work-placement 1	10
Year Two: Diploma in Arts (Social Care)	
Module	ECTS
Sociology: social carein context	5
Psychology across the lifespan in the social care context	5
Health promotion model of social care	5
Care planning for social care	5
Communication and relationship skills for social care	5
Legal, ethical and professional practice in social care	5
Introduction to research for social care	5
Work-placement 2	10
Year 3: Bachelor of Arts (Social Care)	
Module	ECTS
Experiential learning and evidence based practice in social care	5
Working with people with disabilities	5
Professional autonomy and accountability in social care practice	5
Social care across the lifespan – working with children and young people	5
Health promotion strategies and approaches in social care	5
Research methods and methodology for social care	10
Work-placement 3	10

#### Year 4: Bachelor of Arts (Social Care)

Module	<b>ECTS</b>
Social care across the lifespan – working with adults and older people	5
Management and leadership in social care settings	10
Research project Dissertation	15
Social care and health promotion – national and international professional perspectives	5
Work-placement 4	10

### **Assessment and Regulations**

Assessment of course modules, seminars and work placement is based on a combination of written assignments, examinations, practical work and project work in each year of the programme.

#### **Entry Criteria**

Formal academic qualifications are not required to commence this BA. Candidates are, however, expected to have good reading and writing skills, as independent home study is required. Candidates must also have a minimum of one year's full-time or equivalent experience in care work, which can have been gained in either a formal or informal capacity. Candidates under 21 years should meet the University's minimum matriculation entry requirements. Those for whom English is not the first language should check the university requirements at: http://www.nuigalway.ie/international/english.html

Students must satisfy Garda/Police clearance requirements.

# SCHOOL OF MEDICINE

# GENERAL REGULATIONS FOR THE DEGREES OF MB BCh BAO (NFQ LEVEL 8 REF; WWW.NFQ.IE)

#### EXPLANATORY NOTES

- 1. The Programme of the Medical School at NUI Galway is a highly integrated modular five year programme, with a requirement for a Foundation Year for some students.
- 2. In the Session 2019-202018-192 the University will consider applications for up to sixfour places on the ACCESS programme (HEAR/DARE).
- 3. All Applications are processed through the Central Applications Office (CAO).
- 4. In the Session 2018-2019-2020 the University will consider applications for up to 3 places for MatureEntry)(Mature Entry (http://:www.nuigalway.ie/medicine-nursing-and-health-sciences/medicine/undergraduatecourses//undergrad.html).

#### REGULATIONS

- I. Entry to the Medical School is limited and is at present based competitively on the results of School-Leaving Examinations and the HPAT aptitude test. Standards as deemed equivalent from time to time are applied to International Students presenting alternative qualifications. Students must also satisfy the Garda Vetting and Medical Clearance requirements.
- **II.** Students for admission to the First Medical Year must have successfully completed the Foundation Year for Medical School **OR** subject to attainments at Biology, Chemistry and Physics in Leaving Certificate or its equivalent students may be deemed to have met the requirements for direct admission to the First Medical Year
- III. Before Registration as a medical student every applicant must furnish evidence
  - (a) that he/she has passed a recognised Examination in General Education (the Examination in General Education required by the National University of Ireland is Matriculation according to the requirements of the College of Medicine, Nursing and Health Sciences, or an Examination accepted by the University in lieu thereof, normally the Irish Leaving Certificate or its recognised equivalent);
  - (b) that he/she has EITHER passed the Foundation Year for Medical School. (To fulfil this requirement, programmes in Biology, Chemistry and Physics are given in the National University of Ireland, Galway, in the Foundation Year for Medical School) OR has satisfied the requirements for direct admission to the First Medical Year

- **IV.** Registration is carried out by the University. Students must be registered as Medical Students not later than **fifteen days** after the commencement of those Programmes for which Certificates of attendance will be required of them (First Medical Programmes).
- **V.** To obtain the degrees of MB BCh BAO Medical Students must pursue programmes of Study extending over a period of not less than five Academic Years and must pass the various Examinations prescribed in the Regulations.
  - (a) The Examinations are as follows:
    - (1) The Foundation Year in Medicine (where the student is commencing their medical studies in this year)
    - (2) The First University Examination in Medicine.
    - (3) The Second University Examinations in Medicine.
    - (4) The Third University Examination in Medicine.
    - (5) The Fourth University Examination in Medicine.
    - (6) The MB BCh BAO Degree Examinations.
- **VI.** For the student who commences their medical studies in the Foundation Year this Examination must be passed before a student can proceed to the First Year Medical Programme.
  - (a) The Foundation Year Examination must be passed within two years from the date of entry. The Foundation year examination will be held during the Summer Examination Period with repeats, if necessary, held in the Autumn Examination Period.
  - (b) From September 2012 it is not possible to compensate marks from one module to another for the purpose of passing failed modules by compensation in the Foundation Year Examination.
- **VII.** The First University Examination in Medicine must be passed before a student can proceed to the Second Year Medical Programme.
  - (a) The First University Examination in Medicine must be passed within two years from the date of entry or of passing the Foundation Year for Medical School.
  - (b) The First Medical University Examination will consist of the examination of the learning from each of the introductory modules, systems-based and Medical professionalism modules in the programme.
  - (c) The First University Examination will comprise examinations on Semester 1 modules in the Winter Examination Session and examinations on the Semester 2 modules in the Summer Examination Session. Repeat examinations, for both.
  - (d) Semester 1 and Semester 2 modules, if necessary will be held, during the Autumn Examination Sessions.
  - (e) From September 2012 it is not possible to compensate marks from one module to another for the purpose of passing failed modules by compensation in the First Medical University Examination.
- **VIII.** The Second University Examination in Medicine must be passed before a student can proceed to the Third Year Medical Programme.
  - (a) The Second University Examination in Medicine must be passed within three

years from the date of entry or of passing the Foundation Year Medical Programme.

- (b) The Second Medical University Examination will consist of the examination of the learning from each of the systems-based and Medical professionalism modules in the programme.
- (c) The Second University Examination will comprise examinations on Semester 1 modules in the Winter Examination Session and examinations on the Semester 2 modules in the Summer Examination Session. Repeat examinations, for both Semester 1 and Semester 2 modules, if necessary will be held, during the Autumn Examination Sessions. From September 2012 it is not possible to compensate marks from one module to another for the purpose of passing failed modules by compensation in the Second Medical University Examination.
- **IX.** The Third Medical University Examinations must be passed before a student can proceed to the Fourth Medical Year.
  - (a) The Third Medical University Examinations must be passed within four years of entry or of passing the Foundation Medical Examination.
- **X.** The Fourth Medical University Examinations must be passed before a student can proceed to the Final Medical Year.
  - (a) The Fourth Medical University Examinations must be passed within Five years of entry or of passing the Foundation Medical Examination.
- **XI.** The Final Medical University Examinations must be passed within six years of entry or of passing the Foundation Medical Examination.

XII The Award of the MB BCh BAO Degree will require successful completion of all years of the Medical Undergraduate Programme as set out in Rules VI, to XI (inclusive) above.

**Note**: The operation of these regulations will invoke a time-limit on completing the programme - a student who fails a y ear-of-programme for the **second time** may not continue and must withdraw from the Medical Programme. Similarly a student who fails to complete two separate years-of-programme within the academic years allowed for each may not continue and must withdraw from the Medical Programme.

- (a) The calculation of the overall degree results awarded, including the calculation of Honours (if any), will be based on the proportion of the overall marks attained across the years of the programme as follows:
- i. For candidates who entered in 2012-13 and following, whether into the Foundation Programme or the First Medical year, the degree result is calculated on the final two (2) years of the programme; based on 50% of the result attained in the Fourth Medical Examination and 50% of the result attained in the Final Medical Examination. Repeat Examinations or re-sits. Examinations of all modules deferred in the corresponding regular session (Christmas and/or May) can be retaken in the August session. The marks attained at a deferred examination will not be capped. Marks will be fully as attained on merit, including honours, if any, in the repeat/re-sit examination. Capping of marks will apply to all years excluding 0MB3 and 1MB3. Repeating the year-of-programme is required from any student whose attendance is considered to have been unsatisfactory, or who has failed individual modules

- of the programme at the second (Autumn repeat) sitting.
- ii. Satisfactory attendance is generally regarded as attendance and participation in not less than 80% of the Compulsory components of the programme. All such components are appropriately notified in the course information material provided to students. Attendance at not less than 80% of these components is a pre-requisite for taking the assessments and examinations of the relevant semester and /or year-of- programme. Students deemed to have unsatisfactory attendance will be excluded from the examinations of that programme component, or of the module(s) in which these components occur, and in the event that examinations are taken, any results will be rendered null. The provisions of this requirement may only be varied by the approval of the Student Affairs Committee and agreed by the Head of the Medical School where exceptional circumstances beyond the control of the student are clearly demonstrated to their satisfaction.
- **XIV.** A student who does not successfully pass any year of the Medical programme within the provisions set out in Rules VI to XI and Rule XIII above, is required to register for the repeat year and, to re-attend as set out above, and complete all continuous assessments, other coursework and examinations in each failed module. This requirement may be varied in exceptional circumstances on the recommendation of the Student Affairs Committee, and agreed by the Head of the Medical School.
- **XV.** Special Provisions may be applied in individual cases at the discretion of the Medical School as follows:
  - (a) **Exemptions** from modules on the basis of previous academic achievement are not allowed.
  - (b) **Deferral** of examinations is considered only in certain circumstances such as bereavement, personal or medical circumstances, which can be professionally or independently verified. Request should be made to the appropriate Module Leader or to the Year Co-ordinator who will forward it to the Student Affair Committee. Deferral normally applies **only between the period of the scheduled first-sitting and the first opportunity for a re-sit normally the Autumn.** Deferral extending into the following academic year falls within the terms of *Leave of Absence* described below. In foreseen circumstances (*e.g.* pregnancy) requests should be made at least 3 months in advance. Deferring the first-sitting of examinations will not incur any mark penalties. Students who defer will sit examinations in the Autumn and this will be deemed to be their first-sitting and will fall outside also of the general time-limit referred in Par. XII above.
  - (c) **Leave of Absence** involving the withdrawal of the student from their studies for a period of time and consequently the loss of opportunity to sit examinations also is considered on similar grounds as the *deferral of examinations* set out in the paragraph above. Students must apply for leave in the same manner also. Where leave extends for a significant period, there is a limit on the period for which results of examinations successfully passed may be retained. In any year-of-programme which remains incomplete at the time that leave commences, the results in any such modules is valid for a maximum period of 2 years (Students should refer also the time-limit noted in Par. XII above
  - (d) **Compensation:** From September 2012 it is not possible to compensate marks from one module to another for the purpose of passing failed modules by

compensation. This includes all core or mandatory prescribed modules or groups of modules, or between sub-components of Modules such as the SSM options

XVI. Medical Graduates, in addition to holding the Degrees of MB BCh BAO must be registered as Medical Practitioners in the appropriate Medical Register. All graduates who wish to practice must register provisionally with the Irish Medical Council. Graduates who wish to practice in Ireland (excluding Northern Ireland) must, after completing one year's internship in an approved hospital, be fully registered with the Irish Medical Council. Those who wish to practice in Great Britain and Northern Ireland must be fully registered with the General Medical Council. Graduates may, if they so wish be fully registered in both Registers. The attention of Medical Graduates is directed to the following Extract from Medical Practitioners' Act, 1978: "A Certificate of Experience shall not be granted to any person unless, after he had been awarded a primary qualification, that person had been engaged in employment in a residential medical capacity in one or more hospitals approved by the Council for this purpose and had been so engaged for such period or periods as may be determined by the Council."

In accordance with Regulation of Medical Council the period for which a person shall have been engaged as an Intern shall be a period of 12 months.

Sources from which information may be obtained:

Registrar, Medical Council, Portobello Court, Lower Rathmines Road, Dublin 6. Registrar, General Medical Council, 44, Hallam St., London WIN 6AE. Royal College of Physicians of Ireland and Royal College of Surgeons in Ireland (L.R.C.P. and S.I.)

The Secretary, Royal College of Surgeons, St. Stephen's Green, Dublin 2. Royal College of Physicians of London, 11 St. Andrew's Place, Regent's Park, London.

Royal College of Surgeons of England, 35-43 Lincoln's Inn Field, London. Royal College of Physicians and Surgeons of Edinburgh, and Royal Faculty of Physicians and Surgeons of Glasgow.

# DEGREES OF MB BCh BAO

# Refer to General regulations for the Degrees of MB BCh BAO NFQ Level 8 Ref; www.nfq.ie)

The following Section provides an outline of the individual years-of-programme of the medical degree programme and the rules which are applied. The curricular detail is provided in the further section entitled [SYLLABUS OF PROGRAMMES OF INSTRUCTION FOR THE DEGREES OF MB BCh BAO]

#### PROGRAMME LEVEL OUTCOMES FOR THE UNDERGRADUATE MEDICAL DEGREE

(MB, BCh, BAO).

# Programme aims

The programme aims to provide students with an integrated, holistic, student-centred medical curriculum based on the principles of adult learning and emphasising professionalism and life-long learning skills; to comply with the statutory requirements laid down by the Irish Medical Council, the Medical Practitioners' Act and the European Commission and in accordance with other international licensing and registering bodies.

## **Outcomes/Competences:**

# On completion of the programme, the medical graduate will be able to<sup>1</sup>:

Diagnose, explain and manage health problems using the current scientific
principles, knowledge and understanding that underpin medicine whilst
demonstrating a sound knowledge of the biological, social and psychological
basis of health and disease

(Medical Expert, Scholar)

2. Communicate effectively and compassionately with patients, carers, colleagues and society in all relevant media necessary to provide high quality, scientific and multidisciplinary patient care

(Communicator, Collaborator)

3. Perform a range of clinical skills and procedures safely, reliably, unsupervised and to the standard of a pre-registrations doctor

(Medical Expert)

 $<sup>^{\</sup>rm 1}$  Based on the Irish Medical Council's competency statement and incorporating specified domains of good professional practice

 Identify, evaluate and apply evidence to their practice of medicine while demonstrating an understanding of how such knowledge is created, shaped, appraised and shared

(Medical Expert, Scholar)

Apply their knowledge of the ethical, regulatory and legal framework within
which they operate to their practice of medicine while recognising the roles
and contributions of other healthcare professionals to the provision of high
quality, holistic care

(Professional, Collaborator)

6. Provide the highest levels of ethical, rational and humane care to all patients they encounter while managing effectively the resources available to them

(Professional, Manager)

7. Apply effectively knowledge of principles of health promotion and disease prevention at individual and population level to their practice medicine

(Medical Expert, Health Advocate).

8. Manage their own professional development and demonstrate an ability to contribute effectively to the teaching of others

(Professional, Scholar).

# MB. BCh. B.A.O Degree PROGRAMME OVERVIEW

#### FOUNDATION YEAR (0MB)

Semester 1	Semester 2	
BO101 Bio	ology (15)	
CH120 Chemistry (15)		
PH101 Physics (15)		
MD103Introduction to Medicine (15)		

Modules (and ECTS weightings) for Foundation Year are as listed above with lectures and practical being provided over two semesters. Students will be assessed on c ompletion of the relevant modulei.e. during the Summer Examination Session, with the exception of the Early Patient Contact component of MD103 which will be examined at the end of Semester I. Students required to take the Foundation Year cannot be registered for the five years Integrated Medical Programme until they have passed the Foundation Year Medical Examination. See section above for **General Regulations** regarding examinations. See School of Medicine Undergraduate Medical Programme **Curriculum Document** for assessment details for each module. Further information and guidance is available on **Blackboard**.

#### FIRST MEDICAL YEAR (1MB)

Semester 1	Semester 2
MD127 Principles of Physiology (10)	MD121 Cardiovascular System (5)
MD137 Principles of Physiology (10)	MD122 Respiratory System (5)
MD138 Biomolecules, Metabolism and Energy	MD124 Gastro Intestinal System (5)
MD1101 Basics of Body Structure/ Musculoskeletal System (10)	MD123 Renal System (5)
	MD140 Metabolism, Nutrition and Health (5)
MD139 Medical Professionalism 1 (10)	

Modules (and ECTS weightings) for Year 1 are as listed above. Semester1 modules provide discipline specific introductory material relating to Anatomy, Physiology, and Biochemistry. Semester 2 modules are devoted to integrated systems-based modules. Medical professionalism is taught throughout the year. Students are examined on completion of each module, at the end of the relevant semester. Continuous assessment is also provided for. See section above for **General Regulations** regarding examinations. See School of Medicine Undergraduate Medical Programme **Curriculum Document** for assessment details for each module. Further information and guidance available on **Blackboard** 

#### SECOND MEDICAL YEAR (2MB)

Semester 1	Semester 2
MD224 Central Nervous System (10)	MD201 Health and Disease 2 (15)
MD214 Introduction to Pharmacology (5)	
MD210 Genes, Gametes and Embryos (5)	MD204 Drugs and Disease (5)
MD206 Molecular Medicine (5)	MD209 Multi Organ Failure (5)
MD202 Medical Professionalism 2 (10)	

See section above for **General Regulations** regarding examinations. See School of Medicine Undergraduate Medical Programme **Curriculum Document** for assessment details for each module. Further information and guidance available on **Blackboard** 

### THIRD MEDICAL YEAR (3MB)

Semester 1	Clinical Phase Semester 2
MD302 Health & Disease II (15)	MD314 Foundations of Clinical Theory (10)
MD304 Global Health and	MD312 Foundations of Clinical
Development (5)	Diagnosis (10)
MD316 Professionalism – Core	MD 313 Foundations of Clinical
Clinical Skills (10)	Management (10)

Modules (and ECTS weightings) for Year 3 are as listed above. The teaching programme for the 2<sup>nd</sup> Semester (3.2) is delivered over 18 weeks at Galway University Hospital and at the affiliated Academies in Castlebar, Sligo, Letterkenny and Portiuncula Hospital, Ballinasloe. The 3.2 programme is organised into a number of strands as follows:

	Strands: Year 3.2 (core and specialty)
1	Cardiovascular
2	Respiratory
3	Gastrointestinal studies
4	Care of elderly
5	Peri-opertive, critical care
6	General medicine/endocrine & general surgery

See section above for **General Regulations** regarding examinations. See School of Medicine Undergraduate Medical Programme **Curriculum Document** for assessment details for each module. Further information and guidance available on **Blackboard** 

#### FOURTH MEDICAL YEAR (4MB)

Semester 1	Semester 2	
MD420 Primary Care and Mental Health (20)		
MD 422 Women's and Children's Health (20)		
MD421 Advanced Clinical Skills (15)		
	MD409 Special Study Module (5)	

# **Programme Structure and Delivery Approach**

The Year 4 programme consists of modules as listed above. These modules will be delivered by the disciplines of Obstetrics & Gynaecology, Paediatrics, Psychiatry,

General Practice, and Oto-rhino-laryngology. The Special Study Module is a core component of professionalism training, and will take place throughout semester 2. Other aspects of professionalism training including clinical methods, ethics, and understanding health & illness will be threaded throughout the specialist modules and delivered by the respective specialist disciplines. The PCMH and WCH modules will be divided into 2 parts, one of which will be delivered in semester 1 and one of which will be delivered in semester 2. Teaching methods will include lectures, small group teaching, case studies, and clinical attachments at UHG and at medical academies. A proportion of the students will complete all of semester 1 in either the Sligo, Letterkenny, Castlebar, or Ballinasloe Medical Academy, and another proportion of the class will complete all of semester 2 in one of the academies.

See section above for **General Regulations** regarding examinations. See School of Medicine Undergraduate Medical Programme **Curriculum Document** for assessment details for each module. Further information and guidance is available on **Blackboard**.

# FIFTH MEDICAL YEAR /FINAL YEAR (5MB)

Semester 1	Semester 2
MD542 Advanced Clinical Theory (20)	
MD540 Advanced Clinical Diagnosis (20)	
MD541 Advanced Clinical Management (20)	

The teaching in Year 5 comprises three modules as listed above. These are delivered in an integrated design with input from medicine, surgery, anaesthesia and radiology, and will cover essential topics in nine clinical disciplines. These modules aim to enhance the students knowledge of clinical practice, and builds on the Year 3 modules: Foundations of Clinical Theory, Foundations of Clinical Diagnosis, and Foundations of Clinical Management incorporating the teaching of Professionalism seamlessly within the following strands. These Year 5 strands are as follows:

	Year 5 Strands (core and specialty)
1	Cardiovascular studies
2	Gastrointestinal
3	Respiratory, Preoperative, Critical cares Medicine
4	General medicine and Surgery
5	Cancer and Imaging studies
6	Musculoskeletal studies
7	Renal-Urology
8	Dermatology, Plastics and Maxilo-facial surgery

Neurology and Ophthalmology	nd Ophthalmology
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Each strand is delivered in 3 or 4 weeks in Semester 1 and Semester 2, and the overall aim is to equip the final medical student with the necessary skills to the standard of a pre-registration medical doctor in the areas of knowledge, application and interpretation, clinical and diagnostic skills, communication skills, professional behaviour, scholarly traits in accordance with the Medical Council guidelines for undergraduate medical training. In Semester 1 each strand is delivered in 4-week rotating blocks at Galway University Hospitals and the Affiliated Hospitals. In semester 2 each strand is delivered over 3 weeks at Galway University hospitals. The teaching of Professionalism is incorporated into each strand.

See section above for **General Regulations** regarding examinations. See School of Medicine Undergraduate Medical Programme **Curriculum Document** for assessment details for each module. Further information and guidance is available on **Blackboard**.

#### STUDENT ASSESSMENT ON THE UNDERGRADUATE MEDICAL PROGRAMME

A wide variety of assessment strategies are employed at successive estages throughout the programme. Using a range and diversity of techniques, assessment is matched to the learning outcomes for each module (which are detailed below). Assessment is designed to assess students' theoretical knowledge, clinical skills and professional behavior, to ensure they meet the necessary competencies for professional practice as a doctor. Assessment techniques include written examination, practicals, projects, case studies, and clinical examinations. Assessment is carried both during and at end of modules. Formative assessment is also used to support learning process.

#### See

9

- Section above for **General Regulations** regarding examinations.
- School of Medicine Undergraduate Medical Programme Curriculum Document for details of assessment for each module
- Relevant Blackboard sites for further details and guidance

# SYLLABUS OF PROGRAMMES OF INSTRUCTION FOR THE DEGREES OF MB BCh BAO:

#### MODULE DESCRIPTIONS

Title, code, credit weighting (ECTs), description and learning outcomes

# FOUNDATION YEAR (OMB) MODULES

Semester 1	Semester 2		
BO101 Biology (15)			
CH120 Chemistry (15)			
PH101 Physics (15)			
MD103 Introduction to Medicine (15)			

CH 120 CHEMISTRY: MOLECULAR SCIENCE (15 ECTS)

This module provides a broad and targeted introduction to Chemistry for students who require a full two semester foundation course, who are pursuing medicine related courses and who will not be continuing with Chemistry in higher years. The module assumes no prior knowledge of Chemistry, though a significant proportion of those taking it (perhaps 50%) will have a level 5 qualification in Chemistry. The course addresses the particular needs of these students through the use of examples and applications related to biology and medicine. The course is based on the concept that an appreciation of how materials (including biomaterials) behave and function on the macroscopic level requires an understanding of their molecular basis. The course is designed to provide an introduction to the molecular world in terms of its structures and the factors that affect how these structures behave. This approach is reflected in both the lecture and the laboratory components of the course

# **Learning Outcomes:**

- 1 Recognize the molecular basis of biological and medicine related processes and phenomena
- 2 Explain the macroscopic behaviour of matter in terms of molecular scale forces and effects
- 3 Recognize the link between chemical changes and environmentally important effects such as global warming and ozone layer depletion
- 4 Carry out calculations relating to the material balance in chemical processes
- 5 Recognize the factors that control the rates of chemical processes and of the importance of chemical and enzymic catalysis
- 6 Carry out basic thermodynamic calculations relating to enthalpy, entropy and free-energy in chemical and biochemical processes
- 7 Recognize how basic chemical principles control the behaviour of

- biological molecules
- 8 Recognize the importance of chemical principles in relation to medicine related issues: magnetic resonance imaging, mechanism of action of pharmaceuticals such as aspirin at a molecular level.
- 9 Recognize the chemical basis of many biomedical processes
- 10 Recognise the importance of carbon based molecules and their importance in terms of the petrochemical, chemical and pharmaceutical industries
- 11 Apply the scientific method in terms of problem solving Laboratory
- 12 Carry out basic qualitative analyses in the laboratory relating to aqueous solutions of the most important anions and cations, and to organic molecules.
- 13 Use appropriate laboratory techniques and equipment to synthesise, separate and purify chemical compounds
- 14 Use titrimetry and physicochemical techniques for quantitative analysis and in the determination physicochemical properties
- 15 Implement safe work practices in a chemistry laboratory, to include an awareness of common hazards and appropriate safety precautions
- 16 Carry out practical experiments in the laboratory, analyse the results and write technical reports on same

### PH 101 PHYSICS (15 ECTS)

This module lays a broad foundation in physics, both for students who will continue to study physics in subsequent years of their degree programme and for those who will instead continue to study other subjects. No prior knowledge of physics is assumed, though a significant minority of students (perhaps 33%) will have a Leaving Certificate qualification in physics. The level of mathematics required is simple algebra and trigonometry.

The general aim of this module is to equip the learner with knowledge of the basic rules of nature that physical systems follow. The student will learn how to express these rules in simple mathematical form and to apply these rules to solve problems. They will also learn how to make measurements in the physics laboratory which can test the rules. They will acquire transferable skills in measurement, numeracy and analysis which will be useful across a broad range of scientific and medical disciplines.

### **Learning Outcomes:**

- 1 Understand and explain basic physical principles related to topics such as motion, forces, energy, heat, waves, electricity, light, atoms and radiation.
- 2 Identify basic physical principles governing the behaviour of simple systems.
- 3 Describe physical processes using simple equations and solve numerical problems.
- 4 Make measurements in the physics laboratory.
- 5 Record and analyse experimental data and draw conclusions based on these data

#### **BO101 BIOLOGY (15 ECTS)**

Biology is an integrative and interdisciplinary field that aims to investigate the dynamic and complex nature of living systems in terms of their molecular components and the interactions between organisms and their biotic and abiotic environment. This module will introduce students to fundamental concepts of biology. The course is intended to provide the necessary biological background to allow learners in general and specialised Science courses, Foundation Medicine and Biomedical Engineering to progress into more specialised topics in later years. First, the nature of biomolecules and the basis for cellular form and function are discussed. Then students are introduced to the structure, function, diversity and impact of plants, animals and microorganisms. This module aims to provide learners with a basic knowledge of the structure and function of biomolecules and cells. The module also seeks to provide learners with an understanding of the evolutionary process and the range of interactions between organisms and their environment. Finally, the module seeks to enable learners to gain an appreciation of major human impacts on the biosphere and the role of biological sciences in societal development.

# **Learning Outcomes:**

# On successful completion of the module you will be able to

- 1 Explain the structure and function of biomolecules
- 2 Describe the form and function of cells
- 3 Discuss organism diversity and evolutionary mechanisms
- 4 Relate basic principles of organismal interactions
- 5 Critically evaluate major human impacts on the environment
- 6 Understand the role of biological sciences in societal development

#### MD103 Introduction to Medicine (15 ECTs)

The module consists of two components: Early Patient Contact and Contemporary Topics in Medicine. The module has been designed to maximise students' exposure to real patients and to clinical practice at an early stage in your professional development.

Contemporary Topics in Medicine component: Section 1 of this course will start with an introduction to Human Form, Function and composition: Introductory lectures in Anatomical terminology, Physiology and Medically relevant Biochemistry. It will also include an Introduction to Medical Imaging. The next section will examine aspects of Biomechanics and how understanding interactions with the physical environment aid in our understanding of various injuries to the musculoskeletal system. Section will allow a downward vertical integration of some of the clinical disciplines by providing an introduction to the Clinical Disciplines including, Surgery, Medicine, Anesthesiology, General Practice, Psychiatry and Introduction to the Allied Health Sciences (Nursing/Occupational Therapy/SLT). The final section of the course consists of Contemporary Topics in Medical Research including Gene and Stem Cell therapy, Aging, Antibiotic Resistance, Tissue Engineering, Cellular Imaging and Cancer. This will provide the

student with some basic terminology and exposure to the multifaceted nature of modern medicine.

# **Learning Outcomes:**

# On successful completion of the module you will be able to: Early Patient Contact

- 1 Demonstrate an approach to interaction with patients commensurate with recognised professional standards of medical etiquette.
- 2 Demonstrate an ability to take a basic history from a patient and to reflect on the information obtained.
- 3 Demonstrate an ability to work as part of a group in searching, appraising and synthesising information related to an assigned clinical topic.
- Demonstrate an ability to present a case history and a PowerPoint presentation on an assigned topic.
- Have a basic understanding of the structure and operation of the Irish health service.
- 6 Show an understanding of the roles of different members of a multidisciplinary healthcare team.
- Demonstrate a basic understanding of the global impact of infectious disease and the burden of imported tropical diseases in Ireland.
- 8 Discuss ways in which healthcare professionals can promote health and prevent disease.
- 9 Demonstrate ability to record and interpret a patient's vital signs.
- Demonstrate an awareness of the importance of observation in making bedside diagnoses in clinical medicine.
- Demonstrate an ability to practice hand-washing to a standard that complies with hospital infection control policies.
- 12 Demonstrate an ability to assess a patient's pulse and respiratory rate and to measure a patient's blood pressure using a sphygmomanometer Contemporary Topics in Medicine
- Demonstrate awareness of basic Anatomical/Physiological and Biochemical Terminology.
- Have a basic understanding of Human Biomechanics in relation to Connective Tissues including Bone and Cartilage.
- Demonstrate an awareness of the pivotal role of the Physical sciences in Medical imaging.
- Demonstrate a basic understanding of the Importance of the Basic sciences in modern therapeutic approaches and challenges.

# FIRST MEDICAL YEAR (1MB) MODULES

SEMESTER 1	SEMESTER 2	
MD137 Principles of Physiology	MD121 Cardiovascular System (5)	
(10)	MD122 Respiratory System (5)	
MD138 Biomolecules, Metabolism and Energy	MD124 Gastro Intestinal System (5)	
MD1101 Basics of Body Structure/	MD123 Renal System (5)	
Musculoskeletal System (10)	MD140 Metabolism, Nutrition and Health (5)	
MD139 Medical Professionalism 1 (10)		

# MD137 PRINCIPLES OF PHYSIOLOGY (5 ECTS) \*

This module is an introduction to fundamental principles of physiology covering aspects of maintenance of cellular homeostasis, cell communication, the blood system and the immune system. At the end of this module the student should know and understand;

# **Learning Outcomes:**

- 1 Understand basic design of the organ systems of the body
- 2 Display an understanding of the fluid compartments of the body, composition, properties and clinical significance
- 3 Understand the mechanisms whereby substances are transported in and out of cells and its relevance to absorption in the gut and the kidney.
- 4 Understand the fundamentals of body pH regulation and its clinical significance
- 5 Demonstrate detailed knowledge of the role of second messengers in various cellular responses
- 6 Understand the endocrine system and hormonal regulation
- 7 Understand blood composition and function including both cells and plasma; this should include formation of blood cells, haemoglobin, blood groups, blood clotting, blood indices and blood disorders
- 8 Understand the fundamentals of immunity, including structure and function of the white blood cells and both cellular and humoral immunity
- 9 Describe physiological basis of nerve and muscle activity
- 10 Understand how nerve impulses are generated and propagated, including the role of ion channels and the physiology of a typical chemical synapse.
- 11 Give some key examples to illustrate the chemical diversity of neurotransmitter molecules.
- 12 Understand the structure and function of skeletal, smooth & cardiac muscle, how these muscle types contract and the role of calcium.

- 13 Describe skeletal muscle fibre types, metabolism, and contractile parameters.
- 14 Have knowledge of muscle fatigue, adaptation to physiological stress /work
- 15 Understand how the autonomic nervous system works in regulating cellular and organ function

# MD138 BIOMOLECULES, METABOLISM AND ENERGY (5ECTS)

This module introduces students to the basic biochemical definitions, concepts and mechanisms that relate to biomolecules, metabolism and energy and that are important in normal cell and tissue functioning. Through study of clinical correlations, the module also highlights how defects in these cellular biochemical processes can lead to human disease. In addition, the students will practice basic biochemistry methods and work collaboratively during laboratory practical sessions.

# **Learning Outcomes:**

# On successful completion of the module you will be able to:

- Memorise key biochemical definitions relating to basic concepts of biomolecules, metabolism and energy
- 2 Describe the structure and explain the function of the four major types of biomolecules (proteins, nucleic acids, lipids and carbohydrates)
- 3 Explain the mechanisms of cellular transmission of information
- 4 Explain the roles and functions of proteins
- 5 Describe the role of key metabolic pathways and their controls and demonstrate an integrated understanding of their functions
- 6 Illustrate with specific examples how interference with or defects in biochemical pathways impact on human health
- 7 Explain biochemical techniques and methods used to identify biochemical defect and reach a clinical diagnosis
- 8 Participate in biochemistry laboratory practicals by collaborating with peer and produce a laboratory report analyzing results obtained

# MD1101 Basics of body structure/musculoskeletal system (10 ECTs)

The module is aimed at giving a general introduction on the body structure and a more detailled knowledge of the individual components of the musculo-skeletal system

# **Learning Outcomes:**

- 1 Have command of the medical/anatomical terminology
- 2 Have an overview of the general body structure including body compartments and the layers of the body
- 3 Have a clear understanding on the general structure of the Musculoskeletal, cardiovascular, and peripheral nervous systems
- 4 Have detailled knowledge on the skeletal system

- 5 Have detailled knowledge of the functional anatomy of the individual muscles of the body, including their innervation and vascular supply
- 6 ave clear understanding of the localisation and topography of the major muscles, blood vessels and nerves of the limbs
- Have a clear understanding of the histological structure of epithelial, connective, muscular, and nervous tissues
  Have a clear overview of the major developmental steps occurring during the first four weeks of prenatal development

# MD139 MEDICAL PROFESSIONALISM (10 ECTS)

The aim of this module is to instill professional behaviour in students from the start of their medical career. Students will develop structured, evidence-based communication skills and learn the basics of near patient testing and the fundamentals of basic patient assessment through workshop and skills practice. Students will learn to analyse the ethical, legal and psychosocial dimensions of clinical practice and will develop an understanding of statistical analysis and evidence-based medicine, st

# **Learning Outcomes:**

- 1 Explain the role of communication skills in the doctor-patient relationship.
- 2 Define verbal and non verbal communication
- 3 Explain the importance of rapport and active listening in the consultation and identify behavioue which illustrate this
- 4 Demonstrate an ability to test and interpret urine, and to interpret a normal chest X-ray or a chest X-ray with basic cardiac or respiratory abnormalities.
- 5 Demonstrate how a shared understanding of the presenting complaint in mental, physical, psychological and social terms is reached, with particular focus on information-gathering skills.
- 6 Demonstrate an ability to measure blood pressure, pulse rate, body temperature and respiratory rate accurately, and to interpret these findings and explain them to patients.
- 7 Demonstrate an ability to calculate BMI, measure waist circumference and chard biomedical data appropriately
- 8 Demonstrate an ability to test and interpret urine, and to interpret a normal chest X-ray or a chest X-ray with basic cardiac or respiratory abnormalities.
- 9 Demonstrate an ability to apply leads appropriately and to take and ECG reading.
- 10 Display an understanding of the basic principles of medical ethics.
- 11 Analyse the role of ethics in clinical practice.
- Demonstrate an understanding of the importance of patient rights, including the right to give or withhold consent to treatment and the right to confidentiality of personal health information.
- 13 Display a basic understanding of the law governing medical practice in Ireland.
- 14 Explain the impact of the psychological and social determinants of health and illness.
- 15 Describe the role of psycho-social factors in early childhood as predictors of health and illness in adult life
- 16 Identify the processes through which stress influences health and illness.
- 17 Systematically search for, store and use scientific papers related to a specific

- topic of interest.
- 18 Categorise various scientific papers in accordance with the 5 existing levels of evidence provided by the Oxford Centre for Evidence-Based Medicine
- 19 Demonstrate a basic understanding of medical statistics.
- 20 Interpret the statistical analysis results of a scientific paper.
- 21 Each special study module will have specific learning outcomes.

#### MD121 CARDIOVASCULAR SYSTEM (5ECTS)

This module covers the anatomy, physiology and biochemistry of the cardiovascular system with clinical applications in an integrated fashion. The anatomy of the heart and blood vessel distribution is covered, as is the microscopic anatomy of the blood vessels. The genesis of the electrical activity of the heart and the formation of the electrocardiogram is described as is the function of the heart as a pump. The control of arterial blood pressure is described as is the control of the various regional circulations. This module will incorporate a clinical seminar session at the end of the module (one day's duration). It is also envisaged that some clinical lectures will be interspersed throughout the module.

#### **Learning Outcomes:**

# On successful completion of the module you will be able to:

- 1 Know and be able to demonstrate the position and function of the heart valves the positions for auscultation of the valves and the positions for placing the chest leads for the ECG.
- 2 Know the Anatomy of the heart and of anatomically and functionally related structures, including why the coronary arteries are important to the functional microanatomy of the heart
- 3 Know the general plan of distribution of arteries, veins, lymphatics
- 4 Know about cardiac cell action potentials and how they give rise to the rhythmical excitation of the heart.
- 5 Know how the spread of cardiac action potentials throughout the heart gives rise to the electrocardiogram (ECG).
- 6 Know the clinical significance of the ECG
- 7 Know the cardiac cycle and the working of the heart as pump
- 8 Know the function and roles of the different parts of the systemic circulation (arteries, arterioles, capillaries and veins).
- 9 Know arterial blood pressure, its clinical significance, how to measure it and its mechanisms of control and the targets for drug intervention.
- 10 Know the control of the various regional circulations
- 11 Discuss the anatomy and pathophysiology related to cardiovascular disease.

#### MD122 RESPIRATORY SYSTEM (5 ECTS)

This module integrates the structure and function of the respiratory system with clinical applications. The anatomy of the respiratory system and associated structures is covered including the structure of the nose, larynx and upper airway, anterior thoracic wall and the diaphragm. The microscopic structure of all parts of the airway is included. There is brief coverage of the embryonic development of the respiratory system and associated structures. The ventilation of the lungs with air, diffusion of gases in the lungs, the perfusion of the lungs with blood, and gas exchange in the

lungs are then described. Gas transport in the blood and gas exchange in the tissues are covered. The regulation of respiratory ventilation is described. Students are introduced to medical imaging of the respiratory system. It is also envisaged that some clinical lectures will be interspersed throughout the module. Practicals are given which explore and reinforce the material covered in lectures.

# **Learning Outcomes**

#### On successful completion of the module you will be able to:

- Explain the general plan of the functional anatomy of the respiratory system
- 2 Be able to demonstrate the positions of the pleurae and lungs and their relations during normal and strenuous breathing and of structures anatomically and functionally related to them.
- Describe the anatomy of the intercostals spaces and the diaphragm and the functional anatomy of ventilation.
- 4 Understand the principles underlying an examination of the lungs including the interpretation of routine radiographs and MRI scans.
- 5 Explain the role of the respiratory system in the control of blood gases and pH, including how normal levels are maintained and the causes and consequences of disturbances.
- 6 Describe the microscopic structure of the airways and lungs and understand how structure and function are interrelated
- 7 Describe the development of the trachea, lungs and pleura and know the most common developmental anomalies
- 8 Outline the factors that govern alveolar ventilation in health and disease.
- 9 Understand the peripheral and central mechanisms involved in controlling respiration.
- 10 Discuss the anatomy and pathophysiology related to respiratory disease.

### MD124 GASTRO-INTESTINAL SYSTEM (5 ECTS)

This module covers the structure and function of the gastrointestinal system and some clinical applications of this knowledge. The Gross Anatomy of the GIT is covered along with aspects of embryology and histology. Aspects of GIT motility, digestion and absorption of nutrients and their control are considered along with the clinical importance of enzymes and GIT secretions. The role of the accessory organs of digestion is described. GIT reflexes such as vomiting and defecation are covered. Clinical lectures may be presented from time to time.

# **Learning Outcomes:**

- 1 Know and be able to demonstrate the surface projections of clinically relevant components of the GIT
- 2 Know the macro and micro anatomy of the main elements of the GIT
- 3 Have an understanding of the importance of sphincteric competence in the GIT
- 4 Understand the four key functions of the GIT
- 5 Understand how these functions are regulated

- 6 Understand the biochemical mechanisms by which proteins, carbohydrates and fats are digested and absorbed by the GIT.
- 7 Understand how defects in biochemical processes can lead to diseases of malabsorption.

#### MD123 Renal System (5 ECTs) ^

This module covers the structure and function of the renal system with clinical applications in an integrated fashion. The development, anatomy and histology of the kidney are described as is the anatomy of the pelvic floor. The formation of urine is covered in terms of the underlying processes of renal blood flow, glomerular filtration and tubular absorption and secretion and their local control. The control of salt and water, pH balance and the medical importance of these processes are indicated. The anatomy and mechanism of the micturition reflex is described. Students are also introduced to medical imaging of the kidney. It is also envisaged that some clinical lectures may be interspersed throughout the module

#### **Learning Outcomes:**

#### On successful completion of the module you will be able to:

- 1 Know and be able to demonstrate the positions of the bladder, urethra, rectum and anal canal.
- 2 Know the macro and micro structure of the kidney, ureter, urinary bladder and urethra.
- 3 Know the neuroanatomical basis of urinary incontinence.
- 4 Be familiar with the medical imaging of the urinary system.
- 5 Understand the dynamics of renal blood flow regulation
- 6 Understand the special features of the renal blood supply which adapt the organ for filtration and reabsorption and how blood flow and GFR can be measured
- 7 Describe the transport properties of the nephron and how these relate to the reabsorptive and excretory roles of the kidney.
- 8 Understand the role of the kidneys in regulating body fluid osmolarity, ECF volume and acid base balance and the methods of investigation used to examine these processes.
- 9 Discuss the anatomy and pathophysiology of processes related to renal disease.

#### MD140 Metabolism, Nutrition and Health (5 ECTs)

## **Learning Outcomes:**

- obtain and use the current scientific knowledge on the normal function of the human organism and its organs and use this knowledge to explain health problems and pathogenesis of diseases
- Be familiar with clinical reasoning, the use of evidence and critical thinking in the process of decision making and how research and scientific methodologies contribute to evidence based medicine.

# SECOND MEDICAL YEAR (2MB) MODULES

Semester 1	Semester 2
MD224 Central Nervous System (10)	MD201 Health and Disease 2 (15)
MD214 Introduction to Pharmacology (5)	
MD210 Genes, Gametes and Embryos (5)	MD204 Drugs and Disease (5)
MD206 Molecular Medicine (5)	MD209 Multi Organ Failure (5)
MD202 Medical Professionalism 2 (10)	

#### MD224 CENTRAL NERVOUS SYSTEM (10 ECTS)

Module examining the structure, organisation and functions of the spinal cord and the different parts of the brain and introducing students to the clinical disciplines of neurology, psychiatry and radiology. Topics covered include: Somatosensory systems and pain circuitry; Special sense systems; Motor system; Vestibular system; Language implementation system; Limbic system; The control of appetite, thirst, thermoregulation; The sleep cycle; Learning and memory.

#### **Learning Outcomes:**

#### On successful completion of the module you will be able to:

- 1 Have a comprehensive understanding of the structure and organisation of the central nervous system; brain and spinal cord
- 2 Be familiar with clinical reasoning, the use of evidence and critical thinking in the process of decision making and how research and scientific methodologies contribute to evidence based medicine

#### MD214 Introduction to Pharmacology (5 ECTs)

This module provides an introduction to Pharmacology, and serves as a foundation to aid the understanding of the drug treatment of disease. Topics include an overview of the various molecular targets for drugs, dose-response relationships,

pharmacokinetics (drug absorption, distribution, metabolism and elimination), drugs acting on the autonomic nervous system (cholinergic and adrenergic, drug discovery and clinical development and drug safety.

### **Learning Outcomes:**

- Describe the general mechanisms of action of drugs at a molecular, cellular, tissue and organ level.
- 2 Describe the ways in which drug actions produce therapeutic and adverse effects, and describe the receptor as a target of drug action and related concepts such as agonism, antagonism, partial agonism and selectivity.

- 3 Describe the mechanisms of drug absorption, distribution, metabolism and excretion, and the concepts of volume of distribution, clearance and half-life and their clinical relevance.
- 4 Identify the pharmacokinetic factors determine the optimal route, dose and frequency of drug administration and the factors that determine interindividual variation in drug response.
- 5 Describe the components of the autonomic nervous system and its effects on physiological functions
- 6 Describe the different ways in which drugs can affect cholinergic and noradrenergic neurotransmission and how such approaches have yielded clinically useful drugs
- 7 Describe the drug development process including clinical trials (Phase I to IV), and the drug approval process. In addition, to have an appreciation of the requirements of good clinical trial design and consent, ethics, bias, statistics, dissemination of information.
- 8 Describe the problems associated with drugs such as the development of dependence and tolerance to drugs, adverse drug reactions, poisoning and the principles of counteracting the effects of toxic substances after ingestion.

### MD210GENES, GAMETES AND EMBRYOS (5 ECTS)

This module, building on previous knowledge of DNA structure, replication and endocrinology, will equip students with a knowledge of the core concepts in reproduction and genetics. Medical students will be introduced to the principles of modern genetics and its application to the understanding and treatment of inherited disease. Clinical context, ethical and professional issues and genetic counselling will be addressed in addition to anatomical and physiological issues related to reproduction.

#### **Learning Outcomes:**

- 1 Have a comprehensive understanding of the main principles of modern medical genetics and cytogenetics and its relevance to modern medicine.
- 2 Have a basic understanding of chromosome analysis and the causes and consequences of cytogenetic disorder and its relevance to modern medicine.
- 3 Have a basic understanding of the role of chromosome rearrangement in human leukemia and cancer
- 4 Have an appreciation of the practical, moral and ethical issues associated with genetic testing, prenatal diagnosis and genetic counseling in modern medicine and some insight into the personal impacts of inherited disease/predisposition to disease for individuals, families and society.
- 5 Know the anatomy and physiology of the male and female reproductive systems as well as the hormonal and nervous control of human reproduction
- 6 Have sufficient anatomical knowledge to understand the anatomy of urinary and faecal continence, of taking cervical smears and of pelvic examination and the anatomical basis of passing a urinary catheter in the male.
- 7 Have an appreciation of anatomical and physiological changes that occur during pregnancy and the anatomy underlying anesthesia during childbirth.
- 8 Know the basis of sexual determination of sex, the control of parturition and lactation

## MD206 MOLECULAR MEDICINE (5 ECTS)

24 lectures (3 x 3 lectures from 8 lecturers) covering Signalling pathways; Molecular Diagnosis; Cell Cycle; DNA Repair; Oncogenes & Tumour Suppressors; DNA Damage Response & Cancer; Cell Biology; Cell Death; Future Therapies and, finally, Drug Discovery & Small Molecules.

#### **Learning Outcomes:**

# On successful completion of the module you will be able to:

- Understand the general concepts of signal transduction 1
- Be familiar with chemical messengers, such as hormones, steroids, growth 2 factors and eicosanoids, and their cellular receptors
- Understand the general concepts of cancer and the DNA damage response 3
- Be familiar with the fundamental principles of the cell cycle, its control and 4 relevance to cancer
- Understand the cell biology of cancer, including the principle cellular 5 hallmarks of cancer and their molecular basis
- Be familiar with the mechanisms of programmed cell death and their relevance 6
- Understand the principles and development of current and potential therapeutic 7 strategies, especially chemotherapeutic strategies against cancer
- Be familiar with some of the technological advances are uncovering novel 8 molecules and intermolecular relationships that are medically relevant

#### MD202 MEDICAL PROFESSIONALISM 2 (15 ECTS)

This module introduces students to clinical history-taking and physical examination in respect of the cardiovascular, gastrointestinal, genitourinary, nervous and musculoskeletal systems. Students will be able to apply communication, historytaking and examination skills during a clinical encounter. Students will learn to analyse the ethical, legal and psychosocial dimensions of clinical practice and will develop an understanding of the principles of evidence-based medicine and statistical analysis

#### **Learning Outcomes:**

- 1. Take a medical history with regard to the following systems: Cardiovascular system, Respiratory system, Gastrointestinal system, Genitourinary system, Nervous system and Musculoskeletal system.
- Perform a clinical examination with regard to the following 2. systems: Cardiovascular system, Respiratory system, Gastrointestinal system, Genitourinary system, Nervous system and Musculoskeletal system.
- Demonstrate the application of communication skills in accordance with the Calgary Cambridge Consultation Model.
- Carry out basic medical procedures, which might include application of a 4. sling, administration of an intramuscular injection, etc.

- 5. Demonstrate an ability to identify ethical issues arising in clinical practice.
- 6. Demonstrate an understanding of the role played by values in the clinical encounter.
- 7. Demonstrate an understanding of the importance of shared decision-making in clinical practice.
- 8. Demonstrate knowledge of how doctors are regulated and an awareness of the legislation governing clinical practice.
- 9. Critically evaluate the role of psychological and social factors in treatment adherence for chronic illness
- Describe the importance of health literacy for patients and health care providers and how it can be promoted
- 11. Appraise the theories and models of health behaviour change and their application in practice
- 12. Systematically search for, store and use scientific papers related to a specific topic and cite this information while writing a paper, essay or case report.
- 13. Categorise various scientific papers according to the 5 existing levels of evidence provided by the Oxford Centre for Evidence Based Medicine and use the evidence to promote best practice in clinical decision-making.
- 14. Demonstrate knowledge of inferential statistics.
- 15. Interpret the statistical analysis results of a scientific paper.
- 16. Each special study module will have specific learning outcomes

# MD201 HEALTH AND DISEASE (15 ECTS)

The module aims to introduce to students the various disciplines, key concepts and knowledge that underpin the development, diagnosis and management of clinical conditions. The module will highlight the interplay between molecular, cellular, microbiological, pharmacological, environmental, epidemiological and social mechanisms in disease development and progression. Principles of health promotion and disease prevention at individual and population levels will also be introduced.

# **Learning Outcomes:**

- 1 Discuss the interplay of molecular, cellular, microbiological, pharmacological and environmental factors in the causation of different diseases, and the clinical relevance of such underlying mechanisms.
- 2 Describe the mechanisms, aetiologies and responses relating to cell injury, death, growth and neoplasia, as well as the subsequent healing, repair and/or neoplastic processes
- 3 Explain the basic alterations of haemodynamic processes including thrombosis, ischaemia, infarction and shock
- 4 Explain the principles and application of biomedical statistical methods in population health and clinical settings
- Discuss the functions of public health and health promotion, including epidemiology, healthcare needs assessment, disease prevention relating to both individual and population health services, and wider determinants of health.
- 6 Discuss pathobiology, aetiology, diagnosis, as well as general principles in surveillance, prevention, control and management of infectious diseases

- 7 Explain the principles and application of infection prevention/control measures and rational use of antimicrobial agents in healthcare settings
- 8 Describe the pathobiology, microbiology, pharmacology, surveillance and prevention of cardiovascular disorders including atherosclerosis, myocardial infarction, valvular disorders, cardiomyopathy, cardiac failure and hypertension
- 9 Describe the pathobiology, microbiology, surveillance and prevention of respiratory disorders including asthma and other allergic disorders, pneumonia, tuberculosis, inflammatory disorders, COPD, cystic fibrosis and neoplasia.

#### MD209 MULTI ORGAN FAILURE (5 ECTS)

The students are introduced to core concepts required for an understand of the causes and effects of failing organs, including heart, liver, kidney, central nervous system and lung. Lectures are provided on essential physiology of the relevant organs (Dept of Physiology) followed in a matched fashion by lectures on clinical concepts (clinical lecturers). A self-directed learning (SDL) task, focuses on a clinical scenario that illustrates the concepts introduced in the lectures.

#### **Learning Outcomes:**

## On successful completion of the module students will be able to:

- Explain essential aspects of physiology of major organ function pertinent to: heart, liver, kidney, Central Nervous system and lung
- 2 List common diseases that contribute to failure of these organs
- 3 Describe the clinical manifestations of organ failure
- 4 Explain these clinical manifestations as consequences of deranged physiology
- 5 Describe basic aspects of clinical management of the failing organ
- 6 Understand the clinical concept of Shock
- 7 Provide more detailed examples of specific clinical conditions highlighted in the SDL tasks

#### MD204 DRUGS AND DISEASE (5 ECTS)

In this module, students will learn the basic Pharmacology & Drugs used in the treatment of a variety of disorders including Endocrine, Immunological,Respiratory,Gastrointestinal, Nervous System and Cancer. The content covers not only basic Pharmacology of important drug group used in the treatment of patients with those diseases, but also clinically relevant topics.

# **Learning Outcomes:**

#### On successful completion of the module you will be able to:

 Understand the Pharmacology of drugs used in the treatment of Endocrine, Gastrointestinal, Respiratory, Immunological, Nervous System, Pain, and Oncological Diseases

- 2 Understand the mechanisms of action and important side effects in the use and administration of drugs
- 3 Knowledge of how those drugs interfere with mechanisms of disease.
- 4 Important drug interactions
- 5 Important drug side effects.

# THIRD MEDICAL YEAR (3MB) MODULES

Semester 1	Clinical Phase Semester 2
MD302 Health & Disease II (15)	MD314 Foundations of Clinical Theory (10)
MD304 Global Health and	MD312 Foundations of Clinical
Development (5)	Diagnosis (10)
MD316 Professionalism – Core	MD 313 Foundations of Clinical
Clinical Skills (10)	Management (10)

#### MD 316 PROFESSIONALISM - CORE CLINICAL SKILLS (10 ECTS)

This module builds spirally upon the learning acquired in proximal Professionalism modules in Years 1MB3 and 2MB3. Large group teaching includes a lecture series covering history-taking, physical examination, ECGs and a weekly caseconference. Small group teaching includes clinical reasoning tutorials, practical procedural skills sessions, physical examination workshops, evidence-based medicine workshops and medical imaging. Students rotate through a ward-based clinical clerkship.

#### **Learning Outcomes:**

#### On successful completion of the module the learner will be able to:

- Take a thorough history from a patient and present the findings to a doctor.
- 2 Recognise the physical signs which accompany a wide range of medical conditions.
- 3 Demonstrate an ability to recognise added heart sounds, murmurs and adventitious breath sounds.
- 4 Apply a knowledge of history-taking and physical examination to the analysis of clinical case studies.
- 5 Demonstrate an ability to interpret laboratory investigations, clinical and radiographic images, and 12-lead ECGs.
- 6 Demonstrate a detailed understanding of total cardiovascular risk estimation.
- 7 Critically analyse published research articles, in terms of study objectives, design, methodology, statistics and limitations.
- 8 Demonstrate an ability to perform the following practical procedural/physical examination skills in a simulated clinical environment:
  - Management of choking
  - Use of an automated external defibrillator
  - Digital rectal examination
  - Passage of a nasogastric tube

Examination of the female breast

#### MD 320 Health and Disease II (15 ECTS)

Students will build on the knowledge of H&D module I to understand the common disease processes affecting different organ systems and their clinical implications. They will learn to apply these principles to common clinical problems. Students will build on the knowledge of biomedical science achieved to develop a basic understanding of the principles of forensic medicine. They will became familiar with the role of the coroner, the role of the autopsy and the inquest.

#### **Learning Outcomes:**

#### On successful completion of the module the learner will be able to:

- Explain pathobiology and microbiology of diseases affecting central nervous system including the causes and effects of raised intracranial pressure, stroke, head trauma, infection and neurodegenerative diseases
- Explain patholobiology and microbiology of diseases of the gastrointestinal system including infections, inflammatory conditions, common malabsorptive disorders, benign and malignant diseases
- Discuss diseases of hepatobiliary system and pancreas including infections, inflammatory disorders, inherited diseases, neoplasms and organ failure
- 4 Discuss haematological disorders including anaemias, haematological malignancy and pathology of the lymph node
- 5 Explain pathobiology of the breast and endocrine system; screening services
- 6 Explain pathobiology and microbiology of the skin and musculoskeletal system
- 7 Discuss the functions of public health and health promotion, including topics of epidemiology, healthcare needs assessment, and prevention of diseases related both to individual and population health services and wider determinants of health
- 8 Explain principles and practical aspects of infection control in the health care setting and use of antimicrobial agents
- 9 Discuss the principles of prevention, control and management and aetiology of major infectious diseases
- Explain basic principles of forensic medicine in relation to common causes and signs of injury, disease and death.
- Describe the role of the coroner, recognise the circumstances in which death should be reported to the coroner, discuss the role of the autopsy and the inquest
- Descibe the process of identification of dead, the importance of accurate certification of death and be familiar with the signs of violence and injury/trauma.
- Establish cause of death in a given case, i.e. whether it is natural, accidental, homicidal or suicidal and recognise the signs of unnatural death, including the effects of various drugs and toxins

### MD304 Global Health and Development (5 ECTS)

Global health can be defined as 'health problems, issues and concerns that trascend national boundaries; that may be influenced by circumstances or experiences in other countries; and that are best addressed by cooperative actions and solutions'. This

module provides an introduction to key concepts in understanding the challenges of human health and development from a global perspective. The content focuses on social and economic development as it relates to global health.

## **Learning Outcomes:**

### On successful completion of the module the learner will be able to:

#### 1 Global Burden of Disease

discuss the main global causes of morbidity and mortality globally including major infectious, non-communicable and chronic diseases and injuries; the impact of travel and migration on diseases seen in Ireland;

recognise issues related to global health security and addressing the causes and control of public health risks from epidemic prone diseases and climate change.

## 2 Socioeconomic and Environmental Determinants of Health

demonstrate awareness of social, economic, political, environmental and gender determinants of health discparities;

recognise the impacts of globalisation, poverty and widening socio-economic inequalities as determinants of health;

understand the concepts of development, poverty, economic and social development, and the right to health.

## 3 Health Systems

discuss the components of a health system and how health system strucutures and functions vary;

understand how global trends in healthcare practice, commerce and culture contribute to health and the qulaity aand availability of healthcare;

be aware of the difficulties faced by health services in resource poor settings and the challenges of strengthening health systems, ensuring adequate human resources for health and equitable access.

# 4 Health Implications of Travel and Migration

understand risks associated with travel and migration

describe how travel and trade contribute to the spead of disease

know where to identify sources of information for medical advice for international travellers.

#### 5 Global Health Governance

demonstrate awareness of the complexity of global health goverance including the roles of international agencies such as WHO and other UN agencies, civil society organisations and new partnerships for health; recognise how health related research is conducted and governed.

## 6 Human Rights and Ethics

understand the concepts of respect for the rights and equal value of all people without discrimination, and to provide compassionate care for all;

examine how international legal frameworks imact on health-care delivery in

Ireland; discuss and critique the concept of the right to health;

consider some of the health issues faced by migrants including refugees and asylum seekers;

reocgnise the role of doctors as advocates for patients, including prioritising health needs and adhering to codes of professional conduct.

#### 7 Culture and Health

demonstrate understanding of the importance of culture and its influences on behaviour:

communicate and work effectively with people from different ethnic, religious and social backgrounds.

#### SEMESTER II

## MD314 FOUNDATIONS OF CLININCAL THEORY (10 ECTS)

This module compliments Foundations in Clinical Diagnosis and Clinical Management in preparing the student to acquire and demonstrate the appropriate outcomes and competencies of the Undergraduate Medical Programme, with emphasis on the fundamental principles underlying patient care, diagnosis and management. This module is delivered in Semester 2 of the third medical year as 4-week clinical placements in core clinical specialities. This is supported by structured teaching activities.

#### **Learning Outcomes**

On successful completion of this module the student should be able to:

- 1. Describe the fundamental basic science theory as applied to the clinical diagnosis and management of diseases in the following disciplines:
  - i. Gastro-intestinal Studies: Cardiovascular Studies
  - ii. Respiratory & Peri-operative/Critical Care
  - iii. General Medicine and General Surgery: Acute Care and Care of the Elderly
- 2. Explain the theory of the indications and preparations for surgery, and the management of post-anaesthesia and post-operative complications.
- 3. Explain the theoretical principles of therapeutics as applied in the safe practice of medicine and surgery
- 4. Apply the principles of evidence-based medicine to patient care to a standard of a third year medical student.
- 5. Describe the approach to the management of the unwell patient with initial resuscitation as per best practice.
- 6. Apply the theoretical principles of patient assessment and management in acute and chronic illnesses
- 7. Discuss the principles of ethical reasoning, compliance with the law, and professional behaviour in patient management to a predetermined standard and the importance of incorporating these principles into one's own practice.
- 8. Demonstrate the necessary skills as an effective communicator as part of a multidisciplinary team approach in patient care.

#### MD312 FOUNDATIONS OF CLININCAL DIAGNOIS (10 ECTS)

This module complements Foundations in Clinical Theory and Clinical Management

in preparing the medical student to acquire and demonstrate the outcomes and competencies fo the Undergraduate Medical Programme, with an emphasis on the foundations of patient investigation and diagnosis. This module is delivered in Semester 2 of the third medical year in 4 week clinical placements in core clinical specialities. This is supported by structured teaching activities.

#### **Learning Outcomes**

On successful completion of this module the student should be able to:

- Take a history and perform a physical examination of patients to reach a clinical diagnosis/differential diagnosis, demonstrating critical skills at the level of a third year medical student in the following core and specialty discipline
  - i. Gastro-intestinal Studies: Cardiovascular Studies
  - ii. Respiratory and Peri-operative/Critical Care Medicine: Acute Care: Care of the Elderly
- Develop a structured approach to ordering laboratory and radiological investigations to confirm the most likely diagnosis and develop an understanding as to why these investigations are ordered.
- Evaluate and interpret evidence from laboratory and radiological investigations.
- 4. Discuss the limitations, risks, costs and potential side-effects of investigations and their impact on decision making in clinical diagnosis.
- 5. Apply current evidence based medicine in devising a plan of investigation and interpretation thereof, in clinical diagnosis.
- 6. Communicate effectively in all areas i.e. with patients, colleagues, health care professionals, and in all media i.e. writing, electronically, by phone, in person, in the practice of medicine.
- 7. Describe the basic principles of effective multidisciplinary team working and its role in patient diagnosis.
- 8. Demonstrate the ability under appropriate supervision to perform common procedures including phlebotomy, IV cannulation and ECG recording.
- 9. Apply principles of ethical reasoning, compliance with the law, and professional behaviour in patient management to a predetermined standard.

#### MD313 FOUNDATIONS OF CLINICAL MANAGEMENT T (10 ECTS)

This module complements Foundations in Clinical Theory and Clinical Diagnosis in preparing the medical student to acquire and demonstrate the outcomes and competencies of the undergraduate medical programme, with an emphasis on the principles of patient management and care. This module is delivered in Semester 2 of the third medical year as 4 week clinical placements in core clinical specialities and subspecialities. This is supported by structured teaching activities.

### **Learning Outcomes**

On successful completion of this module the student should be able to:

- 1. Formulate a plan of treatment demonstrating application of principles of patient management in the following disciplines
  - i. Gastro-intestinal Studies: Cardiovascular Studies
  - ii. Respiratory and Peri-operative/Critical Care Medicine: Acute Care: Care of the Elderly
- Demonstrate the knowledge and skills to devise a management plan for surgical patients during the pre, peri and post-operative phases of their

- treatment. This includes demonstrating an understanding of consent, risk assessment and postoperative management.
- Recognise the need and appropriate timing for senior input in the acutely unwell patient.
- 4. Apply the principles of evidence-based medicine to patient care and become familiar with the principle of critically appraising patient treatments.
- 5. Discuss the importance of effective mutidisciplinary team working in patient management.
- 6. Communicate effectively in all areas i.e. with patients, colleagues, health care professionals and in all media i.e. writing, electronically, by phone, in person, in the practice of medicine
- 7. Explain the principles of therapeutics and patient safety to management and evaluate response to precribed medications.
- 8. Demonstrate the critical skills necessary for effective decision making and judgements in patient care to evaluate and adapt management plans.
- Apply the principles of ethical reasoning, compliance with the law, and
  professional behaviour in patient management to a predetermined standard and
  understand the importance of incorporating these principles into one's own
  practice.

# FOURTH MEDICAL YEAR (4MB) MODULES

Semester 1	Semester 2	
MD420 Primary Care and Mental Health (20)		
MD 422 Women's and Children's Health (20)		
MD421 Advanced Clinical Skills (15)		
	MD409 Special Study Module (5)	

### Structure and delivery

Year 4 will consist of year-long modules in Primary Care and Mental Health, Women's and Children's Health and Advanced Clinical Skills and a semester 2 SSM. Teaching and assessment will be delivered both in Galway and in medical academies. PCMH and WCH will consists of 8 week rotating attachments in both Semester 1 and 2. ACS will be threaded throughout the modules. Teaching will take the form of clinical placements, lectures, small group tutorials, case studies, case presentations, self-directed learning, communication and clinical skills teaching via observed and video based teaching.

#### MD420 PRIMARY CARE AND MENTAL HEALTH (20 ECTS)

This module introduces students to the principles and practice of medicine in the community, as well as the knowledge and skills to assess, diagnose and manage the major mental illnesses. During this module students will also acquire knowledge and skills to diagnose and manage diseases of the ear, nose, throat, head and neck. Students will learn about biopsychosocial risk factors for a range of illnesses presenting to mental health and community services and their multidisciplinary

#### **Learning Outcomes**

On successful completion of this module the student should be able to:

- 1. Create and justify case based management plans for primary care and mental illness presentations, which are evidence based and will provide high quality holistic care effectively, within available resources.
- 2. Recognise and theoretically manage common mental illness, primary care and otorhinolaryngology emergencies.
- 3. Describe the clinical presentations, epidemiology, aetiology, differential diagnosis and management of common illnesses presenting to mental health services, primary care services or otorhinolaryngology services.
- 4. Describe the principal mechanisms of action and appropriate use of common general practice and psychotropic medications, the principles of the main forms of psychotherapy and their appropriateness for different patients with mental illness.
- 5. Demonstrate an awareness of the impact of mental or primary care illness on the patient, their family and the doctor, the resources available to help those with chronic enduring illnesses, the operation and respective roles of multidisciplinary teams, and indications for referral to specialist services.
- 6. Apply effectively knowledge of principles of health promotion and disease prevention in mental health and primary care medicine in the Irish context, including maximising the social integration of patients with mental health problems and reducing the negative impact of stigma.
- 7. Demonstrate awareness of the ethical, regulatory and legal frameworks within which the psychiatrist and general practitioner operate, in relation to such issues in their clinical practice.

### MD422 WOMEN'S AND CHILDREN'S HEALTH (20 ECTS)

The purpose of the WCH module is to provide students with a solid theoretical foundation in the health of women and children, in addition to the recognition and management of maternal or paediatric illness. Whilst the module is primarily delivered in an acute care setting, GPs share antenatal care, are increasingly involved in the care of children with chronic illness and are often the initial source of contact for the sick child or mother. A solid foundation in WCH is highly valued.

## **Learning Outcomes**

On successful completion of this module the student should be able to:

- Describe the clinical presentations, epidemiology, aetiology, differential diagnosis and management of common illness presenting in women and children.
- Diagnose, create and justify management plans for common health presentations in the infant, paediatric, obstetric and gynaecological context, which are evidence based and would provide high quality holistic care effectively, within available resources.
- 3. Diagnose and theoretically manage emergency presentations in the infant, paediatric, obstetric and gynaecological context, which is evidence-based and would provide high care effectively.
- 4. Apply appropriate models of care in the maternal and child health context, in a theoretically informed way, demonstrating a sound knowledge of social and psychological aspects of health and illness (e.g. antenatal care, management of

- labour, chronic illness in childhood).
- 5. Apply effectively knowledge of principles of health promotion and disease prevention to case presentations in maternal and child health context. (e.g. childhood immunisation and cervical screening programmes).
- 6. Demonstrate knowledge of current methods of epidemiological data collection and use in the maternal and child health context. (e.g. perinatal epidemiological data collection and its application to everyday clinical practice.)
- Apply knowledge of the ethical, regulatory and legal frameworks within which
  the paediatrician and obstetrician/gynaecologist operate, in relation to such
  issues in their clinical practice.
- 8. Demonstrate attainment of her/his personal learning objectives as outlined in portfolio at commencement of module.

#### MD 421 ADVANCED CLINICAL SKILLS (15 ECTS)

A Clinical Skills Module that will combine the teaching of communication skills, examination skills and basic point of care investigative testing in the child health, women's health, community and mental health contexts. The student will also learn about differential diagnosis, effective patient-doctor managment planning, emergency care and patient safety in these contexts.

#### **Learning Outcomes:**

On successful completion of the module the learner will be able to:

- 1 Take a history from people of relevant specialties, across a wide range of different scenarios, showing a patient-centred, sensitive, multicultural, structured and thorough approach with demonstration of principles of good communication.
- 2 Undertake a physical examination/mental state examination that are systems-based; appropriate for patient's age, gender and state of mental and physical health, in a rigorous, sensitive, efficient and systematic manner.
- 3 Demonstrate awareness of accepted professional attitude and behaviour with patients, carers and colleagues.
- 4 Evaluate and analyse common investigative test results, and interpret any positive or negative findings therein, and exhibit a further ability to request further appropriate investigations, in the specialty subjects
- 5 Synthesise competently, in the specialist clinical context, all available information gathered from history, examinations and basic investigate testing and formulate a reasonable working diagnosis and differential diagnosis, whilst recognising life threatening conditions that require immediate treatment.
- 6 Explain effectively the diagnosis/prognosis and agree a management plan with the patient, including reference to appropriate additional sources of expertise and information.

#### MD409 SPECIAL STUDY MODULE (5 ECTS)

Special study modules are self selected project components of individual and

group study of scenes that advance students knowledge and skills in topics and themes that are relevant to their personal and professional development as doctors. Students will be asked to select/propose an area of study accompanied by a detailed learning plan. Following an initial screening students will be assigned dedicated supervisors who will help to develop each proposal into a realistic programme over 2 semesters

## **Learning Outcomes:**

On successful completion of the module the learner will be able to:

- Demonstrates a deep and focused knowledge about a particular topic or subject area that relates to his/her personal and/or professional development
- 2 Synthesizes the knowledge skills and experience gained within the period of the SSM in the form of a written presentation assignment/project
- 3 Demonstrates the ability to manage a distributed workload leading the production of a high quality assignment/project and evidence of deep learning in a particular subject

# FIFTH MEDICAL YEAR / FINAL YEAR (5MB3) MODULES

#### Year 5

Semester 1	Semester 2	
MD542 Advanced Clinical Theory (20)		
MD540 Advanced Clinical Diagnosis (20)		
MD541 Advanced Clinical Management (20)		

The final academic year is composed of three year -long modules as listed above. In g en er al t er m s i n the first Semester of the Final Medical Year programme (Semester 5.1) the student will complete a number of strands in core clinical specialties, and in the second semester a number of strands in sub-specialties plus/minus core specialties. Each strand is delivered in a 3 or 4- week rotating blocks over the course of Semester 5.1 and Semester 5.2, at both the Galway University Hospitals and the Affiliated Hospitals. The teaching of Professionalism is incorporated into each strand. Each of the modules is linked to learning objectives, which together reflect and closely follow the outcomes for undergraduate medical training as specified by the Medical Council.

#### MD542 ADVANCED CLINICAL THEORY (20 ECTs)

This module compliments Advanced Clinical Diagnosis and Advanced Clinical Management in preparing the graduating doctor to acquire the outcomes and competencies of the Undergraduate Medical Programme, with emphasis on the theoretical principles underlying patient care, diagnosis and management. Delivery is in semester & 2 through clinical placements in core clinical specialities and subspecialities and through structured teaching activities. All learning outcomes need to be attained to the standard of a junior doctor prepared for internship.

#### Learning outcomes

On successful completion of this module the student should be able to:

- Apply the principles of basic sciences to the clinical diagnosis and management of diseases.
- 2. Evaluate patients risks in pre and post operative settings.
- 3. Apply the principles of therapeutics to effective and safe patient management.
- 4. Apply the principles of evidence-based medicine to patient care.
- Formulate a plan for the assessment and management of an acutely unwell patient.
- 6. Apply the principles of patient assessment and management in acute and chronic illnesses.
- 7. Apply principles of basic sciences to the prescription of oyxgen, fluids and blood products
- 8. Follow hospital guidelines and protocols.

#### MD540 ADVANCED CLINICAL DIAGNOSIS (20 ECTs)

This module complements Advanced Clinical Theory and Advanced Clinical Management in preparing the graduating doctor to acquire and demonstrate the outcomes and competencies for the Undergraduate Medical Programme, with emphasis on the principles of patient investigation and diagnosis. The module is delivered in semester 1 & 2 through clinical placements in core clinical specialities and subspecialities and by teaching activities. All learning outcomes need to be attained to the standard of a junior doctor prepared for internship.

# **Learning Outcomes**

On successful completion of this module the student should be able to:

- 1. Formulate a clinical diagnosis/differential diagnosis, based on clinical skills and judgement to the level of a junior doctor prepared for internship.
- Select appropraiate investigations for clinical diagnosis taking account of the limitations and risks.
- 3. Evaluate and interpret evidence from laboratory and radiological investigations.
- 4. Apply the principles of evidence-based medicine to clincial diagnosis.
- Communicate effectively with patients, families, health care professionals in all media (e.g. in person, writing, electronically, by phone) in the practice of medicine.
- 6. Work effectively as part of a multi-disciplinary team (e.g. closed loop communication, teamwork, leadership, situation awareness, decision-making) utilising all available resources, getting the job done.
- 7. Apply the principles of ethical reasoning, compliance with teh law, and professional behaviour in patient care.
- 8. Document medical data in a logical and legible manner, consistent with accurate patient recorde adn legal requirements.
- 9 Recognise and report potentially life threatening iatrogenic conditions (e.g. adverse drug reactions, transfusion reactions, closing errors and allergic reactions).

#### MD541 ADVANCED CLINICAL MANAGEMENT

This module complements Advanced Clinical Theory and Advanced Clinical

Diagnosis in preparing the graduating doctor to acquire and demonstrate the outcomes and competencies of the Undergraduate Medical Programme, with an emphasis on the principles of patient management and care. This module is delivered in semester 1 & 2 through clinical placements in core clinical specialities and subspecialities and supported by structured teaching activities. All outcomes need to be attained to the standard of a junior doctor prepared for internship.

#### **Learning Outcomes**

On successful completion of this module the student should be able to:

- Formulate a clinical management plan for acute and non-acute patients based on patient assessment and investigations.
- Manage pre, peri and post-operative patients including consent, risk assessment and postoperative.
- 3. Be situation aware and call for senior help in a timely manner
- 4. Re-assess and re-evaluate patient response to treatment, prescribed medications and management plans in ongoing patient care.
- 5. Work effectively as part of a multi-disciplinary team (e.g. close-loop communication, teamwork, leadership, situation awareness, decision-making) utilising all available resources.
- Communicate effectively in all areas i.e. with patients, colleagues, health care
  professionals, and in all media e.g. writing, electronically, by phone, in person,
  in the practice of medicine
- 7. Use clinical judgement and decision-making skills in the ongoing clinical management of patients.
- 8. Apply principles of ethical reasoning, compliance with the law, and professional behaviour in patient care
- 9. Perform procedural skills required to manage patients
- 10. Prescribe accurately and safely in all manner of prescriptions e.g. in-patient charts, discharge prescriptions, out-patient prescriptions.

# PHD DEGREE WITHIN THE UNDERGRADUATE MEDICAL PROGRAMME

GY501 Medicine (8 year)

From September 2012 students entering the Medical programme have the opportunity also to engage a PhD degree through a period of dedicated research. This is done on an integrated schedule, so that at the end of a period that is likely to involve eight years successfully completed, both the Medical degree and the PhD are conferred.

Students of the Medical programme who are interested will undergo a selection process at the mid-point of their medical studies, which includes an assessment of their academic performance to date and an interview. Limited financial support is provided for the additional three years. The programme and the research themes are agreed at the commencement of the research.

<sup>&#</sup>x27;All University Calendars are available online on the NUI Galway website: <a href="http://www.nuigalway.ie/">http://www.nuigalway.ie/</a>
The detail herein is correct at the time of printing. Change may be approved from time to time and these are incorporated into the online version of the Calendar which may therefore be treated as the Primary Reference.

# BACHELOR OF SCIENCE IN MEDICAL SUBJECTS

## Refer to General regulations for the Degrees of MB BCh BAO (NFQ Level 8

Ref; www.nfq.ie)

Students can, if they wish, undertake a B.Sc. Degree in Anatomy, Physiology, Biochemistry, or Pharmacology.

A period of additional study outside of the Medical Degree is required, in general conformity with the regulations for the award of the B.Sc. Degree, as may be prescribed. Admission to the B.Sc. degree programme is subject to the approval of the relevant head of discipline.

The First Medical Examination of the Degree of MB BCh BAO shall be accepted as equivalent to the First University Examination in Science in the case of medical students who propose to proceed to a B.Sc. Degree. Such students are eligible to take the B.Sc. Honours Degree only in the professional subjects, Anatomy, Physiology, Biochemistry, Pathology, Bacteriology and Pharmacology. The standard of entry to the degree shall be Honours at the First, Second or Third University Medical Examination, as appropriate, in the relevant subject.

In addition to attending the course in the professional subjects in the Second and Third Medical Years (and the Fourth Medical Year in the case of Bacteriology and Pathology), students shall be required to take special courses for one session in the subject of the Honours B.Sc. Degree.

Candidates holding the degrees of MB BCh, who wish to proceed subsequently to the B.Sc. Honours Degree in one of the Medical subjects, must have attained Honours standard in that subject, or a related subject, at the last Medical Examination in which he/she sat that subject, or the related subject, and be recommended by the Professor of the subject.

## B.MED.SC.

# Refer to General regulations for the Degrees of MB BCh BAO (NFQ Level 8 Ref; <a href="www.nfq.ie">www.nfq.ie</a>)

The B.Med.Sc. may be awarded to students who have completed the programmes and examinations in the following subjects: Anatomy, Physiology, Biochemistry, Pathology, Bacteriology, Pharmacology and Medical Informatics & Medical Education.

To be eligible for award of the degree candidates must present a minor thesis of not more than 2,000 words embodying a review of the literature or a research project in one of the above subjects.

Students in the Fourth and subsequent years who do not intend proceeding to the MB, BCh, BAO and who wish to be considered for the B.Med.Sc. may be accepted subject to undertaking a period of three months under the Head of one of the specified subjects and submission of a thesis as described above.

# SCHOOL OF NURSING & MIDWIFERY

The School of Nursing and Midwifery is situated on-campus in a purpose built building. The philosophy underpinning programme design and delivery is student-focused and aims to inculcate values of caring, dignity and respect. The School has a reputation for being vibrant and dynamic and its purpose is to develop innovative, practice focused programmes and to undertake quality research of local, national and international relevance. There are two broad goals: to prepare graduates who are analytical, knowledgeable, responsive and highly skilled and to undertake quality research that effects change and makes a difference to client care and service delivery.

# Undergraduate Programmes (NFQ Level 8 awards; ref. www.nfq.ie) provided include

Bachelor of Nursing Science (General)
Bachelor of Nursing Science (Psychiatric)
Bachelor of Midwifery Science.

#### **Postgraduate Programmes**

Professional Credit Award Certificate in Nursing (Nurse/Midwife Prescribing)

Master/Postgraduate Diploma in Health Sciences (Emergency Care)

Master/Postgraduate Diploma in Health Sciences (Advanced Practice with

Prescribing)

Postgraduate Diploma in Nursing (Education)

Master/Postgraduate Diploma inHealth Sciences (Gerontology)

Master/Postgraduate Diploma in Health Sciences (Palliative Care)

Master/Postgraduate Diploma in Health Sciences (Children's Palliative/Complex

Care)Master/Postgraduate Diploma in Health Sciences (Wound Healing and Tissue Repair)

Master/Postgraduate Diploma in Health Sciences (Oncology)

Master of Health Sciences (Nursing)

Master of Health Sciences (Nursing/Midwifery Education)

Master/Postgraduate Diploma in Health Sciences (Public Health Nursing)

Higher Diploma in Midwifery

Master/Postgraduate Diploma in Health Sciences (Acute Medicine)

Master/Postgraduate Diploma in Health Sciences (Intensive Care)

Structured Master of Health Sciences (Specialist Nursing)

# General regulations for Undergraduate Degrees in Nursing & Midwifery (NFQ Level 8 Ref; <a href="https://www.nfq.ie">www.nfq.ie</a>)

#### EXPLANATORY NOTE

The Undergraduate Degree Programmes of the School of Nursing and Midwifery at National University of Ireland, Galway are four-year Honours Degrees, which award the: Bachelor of Nursing Science (General), Bachelor of Nursing Science (Psychiatric) and Bachelor of Midwifery Science.

Regulations may be altered periodically. The regulations applying to students are generally those which applied to their programme at the time in which they commenced their studies, unless otherwise specified in the General Regulations hereunder.

These Regulations form a total, individual clauses may be conditioned or varied by the provision of other clauses and cannot be applied in isolation.

The Regulations may also be supported by, or refer to other publications such as the University Undergraduate Prospectus (available on request or by following on-line links for Future Students from <a href="www.nuigalway.ie">www.nuigalway.ie</a>), and the General Calendar of the University <a href="https://www.nuigalway.ie/calendar/">https://www.nuigalway.ie/calendar/</a>

I. Entry to the Degree is limited and is based competitively on the results of the Irish Leaving Certificate examination or its equivalent. The minimum requirement is matriculation, as set out in the Undergraduate Prospectus. [refer Matriculation Requirements and Additional Requirements in the University Undergraduate Prospectus]. Requirements arising where the results being presented are from any examination other than the Irish Leaving Certificate are also set out in the Prospectus.

**Note:** The competitive cut-off may be significantly higher than the Matriculation standard.

All Applications are processed through the Central Applications Office. (www.cao.ie)

II. Candidates who do not meet the Ordinary Matriculation Requirements as set out in II above, may matriculate on grounds of Mature Years [refer Matriculation on Mature Years in the University Undergraduate Prospectus].

Note: All Applications are processed through the Central Applications Office. (refer to www.cao.ie)

All applications must be successful at the Nursing Careers Centre (NCC) written assessment before being considered for an offer as a mature applicant (refer to www.nurs<u>ingcareers.ie). However</u>, success at the NCC written assessment does not guarantee an offer of a place.

- **III.** Every student must satisfy Garda Vetting and Medical Clearance requirements. This is organised through the Undergraduate Admissions Office Failure to meet the Garda Vetting requirements results in the student being removed from the Degree programme.
- **IV.** Registration is carried out by the University. Students must be registered in their Degree programme not later than fifteen days after the commencement of Programmes.
- V. To obtain the degrees of Bachelor of Nursing Science or Bachelor of Midwifery Science as set out in the Explanatory Note (above);
  - (a) Students must pursue programmes of Study extending over a period of not less than four Academic Years and must pass the various Examinations prescribed below, meeting the requirements as set out elsewhere in these Regulations, in the Marks and Standards of the School

http://www.nuigalway.ie/academic records/syllabus/marks standards. html) and in Student Handbooks where necessary.

- (b) The Examinations are as follows:
  - (1) The First University Examination in their programme.
  - (2) The Second University Examinations in their programme.
  - (3) The Third University Examination in their programme.
  - (4) The Fourth University Examination, being the Final Examination in their programme.

Note: The duration of the programme cannot be shortened; no part of the Final Examination may be taken before the end of 8 Semesters of professional education

There is a time-limit on the completion of the degree; while a student who fails their yearly examination in a particular year has the right to re-sit that/those examination(s) the following year [refer par. VI to X below], the total time allowed for the successful completion of the four University Examinations is 8 years or 16 semesters in total.

- **VI.** The First University Examination must be passed completely before a student can proceed to the Second Year.
  - (a) To enter this Examination, the student must have satisfied the attendance requirements on the First Year Programme, including completion of all coursework and required clinical placement(s). Exceptions may only be permitted by the Head of School where this is recommended by the programme on professionally verified grounds of student ill-health, close family bereavement or of significant personal difficulties.
  - (b) The Examination will comprise examinations on Semester 1 modules in

- the Winter Examination Session and examinations on the Semester 2 modules in the Summer Examination Session. Repeat examinations, for both Semester 1 and Semester 2 modules, if necessary will be held, during the Autumn Examination Sessions.
- (c) Failure of the Examination in full or in part at the repeat examination will require the student to re-sit the Examination in the following year.
- (d) From September 2013 it will not be possible to compensate marks from one module to another for the purpose of passing failed modules by compensation in the First University Examination in the following programmes: Bachelor of Nursing Science (General), Bachelor of Nursing Science (Psychiatric), Bachelor of Midwifery Science.
- (e) The First Year examination must be completed within two years of entering First Year.

# **VII.** The Second University Examination must be passed completely before a student can proceed to the Third Year.

- (a) To enter this Examination, the student must have satisfied the attendance requirements on the Second Year Programme, including completion of all coursework and required clinical placements(s). Exceptions may only be permitted by the Head of School where this is recommended by the programme on professionally verified grounds of student ill-health, close family bereavement or of significant personal difficulties.
- (b) The Examination will comprise examinations on Semester 1 modules in the Winter Examination Session and examinations on the Semester 2 modules in the Summer Examination Session. Repeat examinations, for both Semester 1 and Semester 2 modules, if necessary will be held, during the Autumn Examination Sessions.
- (c) Failure of the Examination in full or in part at the repeat examination will require the student to re-sit the Examination in the following year Provided that this will not breach the overall time-limit as set out in Par. V above. In such a case the student will be unable to continue.
- (d) From September 2013 it will not be possible to compensate marks from one module to another for the purpose of passing failed modules by compensation in the Second University Examination in the following programmes: Bachelor of Nursing Science (General), Bachelor of Nursing Science (Psychiatric), Bachelor of Midwifery Science.
- (e) The Second Year examination must be completed within two years of entering Second Year.

# **VIII.** The Third University Examination must be passed completely before a student can proceed to the Fourth Year.

(a) To enter this Examination, the student must have satisfied the attendance requirements on the Third Year Programme, including completion of all coursework and required clinical placements(s). Exceptions may only be permitted by the Head of School where this is recommended by the programme on professionally verified grounds of

- student ill-health, close family bereavement or of significant personal difficulties.
- (b) The Examination will comprise examinations on Semester 1 modules in the Winter Examination Session and examinations on the Semester 2 modules in the Summer Examination Session. Repeat examinations, for both Semester 1 and Semester 2 modules, if necessary will be held, during the Autumn Examination Sessions.
- (c) Failure of the Examination in full or in part at the repeat examination will require the student to re-sit the Examination in the following year provided that this will not breach the overall time-limit as set out in Par. V above. In such a case the student will be unable to continue.
- (d) From September 2013 it will not be possible to compensate marks from one module to another for the purpose of passing failed modules by compensation in the Third University Examination in the following programmes: Bachelor of Nursing Science (General), Bachelor of Nursing Science (Psychiatric), Bachelor of Midwifery Science.
- (e) The Third Year examination must be completed within two years of entering Third Year.
- IX. The Fourth and Final University Examination must be passed completely before a student can be awarded the Bachelor of Nursing Science or Bachelor of Midwifery Science
  - (a) To enter this Examination, the student must have satisfied the attendance requirements on the Final Year Programme, including completion of all coursework, required clinical placement(s) and clinical hours. Exceptions may only be permitted by the Head of School where this is recommended by the programme on professionally verified grounds of student illhealth, close family bereavement or of significant personal difficulties.
  - (b) The Examination will comprise examinations on Semester 1 modules in the Winter Examination Session and examinations on the Semester 2 modules in the Summer Examination Session. Repeat examinations, for both Semester 1 and Semester 2 modules, if necessary will be held, during the Autumn Examination Sessions.
  - (c) Failure of the Examination in full or in part at the repeat examination will require the student to re-sit the Examination in the following year Provided that this will not breach the overall time-limit as set out in Par. V above. In such a case the student will be unable to continue.
  - (d) From September 2013 it will not be possible to compensate marks from one module to another for the purpose of passing failed modules by compensation in the Fourth University Examination in the following programmes: Bachelor of Nursing Science (General), Bachelor of Nursing Science (Psychiatric), Bachelor of Midwifery Science.
  - (e) The Final Year examination must be completed within two years of entering Final Year.
  - (f) To be awarded the Degree students must meet the requirements of An

- Bord Altranais agus Cnaimhseachais na hÉireann (Nursing and Midwifery Board of Ireland) in full.
- **X** (a) The Award of the Bachelor of Nursing Science or Bachelor of Midwifery Science Degree will require successful completion of all years of the Undergraduate Programme as set out in Rules V to IX (inclusive) above.
  - (a) The calculation of the overall degree results awarded, including the calculation of Honours (if any), will be based on 30% of the aggregate mark obtained at the 3<sup>rd</sup> Year examinations, and 70% of the aggregate obtained at the 4<sup>th</sup> year examinations.
- XI. Any student failing to pass the Examination indicated in Rules VI, to IX (inclusive) above within the specified intervals will be ineligible to proceed further with his/her nursing / midwifery studies. Exceptions to this rule will be granted by the Academic Council, on the recommendation of the College of Medicine, Nursing and Health Sciences, only for very serious reasons.
- XII. Re-attendance may be required from any student whose attendance is considered to have been unsatisfactory, or who has not attained a sufficient standard of knowledge as judged by examination, competency or progressive assessment. Satisfactory attendance is generally regarded as attendance and participation in not less than 70% of the taught sessions provided. Students who have not achieved satisfactory attendance may not be admitted to examinations.
- XIII Given that these programmes award a professional qualification and lead to professional registration, there are specific requirements for the completion of clinical education and training components of the programme, which include also a prescription on the number of opportunities allowed to repeat/re-sit these components. When students have not successfully completed these clinical components of their degree programme, in total or in part, including their practice education, clinical theory, or other such components as are required, and have exhausted all repeat-re-sit options for so doing, they are not eligible for the award of the B.Sc. in their designated nursing/midwifery programme but may, subject to the decision of the Head of School on the recommendation of the programme, transfer to complete the non-clinical degree, the B.Sc (Heath Studies) as outlined in the Paragraph XIV below.
- XIV Students who are rendered ineligible for the award of the B.Sc in their designated Nursing/Midwifery programme by the provisions of ParagraphXIII above, may be offered the option of transferring to complete the non-clinical award of the B.Sc (Health Studies). This programme also an Honours (NFQ Level \* award) will include all of the modules of the BSc in their original nursing/midwifery programme except the practice placement, and or clinical practice education modules. These will all be substituted by independent study

module(s) which will constitute a non-clinical degree route. Students may be transferred into the non-clinical award route in their Final Year. The decision to transfer must be approved by the Head of School on the recommendation of the programme, only in the circumstances described in Paragraph XIII above.

# BACHELOR OF NURSING SCIENCE (GENERAL)

Refer to General regulations for the Undergraduate Degrees in Nursing & Midwifery (NFQ Level 8 Ref; <a href="https://www.nfq.ie">www.nfq.ie</a>) Paragraphs to I to XII above

This programme leads to the award of Bachelor of Nursing Science (General) and registration in the General division of the Nurse Register maintained by Bord Altranais agus Cnáimhseachais na hÉireann (Nursing and Midwifery Board of Ireland). The programme is offered in partnership with the Health Service Executive, West.

#### PROGRAMME STRUCTURE

The Bachelor of Nursing Science Programme is a four-year academic programme, which is delivered over two semesters for the first three years. Year four of the programme comprises of clinical/theory instruction in semester one and a clinical internship which occurs in year four, semester two, to run over 36 weeks. The theoretical component comprises of lectures, seminars, workshops, experiential learning, skills' training and reading time. The clinical practice placements are linked to the theoretical input. Clinical practice modules require students to complete clinical placements throughout the Health Service Executive region. While on clinical placements students will be supervised by a named preceptor. In accordance with Bord Altranais agus Cnáimhseachais na hÉireann (Nursing and Midwifery Board of Ireland) the total requirements of the programme are 144 weeks. During clinical internship students will be paid a salary.

#### PROGRAMME CONTENT

Theoretical content aims to provide students with the knowledge necessary to underpin their professional practice. The following key themes will be addressed: Biological Sciences, providing students with a basis for understanding the structure and function of the human body in health and ill-health.

Social Sciences, introducing students to the disciplines of sociology, psychology, philosophy and law as applied to nursing practice. The overall aim is to provide students with an understanding of what influences behaviour in both personal and professional contexts

Nursing practice, including an exploration of the nature and goals of nursing, the nursing management of the ill adult and specialist client groups and preparation for practice. Later in the programme the focus is on enabling students to make the transition from student nurse to registered practitioner.

Research / Informatics, introducing students to the concepts and principles of research and its use in clinical practice. Students will also have an opportunity to develop competency in basic information technology skills.

Health promotion, introducing students to the principles and skills of promoting health.

Leading & Developing practice – focuses on exploring the transition from student

nurse to that of registered practitioner, further developing students skills in care provision, examining issues around leadership, management and clinical governance in relation to factors that affect the quality of care for clients.

Clinical modules provide students with the opportunity to develop their nursing skills in the reality of practice.

#### ASSESSMENT AND REGULATIONS

Each year both the theoretical and clinical components of the programme will be assessed. Modules are assessed by means of a combination of written examinations and coursework; this includes both theoretical and clinical modules. Students' clinical performance/progress is assessed on an on-going basis while on placements to determine competency. To be deemed competent students must attain the level specified in the Assessment of Competency Tool, based on the Domains of Competency identified by Bord Altranais agus Cnáimhseachais na hÉireann (Nursing and Midwifery Board of Ireland). Students must pass both theoretical, clinical and competency assessments to be deemed to have passed the year. Students will not be permitted to proceed to the next year of the programme until they have met all the requirements specified in the Marks and Standards. Students who fail to proceed must pass within one further year or they will be required to withdraw from the programme.

To pass the programme overall students must pass the required theoretical, practice and competency assessments. In addition, to be awarded the degree and to register as a general nurse, students must meet the requirements for registration identified by Bord Altranais agus Cnáimhseachais na hÉireann (Nursing and Midwifery Board of Ireland). The calculation of the overall degree results awarded, including the calculation of Honours (if any), will be based on 30% of the aggregate mark obtained at the 3<sup>rd</sup> Year examinations, and 70% of the aggregate obtained at the 4<sup>th</sup>

year examinations. A full account of programme regulations, compensation and credits is provided in the Marks and Standards.

#### ENTRY CRITERIA

Applicants must meet the following criteria to be eligible for admission to the Bachelor of Nursing Science (General) programme.

Applicants must be at least 17 years of age on 15 January of the year of entry onto the programme.

The minimum educational requirements for admission to the programme is a pass in the Leaving Certificate examination, having obtained a minimum of grade C3 in higher level papers in any two of the subjects listed below and a minimum of grade D3 in ordinary or higher level papers in the other four subjects.

Irish (not Foundation Level)

English

Mathematics (not Foundation Level)

A laboratory science subject (Chemistry, Physics, Biology, Physics and Chemistry

(joint), Agricultural Science)

Any other two subjects acceptable for matriculation registration purposes.

Or

Have second level education qualifications equivalent to the above

An applicant who does not meet the education requirements and who is 23 years of age or over on 15 January in the year of application may apply as a mature student. A separate pathway is available for mature students.

Successful applicants must be of good mental and physical health and free from any defect or abnormality which would interfere with the efficient performance of their role as nurse. All successful applicants are required to have medical screening and be deemed fit to undertakethis role.

#### SELECTION CRITERIA

Selection of applicants meeting the minimal educational requirements is on the basis of points obtained in the Leaving Certificate (or equivalent). Applicants apply through the CAO. A separate pathway applies to mature applicants, that is, those who are applying on the grounds of mature years only and not on the basis of educational achievement. Further details are available from the Nursing Careers Centre, Bord Altranais agus Cnáimhseachais na hÉireann (Nursing and Midwifery Board of Ireland).

# BACHELOR OF NURSING SCIENCE (PSYCHIATRIC)

# Refer to General regulations for the Undergraduate Degrees in Nursing & Midwifery(NFQ Level 8 Ref; <a href="https://www.nfq.ie">www.nfq.ie</a>)

This programme leads to the award of Bachelor of Nursing Science (Psychiatric) and registration in the Psychiatric division of the Nurses Register maintained by Bord Altranais agus Cnáimhseachais na hÉireann (Nursing and Midwifery Board of Ireland).

#### PROGRAMME STRUCTURE

The Bachelor of Nursing Science Programme is a four-year academic programme, which is delivered over two semesters for the first three years. Year four of the programme comprises of clinical/theory instruction in semester one and a clinical internship which occurs in year four, semester two, to run over 36 weeks.

Students are required to be in clinical practice for 39 hours per week over the internship period. Students are paid a salary during their clinical internship. In total, students will complete 24 theoretical modules and 6 clinical modules. Clinical modules will require students to complete clinical placement throughout the Health Service Executive West. While on clinical internship students will be supervised by a named preceptor, who is a Registered Nurse. Clinical modules require students to be in clinical practice for 35 hours per week. Students are supernumerary while on placement, that is, when not on clinical internship.

#### PROGRAMME CONTENT

Theoretical content aims to provide students with the knowledge necessary to underpin their professional practice. The following key themes will be addressed:

- Biological Sciences, providing students with a basis for understanding the structure and function of the human body in health and ill-health.
- Social Sciences, introducing students to the disciplines of sociology, psychology, philosophy and law as applied to nursing practice. The overall aim is to provide students with an understanding of what influences behaviour in both personal and professional contexts
- Nursing practice, including an exploration of the nature and goals of psychiatric nursing, the nursing management of the mentally ill person and preparation for practice. Later in the programme the focus is on enabling students to make the transition from student nurse to registered practitioner.
- Research / Informatics, introducing students to the concepts and principles of research and its use in clinical practice. Students will also have an opportunity to develop competency in basic I.T. skills.
- Mental health promotion, introducing students to the principles and skills of promoting mental health.
- Leadership in psychiatric nursing practice, students will examine factors that affect the management of care and develop an understanding of theories of leadership and management of change.

Clinical modules provide students with the opportunity to develop their nursing skills in the reality of practice.

#### ASSESSMENT AND REGULATIONS

Each year both the theoretical and clinical components of the programme will be assessed. Modules are assessed through a combination of written examinations and coursework; this includes both theoretical and clinical modules. Students' clinical performance/progress is assessed on an on-going basis while on placements to determine competency. To be deemed competent students must attain the level specified in the Assessment of Competency Tool, based on the Domains of Competency identified by Bord Altranais agus Cnáimhseachais na hÉireann (Nursing and Midwifery Board of Ireland). Students must pass both theoretical, clinical and competency assessments to be deemed to have passed the year. Students will not be permitted to proceed to the next year of the programme until they have met all the requirements specified in the Marks and Standards. Students who fail to proceed must pass within one further year or they will be required to withdraw from the programme.

To pass the programme overall students must pass the required theoretical, practice and competency assessments. In addition, to be awarded the degree and to register as a psychiatric nurse, students must meet the requirements for registration identified by Bord Altranais agus Cnáimhseachais na hÉireann (Nursing and Midwifery Board of Ireland). The calculation of the overall degree results awarded, including the calculation of Honours (if any), will be based on 30% of the aggregate mark obtained at the 3<sup>rd</sup> Year examinations, and 70% of the aggregate obtained at the 4<sup>th</sup> year examinations. A full account of programme regulations, compensation and credits is provided in the Marks and Standards.

#### ENTRY CRITERIA

Applicants must meet the following criteria to be eligible for admission to the Bachelor of Nursing Science (Psychiatric) programme.

- Applicants must be at least 17 years of age on 15 January of the year of entry onto the programme
- The minimum educational requirements for admission to the programme is a pass in the Leaving Certificate examination, having obtained a minimum of grade C3 in higher level papers in any two of the subjects listed below and a minimum of grade D3 in ordinary or higher level papers in the other four subjects.
  - Irish (not Foundation Level)
  - English
  - Mathematics (not Foundation Level)
  - A laboratory science subject (Chemistry, Physics, Biology, Physics and Chemistry (joint), Agricultural Science)
  - Any other two subjects acceptable for matriculation registration purposes **OR**
  - Have second level education qualifications equivalent to the above

An applicant who does not meet the education requirements and who is 23 years of age or over on 15 January in the year of application may apply as a mature student. A separate pathway is available for mature students.

Successful applicants must be of good mental and physical health and free from any defect or abnormality which would interfere with the efficient performance of their role as nurse. All applicants must undertake a medical and be deemed fit to undertake this role.

#### SELECTION CRITERIA

Selection of applicants meeting the minimal educational requirements is on the basis of points obtained in the Leaving Certificate (or equivalent). Applicants apply through the CAO. A separate pathway applies to mature applicants, that is, those who are applying on the grounds of mature years only and not on the basis of educational achievement. Further details are available from the Nursing Careers Centre, Bord Altranais agus Cnáimhseachais na hÉireann (Nursing and Midwifery Board of Ireland).

#### BACHELOR OF MIDWIFERY SCIENCE

# Refer to General regulations for the Undergraduate Degrees in Nursing & Midwifery (NFQ Level 8 Ref; <a href="www.nfq.ie">www.nfq.ie</a>)

On completion of this programme students are awarded the Bachelor of Midwifery Science and are eligible to apply to register as a midwife with Bord Altranais agus Cnáimhseachais na hÉireann (Nursing and Midwifery Board of Ireland). The programme is offered in partnership with the. Saolta University Health Care Group.

#### PROGRAMME CONTENT

Theoretical content aims to provide students with the knowledge necessary to underpin their professional practice. The following key themes are addressed:

Biological Sciences: Provides students with a basis to understand the structure and functioning of the human body, with a specific emphasis on the knowledge necessary to underpin midwifery practice.

Social Sciences: Introduces students to psychology, sociology, and philosophy and its application to midwifery practice. The overall aim is to give students an understanding of what influences behavior in both personal and professional contexts.

Midwifery Skills: Focuses on the different skills required to practice as a midwife.

Midwifery Studies: Provides students with the knowledge of how to care for a woman and her baby experiencing a normal pregnancy, childbirth and puerperium and the woman and her baby experiencing complications during pregnancy, childbirth and the puerperium.

Health Promotion: Introduces students to the principles of health and health promotion in relation to midwifery practice.

Research: Gives students an in-depth understanding of research methods and its application to midwifery practice. Students will also become competent in basic IT skills with an emphasis on electronic information retrieval.

Leading & Developing Practice – focuses on exploring the transition from student midwife to that of registered practitioner, further developing students skills in care provision, examining issues around leadership, management and clinical governance in relation to factors that affect the quality of care for clients.

Clinical modules provide students with the opportunity to develop their midwifery skills in the reality of practice.

#### ASSESSMENT AND REGULATIONS

Each year both the theoretical and clinical components of the programme are assessed. Modules are assessed by means of a combination of written examinations

and coursework; this includes both theoretical and clinical modules. Students' clinical performance/progress is assessed on an on-going basis while on placements to determine competency. To be deemed competent students must attain the level specified in the Competency Assessment Tool, based on the Domains of Competence identified by Bord Altranais agus Cnáimhseachais na hÉireann (Nursing and Midwifery Board of Ireland). Students must pass both the theoretical, clinical and competency assessments to be deemed to have passed the year. Students will not be permitted to proceed to the next year of the programme until they have met all the requirements specified in the Marks and Standards for the programme. Students who fail to proceed must pass within one further year or they will be required to withdraw from the programme.

To pass the programme overall, students must pass the required theoretical, practice and competency assessments. In addition, to be awarded the degree and to apply to register as a midwife, students must complete the minimum clinical practice experience requirements and minimum number of clinical hours required by Bord Altranais agus Cnáimhseachais na hÉireann (Nursing and Midwifery Board of Ireland). The final calculation of marks is based on 30% of the aggregate mark obtained at the 3<sup>rd</sup> Year examinations, and 70% of the aggregate obtained at the 4<sup>th</sup> year examinations. A full account of programme regulations, compensation and credits is provided in the Marks and Standards.

#### ENTRY CRITERIA

Applicants must meet the following criteria to be eligible for admission to the Bachelor of Midwifery Science programme.

Applicants must be at least 17 years of age on 15 January of the year of entry onto the programme.

The minimum educational requirements for admission to the programme is a pass in the Leaving Certificate examination, having obtained a minimum of grade C3 in higher level papers in any two of the subjects listed below and a minimum of grade D3 in ordinary or higher level papers in the other four subjects.

Irish (not Foundation Level)

**English** 

Mathematics (not Foundation Level)

A laboratory science subject (Chemistry, Physics, Biology, Physics and Chemistry (joint), Agricultural Science)

Any other two subjects acceptable for matriculation registration purposes.

Or

Have second level education qualifications equivalent to the above

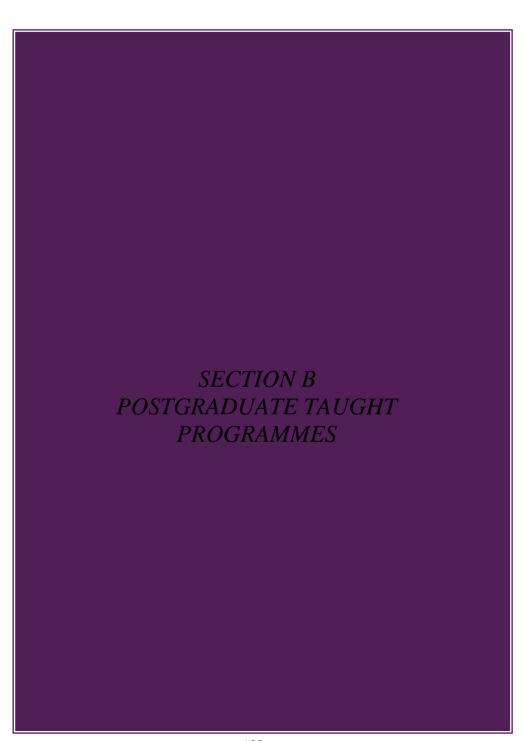
An applicant who does not meet the education requirements and who is 23 years of age or over on t he 1st January in the year of application may apply as a mature

student. A separate pathway is available for mature students.

Successful applicants must be of good mental and physical health and free from any defect or abnormality which would interfere with the efficient performance of their role as midwife. Al l applicants must undertake medical screening and be deemed fit to undertake this role. In addition each student must undergo Garda Vetting.

#### SELECTION CRITERIA

Selection of applicants meeting the minimal educational requirements is on the basis of points obtained in the Leaving Certificate (or equivalent). Applicants apply through the CAO. A separate pathway applies to mature applicants, that is, those who are applying on the grounds of mature years only and not on the basis of educational achievement. Further details are available from the Nursing Careers Centre, Bord Altranais agus Cnáimhseachais na hÉireann (Nursing and Midwifery Board of Ireland).



# COLLEGE OF MEDICINE, NURSING & HEALTH SCIENCES

# COLLEGE OF MEDICINE, NURSING & HEALTH SCIENCES

# $TAUGHTPOSTGRADUATE CERTIFICATE, DIPLOMA\,AND\,MASTERS\\PROGRAMMES$

(NFQ level 9 awards; ref. www.nfq.ie)

# SCHOOL OF MEDICINE

# TAUGHT POSTGRADUATE CERTIFICATE, DIPLOMA AND MASTERS PROGRAMMES

(NFQ level 9 awards; ref. www.nfq.ie)

# POSTGRADUATE DIPLOMA IN MEDICAL SCIENCE

## PROGRAMME DESCRIPTION

The Medical Science programmes introduce candidates to techniques and frameworks to enable them to critically appraise scientific evidence to answer researchable clinical questions and conduct dedicated research in their own speciality or field of interest. The postgraduate programmes are designed for health care providers with an interest in evidence-based medicine/practice and health and medical research. Content is delivered via distance learning and face-to-face teaching. Beginners in EBM are brought to an advanced level through enquiry based learning. Through this course professionals become better health care providers.

The Postgraduate Diploma is a one year part time course completed over two semesters (60 ECTS). The programme consists of six online modules with candidates completing three modules each semester. The Postgraduate Diploma is also an exit award for the Masters in Medical Science programme available after successful completion of 60 credits.

# MINIMUM ENTRY REQUIREMENTS

Successful applicants will normally hold a primary degree in health care, medicine or equivalent qualification, at second class Honours grade one level or above, in a relevant subject. Competence in English language equivalent to IELTS 6.5.

25 places available

#### CAREER OPPORTUNITIES

Graduates of our Postgraduate Diploma in Medical Science have gone on to pursue careers in a diverse range of fields including the completion of a masters degree in Medical Science, Medical Research and improved professional attitude in daily practice (Evidence Based Practice/Medicine).

#### PROGRAMME AIMS

The broad aim of this programme is to strengthen a health care provider's knowledge and skills in subjects particular to medical research and clinical teaching. In particular the programme aims to:

- Using a blend of enquiry based learning and a self-directed interactive approach, by the end of this programme you should be able to:
- To search, retrieve, and store scientific information related to a specific topic of interest.

- Demonstrate critical appraisal skills regarding specified scientific literature.
- Demonstrate an ability to ask researchable questions related to a specified field of interest.
- To detect the validity and reliability of published evidence and measurement devices aimed to be used in a future research project.
- To write a scientific essay in Word and referencing according to Vancouver formats (Word plus Endnote)
- To know how to use advanced descriptive and inferential statistics and critical appraisal of published statistics.
- Demonstrate competence in designing your own research design and to produce an appropriate research proposal.
- To organise a research meeting(s) with fellow researchers/heads of departments aiming the launch of your own researchstrand.
- To submit an approved research proposal.
- To be enrolled in the second year of the Master of Medical Science (Health Informatics)

## **DURATION OF THE PROGRAMME**

The programme may be taken on a part-time basis over at least 1 year.

# **Programme Content**

All modules are delivered in one week blocks and include distance learning element.

Time table details: modules completed over two semesters		
Modules, Year 1, Semester 1	ECTS	
Finding the Needle in the I-stack (E-resources)	10	
Lies, Damned Lies, and Statistics	10	
From Popper to Proposal (research methods)	10	
Modules, Year 1, Semester 2		
Choice Module	10	
Research Methods (Advanced Level)	10	
Advanced Statistics	10	
Deadline for Final Research Proposal	Spring	

# MASTERS IN MEDICAL SCIENCE

## PROGRAMME DESCRIPTION

The Masters in Medical Science (Health Informatics) is a one year programme designed for health care providers to conduct and publish dedicated evidence-based research in their own speciality or field.

The Masters in Medical Science (Health Informatics) is completed over a 12-month period (90 ECTS). The programme consists of the modular content of the Postgraduate Diploma plus a dedicated Research Thesis.

# MINIMUM ENTRY REQUIREMENTS

Successful applicants will normally hold a primary degree in health care, medicine or equivalent qualification, at second class Honours grade one level or above, in a relevant subject. Competence in English language equivalent to IELTS 6.5. All candidates must have successfully completed the Postgraduate Diploma in (Health Informatics) or a comparable award deemed by the School of Medicine to satisfy these requirements.

25 places available

## CAREER OPPORTUNITIES

Graduates of the Masters in Medical Science have gone on to pursue careers in a diverse range of fields including the completion of a MD and PhD degrees in Medical Science and Medical Research. They have brought improved professional skills and attitudes into their daily practice (Evidence Based Practice/Medicine).

#### PROGRAMME AIMS

The broad aim of this programme is to strengthen a health care provider's knowledge and skills in subjects particular to medical research and clinical teaching. In particular the programme aims to:

- Using a blend of enquiry based learning and a self-directed interactive approach, by the end of this programme you should be ableto:
- To search, retrieve, and store scientific information related to a specific topic of interest.
- Demonstrate critical appraisal skills regarding specified scientific literature.
- Demonstrate an ability to ask researchable questions related to a specified field of interest.
- To detect the validity and reliability of published evidence and measurement devices aimed to be used in a future research project.
- To write a scientific essay in *Word* and referencing according to Vancouver formats (*Word* plus *Endnote*)

- To know how to use advanced descriptive and inferential statistics and critical appraisal of published statistics.
- Demonstrate competence in designing your own research design and to produce an appropriate research proposal.
- To organise a research meeting(s) with fellow researchers/heads of departments aiming the launch of your own researchstrand.
- To submit a research Thesis
- Publish a research paper
- To encourage progression to PhDprogrammes.

# DURATION OF THE PROGRAMME

The programme may be taken on a 1-year full-time, or 2-year part-time basis.

# **Programme Content**

Modules, Year 1, Semester 1	
Finding the Needle in the I-Stack (E-Resources)	10 ECTS
Lies, Damned Lies, and Statistics	10 ECTS
From Popper to Proposal (research methods)	10 ECTS
Modules, Year 1, Semester 2	
Optional Module	10 ECTS
Research Methods (Advanced Level)	10 ECTS
Advanced Statistics	10 ECTS
Research Thesis	30 ECTS

# POSTGRADUATE DIPLOMA IN MEDICAL SCIENCE (ENDOVASCULAR SURGERY)

#### PROGRAMME DESCRIPTION

A new study programme combining practical endovascular surgical training with evidence based medical research skills.

#### GENERAL

The Endovascular Training content is provided under the guidance of vascular surgeons from the Western Vascular Institute. The curriculum is taught through hands-on, supervised training, and supervised sessions in the Endovascular surgery teaching lab, and weekly scheduled educational meetings.

Candidates will apply knowledge and skills to search for and critically appraise scientific evidence to answer researchable clinical questions, to submit a research proposal and to complete this proposal through a research thesis in endovascular surgery. The Postgraduate Diploma is also an exit award for the Masters in Medical Science programme available after successful completion of 60 credits.

# PROGRAMME AIMS AND OBJECTIVES

The aim of the study programme is to combine practical endovascular surgical training with evidence based medical research skills.

By the end of this programme you should be able to:

- To search, retrieve, and store scientific information related to a specific topic of interest within endovascular surgery.
- Demonstrate critical appraisal skills regarding specified scientific literature.
- Demonstrate an ability to ask researchable questions related to endovascular surgery.
- To detect the validity and reliability of published evidence and measurement devices aimed to be used in a future research project.
- To write a scientific essay in Word and referencing according to Vancouver formats (Word plus Endnote).
- To know how to use advanced descriptive and inferential statistics and critical appraisal of published statistics.
- Demonstrate competence in designing your own research design and to produce an appropriate research proposal.
- To organise a research meeting(s) with fellow researchers/heads of departments aiming the launch of your own research strand.
- To submit an approved research proposal.
- Understand the basic concepts of all endovascular surgery procedures, including: Imaging equipment, radiation physics, and safety Diagnostic arteriography and venography Guide wire and catheter skills Percutaneous vascular access Percutaneous transluminal angioplasty (PTA)

Subintimal Angioplasty

Intravascular stents

Pharmacologic and mechanical thrombolytic therapy Stent-grafts for endovascular repair of abdominal aortic aneurysms Coil embolization (to facilitate endovascular AAA repair)

Closure of percutaneous access sites

Accepted intra-arterial and intracaval filtering devices

## ECTS WEIGHTING

60 ECTS.

# MINIMUM ENTRY REQUIREMENTS

Applicants must be a qualified and registered medical physician/surgeon, and enrolled on the Western Vascular Institute's Endovascular Training Programme as well as other suitably qualified medical persons.

Competence in English language equivalent to IELTS 6.5.

#### EXAMINATIONARRANGEMENTS

Candidates will be required to complete individual assignments and presentations for each module. A detailed research proposal including a scientific review of the literature (introduction section), and a fully-fledged research proposal (method section) together with regular attendance will be part of the final exam.

Candidates must complete a logbook and there will be ongoing evaluation of the knowledge, competency, attitudes, and performance of the Endovascular surgery trainees. The assessment will include cognitive, motor, and interpersonal skills as well as Endovascular surgery judgment, to verify the individual has demonstrated sufficient professional ability to practice Endovascular surgery therapy completely and independently. This evaluation will be performed at three-monthly intervals, as well as upon completion of the training programme.

## CAREER OPPORTUNITIES

Graduates of our previous programmes have gone on to pursue careers in a diverse range of fields of health and medical research including MDs and PhDs and improved professional knowledge, skills and attitudes in daily practice (Evidence Based Medicine

- Endovascular Surgery).

# PROGRAMME CONTENT (SUBJECT TO CHANGE)

Specialist surgical training combined with six research modules—one year.

Modules, Year 1, Semester 1	ECTS
Finding the Needle in the I-stack (E-resources)	10
Lies, Damned Lies, and Statistics	10
From Popper to Proposal (research methods)	10
Modules, Year 1, Semester 2	
Optional Module	10
Research Methods (Advanced Level)	10
Advanced Statistics	10
Deadline for Final Research Proposal	Spring

# MASTERS IN MEDICAL SCIENCE (ENDOVASCULAR SURGERY)

## PROGRAMME DESCRIPTION

A new study programme combining practical endovascular surgical training with evidence based medical research skills.

The Masters in Medical Science (Endovascular Surgery) is a completed over a 12 month period (90 ECTS) full-time, or 2 years part-time. The programme consists of specific research modules in addition to dedicated supervised session in Endovascular Surgery delivered by the Western Vascular Institute. The programme consists of the modular content of the Postgraduate Diploma plus a dedicated Research Thesis.

# MINIMUM ENTRY REQUIREMENTS

Applicants must be a qualified and registered medical physician/surgeon, and enrolled on the Western Vascular Institute's Endovascular Training Programme as well as other suitably qualified medical persons. Competence in English language equivalent to IELTS 6.5.

25 places available

#### CAREER OPPORTUNITIES

Graduates of the Masters in Medical Science programmes have gone on to pursue careers in a diverse range of fields including the completion of a MD and PhD degrees in Medical Science and Medical Research. They have brought improved professional skills and attitudes into their daily practice (Evidence Based Practice/Medicine).

## PROGRAMME AIMS

The broad aim of this programme is to strengthen a surgeon's knowledge and skills in subjects particular to medical research and clinical teaching. In particular the programme aims to:

- To know how to use advanced descriptive and inferential statistics and critical appraisal of published statistics.
- Demonstrate competence in designing your own research design and to produce an appropriate research proposal.
- To organise a research meeting(s) with fellow researchers/heads of departments aiming the launch of your own researchstrand.
- To submit a research Thesis
- Publish a research paper
- To encourage progression to PhDprogrammes.

• Understand the basic concepts of all endovascular surgery procedures, including:

Imaging equipment, radiation physics, and safety

Diagnostic arteriography and venography

Guide wire and catheter skills

Percutaneous vascular access

Percutaneous transluminal angioplasty (PTA)

Subintimal Angioplasty

Intravascular stents

Pharmacologic and mechanical thrombolytic therapy

Stent-grafts for endovascular repair of abdominal aortic aneurysms

Coil embolization (to facilitate endovascular AAA repair)

Closure of percutaneous access sites

Accepted intra-arterial and intracaval filtering devices

# DURATION OF THE PROGRAMME

The programme may be taken on a 1-year full-time, or 2-year part-time basis.

Modules, Year 1, Semester 1	ECTS	
Finding the Needle in the I-Stack (E-Resources)	10	
Lies, Damned Lies, and Statistics	10	
From Popper to Proposal	10	
Modules, Year 1, Semester 2		
Optional Module	10	
Research Methods (Advanced Level)	10	
Advanced Statistics	10	
Research Thesis	30	

# MASTERS OF SCIENCE IN SPORTS & EXERCISE PHYSIOTHERAPY

(Programme is currently suspended)

A new revised and updated programme offered in conjunction with the University of Limerick. The MSc in Sports and Exercise Physiotherapy combines practical training with evidence based medical research skills

Part-time Masters two years - Places limited to 10

# PROGRAMME DESCRIPTION

The overall intention of the Masters programme is to produce a successful student with a wide breadth of knowledge across Sports & Exercise Physiotherapy and the necessary skills to put the theory into practice

#### PROGRAMME AIMS & OBJECTIVES

The programme will provide physiotherapists with:

- The necessary scientific background knowledge to appreciate the issues arising in the field of Sports & Exercise Physiotherapy.
- The necessary skills and knowledge to provide advice on the prevention of sports injuries.
- Up to date training in modern methods of assessing, diagnosing and treating sports injuries including emergencycare.
- Opportunities to learn about the theory and application of Sports Psychology, Podiatry, Biomechanics, Sports Nutrition, Sports Pharmacology, Exercise Physiology, Fitness Assessment and ethical issues within sport.
- Opportunity to learn about the medical applications of exercise in maintaining health and in disease
- An introduction to research appropriate to the field of Sports & Exercise Physiotherapy

## ECTS WEIGHTING 90 ECTS

# MINIMUM ENTRY REQUIREMENTS

Applicants must be chartered physiotherapy graduates (BSc Physiotherapy NUI) of National University of Ireland or another university deemed acceptable, and have a minimum of two year's experience post qualification.

# SELECTION CRITERIA

Short listed applicants may be called to interview and the final selection made at that point. Preference will be given to applicants with a strong sporting background, either personal involvement or recognized service provision.

# PROGRAMME CONTENT

Sports & Exercise Physiotherapy	ECTS	Year 1	
Musculoskeletal Anatomy	5	Semester 1	
Sports Injuries 1	5	Semester 1	
Biomechanics	5	Semester 1	
Exercise Physiology	5	Semester 2	
Sports Injuries 2	5	Semester 2	
Bioinformatics and Bioethics	5	Semester 2	
		Year 2	
Pre Existing Medical Conditions and Exercise	5	Semester 1	
Clinical Exercise Rehabilitation	5	Semester 1	
Biostatistics	5	Semester 1	
Population Health and Exercise programming	5	Semester 2	
Medical Emergencies	5	Semester 2	
Sport, Exercise, and Performance	5	Semester 2	
Thesis	30	Both Summers	

# POSTGRADUATE DIPLOMA IN SPORTS & EXERCISE PHYSIOTHERAPY

(Programme is currently suspended)

A new revised and updated programme offered in conjunction with the University of Limerick. The Postgraduate Diploma in Sports and Exercise Physiotherapy combines practical training with evidence based medical research skills.

Part-time Postgraduate Diploma two years - Places limited to 10

#### PROGRAMME DESCRIPTION

The overall intention of the Post Graduate Diploma programme is to produce a successful student with a w ide breadth of knowledge across Sports & Exercise Physiotherapy and the necessary skills to put the theory into practice

#### PROGRAMME AIMS & OBJECTIVES

The programme will provide physiotherapists with:

- The necessary scientific background knowledge to appreciate the issues arising in the field of Sports & Exercise Physiotherapy.
- The necessary skills and knowledge to provide advice on the prevention of sports injuries.
- Up to date training in modern methods of assessing, diagnosing and treating sports injuries including emergencycare.
- Opportunities to learn about the theory and application of Sports Psychology, Podiatry, Biomechanics, Sports Nutrition, Sports Pharmacology, Exercise Physiology, Fitness Assessment and ethical issues within sport.
- Opportunity to learn about the medical applications of exercise in maintaining health and in disease
- An introduction to research appropriate to the field of Sports & Exercise Physiotherapy

## ECTS WEIGHTING 60 ECTS

# MINIMUM ENTRY REQUIREMENTS

Applicants must be chartered physiotherapy graduates (BSc Physiotherapy NUI) of National University of Ireland or another university deemed acceptable, and have a minimum of two year's experience post qualification.

# SELECTION CRITERIA

Short listed applicants may be called to interview and the final selection made at that point. Preference will be given to applicants with a strong sporting background, either personal involvement or recognized service provision.

# PROGRAMME CONTENT

Sports & Exercise Physiotherapy	ECTS	Year 1
Musculoskeletal Anatomy	5	Semester 1
Sports Injuries 1	5	Semester 1
Biomechanics	5	Semester 1
Exercise Physiology	5	Semester 2
Sports Injuries 2	5	Semester 2
Bioinformatics and Bioethics	5	Semester 2
		Year 2
Pre Existing Medical Conditions and Exercise	5	Semester 1
Clinical Exercise Rehabilitation	5	Semester 1
Biostatistics	5	Semester 1
Population Health and Exercise programming	5	Semester 2
Medical Emergencies	5	Semester 2
Sport, Exercise, and Performance	5	Semester 2

# MASTERS OF SCIENCE IN SPORTS & EXERCISE MEDICINE

(Programme is currently suspended)

A new revised and updated programme offered in conjunction with the University of Limerick. The MSc in Sports and Exercise Medicine combines practical training with evidence based medical research skills.

Part-time Masters two years - Places limited to 10

# PROGRAMME DESCRIPTION

The overall intention of the Masters programme is to produce a successful student with a wide breadth of knowledge across Sports & Exercise Medicine and the necessary skills to put the theoryinto practice

## PROGRAMME AIMS AND OBJECTIVES

The programme will provide doctors with:

- The necessary scientific background knowledge to appreciate the issues arising in the field of Sports & Exercise Medicine.
- The necessary skills and knowledge to provide advice on t he prevention of sports injuries.
- Up to date training in modern methods of assessing, diagnosing and treating sports injuries including emergency care.
- Opportunities to learn about the theory and application of Sports Psychology, Podiatry, Biomechanics, Sports Nutrition, Sports Pharmacology, Exercise Physiology, Fitness Assessment and ethical issues within sport.
- Opportunity to learn about the medical applications of exercise in maintaining health and in disease
- An introduction to research appropriate to the field of Sports & Exercise Medicine

## ECTS WEIGHTING 90 ECTS

# MINIMUM ENTRY REQUIREMENTS

Applicants must be medical graduates of National University of Ireland or another university deemed acceptable, and have a minimum of one year's experience after registration with the Irish Medical Council.

## SELECTION CRITERIA

Applicants wishing to enter for the Pfizer Bursary must complete a 200 word statement on why they feel they should be accepted into the programme. Short listed applicants may be called to interview and the final selection made at that point. Preference will be given to applicants with a strong sporting background, either personal involvement or recognized service provision.

# PROGRAMME CONTENT

Sports & Exercise Medicine	ECTS	Year 1
Musculoskeletal Anatomy	5	Semester 1
Sports Injuries 1	5	Semester 1
Biomechanics	5	Semester 1
Exercise Physiology	5	Semester 2
Sports Injuries 2	5	Semester 2
Bioinformatics and Bioethics	5	Semester 2
		Year 2
Pre Existing Medical Conditions and Exercise	5	Semester 1
Clinical Exercise Rehabilitation	5	Semester 1
Biostatistics	5	Semester 1
Population Health and Exercise programming	5	Semester 2
Medical Emergencies	5	Semester 2
Sport, Exercise, and Performance	5	Semester 2
Thesis	30	Both Summers

# POSTGRADUATE DIPLOMA IN SPORTS & EXERCISE MEDICINE

(Programme is currently suspended)

A new revised and updated programme offered in conjunction with the University of Limerick. The Postgraduate Diploma in Sports and Exercise Medicine combines practical training with evidence based medical research skills.

Part-time Postgraduate Diploma- two years - Places limited to 10

#### PROGRAMME DESCRIPTION

The overall intention of the Postgraduate Diploma programme is to produce a successful student with a wide breadth of knowledge across Sports & Exercise Physiotherapy and the necessary skills to put the theory into practice

## PROGRAMME AIMS & OBJECTIVES

The programme will provide doctors with:

- The necessary scientific background knowledge to appreciate the issues arising in the field of Sports & Exercise Physiotherapy.
- The necessary skills and knowledge to provide advice on the prevention of sports injuries.
- Up to date training in modern methods of assessing, diagnosing and treating sports injuries including emergencycare.
- Opportunities to learn about the theory and application of Sports Psychology, Podiatry, Biomechanics, Sports Nutrition, Sports Pharmacology, Exercise Physiology, Fitness Assessment and ethical issues within sport.
- Opportunity to learn about the medical applications of exercise in maintaining health and in disease
- An introduction to research appropriate to the field of Sports & Exercise Physiotherapy

## ECTS WEIGHTING 60 ECTS

# MINIMUM ENTRY REQUIREMENTS

Applicants must be medical graduates of National University of Ireland or another university deemed acceptable, and have a minimum of one year's experience after registration with the Irish Medical Council.

## SELECTION CRITERIA

Short listed applicants may be called to interview and the final selection made at that point. Preference will be given to applicants with a strong sporting background, either personal involvement or recognized service provision.

# PROGRAMME CONTENT

Sports & Exercise Physiotherapy	ECTS	Year 1
Musculoskeletal Anatomy	5	Semester 1
Sports Injuries 1	5	Semester 1
Biomechanics	5	Semester 1
Exercise Physiology	5	Semester 2
Sports Injuries 2	5	Semester 2
Bioinformatics and Bioethics	5	Semester 2
		Year 2
Pre Existing Medical Conditions and Exercise	5	Semester 1
Clinical Exercise Rehabilitation	5	Semester 1
Biostatistics	5	Semester 1
Population Health and Exercise programming	5	Semester 2
Medical Emergencies	5	Semester 2
Sport, Exercise, and Performance	5	Semester 2

# POSTGRADUATE DIPLOMA IN MEDICAL SCIENCE (MUSCULOSKELETAL MEDICINE)

(Programme is currently suspended)

#### PROGRAMME DESCRIPTION

An exciting new study programme in integrated musculoskeletal practice aimed at establishing a method of musculoskeletal assessment, clinical reasoning and a choice of appropriate treatment of the spectrum of musculoskeletal conditions presenting at the frontline. The programme incorporates critical evaluation of the existing tenets of musculoskeletal medicine practice, and includes mastery of the skills required to undertake advanced research and develop innovative skills in practice. Content is delivered via face-to-face teaching (block weeks) and distance learning. Beginners in EBM are brought to an advanced level through enquiry based learning.

The Postgraduate Diploma is a one year part time course completed over two semesters (60 ECTS). The programme consists of six modules with candidates completing three modules each semester. Candidates fulfilling the requirements of the Postgraduate Diploma will be eligible for progression onto the Masters in Medical Science (Musculoskeletal Medicine) programmes.

# MINIMUM ENTRY REQUIREMENTS

This programme is open to Registered Medical Practitioners, Chartered Physiotherapists, Podiatrists and Advanced Nurse Practitioners or equivalent. Competence in English language equivalent to IELTS 6.5.

25 places available

#### CAREER OPPORTUNITIES

This programme is designed to enhance the academic and professional development of professional health care practitioners. The future models of care delivery in the field of musculoskeletal medicine will require up-skilling of Doctors and Physiotherapists, Podiatrist and Advanced Nurse practitioners to meet the challenges of their new role. This course will improve professional knowledge, skills, and attitudes in daily practice (Evidence-Based Healthcare).

# PROGRAMME AIMS

The musculoskeletal medicine components of the programme include:

- Connective tissue injury and repair
- Pain theory
- Fundamentals of examination and treatment
- Choice of appropriate imaging
- Introduction to injection treatment

In the informatics and biostatistics modules candidates will learn how:

- To search, retrieve, and critically appraise scientific information
- Formulate research questions

• Interpret evidence based guidelines & protocols related to patient information

# **DURATION OF THE PROGRAMME**

The programme may be taken on a part-time basis over at least 1 year.

# **Programme Content**

All modules are delivered in one week blocks and include distance learning elements.

Time table details: modules completed over two semesters		
Modules, Year 1, Semester 1	ECTS	
Musculoskeletal Medicine I	10	
Informatics I	10	
Biostatistics I	10	
Modules, Year 1, Semester 2	•	
Musculoskeletal Medicine II	10	
Informatics II	10	
Biostatistics II	10	
Deadline for Final Research Proposal	Spring	

# MASTERS IN MEDICAL SCIENCE (MUSCULOSKELETAL MEDICINE) (Programme is currently suspended)

## PROGRAMME DESCRIPTION

The Masters in Medical Science (Musculoskeletal Medicine) is a one year programme designed for health care providers to conduct and publish dedicated evidence-based research in musculoskeletal medicine.

The Masters in Medical Science (Musculoskeletal Medicine) is a completed over a 12 month period (60 ECTS). The programme consists of specific modules in scientific writing and publication. In addition all candidates will complete a research Thesis and submit a publishable paper according to journal publication guidelines.

# MINIMUM ENTRY REQUIREMENTS

This programme is open to Registered Medical Practitioners, Chartered Physiotherapists, Podiatrists and Advanced Nurse Practitioners or equivalent. Competence in English language equivalent to IELTS 6.5. All candidates must have successfully completed the Postgraduate Diploma in (Health Informatics) or a comparable award deemed by the School of Medicine to satisfy these requirements.

# 25 places available.

## **CAREER OPPORTUNITIES**

Graduates of the Masters in Medical Science programmes have gone on to pursue careers in a diverse range of fields including the completion of a MD and PhD degrees in Medical Science and Medical Research. They have brought improved professional skills and attitudes into their daily practice (Evidence Based Practice/Medicine).

#### PROGRAMME AIMS

The broad aim of this programme is to strengthen a health care provider's knowledge and skills in subjects particular to medical research and clinical teaching. In particular the programme aims to:

- To know how to use advanced descriptive and inferential statistics and critical appraisal of published statistics.
- Demonstrate competence in designing your own research design and to produce an appropriate research proposal.
- To organise a research meeting(s) with fellow researchers/heads of departments aiming the launch of your own researchstrand.
- To submit a research Thesis
- Publish a research paper
- To encourage progression to PhDprogrammes.

# DURATION OF THE PROGRAMME

The programme may be taken on a part-time basis over at least 1 year.

# **Programme Content**

Modules completed over two semesters	
Scientific Writing and Publication	10
Research Thesis	50

# POSTGRADUATE DIPLOMA AND MASTERS IN SURGERY (MCH)

## PROGRAMME DESCRIPTION

An exciting new study programme the Masters Degree in Surgery (MCh) is designed to enhance the academic and professional development of surgical trainees by improving the level of scientific appreciation for evidence-based clinical practice. Running parallel to the basic surgical training scheme (BST) this programme will provide surgical trainees with the academic and scientific research skills needed for progression to higher surgical training schemes and academic surgery.

# MINIMUM ENTRY REQUIREMENTS

Successful candidates will hold a primary degree in Medicine and are conferred with the degrees of Bachelor of Medicine, Bachelor of Surgery and Bachelor of Obstetrics (MB BCh BAO). The applicants should be selected for the BST national programme but will be required to demonstrate an equivalent clinical and academic competence and have appropriate interview and clinical skills. Candidates not on the BST programme may be eligible and interviews will apply. Competence in English language equivalent to IELTS 6.5.

25 places available

## CAREER OPPORTUNITIES

This programme is designed to enhance the academic and professional development of surgeons. The combination of professional surgical training and research output will appeal to graduates intending to apply for higher surgical training (HST) schemes in Surgery or similar medical specialities. Surgeons require recognised postgraduate research and academic qualifications for progression to higher surgical training schemes. This programme will serve as a stepping stone to an MD or PhD.

## PROGRAMME AIMS

The aims of this programme include:

- To enhance the academic and professional development of surgeons
- Up-skilling of surgeons to meet the challenges of their new role
- Improve professional knowledge and attitudes in daily practice
- To search, retrieve, and critically appraise scientific information
- Formulate research questions
- Interpret evidence based guidelines & protocols related to patient information

## DURATION OF THE PROGRAMME

The programme may be taken on a part-time basis over a 2 year period. An exit award, The Postgraduate Diploma in Surgery is available after year 2.

# **Programme Content**

Time table details: modules completed over two seme	esters
Modules, Year 1	
Informatics	
Research Methods	
Biostatistics Informatics	
Modules, Year 2	
Surgical Lab Skills	
Surgical Education	
Patient Safety in the Surgical Environment	
Research Thesis	

# POSTGRADUATE CERTIFICATE IN HEALTH SCIENCES (CLINICAL PRIMARY CARE)

# POSTGRADUATE DIPLOMA IN HEALTH SCIENCES (CLINICAL PRIMARY CARE) (Programme is currently suspended)

There is an increasing expectation for community-based health professionals to demonstrate their continuing competence in primary care. Inter-disciplinary learning provides new and interesting challenges for primary care professionals that reflect many of the issues that occur in the context of primary care teams.

This course aims to meet the learning needs of general practitioners and community-based nurses in the management of disease in the community. It aims to give practitioners upto-date, relevant, in-depth understanding and knowledge of common conditions to assist in the management of disease in practice.

## **ENTRY**

Applicants must be clinically qualified healthcare professionals registered with their relevant professional body and working in a primary care setting. Applicants from secondary care may also be considered. Parts of the programme are delivered in distance learning format and general computer literacy is essential for this.

## COURSE STRUCTURE

The Clinical Primary Care collection is a suite of modules on clinical and related nonclinical topics. It has been designed with maximum flexibility in mind to meet the needs of busy health professionals. You can take a single module in a subject of your choice or you can construct your own course at Postgraduate Certificate or Postgraduate Diploma levels by choosing a selection of modules that suit your needs. Modules can be accumulated over up to five years (or one year) as you wish.

The modules are delivered using an e-learning platform supported by dedicated skills training sessions at NUI Galway (usually two non-consecutive days per module). The distance education format allows you to engage in learning at a time and place that suit your lifestyle.

Postgraduate Certificate (30 ECTS) = any 3 modules - at least 2 clinical. Postgraduate Diploma (60 ECTS) = any 6 modules - at least 3 clinical.

## COURSE CONTENT

The modules are listed below. In all modules there is an emphasis on practical application of the learning to the practice setting.

Clinical Modules	ECTS
Diabetes in Primary care	10
Cardiovascular Disease in Primary care	10
Infectious Disease in Primary Care	10

Women's Health in Primary Care	10
Respiratory Disease in Primary Care	10
Minor Surgery and Related Dermatology in General Practice	10
Mental Health in Primary Care	10
Advanced Wound Care Management	10

Non-Clinical Modules	ECTS
Concepts and Principles of Primary Care	10
Health Research Methods	10
Literature-based Research Skills	10
Clinical Teaching Methodologies	10
Collaboration and Interagency Working	10

# ASSESSMENT

Each module is assessed via a combination of submitting practice-based assignments and participating in online activities

# MASTERS IN HEALTH SCIENCES (PRIMARY CARE) (Programme is currently suspended)

# **OVERVIEW**

This programme is designed for multidisciplinary professionals working in Irish primary health care. Against a background of ongoing changes in primary care policy as well as advances in approaches to disease management, it is crucial for practitioners to keep up to date with rapid developments in this sector.

Our flexible approach to learning makes it possible for you to pursue your studies while working full time. The taught component of the course is delivered via blended learning, an innovative educational strategy combining online and face-to-face learning and teaching. A menu of optional modules allows you to tailor the course to your individual learning needs.

## **ENTRY**

This course is open to qualified health professionals (doctor, midwife, nurse, occupational therapist, pharmacist, physiotherapist, podiatrist, speech & language therapist, other) currently registered with their relevant professional body and actively involved in community-based clinical practice in Ireland. Applicants with other primary care backgrounds/experience may also be considered (e.g. administrators, policy makers, psychologists, social workers). Candidates must have secured a final grade of at least second class honours in their primary degree, or hold a relevant Postgraduate Diploma (Level 9).

Students must complete the taught element of the programme to second class honours standard (i.e. 60%) before proceeding to complete the dissertation element.

Parts of the programme are delivered in distance learning format and general computer literacy is essential for this.

# COURSE STRUCTURE

The Masters may be completed over one year or over two years, according to preference. The programme is delivered mostly by distance learning, with an average of two non-consecutive days of skills workshops in Galway per module. Students complete six modules in total (three core and three optional) as well as a research dissertation. (Credit may be awarded for modules previously completed as part of the <a href="Postgraduate Diploma">Postgraduate Diploma</a> in Clinical Primary Care).

# COURSE CONTENT

# Core Modules

- Concepts and Principles of Primary Care
- · Literature Based Research Skills
- · Health Research Methods

# **Optional Modules**

Students choose three optional modules from a menu that will include most or all of the following:

- Advanced Wound Care Management
- Cardiovascular Disease in Primary Care
- Collaboration and Interagency Working
- Critical Issues in Chronic Disease Management
- Diabetes in Primary Care
- Effective Chronic Disease Management Strategies for Healthcare Professionals
- Ethics of Health Research
- Infectious Disease in Primary Care
- Mental Health in Primary Care
- Minor Surgery and Related Dermatology in General Practice
- Respiratory Disease in Primary Care
- Women's Health in Primary Care

# Dissertation

Students complete a minor research dissertation in the form of a 4,000/5,000-word ready-for-publication research paper.

# POSTGRADUATE CERTIFICATE & POSTGRADUATE DIPLOMA IN HEALTH SCIENCES (CLINICAL EDUCATION)

#### RATIONALE

In the health professions, much of the undergraduate teaching and most postgraduate education takes place in clinical settings. Most clinical teachers have little background knowledge of adult learning and have received no formal training in clinical teaching techniques. The purpose of this programme is to provide health professionals with the knowledge and skills required for effective clinical teaching and to become successful clinical supervisors and motivators of student learning.

## PROGRAMME OBJECTIVES

The Postgraduate Certificate and Postgraduate Diploma in Clinical Education are aimed at qualified health professionals for whom clinical teaching forms part of their role or work plan. The aims of the programmes are to provide a theoretical and experiential platform for the participants to develop expertise in all of the key components of clinical teaching.

By the end of the Postgraduate Certificate Programme the learners will be able to:

- 1. Demonstrate an awareness of the key relevant theories of learning and how they relate to clinical teaching
- Construct learning events or programmes based on an understanding of the principles of adult learning and programme design
- 3. Implement and evaluate effective clinical teaching using appropriate theory based techniques
- 4. Demonstrate an understanding of the purposes and effects of assessment
- Participate in the design and implementation of objective and reflective methods of assessment
- Demonstrate proficiency in key teaching skills such as small, large group teaching, giving feedback, using questions appropriately and learner appraisal.

In addition to the aims of the Postgraduate Certificate above, the aim of the Postgraduate Diploma is to bring learners to a level where they can take on a leadership role within their clinical teaching contexts.

## **ELIGIBILITY AND SELECTION:**

The programme will be offered to health professionals who have completed their undergraduate degrees and have achieved full registration status, or equivalent. Applicants must be currently registered with their relevant professional body and actively involved in clinical practice. The programme will also be open to registered

health professionals (who qualified prior to the modern degree route) and who have a minimum of 2 years post registration experience in their clinical profession. Applicants will be selected on the basis of the quality of their application measured against established criteria.

## PROGRAMME CAPACITY

Applicants can register for the Postgraduate Certificate or the Postgraduate Diploma. Progression to the Postgraduate Diploma requires successful completion of the Postgraduate Certificate programme. The capacity for the combined programmes is 30 students.

## PROGRAMME STRUCTURE

The Postgraduate Certificate programme is delivered over 2 semesters and comprises 4 modules. The Postgraduate Diploma comprises 6 modules which can be completed over 1 year (2 modules per semester for 3 semesters), or over 2 years (3 modules per year).

Most programme material will be delivered using distance learning techniques. Programme materials will be made available sequentially on the Blackboard virtual learning environment. Communication and discussion will be electronic and assessments will be submitted online. The distance learning components will be supported by face-to-face teaching skills workshops and online webinars.

Each module will require approximately 50 hours of effort of which 25 hours will be contact time. The contact hours include reading formal programme materials, participation in practical workshops, participation in discussion board activities, carrying out assignments and mini projects (e-tivities), and the practical application of new knowledge in the workplace.

## PROGRAMME OUTLINE

The majority of teaching is by distance learning. The skills of clinical teaching are taught in face-to-face workshops, one day per module. In addition, there is a two-day face-to-face introductory workshop in September.

Modules 1-4 below are mandatory for all students. Postgraduate Diploma students must then choose 2 of the 5 optional modules 5-9 listed below.

Module		Trimes	Trimester	
1	Learning Theory in Clinical Settings	1	Sep-Dec	
2	Clinical Teaching Course Design & Evaluation	1	Sep-Dec	
3	Clinical Teaching Methodologies	2	Jan-Mar	
4	Foundations of Assessment in Clinical Education	2	Jan-Mar	

5	Advanced Assessment in Clinical Education	3	Apr-Jul
6	Professional Development	3	Apr-Jul
7.	Creativity & Innovation	3	Apr-Jul
8.	Simulation in Clinical Education	3	Apr-Jul
9.	Leadership & Management in Healthcare Education	3	Apr-Jul

#### ASSESSMENT

Modules are assessed by problem based assignment and reflective portfolio. The assignment should be not less than 1,000 words and not more than 1,500 words long. Students will be asked to solve a generic clinical teaching problem using knowledge and skills gained during the module in question. They will also have to justify their choice of solution using evidence from the programme and other resources. The assignment is assessed according to criteria which are published in the programme handbook. Each problem based assignment is worth 55% of the marks for the module in question, while portfolios are worth 45%.

# MASTERS IN HEALTH SCIENCES (CLINICAL EDUCATION)

The Master of Health Sciences (Clinical Education) has been designed to address the higher educational needs of health care professionals involved in the delivery of teaching and training in the health care environment. It builds on the Postgraduate Diploma in Health Sciences (Clinical Education), successful completion of which is a requirement for entry into the Masters programme.

#### AIMS

The programme aims to:

- Develop the teaching and educational planning skills of experienced clinical professionals who have significant educational responsibilities.
- 2. Provide students with relevant knowledge to both manage and lead effective educational innovations within their profession.
- 3. Provide students with the relevant knowledge and skills to plan and teach clinical and communication skills at an advanced level.
- Enable students to develop the knowledge and skills required to practice evidence based education.
- 5. Enable students to develop and implement a sound educational research protocol.
- 6. Enable students to complete an educational research project and to submit in the form of a research paper.

# **ENTRY**

The programme will be offered to health professionals who have completed the Postgraduate Diploma in Clinical Education (or equivalent) and who have achieved at least 60% in their final mark. Applicants must be currently registered with their relevant professional body and actively involved in clinical teaching. Applicants will be selected on the basis of the quality of their C.V., and an application essay (personal statement) in which each candidate must outline their rationale for doing the programme.

#### STRUCTURE

The programme will be delivered using online distance learning techniques, supported by face to face teaching skills workshops. Students will each have an academic mentor/supervisor for the duration of the Masters. The content of the course is as follows:

## MODULE ECTS

Evidence Based Education	5
Educational Research Design	15
Clinical Teaching Research Dissertation	40

# ASSESSMENT

The taught modules will be assessed using:

- A literature review for the evidence based education module.
- A methodology paper for the educational research module.
- Students are also required to submit a clinical teaching research dissertation at the end of the academic year, in the form of a 4,000 word ready for publication research paper.

# M.SC. (MEDICAL PHYSICS)

Medical Physics involves the application of physics and physical methods to problems in medicine. Although often associated with the use of ionizing radiation (X-Rays and Nuclear medicine) it finds application in almost every clinical discipline present in modern hospitals. There is considerable demand for qualified Medical Physicists in Ireland and this demand is expected to grow in the future.

It is a one year full-time programme for which a minimum of five and a maximum of ten students will be accepted.

# PROGRAMME CONTENT

The programme consists of an intensive programme of lectures, workshops, laboratory sessions, tutorials, and self-directed learning, followed by a short (three-month) project and dissertation. The syllabus contains modules covering the traditional topics associated with medical physics (Radiation Fundamentals, Hospital & Radiation Safety) and those more associated with clinical engineering (Clinical Instrumentation). The emphasis is on radio-therapy, radiation protection and diagnostic imaging. Programmes in anatomy, physiology, hospital safety and risk management are also provided. The course is accredited by the Institute of Physics and Engineering in Medicine (IPEM) and is therefore recognised as a component of IPEM professional training.

#### PROGRAMME AIMS AND OBJECTIVES

The programme is designed to meet the demand for qualified medical physicists in Ireland. It is primarily geared towards training for physicists in the application of radiation physics in medicine but maintains a reasonable exposure to key aspects of clinical engineering so that students receive a comprehensive knowledge of the application of physical sciences and engineering to medicine.

#### ECTS 90 ECTS

#### ASSESSMENT

Assessment will be through a combination of written and oral examinations, continuous assessments, project work, and the writing of a small dissertation.

Graduates must hold at least a second class Honours degree in Physics or Experimental Physics, Electronic Engineering, or another relevant discipline as determined by the College of Medicine, Nursing and Health Sciences. A candidate with a primary degree without Honours, and having practical experience in a relevant subject area over a number of years at a level deemed to be appropriate by the College of Medicine, Nursing and Health Sciences, may be registered for the M.Sc.Degree. Candidates may be interviewed to determine suitability.

#### CAREER OPPORTUNITIES

The healthcare industry is one of the largest commercial sectors both nationally and internationally. There will be a considerable demand for qualified medical physicists in Ireland in the future. There will be a significant increase in the number of radiotherapy facilities in the country, both public and private. New regulations regarding protection against the hazards of radiation will also require additional medical physicists. In the past, vacancies have often been filled from abroad. However, the shortage of medical physicists in the U.S. and U.K. will mean that this supply can no longer be relied upon. Opportunities also exist in specialist medical device industries and in academic research.

# M.SC. (REGENERATIVE MEDICINE)

Regenerative Medicine is a discipline which generates novel therapeutics to mediate repair and generation of damaged and diseased organs. These therapeutics are based on stem cells, gene therapy, biomaterials, engineering tissue and other biologically active compounds. This 12 month taught programme aims to provide graduates in life sciences, biomedical engineering, nursing or medicine with an understanding of Regenerative Medicine and to equip them with the skills necessary for a career in this emerging discipline.

#### PROGRAMME AIMS AND OBJECTIVES

This programme aims to provide graduates with an understanding of Regenerative Medicine integrating information, technologies and skills from biological sciences, engineering, legal and ethical disciplines. These modules will address the science behind Regenerative medicine, its application to human disease and its importance to modern society.

## ECTS 90 ECTS

## **COURSE MODULES**

Compulsorymodules		
Fundamental Concepts in Pharmacology	PM208	5 ECTS
Translational Medicine	REM502	5 ECTS
Scientific Writing	BES519	5 ECTS
Immunology	REM508	5 ECTS
Tissue Engineering	BME405	5ECTS
Advanced Tissue Engineering	BME502	5 ECTS
Advanced Research Techniques	REM503	10 ECTS
Regenerative Medicine	REM504	10 ECTS
Research Project	REM505	30 ECTS
Total		80ECTS
Optional modules		
Optional modules Students will select options worth 10 ECTS		
-	AN230	5 ECTS
Students will select options worth 10 ECTS	AN230 PM209	5 ECTS 5 ECTS
Students will select options worth 10 ECTS Anatomy		
Students will select options worth 10 ECTS Anatomy Applied Concepts in Pharmacology	PM209	5 ECTS
Students will select options worth 10 ECTS Anatomy Applied Concepts in Pharmacology Data Analysis for Genomics Technologies	PM209 MA570	5 ECTS 5 ECTS
Students will select options worth 10 ECTS Anatomy Applied Concepts in Pharmacology Data Analysis for Genomics Technologies Physiology Human Body Function Module	PM209 MA570 SI3 17	5 ECTS 5 ECTS 10 ECTS
Students will select options worth 10 ECTS Anatomy Applied Concepts in Pharmacology Data Analysis for Genomics Technologies Physiology Human Body Function Module Introduction to Business	PM209 MA570 SI3 17 MG529	5 ECTS 5 ECTS 10 ECTS 10 ECTS

If required students can exit the course after completing modules totalling 60 ECTs and be awarded a Postgraduate Diploma.

This programme is open to students who have obtained at least a Second Class Honours degree in an appropriate biological science, biomedical engineering, medicine or nursing. Students who have a degree without Honours in a r elated area and have 3 or more years of practical experience in the subject area will also be eligible to apply for this programme.

#### CAREER OPPORTUNITIES

This programme will equip students for careers in biomedical research and development in an academic or industrial setting. Graduates will also receive training relevant to clinical research, translational research and clinical trial management. Over 60% of the graduates from this course go on to Ph.D. studentship based throughout Ireland, the UK, France, The Netherlands, Spain, Austria, America, and Canada.

# M.S.C. (CLINICAL RESEARCH)

#### PROGRAMME DESCRIPTION

The objective of this course is to provide training for the next generation of healthcare workers in the clinical research arena, providing a platform for more enhanced efficiencies in the translation of medical discoveries into clinical practice. Course contributors include senior academics and medical professionals from NUI Galway, Galway University Hospitals and McMaster University, Canada, who are actively engaged in clinical research. This programme is closely linked with the HRB Clinical Research Facility, Galway. Aimed at individuals employed in the healthcare sector, this course has been developed to meet the needs of working graduates who wish to up-skill, specialise or change career direction. For further details of the course, see <a href="https://www.crfg.ie">www.crfg.ie</a>

The MSc in Clinical Research is intended to be a part-time two-year programme of academic study in Clinical Research Methodology. Year 1 will be spent at NUIG and Year 2 is completed by a combination of distance learning through modules delivered by McMaster University and NUI Galway, and on-site modules delivered by NUI Galway. A full-time 1-year option is available to students who wish to complete the MSc in a full-time capacity.

This course is delivered through blended learning, to include lectures, tutorials, problem based learning (PBL) and distance learning.

#### **NUI GALWAY CODE:**

GYM56 (Full Time); GYM57 (Part-Time)

#### PROGRAMME AIMS AND OBJECTIVES

- Understand primarily quantitative and qualitative research approaches, including
  their strengths and limitations, and learn how to apply research approaches and
  methods by completing weekly assignments and preparing a research protocol in
  the student's area of interest
- Be comfortable examining data analysis, statistical concepts and be able to think on
  a practical level, to apply simple statistical techniques to design, analyse and
  interpret studies in a wide range of disciplines and to utilise statistical package(s)
  and to further illustrate the power of statistical techniques
- Have an in-depth understanding of sampling, causation, survey research, cohort study (retrospective and prospective), case-control, bias in observational research, multivariable analysis and propensity analysis
- Have an appreciation and understanding of the main elements of clinical trial design, execution, and analysis. At the end of the course, students should have a firm grasp of clinical trial methodology at a level that would allow them to prepare successful grant applications
- Understand systematic review methodology and be able to execute a rigorous systematic review. Students will be introduced to review methodology outlined in

- the Cochrane Handbook for Systematic Reviews and will explore concepts and controversies in review methodology
- Have an in-depth understanding of the translational process to enable development
  of therapeutic strategies, Good Clinical Practice (GCP), the clinical trial process and
  Good Manufacturing Practice (GMP), including validation, regulatory and
  legislation requirements for the design and translation of medical therapies and
  ethical issues underpinning the practice of translational medicine
- Understand how to examine the various elements involved in the establishment and
  operation of clinical research facilities and clinical trials, regulatory and ethical
  principles, procedures for successful completion and reporting of clinical trials and
  financial management issues.
- Have been provided with an opportunity to develop a personalised approach to training in clinical research, drawing from a variety of core and optional modules.

#### ECTS WEIGHTING 90 ECTS.

### MINIMUM ENTRY REQUIREMENTS

Students must have completed either; 1) Undergraduate degree in medicine or; 2) Other healthcare-related undergraduate degree with a minimum of 2<sup>nd</sup> Class Honours degree, Grade 1 (including Nursing, Occupational therapy, Physiotherapy, Speech and Language Therapy and Pharmacy) or; 3) Biomedical sciences with a minimum of 2<sup>nd</sup> Class Honours degree, Grade 1. Application from graduates of non-healthcare related degrees are also considered (minimum requirement of 2<sup>nd</sup> Class Honours, Grade 1) on a case-by-case basis, at the discretion of the admissions committee. Students who have a degree without Honours in a related area and have 3 or more years of practical experience in the subject area will also be considered for this programme. Potential students should be seeking a career in clinical research as a principal investigator, research coordinator or research administration.

#### **COURSE OUTLINE:**

**FULL TIME M.SC. (CLINICAL RESEARCH):** Students are required to complete three compulsory modules at NUI Galway. A further 3 modules are selected from additional courses available at NUI Galway via face-face lectures and distance learning..

**PART TIME MSC. (CLINICAL RESEARCH):** Students are required to complete three compulsory modules at NUI Galway. A further 3\* or 5\*\* modules are selected from additional courses available at NUI Galway via face-face lectures and distance learning.

### **Compulsory Modules (Core):**

- 1. Fundamentals of Health Research and Evaluation Methods; 10ECTS
- 2. Introduction to Biostatistics I: 10ECTS
- 3. Ethics of Health Research: 10ECTS

#### **Additional Modules (Optional):**

## SELECT 3 FROM THE FOLLOWING:

- Introduction to Biostatistics II: 10 ECTS
- Introduction to Research Methods for Randomized Controlled Trials;
   5OR-10ECTS
- 6. Systematic Review Methods; 5 OR- 10ECTS
- 7. Translational Medicine; 5 10ECTS
- 8. Clinical Research Administration: 10ECTS
- 9. Health Systems and Policy Analysis; 10ECTS
- 10. Economic Evaluation in Healthcare; 10ECTS
- 11. Observational and Analytical Research Methods; 10ECTS
- 12. Project Management; 5 ECTS
- 13. Database Development; 5 ECTS
- 14. Bio-Ethics; 10ECTS
- 15. First in Man/Early Phase Trials Module; 10ECTS
- 16. Biobanking Advanced Clinical Application and Testing; 10 ECTS

#### **PLUS**

**Full Time:** Thesis (30 ECTS), completed over the 1 year period. Thesis defence will be completed at NUI Galway.

<u>Part Time</u>: \*Thesis (30 ECTS), completed over the 2 year period. Thesis defence will be completed at NUI Galway **OR** \*\*Independent Study Module (10 ECTS), completed and assessed by NUI Galway.

TOTAL: 90 ECTS over 1 year (FT) or 2 years (PT).

**Module assessment:** Departmental assessment, end of module exam, interim assignments or as directed by module leader.

Minimum threshold of students per module will apply

#### CAREER OPPORTUNITIES

The MSc program provides training for qualified individuals (see entry requirements below) who wish to become independent clinical investigators **or** those who wish to seek employment in leadership positions in clinical research teams The conduct and oversight of clinical research has become a prominent source of jobs in a variety of settings, including university and colleges, pharmaceutical industry, non-academic clinical research organizations, independent funding agencies and government agencies. Additional opportunities include employment in teaching and consultation.

# MASTERS & POSTGRADUATE DIPLOMA IN PREVENTIVE CARDIOLOGY

#### Introduction

The scientific evidence for cardiovascular disease prevention is compelling but translating this evidence into effective patient care is a challenge. This innovative programme in Preventive Cardiology, delivered in the Croí Heart and Stroke Centre, provides students with the knowledge and practical skills required to bridge this implementation gap and achieve the recommended lifestyle and therapeutic targets. This programme is associated with the founding programme at Imperial College London (UK) and they are the only courses of their kind available worldwide.

#### **Course Facts**

Course Level: Level 9

**Duration:** 1 year full-time in service (MSc); 9 months full-time in service (PG Diploma), using blended learning

**Entry Requirements:** Successful applicants will possess at least a Second Class Honours, Grade 1 degree in an appropriate life science, biological science, medicine or nursing. For those who do not hold a primary degree at the required level, a special case will be made if they have demonstrated aptitude for the course material through at least 3 years of high quality work experience in a relevant field of cardiovascular health. Entry to the Masters programme is conditional upon achieving at least 60% in the core compulsory modules of the Postgraduate Diploma. Candidates coming to Ireland from abroad or who do not have a degree from Ireland or the UK will be asked to provide evidence of an acceptable result in one of the recognised English language proficiency tests, e.g. IELTS total score of 6.5.

**Applying:** www.pac.ie/nuigalway

PAC Code: 1MPY1 (MSc); 1MPY3 (PG Dip)

Closing Date: Open call

## Why study this programme?

This course equips students with the knowledge and skills required to make meaningful contributions to the discipline of preventive cardiology. The taught modules address the development and practical use of cardiovascular disease risk estimation tools, implementation of healthcare policy, behavioural change strategies, lifestyle approaches to risk factor modification and medical management of risk factors including hypertension, dyslipidaemia, diabetes mellitus, obesity and smoking. Students have the opportunity to actively engage with patients participating in a preventive cardiology programme at the Croí Heart and Stroke Centre in Galway. Small group case-based discussions and clinical activities supplement the didactic lecture programme. The course has online learning and guided self-directed learning dimensions as well as residential elements, enabling students to adapt their learning to their professional lives. Contributors are drawn from clinical departments at Galway University Hospitals, scientific and healthcare disciplines at NUI Galway, the Croí clinical team, and the International Centre for Circulatory Health at Imperial College London.

## Programme outline

The core compulsory modules cover all relevant topics to ensure a comprehensive student learning experience. The elective advanced module includes a specialist area aligned with the student's own professional interests to be studied in greater depth at a higher level.

Core Compulsory Modules:	ECTS	Semester
Fundamentals of Preventive Cardiology	10	1
Research Methods	10	1
Reflective Clinical Practice	10	1
Research Project and Dissertation*	30	2
Elective Advanced Modules**:		
Cardiovascular Risk, Guidelines and Policy	30	2

Medical Risk Factor Management	30	2
Lifestyle Risk Factor Modification	30	2

<sup>\*</sup>Only MSc candidates complete an original research project and dissertation

## **Employment and career opportunities**

The course is undergoing formal accreditation for CME/CPD purposes. Graduates of the course will be positioned as leaders in cardiovascular disease prevention and will find ample opportunities to apply their learning in primary care centres, hospital wards and outpatient clinics. There will also be employment opportunities in the pharmaceutical industry and in public health, healthcare management, academic and research settings. Clinician graduates will benefit from career advancement within their chosen disciplines. Masters students completing the 5,000-word 'ready-for-publication' dissertation will be supported in preparing their work for submission to a peer-reviewed journal which will further augment their career prospects.

## **Unique and Dedicated Learning Environment**

Both didactic and clinical teaching on this course will be delivered at the Croí Heart and Stroke Centre in Galway. This facility is adjacent to NUI Galway and University Hospital Galway. It is the first purpose-built centre of its kind in Europe dedicated to cardiovascular disease prevention and rehabilitation. The project is a flagship initiative for the promotion of cardiovascular wellbeing, with a strong focus on prevention, rehabilitation, education, and patient and family support. It operates as an institute for teaching and training, education and research; a centre for healthy living; and a centre for patient and family support.

<sup>\*\*</sup>Students select one elective advanced module from the 3 options available

# MASTER/ PG DIPLOMA IN (MULTI-DISCIPLINARY RADIOLOGY)

Diagnostic imaging had witnessed major technological advances over the last few decades, particularly in its cross-sectional and interventional aspects. Medical practice had also witnessed a parallel major transition in decision-making, from individual expert consultant decisions to multi-disciplinary team care provision. Radiology plays a major role in multi- disciplinary care, and many specialists depend on imaging for clinical decision beyond the traditional dependence on reading the text of a radiologist report.

For more information: <a href="http://www.nuigalway.ie/courses/taught-postgraduate-courses/multidisciplinary-radiology.html">http://www.nuigalway.ie/courses/taught-postgraduate-courses/multidisciplinary-radiology.html</a>

### PROGRAMME DESCRIPTION

The M.Sc./P.G.Dip. in Multidisciplinary Radiology is a blended course. It is taught using traditional class based educational activities and contemporary distance learning technologies. The course is multidisciplinary in nature with a fully integrated Clinical and Radiological multidisciplinary approach to patient care both among faculty and learners. It is designed for health professionals who rely on imaging for decision making, or those for whom a radiology qualification may offer new career progression routes.

#### CAREER OPPOURTUNITIES

Of the 33 graduates to date (13 more expected this academic year), the majority (19) are currently on National Radiology training programmes in Ireland and the UK. Others have used the programme to upskill either in specific areas (Musculoskeletal for instance) or to further their research careers in other disciplines.

# MINIMUM ENTRY REQUIREMENTS

Successful applicants will normally hold a primary degree in Medicine at second class Honours grade one level or above. Competence in English language equivalent to IELTS 6.5 is required. Interviews may apply.

#### ASSESSMENT

Assessment techniques will vary, depending on the module. For most modules assessment will consist of a short written exam consisting of multiple choice questions/short answer/identifying structures on radiological images in addition to elements of continuous assessment (e.g. problem based and written assignments, online discussion boards, presentations). Students must complete and pass the assignments and course work attached to each module attended.

#### PROGRAMME DURATION AND CONTENT

The programme can be completed full time (1 year) or part-time (2 years).

All students must complete 60 European Credit Transfer (ECT). This is made up from six 10 ECTS modules:

- Research Methods for Evidence Based Practice
- 5 clinical modules:
  - 1. Introduction to Basic Radiological Sciences
  - 2. Chest, Cardiovascular and Breast Imaging
  - 3. Musculoskeletal Imaging
  - 4. Central Nervous System and Head and Neck
  - 5. Gastrointestinal and Genitourinary Imaging

We have designed our modules with distance learning in mind. The traditional class based educational activities are run in one week blocks for each module. This means that a student will only be required to travel to campus for five weeks over the course of the academic year, or this will be spread over the 2 years if doing the course part-time. Utilising contemporary distance learning online technologies students can complete the remaining components of the module in their own time through self-directed learning while not present on campus.

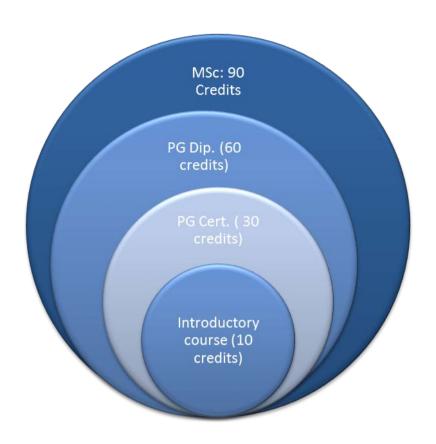
Students undertaking the programme to MSc degree level must also complete a research project and submission of their dissertation (30 ECTS).

Introductory Basic Core module:	modules	Genitourinary
		GIT
(intrododuction to basic sciences for imaging:		CNS ,H&N
Physics Radiographic Anatomy		Chest & CVS
modalities techniques)		MSK
	3 Optional Generic modules	Clinical teaching
		Research methods

course will build on a mandatory core introductory module held in the second half of October of the first year. Candidates would need to accumulate further 50 credits from the available clinical and generic options, with at least two clinical modules relevant to their research area with the research module if they are proceeding to master level. 10-credit modules would normally have class-based component of 5-6 days conducted in one week to allow overseas participants to travel for short period every second or third month, and go back to their workplace in their home countries. Class-based activities include lectures, PBL, workshops, case presentations and simulated multi-disciplinary meetings. Each day will be designed independently, and can be attended in a stand-alone format with accredited CPD hours. While some modules will be available every year, some modules will be held every 2-3 years depending on the presence of satisfactory number (8-24) of participants.

Medical informatic

As illustrated in **Figure-1**, participants who could not complete 60 credits towards PG / Diploma award can exit the course with a or certificate of attendance of the introductory module or any stand-alone optional module or single day CPD equivalent.



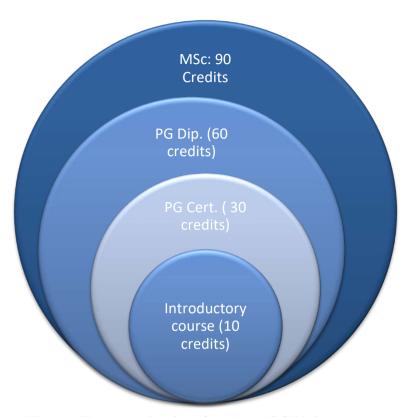


Figure-1: illustrates exit points of the Master/PG Dip/

# **Programme Content**

addition to the core introductory module, other modules options lie in two domains: 5 clinical (body system-based) and 3 generic modules as shown in **Figure 2.** 

Introductory Basic Core module:	5 optional Clinical modules	Genitourinary	
	modules	GIT	
(intrododuction to basic sciences for imaging: Physics Radiographic Anatomy		CNS ,H&N	
		Chest & CVS	
modalities techniques)		MSK	
modalities techniques)	3 Optional Generic modules	Clinical teaching	
		Research methods	
		Medical informatics & PACS	

Introductory Basic Core module •	5 optional Clinical	Genitourinary
	modules	GIT
		CNS ,H&N
(intrododuction to basic sciences		Chest & CVS
for imaging: Physics		MSK
Radiographic Anatomy		
modalities techniques)	3 Optional Generic modules	Clinical teaching
		Research methods
	•	Medical informatics & PACS

Figure-2: Generic, clinical and technical modules options:

## **Assessment Strategy**

Assessment: Total Marks 100: 50 Marks for written (1200 words) Assignment or (1 x 1.5hr written Test (paper/ computer based, MCQ best of five format). Assignment submission dates would regularly be within 6-8 weeks of the end of the module taught course. There are 40 marks for group presentation and 10 marks for attendance & class-based participation. (5% attendance, 3% case submissions for MDT, 2% for educational coordinator and organisational activities). Presentation topics will be e-mailed to participants 4-6 weeks before the start of each module. Written tests would be conducted in a weekend preceding a following module till secure online computer-based exam can be adopted to avail flexible exam timing and location.

#### Marks and Standards

Pass Standard and any Special Requirements for Passing Module: 40%.

MSc Degree requires minimum score for overall 60%, 40% in all individual modules.

**Penalties (for late submission of Course/Project Work etc.):** 15% of the marks will be deduced in submission delay in the first week and 10% per week thereafter.

# Appendix

Append appropriate Syllabus Forms (including new module forms if appropriate) Modules details: Attached

document

## HEALTHCARE SIMULATION AND PATIENT SAFETY

# POSTGRADUATE DIPLOMA IN SCIENCE | MASTERS OF SCIENCE

PAC Code: GYM77 (Master) GYM76 (PDip)

## **Course Overview**

Healthcare simulation education is a bridge between classroom learning and real-life experience. There has been a lack of education and training in how simulation can be used to educate healthcare practitioners or how it can be incorporated into existing educational programmes. The main goal of these postgraduate qualifications in Healthcare Simulation and Patient Safety is to prepare the student to design and deliver effective healthcare simulation education to improve patient safety.

Applications are made online via The <u>Postgraduate Applications Centre</u> (PAC). Relevant PAC application code(s) above.

Paul O'Connor, PhD, MSc, BSc (Hons)

Dara Byrne, MB, BCh, BAO, FRCSI, Med, CHSE

# **Entry requirements:**

An honours Bachelor degree at NFQ Level 8 in a relevant healthcare discipline (e.g., medicine, nursing, speech and language therapy, pharmacy), although applicants with evidence of at least three years' equivalent professional/academic experience will be considered (e.g., Emergency Medicine Technicians, simulation laboratory staff and simulation technicians etc.). Demonstrated proficiency in English. Previous experience, or an academic qualification, in the education and teaching of healthcare professionals. Demonstrated interest in simulation.

# Postgraduate Diploma in Healthcare Simulation and Patient Safety

An honours Bachelor degree at NFQ Level 8 Demonstrated interest in simulation Demonstrated proficiency in English Previous experience or academic qualification

# **Masters in Healthcare Simulation and Patient Safety**

An honours Bachelor degree at NFQ Level 8
Demonstrated interest in simulation
Demonstrated proficiency in English
Previous experience or academic qualification
Achieving a minimum 65% average grade across the Diploma modules

Master-24 months; PDip-12 months

Next start date

September 2018. Please note places are limited and will be assessed and awarded on merit.

Average intake 20

Closing Date: Please refer to the review/closing date website.

Next start date: September 2018. Please note places are limited and will be assessed and

awarded on merit.

# Mode of study

The course is delivered as much as possible online. This delivery method allows the student to study at a time that is convenient to them, no matter where they live. The modules are delivered using a combination of multi-media presentations, online discussion boards, and online tutorials. There will also be a need to attend two 2-day intensive immersive simulation workshops held at the Irish Centre for Applied Patient Safety and Simulation (ICAPSS) at Galway University Hospital and NUI Galway.

ECTS weighting Master 120 ECTS; PDip 60 ECTS PAC code GYM77 (Master) GYM76 (PDip)

# Postgraduate Diploma in Healthcare Simulation and Patient Safety

The course will be delivered in six sequential modules during the academic year.

Module 1. An introduction to simulation and training in healthcare.

Module 2. Simulation with manikin and task based trainers.

Module 3. Standardised patients, virtual patients, and hybrid simulation.

Module 4. Running an effective simulation-based education programme.

Module 5. Human factors and patient safety in simulation.

Module 6. Uses of medical and healthcare simulation beyond education

The course will be assessed by:

Student participation and reflection on weekly discussion board activities related to the materials presented during the week of instruction.

The completion of e-tivities, and one end of module assignment for each module.

Participation, and reflection on, simulation-based teaching activities.

Demonstration of competency in delivering simulation-based education.

# **Masters in Healthcare Simulation and Patient Safety**

Modules 1 to 6 will be delivered during the first academic year. Modules 7 and 8 will be delivered during the second academic year of study.

Module 1. An introduction to simulation and training in healthcare.

Module 2. Simulation with manikin and task based trainers.

Module 3. Standardised patients, virtual patients, and hybrid simulation.

Module 4. Running an effective simulation-based education programme.

Module 5. Human factors and patient safety in simulation.

Module 6. Uses of medical and healthcare simulation beyond education

Module 7. Research Methods for Medical and Healthcare Simulation.

Module 8. Research Thesis.

## course will be assessed by:

Student participation and reflection on weekly discussion board activities related to the materials presented during the research methods module.

Completion of module assignments.

Completion of a research proposal and methodology paper

Completion of a 3,000 to 5,000 simulation-focused research dissertation in the format of a peer-reviewed journal.

In the last decade, there have been large changes in: under-graduate healthcare education, postgraduate healthcare education, delivery of healthcare, and the working environment. These changes have led to a large investment in simulation centres nationally and internationally. A postgraduate qualification in Healthcare Simulation and Patient Safety will provide the student with the expertise required to deliver simulation-based education in undergraduate and postgraduate healthcare teaching environments, implement a simulation based programme in their facility and run skills and team based training f to improve patient safety and the quality of patient care.

#### Who's Suited to This Course?

If you are a doctor, nurse, allied health professional (e.g. speech and language, pharmacy, physiotherapy), paramedic, dentist, veterinary surgeon or work in a healthcare simulation facility and have an interest in simulation based education, you should consider applying for one of our simulation programmes.

## Postgraduate Diploma in Healthcare Simulation and Patient Safety

The main goal of the Diploma in Healthcare Simulation and Patient Safety is to prepare the student to run a simulation centre and use simulation for research, improving patient safety, testing equipment and processes, and integrating simulation into institutional healthcare training, education and delivery systems.

# **Masters in Healthcare Simulation and Patient Safety**

Completing a Masters in Healthcare Simulation and Patient Safety will prepare the student to deliver healthcare simulation, run a healthcare simulation centre, and carry out research on or using healthcare simulation.

## **EU Fees:**

GYM77 - Masters - €5,000 p.a. (€10,000 for 24 month programme)

GYM76 - PG Diploma - €5,000 (12 month duration)

**Non-EU Fees** 

GYM77 - Masters - €6,875 p.a. (€13,750 for 24 month programme)

GYM76 - PG Diploma - €6,875 (12 month duration)

#### Find out More

Visit <a href="http://www.simulationmasters.com/">http://www.simulationmasters.com/</a>

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# M.SC. (Cellular Manufacturing and Therapy)

# PAC Code: GYM80 (Master) (PDip) (exit only) (PgCert) (exit only)

The clinical-grade production of advanced medicinal therapeutics, such as cellular therapy, is quickly evolving as the future of medicine. These therapeutics utilize immune cells, mesenchymal progenitor cells or induced pluripotent stem cells to treat injured or diseased tissues. The MSc in Cellular Manufacturing and Therapy will provide scientific and practical training in the production of these cells as therapeutics for clinical application.

#### PROGRAMME AIMS AND OBJECTIVES

Is a one year full time course consisting of 90 ECTS. The first two semesters will consist of taught modules covering cellular manufacturing, immune cell therapy, mesenchymal stem cell therapy and induced pluripotent stem cell therapy. Training will be delivered both as scientific concepts and practical training. The summer session will concentrate on writing an independent literature review on a topic relevant to cellular manufacturing and therapy.

## ECTS 90 ECTS

# COURSE MODULES Compulsory Modules

Compulsory Modules		
Cellular Manufacturing I	MD1521	10 ECTS
Cellular Manufacturing II	MD1524	10 ECTS
Mesenchymal Stem Cell Therapy	MD1526	10 ECTS
Induced Pluripotent Stem Cell	MD1525	10 ECTS
Cellular Immunotherapy	MD1522	10 ECTS
Dissertation	MD1523	30 ECTS
Total		80 ECTS
Optional modules		
Project Management	IE446	5 ECTS
Molecular & Cellular Biology of Cancer	BI460	10 ECTS
Tissue Engineering	BME511	5 ECTS
Economic Evaluation of Healthcare	EC584	10 ECTS
Fundamental Concepts in	PM208	5 ECTS
Introduction to Business	MG529	10 ECTS
Total		10 ECTS

This programme is open to students who have completed a Level 8 degree in 1) medicine, pharmacy, manufacturing, biology, engineering or 2) an equivalent biomedical science-related Level 8 degree with a minimum of 2<sup>nd</sup> class honors. Applicants from non-biomedical science related backgrounds will be considered on a case-by-case basis at the discretion of the coordinators. Students who have a Level 8 degree with less than 2<sup>nd</sup> class honors in a related area and have 3+ years of practical experience in the subject area will also be considered.

#### CAREER OPPORTUNITIES

Graduates will be well positioned for careers in advanced medicinal therapy development and manufacturing, biotechnology and biopharmaceutical manufacturing in academic, regulatory or industrial settings.

# MASTER OF SCIENCE (MICROSCOPY AND IMAGING)

PG Dip(60ECTS)(exit only) & PG Cert(30ECTS) (exit only)

#### **PROGRAMMEDESCRIPTION**

The visualisation and interpretation of a sample under the microscope is a fundamental skill required for research today. This new exciting programme will provide graduates with a highly marketable and transferable combination of skills required for academic, industrial, public and private sectors. Based in the Centre for Microscopy and Imaging, a multidisciplinary collaborative team which are involved in many aspects of basic science and medical research will deliver the course. This MSc programme aims to up-skill participants with practical hands-on microscopy and imaging techniques, associated sample preparations skills and analysis. Currently, it is the only programme of its kind being offered by an Irish University.

In this multidisciplinary field where biology, physics, medicine, engineering and communication skills are brought together and are valued in many areas of employment and research including basic science, biomedical engineering and industry. This course aims to provide training for applied roles such as laboratory managers, technical staff positions, sales or product development, service laboratories of universities, or health-related institutes. It will also serve to assist with the progression of students to further education. Microscopy, related sample preparation skills, and analysis are now an essential component of the majority of biological science research projects and a necessity for high impact publications.

Most modules will have associated laboratory or practical components which will develop the students' knowledge of cutting edge microscopy practices and techniques. Students will also learn translational skills which may be applied in the work force.

#### ■ NUI GALWAY CODE: GYM81

#### **PROGRAMME**

#### ☐ AIMS AND OBJECTIVES

To up-skill the participants with practical hands-on imaging techniques.

To train participants for applied roles in both the public and private sector such as laboratory managers, technical staff positions, sales or product development, service laboratories of universities, or health-related institutes.

Assist with the progression of students to further education.

MINIMUM ENTRY REQUIREMENTS:

# ECTS WEIGHTING: 90ECTS

Candidates must hold at least an upper second class honours primary degree (NFQ Level 8 or international equivalent qualification) in relevant biological or biomedical sciences, physical sciences or engineering field. Graduates with a Level 7 degree and who can demonstrate that they have at least 2-3 years relevant experience in research or industry may also be considered. Applicants whose first language is not English must also demonstrate English language proficiency as per university guidelines <a href="http://www.nuigalway.ie/international-students/english.html">http://www.nuigalway.ie/international-students/english.html</a>).

A personal statement of approximately 500 words and a curriculum vitae (CV) must be supplied on application, along with academic transcripts. Candidates will be selected based on examination records, previous relevant experience, and personal statement. Candidates may be requested to deliver a short presentation on a topic provided by the selection committee and course coordinators. Short listed candidates may be invited for interview.

#### COURSE OUTLINE

This is a one year full time course consisting of 90ECTs.

**Semester 1** – 30ECTs – Core Modules (An Introduction to Imaging, Microscopy and Analysis, Current Topics in Imaging, Cells and Tissues) plus one of the following Optional Modules (Materials Science & Biomaterials, Radiation and Medical Physics, Biophotonics, Introduction to .)

**Semester 2** – 30 ECTs – Core Modules (BioImaging and Microscopy, Image Analysis and Processing, Imaging in Translational Cancer Research) plus two of the following Optional Modules (Systems Histology, Advanced Cell Biology and Development, Stereology).

Semester 3 – 30 ECTs – Research Project

#### CAREER OPPORTUNITIES:

Graduates of the programme may enter the workforce either in technical or research roles within hospitals, universities or industry in Ireland. In addition, participants may choose to progress to further education or research and undertake a PhD.

# Postgraduate Diploma in Orthopaedic and Rheumatological Medicine

# **Programme currently suspended**

#### **PROGRAMMEDESCRIPTION**

The Postgraduate Diploma in Orthopaedic and Rheumatological Medicine is a 1 year part time, 60 ECTS, level 9 award. The programme aims at establishing: methodology in clinical musculoskeletal assessment; evidence based clinical reasoning in diagnosis; and a high level of physical manual handling skills, procedural skills, and informed pharmacological treatment proficiency. The programme is particularly suited to those intending to deliver care at the Primary level, e.g. General Practitioner, Chartered Physiotherapist and allied professionals.

**NUI GALWAY CODE: GYM72** 

#### PROGRAMME AIMS AND OBJECTIVES

This programme is designed to enhance the professional development of health care practitioners to meet the challenges of future models of care delivery in Musculoskeletal, Orthopaedic and Rheumatological Medicine.

**ECTS WEIGHTING: 60ECTS** 

### MINIMUM ENTRY REQUIREMENTS

#### **Entry Requirements:**

This programme is open to Registered Medical Practitioners, Chartered Physiotherapists, Podiatrists, and Nurse Practitioners.

## **Additional Requirements:**

Applicants must be registered with appropriate medical, physiotherapy, podiatrists, or nursing governing /professional body in Ireland or equivalent. Applicants must demonstrate proof of registration.

#### COURSE OUTLINE

- ☐ The programme consists of 3 modules per semester, delivered over 2 consecutive semesters. Each module comprises 3 full days.
- The scope of programme delivery will include structured face-to-face small group teaching, formal didactic lectures, practical skill sessions, distance learning, and self-assessment sessions.

#### CARFFROPPORTUNITIES:

Graduates of the programme may enter the workforce either in technical or research roles within hospitals, universities or industry in Ireland. In addition, participants may choose to progress to further education or research and undertake a PhD

# MSc (Exercise Physiology and its Application in Therapy)

PAC Code: GYM92 (Master) (PDip) (exit only)

## Introduction

This exciting new degree is the first of its kind in the West of Ireland. This course will enable students to have a full and comprehensive understanding of the integrated physiological responses to exercise, evaluation of fitness levels and exercise prescription according to individual needs. Upon completion students will be able to work in the emerging area of exercise physiology and exercise prescription in health and as therapy.

# **About this Program**

In this course, students will develop an advanced knowledge of exercise physiology including a full and in-depth understanding of physiological processes and changes that occur during routine exercise and during training. Students will understand how these changes are beneficial to general health and fitness. Students will have a clear understanding of the methods of evaluation that can be used to assess these changes, to evaluate the fitness level and to plan and prescribe an exercise program that will be beneficial to the individual in health and in certain chronic disease settings.

## This unique course will enable students to -

- Develop knowledge of exercise physiology and evaluation of fitness
- Learn to prescribe an exercise program to healthy clients and as therapy in certain clinical settings
- Obtain professional recognition from Register of Exercise Professionals Ireland and American College of Sports Medicine
- Pursue a career as an exercise specialist/therapist

#### Total ECTS 90

## Course Modules

Compulsory Core Modules			
Module	Module Name	ECTS	
Code			
ET1500	Essentials of Exercise Physiology	10	
ET1501	Integrated Physiological Responses to Exercise	10	

ET1502	Metabolism and Nutrition in Exercise, Endocrinology and	10
	Toxicology	
ET1503	Physiological evaluation of Exercise, Principles of Exercise	10
	Testing and Exercise Prescription	
ET1504	Application of Exercise in Therapy in health and disease	10
ET1505	Exercise Physiology laboratory and workshops	10
ET1506	Research project and Dissertation	25
Approved Elec	ctive Modules (Any One)	
ET1507	Certificate in Personal Trainer and Gym Instructions	5
BME505	Introduction to Biomechanics	5
MD550	Introduction to Research Methods (MD550)	5
MD551	Statistics for Exercise and Sports (MD551)	5
	Total ECTS	90

This programme is open to students who have completed a Level 8 degree with a minimum of second class honors in Physiology, Biomedical Science, Un-denominated Science, Biochemistry, Microbiology, Exercise Science, Nursing and Health Science, Physiotherapy, Podiatry, or any other related degree in biology. NFQ level 7 (ordinary Bachelors degree) in Physiotherapy or Exercise Science will also be considered and a bridging module in human body functions will be made available for transfer to the course.

Applicants who are not from Physiology, Exercise or Life science backgrounds but have a degree in other Exercise related areas or Sports management and having significant work experience and interest in the area of exercise science or sports will be considered on a case-by-case basis at the discretion of the program board. Students who have a Level 8 degree with less than second class honors in a related area and have 3+ years of practical experience in the subject area will also be considered.

# **Career Opportunities:**

With the increasing number of people living with chronic illnesses the demand for exercise physiologists capable of giving personal exercise advice that can improve the living standards of an individual is growing. Upon successful completion of this course students will be able to work in areas such as:

- Hospital, Health Care Centre and Outpatient Clinic
- Professional Sports and Coaching Centre
- Health club, Leisure Centre and related organizations
- Public sports and recreation facilities
- Local public health authorities
- Nursing Homes and Residential Care Facilities

Schools, further education and higher education institutions

# M. Sc. Cheminformatics and Toxicology PG Dip (exit only) PG Cert (exit only)

## **PROGRAMME DESCRIPTION**

Cheminformatics is the use of computational techniques to solve chemistry, pharmacology and toxicology problems. Students will understand and apply a range of computational tools to address toxicological questions in preparation for a career in in silico toxicity prediction in the pharma, industry, consultancy, academia and government. The course is delivered over one year by the disciplines of Pharmacology and Therapeutics, Mathematics and Chemistry.

The ideal student will have a BSc or MSc in chemistry with an interest in toxicology, and computational approaches to toxicity prediction. Students with a background in Pharmacology or Bioinformatics (or related disciplines) will also be encouraged to apply.

**NUI GALWAY CODE: 1CIT1** 

#### PROGRAMME AIMS AND OBJECTIVES

The course delivers a desirable and highly valued technical skill set that provides strong and diverse employment prospects industry, academia or regulatory bodies. A graduate will contribute to human health and help protect the environment by contributing to a chemically safe society.

Semester 1					
PM208	Fundamental Pharmacology			5ECTS	
CH5106	Computational Approaches to D	rug Desi	gn & Bi	omolecular	Interactions
	5ECTS				
PM311	Introduction to Toxicology		5ECTS		
PM5108	Applied Toxicology			5ECTS	
MA5114	Introduction to programming for b	oiologists	5ECTS		
MA5108	Statistical computing in R		5ECTS		
Semester 2					
PM5110	Current topics in Toxicology		10ECTS		
PM5111	Advanced Toxicology		5ECTS		
PM5114	Screening Molecular Libraries	5ECTS			
PMA324	Introduction to Bioinformatics	5ECTS			
MA5118	Advanced Cheminformatics		5ECTS		
Semester 3					

# PM5112 Research Project **ECTS WEIGHTING** 90 ECT course

#### MINIMUM ENTRY REQUIREMENTS

2.2 degree or higher in chemistry, pharmacology or related discipline and

30FCTS

an IELTS score of 6.5 for those whose first language is not English. A short listing procedure will be applied that evaluates undergraduate academic performance throughout their time at university, the content and quality of their personal statement, prior research or work experience and reference letters.

#### **COURSE OUTLINE**

The course is delivered over three semesters. In semester 1 students learn the fundamentals of pharmacology, toxicology and are introduced to computational drug-design, programming for biology and statistical computing in R. This forms a foundation for more advanced material explored in semester 2.

In semester 2 students consider more advanced concepts in toxicology and investigate controversial areas of toxicology. They also develop a theoretical and a practical understanding of high through put and high content screening technologies that are used to generate large data sets for analysis. The students will learn to apply bioinformatic and cheminformatic tools to such large data sets. This semester equips the students to develop and test a novel hypothesis through independent research that is completed in the third semester.

In the third semester students work independently but with the guidance of an academic or industry-based thesis supervisor on a cheminformatics research project.

The course involves lectures, laboratory-based training, self-directed learning and a three month independent research project. Competence is assessed through a mixture of written examinations, computer-based examinations, course work (including verbal presentations and poster presentations) and a research thesis.

#### **CAREER OPPORTUNITIES**

The ability to identify the toxicity and assure the safety of chemicals used in drugs, foodstuffs, consumer products, industry and agriculture is essential for modern society and the global toxicology testing market is projected to surpass \$16.2 billion by 2024. Scientists to develop and use computational tools that better predict toxicity are at a premium. The value of these skills is further enhanced by the scarcity of training programmes to produce toxicologists with the appropriate computational skills. Graduates from the course will be employed in the Pharmaceutical industry, the Cosmetics Industry, National and EU Regulatory bodies, Toxicology Consultancies and academia.

# MASTER OF SCIENCE (INTERVENTIONAL CARDIOVASCULAR MEDCINE)

# PG Dip(60ECTS)(exit only) & PG Cert(30ECTS) (exit only) PROGRAMME DESCRIPTION

The Masters in Interventional Cardiovascular Medicine will be attractive to clinical doctors with minimum of one-year postgraduate experience, who are interested in furthering their careers in interventional medicine. In addition, the course will be highly attractive to biomedical engineers in the research and development sector of the medical device industry. The programme will be delivered in collaboration with PCR (www.pcronline.com). Course modules cover coronary artery disease (CAD), CAD Treatments, structural heart disease, vascular intervention and medical device innovation.

# **NUI GALWAY CODE: 1ICM1**

## PROGRAMME:

## ☐ AIMS AND OBJECTIVES

To adequately train future Interventional physicians and cardiologists. The Masters will focus on core competencies of clinical knowledge, clinical decision-making, procedural skills, research methodology, professionalism, and interpersonal skills.

The overall objectives of the Masters in Interventional Cardiovascular Medicine are to:

- Establish a working understanding of key scientific and practical principles supporting interventional cardiovascular medicine;
- Acquire, organize, critically evaluate and apply relevant literature, data and results relevant to interventional cardiovascular medicine;
- Apply the knowledge and skills developed within the programme to produce an in depth review of the scientific literature;
- Critically evaluate professional practices at local, national and international levels:
- Communicate complex scientific principles effectively via written, oral and practical methodologies;
- To identify, organize, evaluate and apply knowledge to solve relevant

- problems in interventional cardiology;
- Demonstrate an ability to communicate relevant information to peers, colleagues and examiners;
- Exhibit self-confidence and capability to identify, interpret and analyse data relevant to interventional cardiovascular medicine and establish an extensive understanding of associated techniques and instrumentation;
- Attract highly motivated students, both from Ireland, Europe and overseas;
- Develop a high level of knowledge and understanding of interventional procedures;
- Develop high-level understanding of procedural skills in interventional medicine and cardiology;
- Provide an experience which is intellectually stimulating, enjoyable, and meets diverse students' needs;
- Provide a solid foundation for those Masters students who intend to proceed to study for a PhD.
  - **ECTS WEIGHTING:** 90ECTS

# ■ MINIMUM ENTRY REQUIREMENTS:

Applicants will be expected to possess a good quality undergraduate degree (at least an upper second class honours standard 2:1 academic qualification). It is expected that most of the students will be medical graduates with interest in interventional medicine/cardiology. The Masters will attract non-consultant hospital doctors. The medical graduates/doctors applying for the Masters will not require prior essential exposure to cardiology or interventional medicine. The course will also be open to applicants from biomedical engineering. Candidates coming to Ireland from abroad or who do not have a degree from Ireland or the UK will be asked to provide evidence of an acceptable result in one of the recognised English language proficiency tests, e.g. IELTS total score of 6.5.

## **COURSE OUTLINE**

Table 3: Overview of Course Structure						
	Semester I Semester II					
Core	Core	Core	Core	Core	Core	Core
Module	Module	Module 3	Modul	Module 5	Module	Module
1	2	10ects	e 4	5ects	6	7
10ects	10ects		10ects		5ects	10ects
CAD	CAD	Vascular	Structu	Emerging	Introduct	Medical
Diagnos	Treatme	Interventi	ral	Technolo	ion to	Device
tics	nts	ons	Heart	gies	Research	Innovati
			Diseas		Methods	on
			е		and	
					Medical	
					Statistics	
		June	e – Septen	nber		

June – September Research Dissertation (30ects)

## CAREER OPPORTUNITIES:

After successful completion of the masters programme, graduates will have a better understanding of the field of interventional medicine. Career opportunities will be enhanced depending on students' interest and background. Physicians are expected to obtain easier access to training programs in cardiology or interventional fellowship. Engineers can apply for better positions within the MedTech sector.

The master's qualification will increase chances to be selected for PhD programmes.

# **MSc Diabetes (Medicine)**

## PROGRAMME DESCRIPTION

Diabetes is a global health emergency with over 600 million people expected to have the condition by 2030, representing 10% of the world's population. Therefore the World Health Organisation (WHO) has classed diabetes as an epidemic requiring urgent action for both prevention and management. This has been echoed in Irelands Health Service Executive national policy and clinical strategy for diabetes. It is a chronic metabolic condition that can cause significant cardiovascular morbidity and mortality if not managed correctly. Central to this management is controlling key physiological indices such as blood sugar, blood pressure and blood lipid levels, as well as promoting health behaviours such as regular exercise, healthy eating and not smoking. Unfortunately achieving these biological targets and lifestyle goals is extremely challenging. Therefore given its growing prevalence and resulting impact on health care resources, there is an urgent need to provide specialist training in diabetes. This interdisciplinary programme aims to meet this need.

## NUI GALWAY CODE: 1DIA1

#### PROGRAMME AIMS AND OBJECTIVES

This interdisciplinary programme aims to provide specialist training in diabetes.

# **Learning outcomes**

- 1. Have a systematic understanding of diabetes informed by the latest scholarship.
- 2. Have a critical awareness of the current problems / new insights in diabetes.
- Demonstrate a range of standard and specialised research tools for diabetes

- 4. Develop new skills to a high level including novel and emerging techniques in diabetes.
- 5. Be able to act in a variety of professional contexts on the topic of diabetes.
- 6. Be able to take significant responsibility for leading diabetes research.
- 7. Be able to self-evaluate and take responsibility for continuing academic / professional development in diabetes.
- 8. Be able to scrutinise and reflect on diabetes social norms and relationships and act to change them.

## ECTS WEIGHTING

90 ECTS over 1 Year Long

## MINIMUM ENTRY REQUIREMENTS

Successful applicants will possess at least a Second Class Honours, Grade 1 degree in an appropriate clinical or life science degree program. For those who do not hold a primary degree at the required level, a special case will be made if they have demonstrated aptitude for the course material through at least three years of high quality work experience in a relevant field of diabetes health.

Candidates coming to Ireland from abroad or who do not have a degree from Ireland or the UK will be asked to provide evidence of an acceptable result in one of the recognised English language proficiency tests, e.g., IELTS total score of 6.5.

All prospective candidates will be interviewed by telephone or Skype.

### COURSE OUTLINE

This programme aims to prepare graduates to effectively contribute to diabetes management through comprehensive academic and research training.

The course is delivered through blended learning (online content and face to face workshops), with an attendance requirement of approximately 10 days per 4 month semester (please note some workshops may be scheduled at weekends).

Year 1 Semester 1 & 2 are theoretical based and represents 60 ECTS credits which is equivalent to a Postgraduate Diploma Diabetes at completion (which students can exit with, if they wish, at the end of Semester 2). Semester 3 is research thesis based which builds on the knowledge and skills learned in Semester 1&2 and represents 30 ECTS credits, thus providing a total of 90 ECTS which is the requirement for the awarding of a Masters of Science Diabetes.

## Year 1

Semester 1		
GPN10	Diabetes	10
ECTS		
HP8101	Foundations of Health Promotion	10
ECTS		
MD1562	Research Methods for Evidence Based Practice	10
ECTS		
Semester 2		
MD 578	Lifestyle Risk Factor Modification	30
ECTS		

## (Optional exit opportunity with PDipSc Diabetes or continue on for MSc Diabetes.)

### Semester 3

MD 577 Research Project 30 ECTS

### CAREER OPPORTUNITIES

Specialist training in diabetes at postgraduate level will demonstrate an academic commitment to diabetes care and research, and therefore will allow the graduate to be competitive in pursing future healthcare opportunities.

## Master of Health Science Diabetes –(Nursing) MHSc/PDipHSc (Diabetes) F/T/PT, PG Dip, PG Cert

#### PROGRAMME DESCRIPTION

Diabetes is a global health emergency with over 600 million people expected to have the condition by 2030, representing 10% of the world's population. Therefore the World Health Organisation (WHO) has classed diabetes as an epidemic requiring urgent action for both prevention and management. This has been echoed in Irelands Health Service Executive national policy and clinical strategy for diabetes. It is a chronic metabolic condition that can cause significant cardiovascular morbidity and mortality if not managed correctly. Central to this management is controlling key physiological indices such as blood sugar, blood pressure and blood lipid levels, as well as promoting health behaviours such as regular exercise, healthy eating and not smoking. Unfortunately achieving these biological targets and lifestyle goals is extremely challenging. Therefore given its growing prevalence and resulting impact on health care resources, there is an urgent need to provide specialist training in diabetes for clinicians and in particular nurses who are an integral part of the Diabetes Multidisciplinary Team.

#### NUI GALWAY CODE:

1DIN1 (MHSc); 1DIN9 (PDip)

### PROGRAMME AIMS AND OBJECTIVES

This programme aims to provide specialist training in diabetes for clinicians and in particular nurses who are an integral part of the Diabetes Multidisciplinary Team.

### **Learning outcomes**

 Demonstrate ethically sound decision making in relation to the care of patients living with diabetes.

- Demonstrate evidence-based knowledge and skills in the care of patients with diabetes.
- 3. Demonstrate the ability to contribute to the professional body of knowledge related to diabetes.
- 4. Advocate with other health care professionals for patients with diabetes.
- Assess risk and promote a safe environment and quality patient care.
- 6. Contribute in multidisciplinary team planning.
- 7. Contribute to the multidisciplinary team in the delivery of quality care for patients with diabetes.

#### ECTS WEIGHTING

90ects over 2 academic years Year 1 60 ECTS Year 2 30 ECTs

### MINIMUM ENTRY REQUIREMENTS

To be considered for entry to the programme applicants must meet the following entry requirements:

- be registered as a general nurse
- hold an active general nursing registration
- have a minimum of one year's post-registration experience

Applicants who do not hold an honours degree or postgraduate diploma (Level 9) may apply but must clearly demonstrate their capacity to complete a

programme at this level, and must successfully undertake a minimum of one 10ECTS module (Level 9) offered as a Professional Credit Award.

Candidates coming to Ireland from abroad or who do not have a degree from Ireland or the UK will be asked to provide evidence of an acceptable result in one of the recognized English language proficiency tests, e.g., IELTS total score of 6.5.

#### COURSE OUTLINE

This programme aims to prepare nurses to effectively contribute to diabetes nursing practice. The essence of diabetes nursing is the provision of individualised care to patients with diabetes. Caring for patients with diabetes requires nurses to have specialist knowledge and skills that meet the physical, psychological, mental and social needs of patients and their relatives. The multi-faceted nature of nursing in diabetes care settings encompasses the whole spectrum of care, from prevention to diagnosis to treatment and chronic disease management and this course encompasses that ethos.

The course is delivered through blended learning (online content and face to face workshops), with an attendance requirement of approximately 10 days per 4 month semester (please note some workshops may be scheduled at weekends).

Year 1 is theoretical-/clinical-based and represents 60 ECTS credits which is equivalent to a Postgraduate Diploma Diabetes at completion (which students can exit with, if they wish, at the end of Year 1). Year 2 is research thesis based which builds on the knowledge and skills learned in Year 1 and represents 30 ECTS credits, thus providing a total of 90 ECTS (Year 1 & 2) which is the requirement for the awarding of a Masters Health Sciences Diabetes.

#### Semester 1

GPN10 Diabetes (10

ECTS)

NU623 Clinical Governance: Supporting Safe Practice (10 ECTS)

NU605 Recognising & Responding to Client Deterioration (10

ECTS)

NU921 Clinical Competence 1 (0 ECTS)

### Semester 2

NU502 Advanced Research Methods (10

ECTS)

NU6439 Service Improvement (10

ECTS)

HP 6101 Cardiovascular Health and Diabetes Prevention (10 ECTS)

NU922 Clinical Competence 2 (0 ECTS)

(Optional exit opportunity with PDip Diabetes or continue on for MHSc Diabetes.)

#### Year 2

### Semester 1 & Semester 2

NU6515 Research Dissertation (30 ECTS)

Students' clinical competency will be assessed by a practice portfolio (submitted end of Year 1 Semester 2). Students also complete practice focused assignments throughout the whole of Year 1 programme [September to June]. In order to be eligible for the award of the Postgraduate Diploma in Nursing (Diabetes) students must pass each module at 40% and pass the clinical practice portfolio.

The clinical practice component forms an integral part of the programme. Students are required to attain at least 1,000 hours specialist

practice experience of working and caring for patients with diabetes in a variety of environments over the programme. This includes consolidating the experiences and opportunities that are available in their own clinical environments. The student will be expected to engage in the assessment, planning, delivery and evaluation of care to patients with diabetes with the support of designated preceptor agreed on with the programme director. To successfully meet the requirements of 1,000 hours of practice, the student will be required to work, for the duration of the first year of the programme, within practice settings that manage care for diabetes patients. If required, it may be possible to arrange clinical placements with the Diabetes Service at the University Hospital Galway which will cover the full spectrum of Diabetes Care.

#### CAREER OPPORTUNITIES

On completion of the Postgraduate Diploma/Master of Health Sciences Diabetes, which are Level 9 NFQ awards, a registered nurse would be eligible to apply for clinical nurse specialist registration in diabetes. Please note that this course is accredited by the Nursing and Midwifery Board of Ireland (NMBI).

## SCHOOL OF NURSING & MIDWIFERY

## TAUGHT POSTGRADUATE CERTIFICATE, DIPLOMA AND MASTERS PROGRAMMES

(NFQ level 9 awards; ref. www.nfq.ie)

PLEASE NOTE THIS INFORMATION IS SUBJECT TO CHANGE AND CANDIDATES ARE ADVISED TO VISIT THE POSTGRADUATE APPLICATION WEBSITE AT THE TIME OF APPLICATION

## **CERTIFICATE IN NURSING (NURSE/MIDWIFE PRESCRIBING)**

This programme's development is in response to a need for nurses and midwives to prescribe, in order to support high quality person-centered care. Nurses and midwives prescribe within the confines of robust legislation and professional regulation and their scope of practice. Improving client care is core to this extended role.

#### PROGRAMME DURATION AND STRUCTURE

The programme is delivered over a six-month period. The modules are delivered in a blended learning format using a combination of Blackboard and workshops in college. In addition, students will be mentored in their practice setting for the duration of the programme which will include 12 days of direct supervision of the prescriptive process by a designated medical practitioner.

#### PROGRAMME CONTENT

The programme is comprised of three theory/practice modules and a clinical competency assessment in prescribing:

- Physical assessment skills
- Professional, Ethical & Legal Issues of Nurse and Midwife Prescribing
- Drugs. Patients and illness.
- Clinical competency-Prescribing

#### ENTRY CRITERIA

- Registered as a nurse or midwife on the live register of An Bord Altranais.
- Currently employed as a nurse or midwife.
- Minimum of three years recent post registration clinical experience in nursing or midwifery (within the last five years) with the equivalent of one-year full-time experience in the specific area of practice in which prescribing is proposed.
- Possession of the competencies recognised at level 8 of the National Framework of Qualifications.
- Evidence of undertaking continuing professional education.
- Support from employer to undertake the programme as evidenced by a completed Site Declaration Form.
- Confirmation of a designated nurse/midwife/medical mentor as evidenced by a completed Site Declaration Form.

## MASTERS/POSTGRADUATE DIPLOMA IN HEALTH SCIENCES (EMERGENCY CARE)

Compensation is not permitted between modules.

#### PROGRAMME DURATION AND STRUCTURE

The programme is delivered over two years using a blended learning format, combing online learning and face-to-face workshops. On completion of Year 1 students have the option of being awarded a Postgraduate Diploma or progress onto the second year to attain a Masters of Health Sciences.

The programme is comprised of six theory/practice modules of which three are generic/core and three are specialist and related to emergency nursing. Core modules and some aspects of specialist modules are taken in conjunction with students undertaking other Masters/Postgraduate Diplomas. It will be delivered using a blended learning format, combining online learning and face-to-face workshops This means that teaching/learning will be delivered online through Blackboard, an interactive learning system which connects directly to the University from any home computer. Students are required to attend face to face workshops for total of 10 -11days across the programme. Workshops will employ a variety of teaching strategies including, problem focused lectures, skills teaching, and simulated patient scenario based exercises, student-led seminars, small group learning and experiential learning. Case studies will be used to help students test out what they would do in different situations. Students will simultaneously work in the clinical setting (usually their own work place) for the duration of the programme and will have to pass two clinical competencies and complete a minimum of 1000 hours in an emergency care setting and will be supported by their unit manager and named preceptor.

#### Online Module titles are as follows:

- Recognising and responding to client deterioration (10 credits—specialist);
- Principles and practice of acute medical nursing (10 credits—specialist);
- Essential Physical Assessment Skills (10 credits—specialist);
- Service Improvement (10 credits—core);

- Clinical Governance: Supporting Safe Practice (10credits—core);
- Advanced Research Methods (10 credits—core);
- Clinical Assessment 1: Clinical Assessment 2.

#### ENTRY CRITERIA

All applicants must meet the following entry requirements:

Hold a Bachelor degree at NFQ Level 8 in Nursing or a comparable qualification.

a) Determining equivalence: This is a Level 9 programme. Applicants who do not hold an Honours degree or Higher Diploma (Level 8) may apply but must clearly demonstrate their capacity to complete a programme at this level. In addition to the other requirements outlined above, these applicants are required to submit a 1000 word literature-based essay. To be considered for admission, this essay must be at the level expected of an Honours degree candidate (Level 8). Click here for more information on

- this essay.

  1. Registration as a General nurse on the live register of An Bord Altranais a gus Cnáimhseachais na hÉireann.
  - 2. Currently employed as a nurse in an Emergency Department. The applicants must have a minimum of six months experience in this setting over the past two years.
- 3. Written evidence of support for the applicant from their Director of Nursing and Clinical Unit Manager. academic and/or professional qualifications and standards required, together with any equivalence that may apply.

Students must work in the clinical area for the duration of the programme. Clinical requirements for completion of the programme are to pass two clinical competencies and complete a minimum of 1000 hours in an acute medical unit or equivalent setting as deemed by the Programme Director.

#### SELECTION CRITERIA

All students that meet the entry criteria stipulated above will be eligible for acceptance on the programme. Students will spend the majority of the placement in their own work setting. Its suitability in terms of equivalence will be assessed by the Programme Director in consultation with the Clinical Facilitator and Unit Manager from the Emergency Department UCHG before the student starts the programme. Any deficits in learning opportunities identified (in terms of capacity to meet the programme learning outcomes) may require the student taking an additional practice placement in a clinical setting outside their own workplace to meet these outcomes. An audit of each clinical unit will be undertaken prior to students commencing their programme to determine its suitability and identify deficits that may impact on students achieving the programme learning outcomes.

#### ASSESSMENT

In order to be eligible for the award of the Masters/Post graduate Diploma in Health Sciences (Emergency Care) students must

• pass each theoretical component at 40%

• pass two clinical assessments Students must have completed a minimum of 1000 clinical practice hours over the duration of the programme.

Compensation is not permitted. A maximum of 40% can only be obtained in a module on repeat. The standard for progression to year two is a mark of at least 60% at the end of year one.

Students must have completed a minimum of 1000 clinical practice hours over the duration of the course.

#### **Additional Issues:**

Students must complete the programme within two years of commencement for the full time option, and within four years of commencement for the part time programme.

Students who achieve an aggregate mark of 60% will be entitled to progress to the second year of the programme where they submit a thesis for the award of Masters

## MASTER/POSTGRADUATE DIPLOMA IN HEALTH SCIENCES (ADVANCED PRACTICE WITH PRESCRIBING)

This is a full-time programme running over one calendar year. Taught programme content is delivered over two trimesters and is offered in blended mode, workshops and on-line.

### PROGRAMME CONTENT

Specialist practice modules address the context of advanced practice, physical assessment skills, pathophysiology, pharmacology and clinical decision making. Submission of a portfolio demonstrating competencies pertaining to advanced practice is required. Substantive hours of clinical practice at an advanced practice level and supervised by appropriate healthcare professionals is also integral to the programme.

#### ASSESSMENT

Each module is assessed independently. Strategies for assessment include essays, reflective practice assignments, presentations, clinical competency assessments and dissertation

#### MINIMUM ENTRY CRITERIA:

- Master in Health Sciences (Nursing/Midwifery) or equivalent
- Be on the active Register as a nurse/midwife
- Have practiced as a nurse/midwife for a minimum of five (5) years post registration three (3) of which are in the specialist area
- Letters from the Director of Nursing and the appropriate health care professional Clinical Supervisor in support of the application.

### POSTGRADUATE DIPLOMA IN NURSING (EDUCATION)

This programme is aimed at masters prepared graduates who wish to gain a teaching qualification. Broadly the programme aims to develop nurses/midwives expertise and understanding of teaching in higher education and clinical settings.

#### PROGRAMME DURATION AND STRUCTURE

The programme is facilitated online and students attend for three-day workshops in semester 1 and two half days and one full day workshops in  $2^{nd}$  semester. A one-day introduction to the programme is offered the week prior to the programme commencing.

The programme is comprised of three taught modules and three competency assessments. To support learners' skill development, they are expected to complete 100 hours of teaching/facilitation during the programme. Learners are also expected to gain expertise in a wide range of teaching methods including lecturing, clinical teaching in both laboratory and clinical settings, and working with small groups using experimental approaches. Students are required to provide evidence of having completed:

- 30 hours experience of formal classroom based lecturing;
- 25 hours of clinical focused teaching which should comprise of both classroom based skills teaching and teaching in the clinical setting;
- 25 hours of small group work with a focus on experiential approaches, for example, seminars, workshops;
  - 10 hours at the discretion of the student;
- 10 hour that demonstrates engagement and adoption of an innovative teaching methodology or technology.

#### PROGRAMME CONTENT

The programme is comprised of three taught modules, and three teaching assessments and the completion of an E-Portfolio. The modules are as follows:

Student-centred teaching and learning – active engagement strategies Designing for Learning Teaching Competency Assessment 1, 2, and 3 Electronic Teaching Portfolio (e-Portfolio)

#### ASSESSMENT

The programme is assessed by means of continuous assessment. In order to be eligible for the award of the Postgraduate Diploma in Nursing (Education) students must pass each module at 40% to be deemed to have passed the theoretical component and three teaching assessments to be deemed to have passed the practice component. Students must complete the required 100 hours of teaching practice in the areas specified. Compensation is not permitted. The standard for the award of a distinction is the attainment of 65% on the aggregate. Normally, a Distinction may be awarded only when the assessment is passed at the first attempt.

#### MINIMUM ENTRY CRITERIA:

Candidates must have successfully completed a Master in Nursing/Midwifery or its equivalent; be a registered nurse/midwife on the Register maintained by the Nursing and Midwifery Board of Ireland (NMBI); have practiced as a nurse/midwife for a minimum of three years post registration (exclusive of post-registration/educational programmes); have negotiated a placement in a Centre of Nurse/Midwifery Education which will provide them with the opportunity to meet the practice requirements of this programme.

#### SELECTION CRITERIA

Selection is based on applicant's academic and professional qualifications (as above). In order to register as a nurse tutor students must meet any requirements for registration identified by the NMBI.

# MASTER/POSTGRADUATE DIPLOMA IN HEALTH SCIENCES (GERONTOLOGY)

The Master/Postgraduate Diploma in Health Sciences (Gerontology) offered in partnership with the Health Service Executive West, is Major Award, at Level (9) on the National Framework of Qualifications. It has been designed for registered nurses who wish to pursue a specialist programme in caring for older people and their families working in a variety of clinical settings. The overall goal of the programme is to further enhance nurses' ability to provide effective, appropriate, high quality nursing care for older people. On successful completion of this programme, students will hold a Master/Postgraduate Diploma in Health Sciences (Gerontology) and will be eligible to work as a gerontological nurse in a variety of older person care settings.

The programme is offered full time over two calendar years. Students can exit at the end of year one with a Postgraduate Diploma in Health Sciences (Gerontology). While undertaking the programme students will continue to work in an approved older person care setting. It is comprised of theoretical and clinical components, commencing in September of each year. Taught programme content is delivered over two trimesters.

#### PROGRAMME CONTENT

The programme is comprised of seven theory modules (three specialists, two core, one option, and a Service Improvement module) and two practice assessments. In all modules there is an emphasis on exploring the relevance of module content to practice. A blended learning approach is adopted in the delivery of this programme. Students continue to work in their own practice setting while undertaking the programme.

## Modules: Core Modules:

- Clinical Governance: Supporting Safe Practice (core)
- Advanced Research Methods (core)
- Research Dissertation (core)

#### **Specialist Modules:**

 Ageing and Older People: Biopsychosocial Perspective Contemporary Issues in Gerontological Nursing Dementia Care: Transforming PracticeService Improvement

### **Clinical Competencies:**

- Clinical Competence 1
- Clinical Competence 2

#### **ENTRY CRITERIA**

All applicants must meet the following entry criteria:

 Be a registered nurse on the General, Mental Health, or Learning Disability Nurse divisions of the Register maintained by An Bord

	Altranais agus Cnáimhseachais na hÉireann;
	Hold an active general nursing registration
•	Have a minimum of one year's post-registration experience
	be currently working in a setting in Ireland which requires him/her to care
	for older people and have as a minimum six months clinical experience in
	caring for older people within the previous two years
	Hold an honours degree or a Bachelor Degree at NFQ Level 8 in Nursing or
	a comparable qualification. Applicants who do not hold an honours degree
	or a Postgraduate Diploma are required to submit a literature based essay
	(1000 words) on a topic relevant to the care of older people with their
	application. To be considered for admission, this essay must be at the level
	expected of an honours degree candidate (Level 8).
	Satisfy the selection panel that they have the ability to complete
	the programme

#### SELECTION CRITERIA

Selection will be made, by the Programme Director, in consultation with the Head of School, on the basis of applicants' written application. To be considered for admission to the programme applicants must meet the admission criteria outlined above. Applications will be evaluated on the following:

- A. Meet the entry criteria
- B. Demonstrate an understanding of the demands of the programme and the motivation to complete the programme
- C. Demonstrate in his/her essay the potential to cope with the academic standards required
- D. Undergo a clinical audit of the learning environment and provide the written support of the Director of Nursing in each area that students will be supported to meet clinical learning outcomes
- E. Be able to demonstrate application of theory to practice in an approved older person care setting.
- F. Obtain a letter from their Director of Nursing guaranteeing practice placements in the older person care setting for the duration of the programme.

#### ASSESSMENT

Modules are assessed by means of continuous assessment only.

Clinical competence must be demonstrated by:

Students passing all the competencies at the specified level of competence for each clinical assessment

Two clinical assessments must be completed and passed to successfully complete the programme.

In order to be eligible for the award of the Master/Postgraduate Diploma in Health Sciences (Gerontology) students must

• pass each theoretical component at 40% pass three clinical assessments

Students must have completed a minimum of 1000 clinical practice hours over the duration of the programme.

Compensation is not permitted. A maximum of 40% can only be obtained in a module on repeat. Students who achieve an aggregate mark of 60% will be entitled to progress to the second year of the programme where they submit a thesis for the award of Masters

## MASTER/POSTGRADUATE DIPLOMA IN HEALTH SCIENCES (INTENSIVE CARE)

The Masters/Postgraduate Diploma in Health Sciences (Intensive Care) has been designed for registered nurses, who wish to pursue a specialist course in Intensive Care. The Masters/Postgraduate Diploma is offered in partnership with the Health Service Executive.

#### PROGRAMME DURATION AND STRUCTURE

The aim of the programme is to develop knowledgeable sensitive practitioners who have a high level of specialist skills.

The programme is offered full-time over one calendar year. Taught components of the programme are delivered in a blended learning format and classroom teaching. Blended learning is an innovative teaching strategy which involves a combination of face-to-face and on-line learning. This means that learning/teaching will be delivered on-line through Blackboard, an interactive learning system which connects directly to the University from your own home computer. Students are required to attend face to face workshops for a total of 12 days across the programme (in blocks of 2 days at a time). The programme is comprised of seven theory/practice modules. In all modules there is an emphasis on exploring the relevance of module content to practice, similarly, practice placements allow students to explore "new" knowledge in practice, enabling them an opportunity to integrate theory and practice. Students are required to undertake their clinical practice in an approved clinical practice setting within Ireland normally within the students' own work setting. Students are required to complete a minimum of 1,000 clinical hours within the specialist area before completing this programme.

#### ENTRY CRITERIA

All applicants must meet the following entry requirements:

- Be a registered nurse on the General Nurse division of the Register maintained by an Bord Altranais.
- o Hold an active nursing registration.
- Have a minimum of two years post-registration experience (exclusive of post-registration courses).
- Be currently working in the required specialist area, i.e., Intensive Care, and have as a minimum six months clinical experience in this specialist area.
- Hold an Honours degree or hold a Bachelor Degree at NFQ Level 8 in Nursing or a comparable qualification.
- O Determining Equivalence: This is a level 9 programme. Applicants who do not hold an Honours degree or higher diploma (Level 8) may apply but must clearly demonstrate their capacity to complete a programme at this level. In addition to the other requirements outlined above, these applicants are required to submit a 1000-word literature-based essay. To be considered for admission, this essay must be at the level expected of an Honours degree candidate (Level 8). Click <a href="here">here</a> for more information on this essay.

To be considered an applicant must:

- Meet the entrycriteria
- Obtain a letter from the candidate's Director of Nursing guaranteeing practice
  placements within Ireland, in the appropriate specialism for the duration of the
  programme, within the candidate's current place of work. Where the environment
  does not provide sufficient opportunities to meet the learning outcomes of the
  programme addition placements will be required by the student in sites which will
  provide the experience needed.

#### PROGRAMME CONTENT

The programme comprises of six modules of which three are generic/core and three are specialist exclusive to Intensive Care Nursing. Core modules and some aspects of specialist modules are taken in conjunction with students undertaking other Postgraduate Diplomas. Students will also undertake two practice assessments and a service improvement project.

The six programme modules are listed below:

#### **Core Modules:**

- Clinical Governance: Supporting Safe Practice (core)
- Advanced Research Methods (core)

#### **Specialist Modules:**

- Specialist Nursing Module 1
- Specialist Nursing Module 2
- Specialist Nursing Module 3

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### **Service Improvement Project**

#### ASSESSMENT

The modules are assessed by means of continuous assessment and examinations. In order to be eligible for the award of the Post Graduate Diploma in Nursing Studies students must pass each of the modules of the programme with a minimum of 40%.

Compensation is not permitted between modules.

 A Maximum of Students reaching the specified level of competence in the assessment overall.

40% can only be obtained in a module on repeat

Clinical competence must be demonstrated by:

- Students passing all performance criteria within each of the five domain of the clinical assessment and
- Students reaching the specified level of competence in the assessment overall.

Two clinical assessments must be completed and passed to successfully complete
the course

Students must have completed a minimum of 1000 clinical practice hours over the duration of the course.

Students may progress to take the Master of Health Sciences in Year Two provided they have attained 60% on the aggregate on the Postgraduate Diploma element. Eligible students may progress to undertake the Master of Health Sciences within four years of first entering the programme.

## MASTER/POSTGRADUATE DIPLOMA IN HEALTH SCIENCES (ACUTE CARE)

The Masters/Postgraduate Diploma in Health Sciences (Acute Medicine) aspires to meet the needs of registered nurses working in Hold an Honours degree or hold a Bachelor Degree at NFQ Level 8 in Nursing or a comparable qualification.

#### Clinical competence must be demonstrated by:

Students passing all performance criteria within each of the acute medical settings with evidence based knowledge and training so that they can expertly recognise, intervene, and manage acute changes in the complex conditions of patient-care environments. The focus will be on consolidating and expanding their knowledge and skills in response to the need for early detailed assessment and development of initial treatment plans.

The programmes are offered in partnership with the Health Service Executive.

#### PROGRAMME DURATION AND STRUCTURE

The programme is delivered over two years using a blended learning format, combining online learning and face-to-face workshops. On completion of Year 1 students have the option of being awarded a Postgraduate Diploma or progress onto the second year to attain a MSc

The programme is comprised of six theory/practice modules of which three are generic/core and three are specialist and related to acute medical nursing. Core modules and some aspects of specialist modules are taken in conjunction with students undertaking other Masters/Postgraduate Diplomas. . It will be delivered using a blended learning format, combining online learning and face-to-face workshopsThis means that teaching/learning will be delivered online through Blackboard, an interactive learning system which connects directly to the University from any home computer. Students are required to attend face to face workshops for approximately 10-11 days across the programme. Workshops will employ a variety of teaching strategies including, problem focused lectures, skills teaching, simulated patient scenario based exercises, student-led seminars, small group learning and experiential learning. Case studies will be used to help students 'test' out what they would do in different situations. Students will simultaneously work in the clinical setting (usually their own work place) for the duration of the programme and will have to pass two clinical competencies and complete a minimum of 1000 hours in an acute medical unit or equivalent setting.

Student learning in the clinical setting will be supported by their unit manager and named preceptor.

On-line Module titles are as follows:

- Recognising and responding to client deterioration (10 credits—specialist);
- Principles and practice of acute medical nursing (10 credits—specialist);
- Essential Physical Assessment Skills (10 credits—specialist);
- Service Improvement (10 credits—core);
- Clinical Governance: Supporting Safe Practice (10credits—core);
- Advanced Research Methods (10 credits—core);

Clinical Assessment 1; Clinical Assessment 2.

#### ENTRY CRITERIA

#### ENTRY CRITERIA

An Honours Bachelor Degree at NFQ Level 8 in nursing or a comparable qualification. Determining Equivalence: This is a level 9 programme. Applicants who do not hold an Honours degree or higher diploma (Level 8) may apply but must clearly demonstrate their capacity to complete a programme at this level. In addition to the other requirements outlined above, these applicants are required to submit a 1000-word literature- based essay. To be considered for admission, this essay must be at the level expected of an Honours degree candidate (Level 8).

Click here for more information on this essay.

- 2. Currently employed as a nurse in an Acute Medical Unit (AMUs), Acute Medical Assessment Unit (AMAUs) or Medical Assessment Unit (MAUs), Short Stays Unit (SSU), or an equivalent clinical setting that has a remit for caring for patients in the acute stages of their medical illness. The applicants must have a minimum of six months experience in this setting over the past two years. Registration as a General nurse on the live register of An Bord Altranais agus Cnáimhseachais nahĒireann
- 3. Written evidence of support for the applicant from their Director of Nursing and Clinical Unit Manager.
- 4. Minimum academic and/or professional qualifications and standards required, together with any equivalence that may apply.
- 5. Students must work in the clinical area for the duration of the programme. Clinical requirements for completion of the programme are to pass two clinical competencies and complete a minimum of 1000 hours in an acute medical unit or equivalent setting as deemed by the Programme Director.
- 6. Registration as a General Nurse on the Live Register of An Bord Altranais agus Cnáimhseachais na hÉireann

#### SELECTION CRITERIA

All students that meet the entry criteria stipulated above will be eligible for acceptance onto the programme. Students will spend the majority of the placement in their own work setting. Its suitability in terms of equivalence i.e. a recognised acute medical unit (AMU, AMAU, MAU) for the programme will be assessed by the Programme Director in consultation with the Unit Manager from the Acute Medical Unit of UCHG before the student starts the programme. Any deficits in learning opportunities identified (in terms of capacity to meet the programme learning outcomes) may require the student taking an additional practice placement in a recognised AMU to meet these outcomes. An audit of each clinical unit will be undertaken prior to students commencing their programme to determine its suitability and identify deficits that may impact on students

achieving the programme learning outcomes.

ASSESS	SMENT
In order	to be eligible for the awards of Masters/Postgraduate Diploma in Health
Sciences	s (Acute Medicine) students must:
	pass each theoretical component at 40%
	pass two clinical assessments

Students must have completed a minimum of 1000 clinical practice hours over the duration of the programme.

Compensations is not permitted. A maximum of 40% can only be obtained in a module on repeat. The standard for progression to year two is a mark of at least 60% at the end of year one.

## MASTER/POSTGRADUATE DIPLOMA IN HEALTH SCIENCES (PALLIATIVE CARE)

The Master/Postgraduate Diploma in Health Sciences (Palliative Care) is designed for registered General, Mental Health or Intellectual Disability or Children's nurses who wish to pursue a specialist programme in Palliative Care. Each module is designed to provide students with a theoretical framework from which they can explore and integrate theory & practice. This programme aims to:

- 1. Provide students with knowledge and skills to enhance palliative nursing practice.
- 2. Prepare nurse practitioners for entry to specialist nursing practice

#### PROGRAMME STRUCTURE & DESIGN

- The programme is comprised of si x theory/practice modules. Core modules and some aspects of specialist modules are taken in conjunction with students undertaking other Masters/Postgraduate Diplomas.
- Advanced Research Methods (Core)
- End of Life Care: Psychological & Social Perspectives (Specialist)
- Palliative Approaches to Symptom Management (Specialist)
- Care of the Child and Family with Palliative / Complex Needs Service Improvement (Core)

The content of this programme is delivered over two semesters, comprising of lectures, workshops, seminars, the reading and preparation of assignments and clinical practice in the specialist area. The programme is offered full-time over one academic year .. Taught components of the programme are delivered in a blended learning format and classroom teaching. Blended learning is an innovative teaching strategy which involves a combination of face-to-face and online learning. This means that learning/teaching will be delivered online through Blackboard, an interactive learning system which connects directly to the University from your own home computer. Students are required to attend face to face workshops for a total of 12 days across the programme. In addition to clinical experience gained in the students' own work setting, all students undertake two alternative clinical placements as part of the programme

#### DURATION

The programme is delivered on a full-time basis commencing in September of each year.

#### INTAKE

There is one intake per year.

#### ENTRY CRITERIA

All applicants must meet the following entry requirements:

 Be a registered nurse on the General, Mental Health, Intellectual Disability of Children's Nurse division of the Register maintained by the Nursing and Midwifery Board of Ireland.

- Hold an active nursing registration.
- Hold an active nursing registration experience

In order to be eligible for the award of the Master/Postgraduate Diploma in Health Sciences (Palliative Care) students mustpass each of the modules of the programme with a minimum of 40% and pass two clinical assessments.

A maximum of 40% can only be obtained in a module on repeat. The standard for progressions to year two is a mark of at least 60% at the end of year one.

- t en domains of the clinical assessment and
- Two clinical assessments must be completed and passed to successfully complete
  the course

# MASTER/POSTGRADUATE DIPLOMA IN HEALTH SCIENCES (CHILDREN'S PALLIATIVE/COMPLEX CARE)

The Master / Postgraduate Diploma in Health Sciences (Children's Palliative / Complex Care) is designed for registered General, Mental Health, Intellectual Disability, Children's nurses or Midwives working with children and adolescents with complex or life limiting conditions. Each module is designed to provide students with a theoretical framework from which they can explore and integrate theory & practice. This programme aims to:

- 1. Provide students with the necessary in-depth evidence based knowledge, skills and competencies to provide quality care to highly dependent clients as they live with life-limiting illness and face end-of-life.
- 2. Prepare nurse practitioners for entry to specialist nursing / midwifery practice in their registered discipline.

#### PROGRAMME STRUCTURE AND DESIGN

The programme is comprised of six theory/practice modules. Core modules and some aspects of specialist modules are taken in conjunction with students undertaking other Masters / Postgraduate Diplomas. Modules are listed below:

	Clinical Governance: Supporting Safe Practice (Core)
	Advanced Research Practice (Core)
	Specialist Understanding of Complex Care for Children (Specialist)
•	Quality of Life and Symptom Management in Children's Palliative / Complex
	Care (Specialist)
	Care of the Child and Family with Palliative / Complex Needs (Specialist)
	Service Improvement (Core)

#### THEORETICAL INSTRUCTION

The content of this programme is delivered over two semesters, comprising of lectures, workshops, seminars, the reading and preparation of assignments and clinical practice in the specialist area. The programme is offered full-time over one academic year. Taught components of the programme are delivered in a blended learning format and classroom teaching. Blended learning is an innovative teaching strategy which involves a combination of face-to-face and on-line learning. This means that learning/teaching will be delivered online through Blackboard, an interactive learning system which connects directly to the university from your own home computer. Students are required to attend face to face workshops for a total of 12 days across the programme. In addition to clinical experience gained in the students' own work setting, all students undertake two alternative clinical placements as part of the programme.

#### DURATION

The programme is delivered on a full-time basis commencing in September of each year.

#### INTAKE

There is one intake per year.

#### ENTRY CRITERIA

All applicants must meet the following entry requirements:

•	Be a registered nurse on the General, Mental Health, Intellectual Disability,
	Children's Nurse or Midwifery division of the Register maintained by an Bord
	Altranais.
	Hold an active nursing registration.
	Be currently working in the required specialist area and have as a minimum six months clinical experience in this specialist area.
	Hold an Honours degree or hold a Bachelor Degree at NFQ Level 8 in Nursing or a comparable qualification.
	Determining Equivalence: This is a level 9 programme. Applicants who do not hold an Honours degree or higher diploma (Level 8) may apply but must clearly demonstrate their capacity to complete a programme at this level. In addition to the other requirements outlined above, these applicants are required to submit a 1000- word literature-based essay. To be considered for admission, this essay must be at the level expected of an Honours degree candidate (Level 8). Click here for more information on this essay.

#### SELECTION CRITERIA

To be considered an applicant must:

- Meet the entrycriteria
- Obtain a letter from the candidate's Director of Nursing guaranteeing practice
  placements within Ireland, in the appropriate specialism for the duration of the
  programme, within the candidate's current place of work. Or, where necessary,
  additional appropriate clinical placements in order to meet clinical learning
  requirements.

#### ASSESSMENT

All modules are assessed through continuous assessment, written coursework and examination. SELECTION CRITERIA

To be considered an applicant must:

□ Me	et the	entry	criteria
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Obtain a letter from the candidate's Director of Nursing guaranteeing practice
placements within Ireland, in the appropriate specialism for the duration of the
programme, within the candidate's current place of work. Or, where necessary,
additional appropriate clinical placements in order to meet clinical learning
requirements.

#### **ASSESSMENT**

All modules are assessed through continuous assessment, written coursework and examination. In order to be eligible for the award of a Masters / Postgraduate Diploma in Health Sciences (Children's Palliative / Complex Care) students must pass each theoretical component at 40% and pass two clinical assessments.

Compensation is not permitted between modules.

A maximum of 40% can only be obtained in a module on repeat. The standard for progression to year two is a mark of at least 60% at the end of year one.

Clinical competence must be demonstrated by:

Students passing all performance criteria within each of the ten domains of the clinical assessment and students reaching the specified level of competence in the assessment overall.
Two clinical assessments must be completed and passed to successfully complete the course
Students must have completed a minimum of 1000 clinical practice hours over the duration of the course.

## MASTER/POSTGRADUATE DIPLOMA IN HEALTH SCIENCES (PERIOPERATIVE)

The Master/Postgraduate Diploma in Health Sciences (Perioperative) Major Award is at Level (9) on the National Framework of Qualifications. The programme has been designed for registered nurses, who wish to pursue a specialist course in Perioperative Nursing. The programme is offered in partnership with the Health Service Executive. The programme is offered full-time over two academic years. Students can exit at the end of year one with a Postgraduate Diploma. While undertaking the programme, students will continue to work in an approved perioperative care setting. Students are required to complete a minimum of 1,000 clinical hours before completing the programme.

#### PROGRAMME CONTENT

The programme comprises of seven theory modules of which three are core and three are specialist exclusive to Perioperative Nursing and a Service Improvement Module). In all modules there is an emphasis on exploring the relevance of module content to practice. A blended learning approach is adopted in the delivery of this programme. Students continue to work in their own practice setting while undertaking the programme.

The seven programme modules are listed below:

Core 1	Modules:
	Clinical Governance: Supporting Safe Practice (core)
	Advanced Research Methods (core)
	Research Dissertation (core)
	Service Improvement
Specia	alist Modules:
	Perioperative Nursing 1: Physiological Effects of Surgery and Promotion of
	Safety
	Perioperative Nursing 2: Prevention of Anaesthetic Complications
	Perioperative Nursing 3: Prevention of Surgical Complications
In ord	er to be considered for entry to the programme, applicants nmust meet the
follow	ring entry requirements:
	Be a registered general nurse
•	Have a minimum of one year's post-registration experience (exclusive of
	post-registration courses).
	Be currently working in the required specialist area, i.e., perioperative
	department, and have as a minimum six months clinical experience in this
_	specialist area.

Determining Equivalence: This is a level 9 programme. Applicants who do not hold an Honours degree or postgraduate diploma (Level 9) may apply but must clearly

demonstrate their capacity to complete a programme at this level. In addition to the other requirements outlined above, these applicants are required to submit a 1000-word literature-based essay. To be considered for admission, this essay must be at the level expected of an Honours degree candidate (Level 8).

#### SELECTION CRITERIA

To be considered an applicant must:

Meet the entrycriteria

#### SELECTION CRITERIA

Selection will be made by the Programme Director in consultation with the Head of School on the basis of the applicants' written application. To be considered for adn abo

	n to the programme applicants must meet the admission criteria outlined pplicants will be evaluated on the following:
	Be able to demonstrate application of theory to practice in an approved peri operative setting for the duration of the programme.
	Be working in the required specialist area i.e., peri operative care setting for the
	duration of the programme.  Undergo a clinical audit of the learning environment and provide written support of the Director of Nursing in each area that students will be supported to meet clinical learning outcomes.
	Undertake additional placement(s) in the areas of peri operative settings if deemed necessary by the Programme Director before completion of the peri operative programme.
	S are assessed by means of continuous assessment only. Clinical competence demonstrated by:
Students	passing all the competencies at the specified level of competence for each ssessment.
	ical assessments must be completed and passed to successfully complete the
	ents must have completed a minimum of 1000 clinical practice hours over the tion of the course.
Science (	to be eligible for the award of Post graduate Diploma/Master of Health Nursing) students must
	Pass the theoretical component at 40%. Pass two clinical assessments
	must have completed a minimum of 1000 clinical practice hours over the

Stu duration of the programme.

Compensation is not permitted. A maximum of 40% can only be obtained in a module on repeat. The standard for progression to year 2 is a mark of at least 60% at the end of year one.

### **Additional Issues:**

- Students must complete the programme within two years of commencement of the programme.
- Students may progress to take the Master of Health Sciences in *Year Two* provided they have attained 60% on the aggregate on the Postgraduate Diploma element.

## MASTER/POSTGRADUATE DIPLOMA IN HEALTH SCIENCES (PUBLIC HEALTH NURSING)

The Masters/Postgraduate Diploma in Health Sciences (Public Health Nursing) programme is aimed at nurses who wish to work in the community setting as a public health nurse. The experience of health is both socially and culturally determined with the achievement of maximum health potential influenced by the wider determinants of health. The Public Health Nurse has a unique role in recognising the wider realms of what impacts and determines community health and in facilitating maximum health potential. Nursing in the community involves the consideration and enablement of health care needs which demands both a clinical and public health focus of care. In considering this multifaceted function and the fact that primary health care and targeting population health is integral to community nursing practice, this programme aims to prepare students to competently meet the complex health care needs of the community as client.

The Master/Postgraduate Diploma in Health Sciences (Public Health Nursing) is run over two academic years. Candidates registering for this programme will complete the Postgraduate Diploma in Health Sciences (Public Health Nursing) in one year and upon successful completion can register with the NMBI as a public health nurse.

The first year of this programme is offered by the School of Nursing and Midwifery, NUI Galway, and the Health Service Executive. To successfully complete the Postgraduate Diploma students must complete modules totaling 60 ECTS. Students **may opt** to progress on to the Master of Health Sciences (Public Health Nursing) totalling 30 ECTS in the second year. Entry to the Masters programme is subject to the student achieving 60% on the aggregate of the Postgraduate Diploma modules undertaken in year one. Students who are eligible for the award of Postgraduate Diploma may progress to undertake the Masters within four years of first entering the programme.

For year one of the programme in partnership with the relevant third level institutions the Health Services Executive Areas run a centralised funding application process for candidates. Sponsorship is offered by the Health Areas of the Health Service Executive. Sponsorship must be secured by the candidate prior to commencement on the programme. Year two of this programme is offered by the School of Nursing and Midwfiery, NUI Galway, and is not sponsored by the Health Services Executive.

#### PROGRAMME DURATION AND STRUCTURE

Year One - Postgraduate Diploma of Health Sciences (Public Health Nursing) The Postgraduate Diploma in Health Sciences (Public Health Nursing), totaling 60 ECTS is delivered in one academic year. The theoretical component of the programme is comprised of six modules (if a registered midwifer) and seven modules (if not a registered midwife). Students will complete two clinical practicum competency assessments within the community setting comprising of practicum one (1, 2, 3 professional assessments) and practicum two (4 and 5 professional assessments). For

students who are not registered midwives, one clinical skills assessment in the maternity unit is also undertaken

#### Modules (Year One)

•	Clinical Governance – Supporting Safe Practice
	Advanced Research Methods
	Service Improvement A (non-midwife cohort)
	Service Improvement B (midwife-cohort)
	Promoting Population Health Across the Lifespan
	Essential Physical Assessment Skills
	Child Health Surveillance, Welfare and Protection
	Child and Maternal Health (non-midwives only)
	Practicum One (Professional Practice 1,2,3)
	Practicum Two (Professional Practice 4,5)
	Practicum One (Child and Maternal) (non-midwives only)

Master of Health Sciences (Public Health Nursing) – Year Two On successful completion of the Postgraduate Diploma in Health Science s (Public Health Nursing) students can opt to undertake the Master of Health Sciences (Public Health Nursing).

Entry to the Master of Health Sciences (Public Health Nursing) programme is subject to students achieving 60% on the aggregate of the Postgraduate Diploma modules. In Year 2, students complete a research dissertation (30 ECTS) on a topic of relevance to public health nursing.

Note: Year two of this progamme is not sponsored by the Health Services Executive.

#### ENTRY CRITERIA

All candidates must meet the following entry requirements:

- Be a registered nurse on the General Division of the Register of Nurses maintained by Nursing and Midwifery Board of Ireland (NMBI)
- Candidates must be a registered nurse (RGN) and have a minimum of 3 years postregistration experience as an RGN within the past 7 years, working 39 hours per week, or its equivalence within the last 7 years if working less hours.
- Unless the candidate's name is registered in the Midwives division of the Register maintained by the Nursing and Midwifery Board of Ireland (NMBI), the candidate must complete a Nursing and Midwifery Board of Ireland (NMBI) (2005) approved module of study on Child and Maternal Health as part of the programme.
- Hold an NQAI level 8 qualification (honors degree or higher diploma) or proof of equivalency.
- Fluency in English or evidence of level 7.0 as per the IELTS academic test.

- Applicants must satisfy the selection/admission committee that they have the ability to complete the programme.
- Applicants must demonstrate that they have undertaken a programme of study at National Qualification Framework,, academic Level 8. The academic transcript provided will be used as evidence to demonstrate this, and it should be for the highest level award.
- To be eligible for the award of the Postgraduate Diploma in Nursing (Public Health Nursing), candidates must meet the full requirements for registration specified by the Nursing and Midwifery Board of Ireland (NMBI)

Successful candidates must have secured Health Service Executive sponsorship prior to commencement on the programme.

To be considered an applicant must:

- ☐ Meet the entry criteria
- A. Demonstrate his/her potential to cope with the academic standards required
- B. Confirmation of placement on the programme is subject to the candidate confirming sponsorship and clinical placement for the duration of the programme from their relevant Director of Public Health Nursing.

#### ASSESSMENT

This programme is assessed by means of a combination of coursework, examination and competency assessment. In order to be eligible for the award of the Postgraduate Diploma in Health Sciences (Public Health Nursing) in year one of the programme students must pass each component at 40%. The Professional Practice component requires students to attain identified competencies; to pass overall the student must pass all of the practice assessments. Practicum One must be completed in order to progress to Practicum Two in the programme. Compensation between modules is not permitted. For students who opt to undertake the Master of Health Sciences (Public Health Nursing), entry to Year Two of the programme is subject to achieving 60% on the aggregate of the Postgraduate Diploma modules. In order to register as a Public Health Nurse, students must meet any requirements for registration identified by the Nursing and Midwifery Board of Ireland (NMBI).

#### HIGHER DIPLOMA IN MIDWIFERY

The Higher Diploma in Midwifery is for registered nurses, who wish to pursue a career in midwifery. The programme builds on students' prior professional, academic and personal experiences. Following successful completion of the programme, students are competent to fulful the role of the midwife as outlined by the International Confederation of Midwives are are eligible to apply to register as a midwife with An Bord Altranais agus Cnáimhseachais na hÉireann (Nursing and Midwifery Board of Ireland). The Higher Diploma in Midwifery is offered in partnership with University Hospital Galway, Saolta Group. The aims of this programme are:

- To prepare the student to practice the activities of a registered midwife in order to contribute meaningfully to the physical, social, and psychological care of women and their babies.
- To facilitate the student to develop both personally and professionally. Inherent in this, is the development of an analytical and reflective midwife who has the knowledge and skills to meet the demands of professional practice with competence and skill.

#### PROGRAMME STRUCTURE AND DURATION

The Higher Diploma in Midwifery is an 18 month full time programme consisting of a theoretical and clinical component. There are twenty-six weeks of theory which is organized in planned study blocks. Students undertake 10 theory modules over the course of the programme. The modules focus on: the application of the biological sciences to midwifery, normal midwifery care, social sciences (Sociology and Psychology), evidence based practice, caring for the woman experiencing complications during pregnancy and childbirth, caring for the neonate requiring special care, and issues in midwifery practice and women's health.

Clinical placements are undertaken throughout the 18 months in University Hospital Galway, under the supervision of a preceptor.

Students are salaried employees of University Hospital Galway for the duration of the programme.

#### ASSESSMENT

Theory and clinical practice modules are assessed by a combination of coursework and written examinations. In addition, students' clinical performance/progress is assessed on an on-going basis while on placements, to determine competency. To be deemed competent students must attain the level specified in the Competency Assessment Tool, based on the Domains of Competence identified by the Nursing and Midwifery Board of Ireland (NMBI). Students must pass both the theoretical and clinical assessments to be deemed to have passed the programme.

In addition, in order for a student to apply to register as a Midwife with the NMBI, the student must complete the minimum clinical practice experience and minimum number of clinical hours required by the NMBI

#### ENTRY CRITERIA

All candidates must be registered in the General Division of the Register of Nurses maintained by the Nursing and Midwifery Board of Ireland (NMBI) or entitled to be registered.

Candidates must have at least six months relevant post-regulation experience as a general nurse within the past three years, working a minimum of 78 hours per month.

The next intake of students is planned for March 2018.

Applications for the Higher Diploma in Midwifery programme are made to the Health Service Executive.

### MASTER/POSTGRADUATE DIPMOLA IN HEALTH SCIENCES (WOUNDHEALING AND TISSUE REPAIR)

The Master of Health Sciences /Postgraduate Diploma in Health Sciences (Wound Healing and Tissue Repair), Major Award, is at Level (9) on the National Framework of Qualifications. This programme is aimed at all health care professionals working in a variety of settings registered with their national body including Nursing and Midwifery Board of Ireland. It aims to provide students with the necessary in-depth evidence based knowledge, skills and competencies to provide quality care to patients/clients with wounds or at risk of a wound. On successful completion of this programme, students will hold a MSc/Postgraduate Diploma in Health Science (Wound Healing and Tissue Repair).

#### PROGRAMME DURATION AND STRUCTURE

The programme is offered full time over two years. Students can exit at the end of year one with a Postgraduate Diploma. While undertaking the programme students will continue to work in an area where patients/clients with wounds or at risk of a wound are cared for.

#### CONTENT

The programme is comprised of six theory/practice modules. Module content is viewed as interconnected and interdependent. In all modules there is an emphasis on exploring the relevance of module content to practice.

#### **Modules: Core**

#### **Modules:**

- Using Research in Practice
- Clinical Governance Supporting Safe Practice
- Service Improvement

#### **Specialist Modules:**

- Management of diabetic foot disease
- Advanced wound care management

#### **Elective:**

- Management of venous leg ulceration
- Critical issues in Chronic Illness
- Collaboration and interagency working

#### ENTRY CRITERIA

In order to be considered for entry to the programme applicants must meet the following criteria:

<b>Note</b> applicants without this qualification have an opportunity to demonstrate
equivalence. Applicants who do NOT hold an honours degree or higher
diploma may apply but must clearly demonstrate their capacity to undertake a
programme at this level. To demonstrate this capacity applicants are expected
to submit a 1000 word literature based essay. To be considered for admission
this essay must be judged equivalent to an honours degree (Level 8).
Hold current registration with their relevant governing body, for example
NMBI, CORU, IMC.
Be currently employed in healthcare
Have a minimum of 6 months clinical experience in an appropriate setting
since qualification.
As programmes are delivered through blended learning it is expected that
applicants have a basic level of computer literacy to enable them to fully

Hold an Honours Bachelor Degree at NFQ Level 8 in a healthcare profession.

The Programme Director, based on applicants' meeting the criteria above, will make the final selection.

#### ASSESSMENT

Modules are assessed by a variety of methods including:

participate in the programme.

- e-tivities
- participation in on-line discussion forums
- written assignment
- OSCE.

In order to be eligible for the award of MSc/Post Graduate Diploma of Health Sciences (Wound Healing and Tissue Repair) students must

- pass each theoretical component at 40%
- pass the OSCE

Compensation is not permitted. A maximum of 40% can only be obtained in a module on repeat. The standard for progression to year two is a mark of at least 60% at the end of year one.

#### **MASTER IN HEALTH SCIENCES**

The School of Nursing & Midwifery offers (3) programmes, two taught and 1 research at the Masters level, Master inHealth Sciences (Nursing) two years, Master in Health Sciences (Nursing/Midwifery Education) two years, Master in Health Sciences (Specialist Nursing). These programmes have been designed to meet the needs of practicing nurses allowing the candidates to focus on their area of practice. The programmes are offered in blendedlearning, workshops and online.

#### MASTER IN HEALTH SCIENCES (NURSING)

The programme comprises three (3) core modules, four (4) option modules, and a research dissertation.

#### PROGRAMME CONTENT

Theoretical and philosophical underpinnings of nursing practice; research methodology and evidence based practice; practice development and conduct of research form the framework for reflection on practice and exploration of aspects of practice.

#### ASSESSMENT

Each module is assessed independently. Strategies for assessment include essays, reflective practice assignments, presentations and dissertation.

#### **ENTRY REQUIREMENTS**

Upper 2<sup>nd</sup> class Honours degree in nursing or Nursing Studies at H2.1 or at H2.2 with appropriate experience; or Higher Diploma in Nursing/Midwifery Studies with appropriate experience; or meet the required standard in the Master in Health Sciences Qualifying Examination.

Be on the active Register as a nurse.

Have practiced as a nurse for a minimum of two (2) years post registration

#### MASTER IN HEALTH SCIENCES (NURSING EDUCATION)

The Master of Health Sciences (Nursing/Midwifery Education), Major Award, is at Level 9 on the National Framework of Qualifications. This two-year programme is aimed at nurses and midwives working in the public, voluntary or private sectors and it also aims to prepare nurses and midwives to be able to teach competently & confidently. Students are required to gain 100 hours of teaching experience over the two years. To increase programme accessibility, the programme will be delivered using blended learning. Blended learning will combine face-to-face teaching and facilitated on-line learning. Face-to-face learning/teaching takes the form of 2 or 3 workshops (depending on the module) each semester. Students will therefore attend for 2 or 3 days a semester, plus and orientation day prior to the commencement of the first year.

#### PROGRAMME CONTENT

The programme comprises of seven taught modules, three specialist modules, four core modules of which one includes a research dissertation. Taught modules are subdivided into core (across all programmes at Masters level and specialist modules (unique to nursing/midwifery education). An e-Portfolio and three teaching competency assessments across the two years are also included.

100 hours of teaching practice is completed over the two years and is an integral part of the programme. To experience teaching at different levels it is expected that students gain experience of teaching at undergraduate/ postgraduate levels and in their work place.

The 100 hours are subdivided as follows:

- 30 hours experience of formal classroom based lecturing;
- 25 hours of clinical focused teaching which should comprise of both classroom based skills teaching and teaching in the clinical setting;
- 25 hours of small group work with a focus on experiential approaches, for example, seminars, workshops;
  - 10 hours at the discretion of the student;
- 10 hour that demonstrates engagement and adoption of an innovative teaching methodology or technology.

#### ASSESSMENT

Each module is assessed independently. Strategies for assessment include essays, reflective practice assignments, presentations, competency assessment of teaching practice and dissertation.

#### ENTRY CRITERIA

- Upper 2<sup>nd</sup> class degree in nursing or Nursing Studies at H2.1 or at H2.2 with appropriate experience; or Higher Diploma in Nursing Studies with appropriate experience
- Be on the active Register as a nurse/midwife
- Have practiced as a nurse/midwife for a minimum of three (3) years post registration

 A letter indicating that teaching practice has been negotiated in an educational establishment

#### **AWARD**

On successful completion of the programme students will be awarded A Master of Health Sciences (Nursing/Midwifery Education). In order to be eligible for this award, the student must pass each module at 40%. Compensation is not permitted between modules. The student must pass the competency element of the programme to successfully complete the programme. To be eligible to register candidates must meet in full the requirements for registration specified by Nursing and Midwifery Board of Ireland (NMBI).

### STRUCTURED MASTER IN HEALTH SCIENCES (SPECIALIST NURSING) -

The one (1) year research programme comprises one (1) taught module and a research dissertation.

#### PROGRAMME CONTENT

Research methodology as evidenced by the ability to design and implement a research study; evaluation and application of research findings to practice.

#### ASSESSMENT

Each module is assessed independently.

#### ENTRY CRITERIA

- Have achieved an aggregate of 60% and successfully completed a Postgraduate Diploma in Nursing Studies at level 9
- Be on the active Register as anurse
- Have practiced as a nurse for a minimum of two (2) years post registration

#### PROFESSIONAL CREDIT AWARDS

These modules provide the opportunity for nurses and midwives to fulfil and support learning needs identified during their clinical practice and therefore allows for their ongoing education and professional development. These modules are mainly components of recognised Master's programmes offered by the School of Nursing and Midwifery, NUI Galway. Each module is worth 10 ECTS which may be credited towards further academic study. A Student taking a stand alone module is classed as an Occasional Student. These students however, are not on a programme leading to a Degree, Diploma or any other award of this University. These modules are delivered via blended learning which involves a combination of face to face and online learning. Modules are delivered over one semester.

#### The following modules are available:

#### Starting in September

- Care of the Child and Family with Palliative/Complex Needs
- Clinical Governance: Supporting Safe Practice
- Experiencing Cancer
- High Dependency Maternity Care
- Management of Venous Leg Ulceration
- Psychosocial Interventions: Evidence-based Recovery Practice
- Quality of Life and Symptom Management in Children's Palliative/Complex Care
- Principles and Practices of Acute Medical Nursing
- Recognising and Responding to Client Deterioration
- Recovery for Mental Health Practice
- Teaching Effectively

#### Starting in January

- Advanced Research Methods
- Best Practice in Cervical Smear Taking<sup>1</sup>
- Cardiac Nursing Management
- Effective Chronic Disease Management Strategies for Health Care Professionals
- End of Life Care: Psychological and Social Perspectives
- Engaging Students in their Learning
- Introduction to Clinical Supervision: Supporting Continuing Professional Development
- Management of Diabetic Foot Disease
- Specialist Practice of Complex Care for Children
- Women's Health in Primary Care

#### ENTRY CRITERIA

All applicants for Professional Credit Awards must be:

- (a) A Registered Nurse or Midwife on the Register held by The Nursing and Midwifery Board of Ireland
- (b) Hold an active nurse/midwife registration
- (c) Work in a clinical area where they are able to develop the clinical skills required to meet the learning outcomes of his/her chosen module (d) Meet any other specified entry requirements.

#### SELECTION CRITERIA

Occasional students are considered for admission on the basis of their application, and considering the following points:

- 1. Applicant's academic record
- 2. Applicant's level of motivation and suitability based on his-her personal personal statement (submitted as part of the application)
- 3. Recommendation by the module leader in consultation with the Strand Leader, after revieweing the application. In the case where an applicant must have: (1) access to or care for a specific client group or (2) have the opportunity to practice specific skills to the learning outcomes of a module he/she must supply a letter from his/her Director of Nursing/Midwifery (or equivalent or appointed person) guaranteeing that the student will have opportunity to meet these requirements for the duration of the module content in the applicant's current place of work.

#### SCHOOL OF HEALTH SCIENCES

### TAUGHT POSTGRADUATE CERTIFICATE, DIPLOMA AND MASTERS PROGRAMMES

(NFQ level 9 awards; ref. www.nfq.ie)

PLEASE NOTE THIS INFORMATION IS SUBJECT TO CHANGE AND CANDIDATES ARE ADVISED TO VISIT THE POST GRADUATE APPLICATION WEBSITE AT THE TIME OF APPLICATION

### MASTERS OF SCIENCE IN CHILDHOOD SPEECH, LANGUAGE, AND COMMUNICATION NEEDS

#### PROGRAMME DESCRIPTION

This interdisciplinary MSc has been designed to facilitate students to develop the knowledge, skills, and attitudes in relation to supporting children with developmental speech, language, and communication needs in the clinic, crèche, classroom, community, and service contexts.

#### MINIMIUM ENTRY REQUIREMENTS

Or if necessary, agreement that the applicant

Students will be expected to hold a primary degree with at least second class honours OR equivalent qualification. Where students are conducting research with children, Garda Vetting will be required. For international students, the English level requirement is 6.5 in all areas.

#### PROGRAMME AIMS

The aim of this MSc in Childhood Speech, Language, and Communication Needs is to provide a critical and conceptually sophisticated understanding of children with S.L.C.N. and the contexts of their lives. This programme has been designed to meet the needs of busy practitioners who wish to keep up-to-date with the emerging evidence base when working with children with S.L.C.N. in the clinic, crèche, classroom, and community.

#### DURATION OF THE PROGRAMME

This programme may be taken on a 1-year full-time, or 2-year part-time basis.

Module	Semester	ECTS
Advanced Research Methods	2	10
Narratives in Childhood	1	10
Using Evidence to Inform Practice	1 & 2	10
Cultural, Linguistic & Social Diversity in Health & Education	1	15
Supporting Children with SLCN	1 & 2	15
Minor Dissertation (Thesis)	Year Long	30

### MASTERS OF SCIENCE IN ADVANCED HEALTHCARE PRACTICE AND RESEARCH

#### PROGRAMME DESCRIPTION

The MSc Advanced Healthcare Practice and Research is completed over a 12 month period (90 ECTS) full-time, or 2 years part-time. The programme is delivered in collaboration with the Discipline of General Practice and will primarily involve distance learning. The programme consists of 5 taught modules with a minor dissertation.

#### WHY STUDY THIS PROGRAMME?

The aims of the MSc are to develop learners with the knowledge, skills and attitudes to use and contribute to evidence-based practice. Participants will be empowered to take a leadership role in designing and implementing research to support best practice in their working context.

On completing the MSc you will have the knowledge and skills to be a:

- Highly skilled, confident clinical educator with the ability to implement evidence based practice in teaching and assessment
- Role model in the implementation of high quality educational environments to enhance practice for educators, students and clients.
- Competent researcher with the ability to develop research capacity in your working community. You will lead by example and empower others to pursue research and contribute to evidence based practice.

#### MINIMUM ENTRY REQUIREMENTS

Students will be expected to hold a degree in a professional healthcare course (minimum second class degree required).

While not compulsory, it is recommended that applicants should:

• Have relevant experience in clinical teaching and supervision.

#### DURATION OF THE PROGRAMME

This programme may be taken as a 1-year full-time course, or as a 2-year part-time course.

Module	Semester	ECTS
Educational Research	1 & 2	15
Using Evidence to Inform Practice	1 & 2	10
Clinical Teaching	1	5
Clinical Teaching Methodologies	2	15
Foundations of Assessment in Clinical	2	15
Education		
Minor Dissertation (Thesis)	Year Long	30

#### CAREER OPPORTUNITIES

On completion of the MSc Advanced Healthcare Practice and Research, you will be well positioned to pursue senior, specialist and managerial posts within the HSE and voluntary agencies. You may also choose to pursue opportunities in academic teaching. The interdisciplinary learning environment offered in this MSc will equip you with new and innovative ways of working in our challenging healthcare system.

#### MASTERS OF SCIENCE IN PODIATRIC MEDICINE

This is a 90 credit postgraduate taught masters degree programme with 6 x 10 modules and a 30 credit research dissertation, taken over one (full-time) or two (part-time) years. There is an option to exit with a 60 credit postgraduate Diploma.

The modules comprise: Musculoskeletal Conditions of the Foot and Ankle; Inflammatory Arthropathies of the Foot and Ankle; Management of Diabetic Foot Disease; Vascular Disease and Advanced Research Methods. Optional modules include Venous Leg Ulcers or Advanced Wound Management.

A blended learning strategy has been adopted, with a variety of instructional methods employed, all of which are appropriate for the intended learning outcomes. The distance-learning is supported by the use of a virtual learning environment (Blackboard®), with blogs being used to engage students and facilitate feedback from their teachers. Assessment is distributed across the programme, and within modules, with a range of modalities being used, including 3,000-word written assignments, blog entries, an OSCE, and a 12,000 word research dissertation.

#### WHY STUDY THIS PROGRAMME?

- 1. The course will provide a postgraduate learning experience that adopts problem solving, clinical reasoning and critical reflection in the analysis of podiatric practice and advancement of individual expertise.
- 2. It will provide students with the opportunity to develop their own clinical and professional interests.

Enhances knowledge and capacity to critique current literature, adopt best practice, and develop, undertake and disseminate research pertinent to podiatric medicine. Admissions will normally be restricted to those who hold an honours degree, first or upper 2<sup>nd</sup> class or equivalent in Podiatry / Podiatric Medicine. Those with degrees in cognate medical / science / engineering disciplines may be eligible for entry. An interview is part of the process.

#### **DURATION OF THE PROGRAMME**

This programme may be taken as a 1-year full-time course, or as a 2-year part-time course.

Module	Semester	ECTS
Management of venous leg ulceration (Optional)	Semester 1	10
Inflammatory Arthropathies of the Foot & Ankle	Semester 1	10
Musculoskeletal Conditions of the Foot & Ankle	Semester 1	10
Advanced Wound Care Management (Optional)	Semester 2	10
Advanced Research Methods	Semester 2	10
Vascular Disease	Semester 2	10
Management of Diabetic Foot Disease	Semester 2	10
Research Dissertation Project	Semester 1 & 2	30

#### RESEARCH PROGRAMMES

# THE DEGREE OF MASTER OF HEALTH SCIENCE (MHSc), MASTER OF PHILOSOPHY (MPHIL) MASTER OF SURGERY BY RESEARCH (MCh) MASTER OF SCIENCE (MSc)

(LEVEL 9; REF.WWW.NFQ.IE)

#### GRADUATE RESEARCH OPTIONS

The College of Medicine, Nursing and Health Sciences offers the following postgraduate research masters degrees: Master of Health Science, Master of Science by research and Master of Surgery (MCh) by research in the School of Medicine; MPhil in the School of Health Sciences and School of Nursing and Midwifery. These programmes aim to prepare graduates to develop, improve and enhance knowledge and understanding in their chosen area of research.

#### **MASTER OF HEALTH SCIENCE (PRIMARY CARE)**

#### OVERVIEW

The MHSc research degree is a m asters research programme offered by the School of Medicine which will equip students to successfully develop and carry out a piece of research within the primary care setting, and in doing so develop relevant expertise in research methodology.

#### The supervisor

The primary supervisor(s) is responsible for the overall management of the student's training and research project. The supervisor(s) must meet the criteria set out in the <u>University Guidelines</u> and fulfill the following:

- be an active scholar and researcher with good records of achievement and publication
- have a PhD in a suitable academic area or an equivalent record of achievement

#### **Graduate Research Committee**

Every research student and supervisor has the support of a Graduate Research Committee which is charged with ensuring compliance with basic good practices and will oversee student progress.

#### ENTRY REQUIREMENTS

Candidates should normally have an honours standard in a relevant academic discipline at primary degree level or equivalent. Entry to the Masters will usually follow successful completion of the Postgraduate Diploma in Primary Care or Clinical Primary Care.

Applications may also be considered from candidates with relevant educational background and experience. Selection is based on academic record and congruence of the candidate's thesis proposal with expertise and capacity for supervision within the Discipline of General Practice. The staff member must be approved by the College to supervise the research in terms of its nature and scope

#### **Additional entry requirements**

Candidates may be required to submit a research proposal for consideration by the School as part of their application.

#### DURATION

Normal duration of the MHSc programme is one calendar year, starting in September. If candidates do not complete the degree within the due period from the date of registration they must re-apply to the College, presenting justification for an extension.

#### ASSESSMENT

Assessment is by examination of a written thesis. To be awarded a MHSc, a candidate must demonstrate that, in pursuance of an agreed project, he/she has met all of the following criteria:

- Has made a contribution to knowledge and scholarship
- Can display an appropriate depth and breadth of knowledge and understanding of the relevant field(s) of study
- Has gained a corresponding level of expertise with respect to relevant methodologies and techniques
- Has presented a thesis with the appropriate structure and written style

Evidence as to whether or not these criteria are met will be found in the thesis. An oral examination may be required.

For instructions regarding formatting and submission of thesis for examination see 'University Guidelines for Research Degree Programmes'

#### MASTER OF PHILOSOPHY

#### **OVERVIEW**

The MPhil degree is a masters research programme which will prepare graduates to develop, improve and enhance knowledge and understanding in their chosen area of research. The School of Health Sciences offers MPhil degrees in Health Science, Occupational Therapy, Podiatry, and Speech and Language Therapy. The School of Nursing and Midwifery offers MPhil degrees in Midwifery and Nursing,

#### The supervisor

The primary supervisor(s) is responsible for the overall management of the student's training and research project. The supervisor(s) must meet the criteria set out in the <u>University Guidelines</u> and fulfill the following:

- be an active scholar and researcher with good records of achievement and publication
- have a PhD in a suitable academic area or an equivalent record of achievement

#### **Graduate Research Committee**

Every research student and supervisor has the support of a Graduate Research Committee which is charged with ensuring compliance with basic good practices and will oversee student progress.

#### ENTRY REQUIREMENTS

Candidates should normally have a honours standard in a relevant academic discipline at primary degree level or equivalent together with the support of an academic staff member who is approved by the College to supervise the research in terms of its nature and scope.

#### **Additional entry requirements**

Candidates may be required to submit a research proposal for consideration by the School as part of their application.

#### **DURATION**

The MPhil programme can commence at anytime in the academic year. Normal duration is 12 months full time or 24 months part time. If candidates do not complete the degree within the due period from the date of registration they must re-apply to the College, presenting justification for an extension.

#### ASSESSMENT

Assessment is by examination of a written thesis. To be awarded a MPhil, a candidate must demonstrate that, in pursuance of an agreed project, he/she has met all of the following criteria:

• Has made a contribution to knowledge and scholarship

- Can display an appropriate depth and breadth of knowledge and understanding of the relevant field(s) of study
- Has gained a corresponding level of expertise with respect to relevant methodologies and techniques
- Has presented a thesis with the appropriate structure and written style

Evidence as to whether or not these criteria are met will be found in the thesis. An oral examination may be required.

For instructions regarding formatting and submission of thesis for examination see 'University Guidelines for Research Degree Programmes'

#### MCh RESEARCH

#### **OVERVIEW**

The MCh research degree is a masters research programme offered in the School of Medicine for Surgeons, which will prepare graduates to develop, improve and enhance knowledge and understanding in their chosen area of research.

#### The supervisor

The primary supervisor(s) is responsible for the overall management of the student's training and research project. The supervisor(s) must meet the criteria set out in the <u>University Guidelines</u> and fulfil the following:

- be an active scholar and researcher with good records of achievement and publication
- have a PhD in a suitable academic area or an equivalent record of achievement

#### **Graduate Research Committee**

Every research student and supervisor has the support of a Graduate Research Committee which is charged with ensuring compliance with basic good practices and will oversee student progress.

#### ENTRY REQUIREMENTS

Candidates should normally have a honours standard in Medicine from NUI Galway or possess qualifications deemed by the University to be equivalent. Candidates shall be eligible to register onto the MCh programme under the following conditions:

- The candidate must pass a preliminary clinical examination in general surgery. Exemption from this examination may be granted if the College considers that the candidate holds a suitable senior surgical qualification acquired by examination.
- The application will also require the support of an academic staff member who is approved by the College to supervise the research in terms of its nature and scope.

Candidates for Higher Medical Degrees will not be examined in the Clinical or Practical Part of the Examination in hospitals in which they, at the time, hold appointments.

#### Additional entry requirements

Candidates may be required to submit a research proposal for consideration by the School as part of their application.

#### DURATION

The MCh programme can commence at anytime in the academic year. Normal duration is 12 months full time or 24 months part time. If candidates do not complete the degree within the due period from the date of registration they must re-apply to the College, presenting justification for an extension.

#### ASSESSMENT

Assessment is by examination of a written thesis. To be awarded a MCh, a candidate must demonstrate that, in pursuance of an agreed project, he/she has met all of the following criteria:

- Has made a contribution to knowledge and scholarship
- Can display an appropriate depth and breadth of knowledge and understanding of the relevant field(s) of study
- Has gained a corresponding level of expertise with respect to relevant methodologies and techniques
- Has presented a thesis with the appropriate structure and written style

Evidence as to whether or not these criteria are met will be found in the thesis. An oral examination may be required.

For instructions regarding formatting and submission of thesis for examination see 'University Guidelines for Research Degree Programmes'

#### **MASTER OF SCIENCE (BY RESEARCH)**

#### **OVERVIEW**

The M.Sc. (by Research) degree is a masters research programme offered by the School of Medicine which will equip students to successfully develop and carry out a piece of research in their chosen area of research.

#### The supervisor

The primary supervisor(s) is responsible for the overall management of the student's training and research project. The supervisor(s) must meet the criteria set out in the <u>University Guidelines</u> and fulfill the following:

- be an active scholar and researcher with good records of achievement and publication
- have a PhD in a suitable academic area or an equivalent record of achievement

#### **Graduate Research Committee**

Every research student and supervisor has the support of a Graduate Research Committee which is charged with ensuring compliance with basic good practices and will oversee student progress.

#### ENTRY REQUIREMENTS

Candidates should normally have a honours standard in a relevant academic discipline at primary degree level or equivalent together with the support of an academic staff member who is approved by the College to supervise the research in terms of its nature and scope.

#### **Additional entry requirements**

Candidates may be required to submit a research proposal for consideration by the School as part of their application.

#### DURATION

The M.Sc. programme can commence at anytime in the academic year. Normal duration is up to 24 months full time or 36 months part time. If candidates do not complete the degree within the due period from the date of registration they must re-apply to the College, presenting justification for an extension.

#### ASSESSMENT

Assessment is by examination of a written thesis. To be awarded a MSc, a candidate must demonstrate that, in pursuance of an agreed project, he/she has met all of the following criteria:

- Has made a contribution to knowledge and scholarship
- Can display an appropriate depth and breadth of knowledge and understanding of the relevant field(s) of study

- Has gained a corresponding level of expertise with respect to relevant methodologies and techniques
- Has presented a thesis with the appropriate structure and written style

Evidence as to whether or not these criteria are met will be found in the thesis. An oral examination may be required.

For instructions regarding formatting and submission of thesis for examination see 'University Guidelines for Research Degree Programmes'

### THE DOCTOR OF PHILOSOPHY (PHD) AND DOCTOR OF MEDICINE (MD) DEGREES

[Level 10; ref. www.nfq.ie]

The College of Medicine, Nursing and Health Sciences offers higher research degrees in most disciplines leading to a PhD. The School of Medicine offers a higher research degree leading to a MD based on research.

The PhD is awarded following successful completion of a programme of supervised research and advanced education and training. The degree will be awarded only where the outcome of the research makes an original and substantial contribution to knowledge and where the candidate has demonstrated the capacity to pursue original research and scholarship.

The MD is, in accordance with national and international norms, provided to encourage the development of advanced research skills in medical graduates and the medical profession, and is adapted to the particular circumstances of advanced professional training in that profession. The nature of the preparation for the degree is similar to other research doctoral degrees, but research for the degree is normally completed within a shorter period of time, typically two years of full-time research and study. The primary purpose of the MD level research is to develop in the student the skills and competencies required to conduct effective research and to make a significant contribution to new knowledge and understanding in the theory and/or practice of any area of medicine or medical science.

The School of Medicine offers a medical degree programme (MB, BCh, BAO) combined with a research programme leading to the award of the degree of PhD. The primary purpose of the combined medical programme and PhD programme is the development of advanced research skills in medical graduates to enable them make a significant contribution to new knowledge and understanding in the theory and/or practice of an area of medicine or medical science. Regulations for the award of MB/PhD are set out in Ph.D DEGREE WITHIN THE UNDERGRADUATE MEDICAL PROGRAMME

#### STRUCTURED PHD

#### **OVERVIEW**

The structured PhD degree is a doctoral training programme with the core component of advancement of knowledge through original research and integrated support for professional development. The programme is student centred and the qualification is designed to enhance, improve and directly engage the student in relevant research skills. In addition, it will offer the student disciplinary, generic and transferable skills, tailored to suit the experience of students and reflect the disciplinary requirements.

#### The supervisor

The primary supervisor(s) is responsible for the overall management of the student's training and research project. The supervisor(s) must meet the criteria set out in the University Guidelines and fulfill the following:

- be an active scholar and researcher with good records of achievement and publication
- have a PhD in a suitable academic area or an equivalent record of achievement

#### **Graduate Research Committee**

Every research student and supervisor has the support of a Graduate Research Committee which is charged with ensuring compliance with basic good practices and will oversee student progress (for details see University Guidelines for Research Degree Programmes).

#### **ECTs Weighting**

- Full time PhD: The PhD requires the successful completion of 90ECTs per annum. The structured component will require the successful completion of 30ECTs over the entire duration of the programme. The balance of ECTs awarded each year will be for the research component of the PhD.
- Part time PhD: The PhD requires the successful completion of 60ECTs per annum. The structured component will require the successful completion of 30 ECTS over the entire duration of the programme. The balance of ECTs awarded each year will be for the research component of the PhD.

#### **ENTRY REQUIREMENTS**

Candidates should normally have a high honours standard in a relevant academic discipline at primary degree level or equivalent together with the support of an academic staff member who is approved by the College to supervise the research in terms of its nature and scope.

#### Additional entry requirements

Candidates may be required to submit a research proposal for consideration by the School as part of their application.

#### DURATION

Normal duration is 4 years full time or 6 years part time. In exceptional circumstances, the programme may be completed in a shorter period where there is approval by the supervisor and the relevant School. If candidates do not complete the degree within the due period from the date of registration they must re-apply to the College, presenting justification for an extension.

#### ASSESSMENT

Assessment is by examination of a written thesis and oral defence. To be awarded a PhD, a candidate must demonstrate that, in pursuance of an agreed project, he/she has met all of the following criteria:

- Has made a significant contribution to knowledge and scholarship
- Has demonstrated a capacity for original and critical thought
- Can display an appropriate depth and breadth of knowledge and understanding
  of the relevant field(s) of study in the thesis and at the viva examination
- Has gained significant expertise with respect to basic and advanced methodologies and techniques
- Has presented a thesis with the appropriate structure and written style
- Has completed work that is suitable for publication

Evidence as to whether or not these criteria are met is found in the thesis, but the oral examination or viva is critical to confirmation that the required standards have been achieved.

For instructions regarding formatting and submission of thesis for examination see 'University Guidelines for Research Degree Programmes'. The PhD thesis may be presented for examination in either monograph style or article based format.

The Article based PhD is available to registered students on full or part time, structured PhD programmes within the CMNHS. Students registered on non -structured PhD programmes will not normally be permitted to submit in this format. A minimum of three original, published (peer reviewed) research papers in international leading journals of appropriate impact factor for the area of research is required. If no methodological papers are part of the submission, the student must include a detailed methodological chapter. In line with University guidelines, only articles which are based on research which has been undertaken by the student while registered for the PhD at NUIG are admissible. In addition, the PhD candidate would normally be the first or leading author on the major part of the work. Joint publications may be included but the candidate must make explicit, their contribution to the work.

## BACHELOR OF MEDICINE, SURGERY, and OBSTETRICS DEGREE DOCTOR OF PHILOSOPHY (PhD)

Bachelor of Medicine, SURGERY, and Obstetrics degree (MB BCh BAO) [Level 8; ref. <a href="www.nfq.ie">www.nfq.ie</a>] and Doctor of Philosophy (PhD) [Level 10; ref. <a href="www.nfq.ie">www.nfq.ie</a>]

The School of Medicine offers a medical degree programme (MB, BCh, BAO) combined with a research programme leading to the award of the degree of PhD, called the ATLANTIC MEDICAL SCHOLARS PROGRAMME.

The primary purpose of the combined medical programme and PhD programme is the development of advanced research skills in medical graduates to enable them make a significant contribution to new knowledge and understanding in the theory and/or practice of an area of medicine or medical science.

Candidates enter this programme through one of two possible routes.

- 1. Graduates who have entered the MB BCh BAO programme and who were previously awarded an honours degree (minimum upper second class) of NFQ level 8 standing in a relevant discipline may enter the MB PhD programme following successful completion of semester 3.2 of the MB BCh BAO programme.
- 2. Other students on the MB BCh BAO programme may enter the MB PhD programme following successful completion of semester 3.2 of the MB BCh BAO programme and additionally, fulfillment of the research and minor thesis requirements for the award of B.Med.Sc. Regulations for the award of B.Med.Sc. degree (NFQ Level 8) are set out in the College of Medicine, Nursing and Health Sciences calendar: <a href="http://www.nuigalway.ie/colleges/mnhs/collegecalendar.html">http://www.nuigalway.ie/colleges/mnhs/collegecalendar.html</a>. Performance at an upper second class honours degree standard in all completed semesters of the MB BCh BAO programme is a prerequisite for entry into the PhD programme. In the event that the student subsequently decides not to complete the MB BCh,BAO programme he/she will be awarded the B.Med.Sc. degree.
- 3. The PhD is awarded concurrently with the MB BCh BAO see section 'Award and Conferring of Degree' below) following successful completion of a programme of supervised research and advanced education and training. The degree will be awarded on the basis that the candidate has demonstrated the capacity to pursue original research and scholarship and that the research outcomes make an original and substantial contribution to knowledge. Following completion of the Structured PhD programme, which is normally of 4 years duration, candidates re-enter the MB BCh BAO medical programme at semester 4.1 of the programme.

Candidates cannot re-enter the MB BCh BAO programme until the PhD thesis has been submitted for examination.

### STRUCTURED PHD COMPONENT OF THE COMBINED MB BCH BAO AND PHD PROGRAMMES

#### Overview

The structured PhD degree programme is a research programme with as its principle aim the advancement of knowledge through original research and integrated professional development. The programme is designed to develop and engage the student in relevant research skills. It will provide the student with appropriate disciplinary, generic and transferable skills, towards the professional development of the student, generally and in her/his particular discipline.

#### • The Supervisor

The primary supervisor(s) of the student's research programme is responsible for the overall management of the student's training and research project. To be eligible for appointment as a PhD supervisor, the staff member must meet the criteria set out in the University Guidelines and (a) be an active scholar and researcher with good records of achievement and publication (b) have a PhD, or equivalent qualification, in a relevant area or an equivalent record of achievement.

#### • Graduate Research Committee (GRC)

Every research student and supervisor has the support of a Graduate Research Committee which is charged with ensuring compliance with good practices in relation to research (for details see University Guidelines). It will oversee the student's progress.

#### • ECTs Weighting

The PhD programme requires the successful completion of 90ECTs per annum. The structured component of the programme will require the successful completion of 30ECTs over the duration of the PhD programme. The balance of ECTs awarded each year will be for the research component of the PhD.

#### **ENTRY REQUIREMENTS**

Candidates should have a high honours standard (minimum upper second class) performance in all semesters completed of the MB BCh BAO degree together with the support of an academic staff member(s) who will supervise the research in terms of its nature and scope.

#### Additional entry requirements

Candidates in addition will be required to:

 Submit a research proposal for consideration by the School as part of their application.

- Provide a supervisor's report (or arrange for supervisor to provide same) from a
  previous piece of research work in an area relevant to the proposed PhD research,
  if available (such as arising from a student summer scholarship position).
- Present for interview by a selection committee.
- Have attained a minimum of upper second class honours degree level performance (NFQ level 8) in a relevant discipline (as a graduate, or with a status of B.Med.Sc. degree awardable following successful completion of semester 3.2 of the MB BCh BAO programme and additionally, fulfillment of the research and minor thesis requirements for the award of B.Med.Sc).

#### DURATION

The normal duration of the structured PhD component is 4 years full time, but in exceptional circumstances, the duration may be shorter, in accordance with University guidelines. Reentry to the MB BCh BAO programme occurs following submission of the PhD thesis for examination. The award of the PhD is not made at the point where the student re-enters the medical degree programme but is awarded concurrently with the MB BCh BAO upon its completion.

#### ASSESSMENT

Assessment of the PhD component of the combined MB BCh BAO and PhD programme is by examination of a written thesis and oral defense. To be awarded a PhD, a candidate must demonstrate that, in pursuance of an agreed project, he/she has met all of the following criteria:

- Has made a significant contribution to knowledge and scholarship
- Has demonstrated a capacity for original and critical thought
   Has displayed an appropriate depth and breadth of knowledge and understanding of the relevant field(s) of study in the thesis and at the viva examination
- Has gained significant expertise with respect to basic and advanced methodologies and techniques
- Has presented a thesis with the appropriate structure and written style
- Has completed work that is suitable for publication.

Evidence as to whether or not these criteria are met is found in the thesis, but the oral examination or viva is critical to confirmation that the required standards have been achieved.

For instructions regarding formatting and submission of thesis for examination see 'University Guidelines for Research Degree Programmes'. The PhD thesis may be presented for examination in either monograph style or article based format.

The article-based PhD is available to registered students on full or part time, structured PhD programmes within the CMNHS. A minimum of three original, published (peer reviewed) research papers in international leading journals of appropriate impact factor for the area of research is required. If no methodological papers are part of the submission, the student must include a detailed methodological chapter. In line with University guidelines, only articles which are based on research which has been undertaken by the student while registered for the PhD at NUI Galway are admissible. In addition, the PhD candidate would normally be the first or leading author on the major part of the work. Joint publications may be included but the candidate must make explicit, their contribution to the work.

#### AWARD AND CONFERRING OF DEGREE

The PhD will be awarded and conferred in conjunction with the award and conferral of the MB BCh BAO Degree. If candidates do not complete the PhD but wish to exit after 2 years of research activity they may submit a thesis for examination for the award of M.Sc. if recommended by the Graduate Research Committee and supervisor, and can re-enter the MB BCh BAO programme. The MSc will be awarded concurrently with the MB BCh BAO degree. If following examination, candidates qualify for the award of PhD, but fail to complete the MB BCh BAO programme, they may receive the joint award of B.Med.Sc. (being already awardable of that degree) and PhD. Regulations for the award of B.Med.Sc. degree (NFQ Level 8) are set out in the College of Medicine, Nursing and Health Sciences calendar: http://www.nuigalway.ie/colleges/mnhs/collegecalendar.html

### DOCTORATE IN NURSING PRACTICE DOCTORATE IN MIDWIFERY PRACTICE

#### **OVERVIEW**

This programme is aimed at Masters-prepared candidates working at senior levels (i.e. a level which allows them to initiate and lead practice development), for example, advanced practitioners, nurse or midwifery managers or practice development coordinators.

The Doctorate in Nursing Practice (DNP) or Doctorate in Midwifery Practice (DMP) is a practice-focused doctorate targeted at senior nurses and midwives. The programme combines a focus on applying existing evidence to improve practice with practice leadership. The programme will prepare nurse and midwife leaders to be capable of responding to current demands and challenges in healthcare and service delivery such as: (1) the rapid expansion of practice-based knowledge and skills (2) the increased complexity of patient care, (3) national concern about the quality of care and patient safety and (4) the urgent need to design, implement and evaluate innovative practice and health care interventions.

The programme will be delivered in partnership with Fairfield University, Connecticut, USA and with hospital based partners the Galway Roscommon University Hospitals Group (GRUHG) and Danbury Hospital, Connecticut.

#### STRUCTURE AND DELIVERY

The programme is modelled on the programme delivered by Fairfield University and comprises of: (1) six taught modules (three modules will be delivered by Fairfield University and three modules by NUI Galway which are open to students on both sites) (2) immersion experiences and (3) completion of a practice portfolio. The taught element of the programme will be delivered via blended learning using a combination of (synchronous and asynchronous) on-line and face-to-face teaching. The programme will be offered in partnership and students will share content across sites.

As required under <u>University Guidelines</u> the programme will provide the student with the support of a nominated supervisor responsible for the overall management of their training and research, and a Graduate Research Committee which supports both the student and their supervisor to ensure compliance with basic good practices and to oversee student progress.

#### **ECTs Weighting**

• The PhD requires the successful completion of 90ECTs per annum full-time and 60 ECTs per annum part-time. The taught element of the programme accounts for 90 ECTs of the total credits. The remainder are allocated to research focused work (270 ECTs) presented in the students practice portfolio i.e. the equivalent of a thesis.

#### LEARNING OUTCOMES

The Doctorate in Nursing Practice (DNP) or Doctorate in Midwifery Practice (DMP) aims to further develop nurses or midwives practice expertise and capacity to assure quality patient outcomes, lead and manage change. This programme will prepare participants to:

- 1. Initiate and lead practice and/or care delivery development in their specialism.
- 2. Translate research into practice.
- 3. Competently and independently initiate and lead practice-based research.
- 4. Evaluate patient, population, and healthcare system outcomes.
- 5. Lead quality improvement.
- 6. Contribute to nursing or midwifery policy development at local and national level.
- 7. Function as leaders in their specialism.

#### ENTRY CRITERIA

All applicants must meet the following entry criteria:

- Normally have attained a high honours standard in a nursing, midwifery or other relevant master's degree programme;
- Be a registered nurse or midwife on the active Register with An Bord Altranais agus Cnáimhseachais na hÉireann or be qualified for such registration or hold an appropriate active nursing registration as recognised in the country in which they practice;
- Have a minimum of one-year experience post completion of his/her master's degree;
- Be currently employed as a nurse or midwife.
- Provide a letter of support from his/her employer confirming that he/she will have opportunities to initiate and lead practice-based initiatives at a level that will enable him/her to meet the programme learning outcomes.

Applications will be evaluated on the basis of their:

- Academic record;
- Written personal statement of 2,500 words in which the applicant:
- Discusses a practice problem in his/her practice field that in his/her experience has a broad impact on patient care outcomes. This problem should be a potential area that he/she will focus on during the DNP/DMP programme.
- States professional goals (i.e. an action plan) for addressing the problem identified.
- Explains how a DNP/DMP degree will enable him/her to reach his/her goals

#### DURATION

Programme duration is 4 years full time or 6 years part time. In exceptional circumstances and only if the structure of the programme allows it, the programme may be completed in a shorter period where there is approval by the supervisor and the relevant School. If candidates do not complete the degree within the due period from the date of registration they must re-apply to the College, presenting justification for an extension.

#### ASSESSMENT

The student must successfully complete each module (pass/fail) and demonstrate in his/her practice portfolio that he/she has met the criteria laid down in the University Guidelines for Research Degree Programmes. Evidence as to whether or not these criteria are met is found in the practice portfolio, but the oral examination or viva is critical to confirmation that the required standards have been achieved.

#### NON-STRUCTURED PHD

#### OVERVIEW

The PhD degree is a doctoral training programme with the core component of

advancement of knowledge through original research.

#### The supervisor

The primary supervisor(s) is responsible for the overall management of the student's training and research project. The supervisor(s) must meet the criteria set out in the <u>University Guidelines</u> and fulfil the following:

- be an active scholar and researcher with good records of achievement and publication
- have a PhD in a suitable academic area or an equivalent record of achievement

#### **Graduate Research Committee**

Every research student and supervisor has the support of a Graduate Research Committee which is charged with ensuring compliance with basic good practices and will oversee student progress.

#### **ENTRY REQUIREMENTS**

Candidates should normally have a high honours standard in a relevant academic discipline at primary degree level or equivalent together with the support of an academic staff member who is approved by the College to supervise the research in terms of its nature and scope.

#### Additional entry requirements

Candidates may be required to submit a research proposal for consideration by the School as part of their application.

#### DURATION

Normal duration is 3 or 4 years full time or 6 years part time. In exceptional circumstances, the programme may be completed in a shorter period where there is approval by the supervisor and the relevant School. If candidates do not complete the degree within the due period from the date of registration they must re-apply to the College, presenting justification for an extension.

#### ASSESSMENT

Assessment is by examination of a written thesis and oral defence. To be awarded a PhD, a candidate must demonstrate that, in pursuance of an agreed project, he/she has met all of the following criteria:

- Has made a significant contribution to knowledge and scholarship
- Has demonstrated a capacity for original and critical thought

- Can display an appropriate depth and breadth of knowledge and understanding
  of the relevant field(s) of study in the thesis and at the viva examination
- Has gained significant expertise with respect to basic and advanced methodologies and techniques
- Has presented a thesis with the appropriate structure and written style
- Has completed work that is suitable for publication

Evidence as to whether or not these criteria are met is found in the thesis, but the oral examination or viva is critical to confirmation that the required standards have been achieved.

For instructions regarding formatting and submission of thesis for examination see 'University Guidelines for Research Degree Programmes'

#### STRUCTURED MD

#### **OVERVIEW**

The structured Medical Doctorate (MD) degree is a doctoral training programme offered by the School of Medicine with the core component of advancement of knowledge through original research and integrated support for professional development. The programme is student centred and the qualification is designed to enhance, improve and directly engage the student in relevant research skills. In addition, it will offer the student disciplinary, generic and transferable skills, tailored to suit the experience of students and reflect the disciplinary requirements.

The University may grant the Degree of MD to graduates who have:

a. In the case of a full-time candidate, carried out research in the University for a period of two years and attended such a programme of study as may be prescribed by Regulations. In exceptional circumstances, the College may reduce this period where the thesis has been approved for examination prior to the end of the two year period. In such cases, fees will be applied only until the end of the semester in which the thesis is submitted.

b. In the case of a part-time candidate, carried out research in the University for a period of three years and attended such a programme of study as may be prescribed by Regulations. In exceptional circumstances, the College may reduce this period where the thesis has been approved for examination prior to the end of the three year period. In such cases, fees will be applied only until the end of the semester in which the thesis is submitted.

c. Complied with such Regulations and passed such examinations as may be prescribed.

#### **ENTRY REQUIREMENTS**

Candidates should normally have a high honours standard in the degrees of M.B., B.Ch., B.A.O. from NUI Galway or possess qualifications deemed by the University to be equivalent. The application will also require support of an academic staff member who is approved by the College to supervise the research in terms of its nature and scope.

#### Additional entry requirements

Candidates may be required to submit a research proposal for consideration by the School as part of their application.

#### SUPERVISION

The College, on the nomination of the Head of School, will assign a permanent member of University academic staff to be the primary supervisor of the candidate's research. The College may allow for co-supervision of the thesis. In the case of co-supervision, one of the supervisors need not be a member of the staff of the University. Honorary Clinical academic staff are eligible to be a primary supervisor for a MD thesis, with a fulltime academic consultant or fulltime permanent academic staff member being co-supervisor. Senior researchers may undertake graduate student supervision following approval as

Honorary Research Lecturers. The College may assign a member of the University's research staff as primary supervisor of a candidate's research, with a permanent member of the University's academic staff as co-supervisor, where the research being undertaken by the candidate is funded from a research project on which the member of research staff is the Principal Investigator.

### The supervisor

The primary supervisor(s) is responsible for the overall management of the student's training and research project. The supervisor(s) must meet the criteria set out in the University Guidelines and fulfill the following:

- be an active scholar and researcher with good records of achievement and publication
- have a PhD in a suitable academic area or an equivalent record of achievement
   Graduate Research Committee

Every research student and supervisor has the support of a Graduate Research Committee which is charged with ensuring compliance with basic good practices and will oversee student progress.

The name(s) of the supervisor(s) and the names of the three members of the candidate's Graduate Research Committee nominated by the Head of School in consultation with Head of Discipline must be forwarded when the candidate's name is submitted to the College for approval. A supervisor may not be a member of the student's Graduate Research Committee. At least two permanent members of academic staff in NUI, Galway must be on the GRC committee. Research staff must be appointed as adjunct lecturers before they can be members of a GRC committee.

Unless permission is given to the candidate by the Academic Council, on the recommendation of the College, to work elsewhere under the general direction of the primary supervisor, the research will be carried out in the School mainly responsible for the subject area concerned but, where the research is interdisciplinary in nature, there shall be due co-operation between the main School and the other School(s) involved. A student who has registered for a joint degree with another institution, with whom a formal memorandum of understanding has been signed, will spend a period of time at the partner institution.

The candidate shall pursue research for the period set out at (a) or (b) above and shall also follow such a programme of study in the University as may be prescribed by the College.

A formal review of the research candidate's progress is carried out by the candidate's GRC, at least annually. The supervisor(s) shall submit a written report, according to the local agreed format, on the candidate's progress and the GRC shall review this, together with a written report (according to the local agreed format) from the candidate, and, following a meeting, make a recommendation to the relevant sub-committee of the College on progression. Following consideration of this recommendation, a formal decision on progression shall be made by the sub-committee. A candidate may appeal a decision not to allow progression to the Standing Committee of Academic Council. Candidates whose

theses have not been approved for examination within the due period from the date of registration must re-apply to the relevant College setting out justification for the requested extension of the allowed time period.

### STRUCTURED COMPONENT

Full time MD: The MD requires the successful completion of 90ECTs per annum. The structured component will require the successful completion of a minimum of 20ECTs, a maximum of 60 E CTS, but a recommended normal maximum of 30 ECTS over the entire duration of the programme. The balance of ECTs awarded each year will be for the research component of the MD.

Part time MD: The structured component will require the successful completion of a minimum of 20ECTs, a maximum of 60 ECTS, but a recommended normal maximum of 30 E CTS over the entire duration of the programme. The balance of ECTs awarded each year will be for the research component of the MD.

#### EXAMINATION

Assessment is by examination of a written thesis and oral defense. To be awarded a MD, a candidate must demonstrate that, in pursuance of an agreed project, he/she has met all of the following criteria:

- Has made a significant contribution to knowledge and scholarship
- Has demonstrated a capacity for original and critical thought Can display an appropriate depth and breadth of knowledge and understanding of the relevant field(s) of study in the thesis and at the viva examination
- Has gained significant expertise with respect to basic and advanced methodologies and techniques
- Has presented a thesis with the appropriate structure and written style
- Has completed work that is suitable for publication

Evidence as to whether or not these criteria are met is found in the thesis, but the oral examination or viva is critical for confirmation that the required standards have been achieved.

The MD thesis (softbound) may be submitted after completion of the Approval for Examination form (EOG 020). The student must certify that the thesis is his/her own work. If the thesis is based on a group project, then the student must indicate the extent of his/her contribution, with reference to any other theses submitted or published by each collaborator in the project, and a declaration to this effect must be included in the thesis. The 'Approval for Examination' form EOG 020 is signed by the candidate, the primary supervisor(s), and a member of the candidate's GRC. The completed form is submitted by the candidate to the Examinations Office with the thesis. Where a candidate considers that approval for the submission of the thesis has been withheld unreasonably, s/he may appeal to the Standing Committee of Academic Council.

#### Submission of the Thesis

The candidate must follow the directions on format, layout and presentation of a thesis, as described below. Two copies of the MD thesis, spiral or gum bound, must be lodged with the Examinations Office (unless otherwise stated by the supervisor, such as the case of two external or internal examiners). Each copy of the thesis must be accompanied by:

- a 'Summary of the Contents', not exceeding 300 words in length - a copy of the completed form EOG 020.

### Directions on Format, Layout and Presentation

There must be a title page which shall contain the following information:

- a. The full title (and subtitle, if any)
- b. The volume number and total number of volumes, if more than one
- c. The full name of the candidate, followed, if desired, by any degree and/or professional qualification(s)
- d. The name(s) of the supervisor(s), school(s), component discipline(s), institution
- e. The month and year of submission.

### Table of Contents

The 'Table of Contents', which should not be over-detailed, shall immediately follow the title page.

### Format and Layout

The text must be printed on good quality (110g/m2) A4 size paper. Line-spacing should be a maximum of one-and-half; text must be left justified with a left-hand margin of 4 cm and may be right justified. An easily-readable layout and double- sided printing are recommended for the body text. For double sided printing ensure that the right hand margin is also adequate for binding (i.e. a margin of 4 cm). More compact formats, with smaller font sizes, are usually appropriate for certain sections, such as reference lists, bibliographies and some kinds of appendices. Pages must be numbered consecutively, with page numbers located centrally, at the bottom, and chapter headers at the top, of each page. Diagrams, graphs, photographs and tables should be properly numbered and located in relation to the text.

The MD thesis may be presented for examination in either monograph style or article based format.

#### Article-based MD

The Article based MD is available to registered students on full or part time, structured MD programmes within the CMNHS. Students registered on non-structured MD programmes will not normally be permitted to submit in this format. A minimum of three original, published (peer reviewed) research papers in international leading journals of appropriate impact factor for the area of research is required. If no methodological papers are part of the submission, the student must include a detailed methodological chapter. In line with University guidelines, only articles which are based on research which has been undertaken by the student while registered for the MD at NUIG are admissible. In addition, the MD candidate would normally be the first or leading author on the major part of the work. Joint

publications may be included but the candidate must make explicit, their contribution to the work

### Binding

The copies of the thesis presented initially for examination must be spiral or gum-bound. The copy of the final bound thesis must be bound within boards with leaves permanently secured. The cover of the copies of the final bound thesis must bear the title of the thesis, candidate's name, degree awarded and the date of submission. The spine bears the candidate's name, the degree awarded and the date of submission.

### Approval of Examiners & Chair of the viva

The primary supervisor is responsible for organisation of the overall examination process and for checking that the candidate, examiners and chair have been supplied with the information necessary for understanding their roles.

The Examinations Office is responsible for processing the submitted thesis and the subsequent Examiners' Report.

The examination of a MD candidate involves at least two examiners, one external and one internal. The primary supervisor discusses with the GRC the choice of the external and internal examiners. The candidate is informed in good time when potential examiners and the overall make-up of the examinations board are being considered. At that stage, while providing a rationale for doing so, a candidate may object to the appointment of a particular examiner. If an examiner is recommended for appointment despite an objection from the candidate, a written rationale for the recommendation is supplied to the College by the primary supervisor. Following the consultation outlined above, the primary supervisor submits an online 'Approval of Examiners request. The recommended examiners must be first approved by a member of the GRC, and then the Head of School, before approval of College can be granted.

A chair of the *viva* must be an academic member of staff, nominated, and approved by the College, for each MD examination. The chair will not be an examiner and will not be required to read the thesis. The chair will normally be the Established Professor of the relevant discipline; however, he/she may nominate another permanent member of academic staff in the discipline to act as chair. When the Established Professor is the supervisor of the candidate being examined an alternate chair must be appointed. In the event of a vacancy in the Established Professorship, the Head of School, following appropriate consultation, will appoint the chair. The candidate is informed in good time when the chair is being considered. At that stage, while providing a rationale for doing so, a candidate may object to the appointment of a particular chair. Any member of academic staff who has appropriate expertise and experience may act as an internal examiner. Honorary Clinical Lecturers in the School of Medicine are also eligible to be internal examiners of postgraduate research theses. The internal examiner, with his/her letter of appointment, will be asked to declare any potential conflicts of interest that he/she may have.

A supervisor may not act as an examiner for his/her student. A supervisor may attend the *viva*, subject to the agreement of the examiners, chair and the student. In the case of cosupervision, only one supervisor attends; the decision on who attends is made by the cosupervisors. The supervisor, if present at the *viva*, does not participate in the final decision and leaves the examination when final deliberations are taking place. The external examiner shall have expertise in the field of study of the thesis. A short curriculum vitae of the external examiner will be provided, by the supervisor, to the College to accompany the online request for the approval of Examiners.

External examiners should normally be appointed from outside the Republic of Ireland. The external examiner shall not be drawn from within the NUI system or the University of Limerick, related to the University's alliance with the University of Limerick, except with the approval of Standing Committee, under clearly defined and exceptional circumstances, where the expertise required cannot readily be found elsewhere. The external examiner, with his/her letter of appointment, will be asked to declare any potential conflicts of interest that he/she may have. Diversification in the range of persons appointed as external examiners is encouraged while it being recognised that there may be a particular reason for availing of the expertise of a particular extern for a number of theses within a given period of time.

A second external examiner is appointed: - When the candidate to be examined is a full time member of staff of the University - When the work being examined, because of its nature, justifies this. All examiners participate fully in the two stages of the process: (i) the examination of the thesis and (ii) the *viva* examination of the candidate.

### The Viva (Oral) Examination

The *viva* is arranged by the supervisor at a time suitable for the candidate, examiners and chair. The *viva* should normally be held within two months of the submission of the thesis. The candidate is made familiar by the supervisor in advance with the standard format, timetable and normal length for such examinations.

A short written preliminary report is prepared by each examiner before the *viva* and sent to the chair and only then should the examiners confer. The chair must know the MD regulations, be able to advise the examiners of these regulations and has a particular responsibility to ensure they are implemented. The chair should meet the examiners prior to the *viva* and agree the agenda, format of the examination and procedures to be followed. The chair should introduce the examiners and the candidate and outline to the candidate the procedure for the *viva*. Normally the *viva* should have a minimum duration of one hour and after about two hours a break should be offered. The *viva* should not normally exceed three hours. Except in exceptional circumstances, the *viva* should be held on campus with all examiners physically present. Where it is not possible for the external examiner to attend in person, an application for the participation of the extern by video conference must be made two months in advance of the proposed date of the *viva*. The student must agree to the *viva* being held by video conference and the approval of a GRC member, Head of School, Dean of College and Dean of Graduate Studies obtained.

As soon as is practicable after the *viva*, feedback is given to the candidate by the chair of the *viva*. Where the examiners are in agreement, they shall submit a joint report with a recommendation for award or otherwise of the degree on the online system. This report shall be submitted online by the internal examiner to the Examinations Office within two weeks of the oral examination. The report will be considered by the Academic Council Standing Committee.

Where the examiners are not in agreement, separate reports must be made by each examiner, and all reports submitted together to the Examinations Office. The reports will be considered by the Academic Council Standing Committee. In accordance with the general regulations of the University, the opinion of an external examiner as to the overall result to be awarded to a candidate shall not be overruled unless by decision of not less than two-thirds of all the members of the Standing Committee then in office.

Only reports that are received at least five working days prior to a Standing Committee meeting will be considered at that meeting. Where the examiners have recommended that award of the MD be conditional on corrections being made to the thesis, the primary supervisor is responsible for monitoring the implementation of these corrections, and the internal examiner(s), (in consultation with the external examiner, if necessary) is responsible for ensuring that the changes made satisfy the requirements of the examiners. The internal examiner shall communicate in writing with the Examinations Office that the corrections are made. The timeline for the re-submission of the thesis requiring minor corrections to be made, either typographical or in content, is one month. Three months are allowed for the re-submission of a thesis which is deemed to require major corrections in content. These deadlines may be extended by the Dean of Graduate Studies in extenuating circumstances.

Where the examiners have recommended that the MD be referred, a second *viva* is required. Only one resubmission of a referred thesis is permissible. Formal contact should be made with the student by the Dean of College to inform the candidate of the decision and to ensure that they receive the examiners' report. The re-examination of the thesis must be undertaken by the same examiners. The revised softbound thesis and a new EOG 020 form 'Approval for Examination' must be submitted to the Examinations Office. The new joint examiners' report must be submitted online and considered by the Standing Committee of Academic Council. The time limit for re-submission is one year. The candidate may not graduate until the revised thesis, incorporating the required changes as confirmed by the internal examiner(s), has been lodged with the Examinations Office.

Where the award of the MD has been recommended, and (where necessary) when the

Where the award of the MD has been recommended, and (where necessary) when the internal examiner has confirmed in writing, that all the requirements of the examiners have been met in relation to the thesis in its print and online formats, the candidate must resubmit a hard-bound print copy of the thesis to the Examinations Office. This copy of the thesis must be submitted through the Student Information Desk (SID) to be lodged in the University Library with the appropriate accompanying form signed by the candidate (Library Submission Form, EOG 051). All theses shall remain the property of the

University. Candidates approved for examination after April 1, 2011 may not graduate unless they also submit an online copy to the Library, via the ARAN (Access to Research at NUI Galway) system.

A procedure to appeal the result of a PhD or MD examination is outlined in Section 6 of the University Guidelines for Research Degree Programmes. An appeal may not question the academic judgement of the examiners. Potential grounds for appeal are as follows: circumstances affecting the candidate's performance which the examiners were not aware of at the *viva*; procedural irregularities that occurred in the conduct of the examination which give rise to doubt as to whether the same conclusion would have been reached had the irregularities not occurred; evidence of prejudice, bias, unfair or inadequate assessment in the examination process. Appeals may not be submitted on the basis of inadequate supervision; complaints of that nature should be lodged during the period of study and before the submission of the thesis.

### NON-STRUCTURED MD OVERVIEW

The structured Medical Doctorate (MD) degree is a doctoral training programme offered by the School of Medicine with the core component of advancement of knowledge through original research and integrated support for professional development. The programme is student centred and the qualification is designed to enhance, improve and directly engage the student in relevant research skills. In addition, it will offer the student disciplinary, generic and transferable skills, tailored to suit the experience of students and reflect the disciplinary requirements.

The University may grant the Degree of MD to graduates who have:

a. In the case of a full-time candidate, carried out research in the University for a period of two years and attended such a programme of study as may be prescribed by Regulations. In exceptional circumstances, the College may reduce this period where the thesis has been approved for examination prior to the end of the two year period. In such cases, fees will be applied only until the end of the semester in which the thesis is submitted.

b. In the case of a part-time candidate, carried out research in the University for a period of three years and attended such a programme of study as may be prescribed by Regulations. In exceptional circumstances, the College may reduce this period where the thesis has been approved for examination prior to the end of the three year period. In such cases, fees will be applied only until the end of the semester in which the thesis is submitted.

c. Complied with such Regulations and passed such examinations as may be prescribed.

### **ENTRY REQUIREMENTS**

Candidates should normally have a high honours standard in the degrees of M.B., B.Ch., B.A.O. from NUI Galway or possess qualifications deemed by the University to be equivalent. The application will also require support of an academic staff member who is approved by the College to supervise the research in terms of its nature and scope.

### Additional entry requirements

Candidates may be required to submit a research proposal for consideration by the School as part of their application.

### SUPERVISION

The College, on the nomination of the Head of School, will assign a permanent member of University academic staff to be the primary supervisor of the candidate's research. The College may allow for co-supervision of the thesis. In the case of co-supervision, one of the supervisors need not be a member of the staff of the University. Honorary Clinical academic staff are eligible to be a primary supervisor for a MD thesis, with a fulltime academic consultant or fulltime permanent academic staff member being co-supervisor. Senior researchers may undertake graduate student supervision following approval as Honorary Research Lecturers. The College may assign a member of the University's

research staff as primary supervisor of a candidate's research, with a permanent member of the University's academic staff as co-supervisor, where the research being undertaken by the candidate is funded from a research project on which the member of research staff is the Principal Investigator.

### The supervisor

The primary supervisor(s) is responsible for the overall management of the student's training and research project. The supervisor(s) must meet the criteria set out in the University Guidelines and fulfill the following:

- be an active scholar and researcher with good records of achievement and publication
- have a PhD in a suitable academic area or an equivalent record of achievement
   Graduate Research Committee

Every research student and supervisor has the support of a Graduate Research Committee which is charged with ensuring compliance with basic good practices and will oversee student progress.

The name(s) of the supervisor(s) and the names of the three members of the candidate's Graduate Research Committee nominated by the Head of School in consultation with Head of Discipline must be forwarded when the candidate's name is submitted to the College for approval. A supervisor may not be a member of the student's Graduate Research Committee. At least two permanent members of academic staff in NUI, Galway must be on the GRC committee. Research staff must be appointed as adjunct lecturers before they can be members of a GRC committee

Unless permission is given to the candidate by the Academic Council, on the recommendation of the College, to work elsewhere under the general direction of the primary supervisor, the research will be carried out in the School mainly responsible for the subject area concerned but, where the research is interdisciplinary in nature, there shall be due co-operation between the main School and the other School(s) involved. A student who has registered for a joint degree with another institution, with whom a formal memorandum of understanding has been signed, will spend a period of time at the partner institution.

The candidate shall pursue research for the period set out at (a) or (b) above and shall also follow such a programme of study in the University as may be prescribed by the College.

A formal review of the research candidate's progress is carried out by the candidate's GRC, at least annually. The supervisor(s) shall submit a written report, according to the local agreed format, on the candidate's progress and the GRC shall review this, together with a written report (according to the local agreed format) from the candidate, and, following a meeting, make a recommendation to the relevant sub-committee of the College on progression. Following consideration of this recommendation, a formal decision on progression shall be made by the sub-committee. A candidate may appeal a decision not to allow progression to the Standing Committee of Academic Council. Candidates whose theses have not been approved for examination within the due period from the date of

registration must re-apply to the relevant College setting out justification for the requested extension of the allowed time period.

### **EXAMINATION**

Assessment is by examination of a written thesis and oral defence. To be awarded a MD, a candidate must demonstrate that, in pursuance of an agreed project, he/she has met all of the following criteria:

- Has made a significant contribution to knowledge and scholarship
- Has demonstrated a capacity for original and critical thought
   Can display an appropriate depth and breadth of knowledge and understanding of the relevant field(s) of study in the thesis and at the viva examination
- Has gained significant expertise with respect to basic and advanced methodologies and techniques
- Has presented a thesis with the appropriate structure and written style
- Has completed work that is suitable for publication

Evidence as to whether or not these criteria are met is found in the thesis, but the oral examination or viva is critical for confirmation that the required standards have been achieved.

The MD thesis (softbound) may be submitted after completion of the Approval for Examination form (EOG 020). The student must certify that the thesis is his/her own work. If the thesis is based on a group project, then the student must indicate the extent of his/her contribution, with reference to any other theses submitted or published by each collaborator in the project, and a declaration to this effect must be included in the thesis. The 'Approval for Examination' form EOG 020 is signed by the candidate, the primary supervisor(s), and a member of the candidate's GRC. The completed form is submitted by the candidate to the Examinations Office with the thesis. Where a candidate considers that approval for the submission of the thesis has been withheld unreasonably, s/he may appeal to the Standing Committee of Academic Council.

### **Submission of the Thesis**

The candidate must follow the directions on format, layout and presentation of a thesis, as described below. Two copies of the MD thesis, spiral or gum bound, must be lodged with the Examinations Office (unless otherwise stated by the supervisor, such as the case of two external or internal examiners). Each copy of the thesis must be accompanied by:

- a 'Summary of the Contents', not exceeding 300 words in length - a copy of the completed form EOG 020.

### Directions on Format, Layout and Presentation

There must be a title page which shall contain the following information:

- a. The full title (and subtitle, if any)
- b. The volume number and total number of volumes, if more than one
- c. The full name of the candidate, followed, if desired, by any degree and/or professional qualification(s)

- d. The name(s) of the supervisor(s), school(s), component discipline(s), institution
- e. The month and year of submission.

### Table of Contents

The 'Table of Contents', which should not be over-detailed, shall immediately follow the title page.

### Format and Layout

The text must be printed on good quality (110g/m2) A4 size paper. Line-spacing should be a maximum of one-and-half; text must be left justified with a left-hand margin of 4 cm and may be right justified. An easily-readable layout and double- sided printing are recommended for the body text. For double sided printing ensure that the right hand margin is also adequate for binding (i.e. a margin of 4 cm). More compact formats, with smaller font sizes, are usually appropriate for certain sections, such as reference lists, bibliographies and some kinds of appendices. Pages must be numbered consecutively, with page numbers located centrally, at the bottom, and chapter headers at the top, of each page. Diagrams, graphs, photographs and tables should be properly numbered and located in relation to the text.

The MD thesis may be presented for examination in either monograph style or article based format.

#### Article-based MD

The Article based MD is available to registered students on full or part time, structured MD programmes within the CMNHS. Students registered on non-structured MD programmes will not normally be permitted to submit in this format. A minimum of three original, published (peer reviewed) research papers in international leading journals of appropriate impact factor for the area of research is required. If no methodological papers are part of the submission, the student must include a detailed methodological chapter. In line with University guidelines, only articles which are based on research which has been undertaken by the student while registered for the MD at NUIG are admissible. In addition, the MD candidate would normally be the first or leading author on the major part of the work. Joint publications may be included but the candidate must make explicit, their contribution to the work

### Binding

The copies of the thesis presented initially for examination must be spiral or gum-bound. The copy of the final bound thesis must be bound within boards with leaves permanently secured. The cover of the copies of the final bound thesis must bear the title of the thesis, candidate's name, degree awarded and the date of submission. The spine bears the candidate's name, the degree awarded and the date of submission.

### Approval of Examiners & Chair of the viva

The primary supervisor is responsible for organisation of the overall examination process and for checking that the candidate, examiners and chair have been supplied with the

information necessary for understanding their roles.

The Examinations Office is responsible for processing the submitted thesis and the subsequent Examiners' Report.

The examination of a MD candidate involves at least two examiners, one external and one internal. The primary supervisor discusses with the GRC the choice of the external and internal examiners. The candidate is informed in good time when potential examiners and the overall make-up of the examinations board are being considered. At that stage, while providing a rationale for doing so, a candidate may object to the appointment of a particular examiner. If an examiner is recommended for appointment despite an objection from the candidate, a written rationale for the recommendation is supplied to the College by the primary supervisor. Following the consultation outlined above, the primary supervisor submits an online 'Approval of Examiners request. The recommended examiners must be first approved by a member of the GRC, and then the Head of School, before approval of College can be granted.

A chair of the *viva* must be an academic member of staff, nominated, and approved by the College, for each MD examination. The chair will not be an examiner and will not be required to read the thesis. The chair will normally be the Established Professor of the relevant discipline; however, he/she may nominate another permanent member of academic staff in the discipline to act as chair. When the Established Professor is the supervisor of the candidate being examined an alternate chair must be appointed. In the event of a vacancy in the Established Professorship, the Head of School, following appropriate consultation, will appoint the chair. The candidate is informed in good time when the chair is being considered. At that stage, while providing a rationale for doing so, a candidate may object to the appointment of a particular chair. Any member of academic staff who has appropriate expertise and experience may act as an internal examiner. Honorary Clinical Lecturers in the School of Medicine are also eligible to be internal examiners of postgraduate research theses. The internal examiner, with his/her letter of appointment, will be asked to declare any potential conflicts of interest that he/she may have.

A supervisor may not act as an examiner for his/her student. A supervisor may attend the *viva*, subject to the agreement of the examiners, chair and the student. In the case of cosupervision, only one supervisor attends; the decision on who attends is made by the cosupervisors. The supervisor, if present at the *viva*, does not participate in the final decision and leaves the examination when final deliberations are taking place. The external examiner shall have expertise in the field of study of the thesis. A short curriculum vitae of the external examiner will be provided, by the supervisor, to the College to accompany the online request for the approval of Examiners.

External examiners should normally be appointed from outside the Republic of Ireland. The external examiner shall not be drawn from within the NUI system or the University of Limerick, related to the University's alliance with the University of Limerick, except with the approval of Standing Committee, under clearly defined and exceptional circumstances,

where the expertise required cannot readily be found elsewhere. The external examiner, with his/her letter of appointment, will be asked to declare any potential conflicts of interest that he/she may have. Diversification in the range of persons appointed as external examiners is encouraged while it being recognised that there may be a particular reason for availing of the expertise of a particular extern for a number of theses within a given period of time.

A second external examiner is appointed: - When the candidate to be examined is a full time member of staff of the University - When the work being examined, because of its nature, justifies this. All examiners participate fully in the two stages of the process: (i) the examination of the thesis and (ii) the *viva* examination of the candidate.

### The Viva (Oral) Examination

The *viva* is arranged by the supervisor at a time suitable for the candidate, examiners and chair. The *viva* should normally be held within two months of the submission of the thesis. The candidate is made familiar by the supervisor in advance with the standard format, timetable and normal length for such examinations.

A short written preliminary report is prepared by each examiner before the *viva* and sent to the chair and only then should the examiners confer. The chair must know the MD regulations, be able to advise the examiners of these regulations and has a particular responsibility to ensure they are implemented. The chair should meet the examiners prior to the *viva* and agree the agenda, format of the examination and procedures to be followed. The chair should introduce the examiners and the candidate and outline to the candidate the procedure for the *viva*. Normally the *viva* should have a minimum duration of one hour and after about two hours a break should be offered. The *viva* should not normally exceed three hours. Except in exceptional circumstances, the *viva* should be held on campus with all examiners physically present. Where it is not possible for the external examiner to attend in person, an application for the participation of the extern by video conference must be made two months in advance of the proposed date of the *viva*. The student must agree to the *viva* being held by video conference and the approval of a GRC member, Head of School, Dean of College and Dean of Graduate Studies obtained.

As soon as is practicable after the *viva*, feedback is given to the candidate by the chair of the *viva*. Where the examiners are in agreement, they shall submit a joint report with a recommendation for award or otherwise of the degree on the online system. This report shall be submitted online by the internal examiner to the Examinations Office within two weeks of the oral examination. The report will be considered by the Academic Council Standing Committee.

Where the examiners are not in agreement, separate reports must be made by each examiner, and all reports submitted together to the Examinations Office. The reports will be considered by the Academic Council Standing Committee. In accordance with the general regulations of the University, the opinion of an external examiner as to the overall result to be awarded to a candidate shall not be overruled unless by decision of not less than

two-thirds of all the members of the Standing Committee then in office. Only reports that are received at least five working days prior to a Standing Committee meeting will be considered at that meeting. Where the examiners have recommended that award of the MD be conditional on corrections being made to the thesis, the primary supervisor is responsible for monitoring the implementation of these corrections, and the internal examiner(s), (in consultation with the external examiner, if necessary) is responsible for ensuring that the changes made satisfy the requirements of the examiners. The internal examiner shall communicate in writing with the Examinations Office that the corrections are made. The timeline for the re-submission of the thesis requiring minor corrections to be made, either typographical or in content, is one month. Three months are allowed for the re-submission of a thesis which is deemed to require major corrections in content. These deadlines may be extended by the Dean of Graduate Studies in extenuating circumstances.

Where the examiners have recommended that the MD be referred, a second viva is required. Only one resubmission of a referred thesis is permissible Formal contact should be made with the student by the Dean of College to inform the candidate of the decision and to ensure that they receive the examiners' report. The re-examination of the thesis must be undertaken by the same examiners. The revised softbound thesis and a new EOG 020 form 'Approval for Examination' must be submitted to the Examinations Office. The new joint examiners' report must be submitted online and considered by the Standing Committee of Academic Council. The time limit for re-submission is one year. The candidate may not graduate until the revised thesis, incorporating the required changes as confirmed by the internal examiner(s), has been lodged with the Examinations Office. Where the award of the MD has been recommended, and (where necessary) when the internal examiner has confirmed in writing, that all the requirements of the examiners have been met in relation to the thesis in its print and online formats, the candidate must resubmit a hard-bound print copy of the thesis to the Examinations Office. This copy of the thesis must be submitted through the Student Information Desk (SID) to be lodged in the University Library with the appropriate accompanying form signed by the candidate (Library Submission Form, EOG 051). All theses shall remain the property of the University. Candidates approved for examination after April 1, 2011 may not graduate unless they also submit an online copy to the Library, via the ARAN (Access to Research at NUI Galway) system.

A procedure to appeal the result of a PhD or MD examination is outlined in Section 6 of the University Guidelines for Research Degree Programmes. An appeal may not question the academic judgement of the examiners. Potential grounds for appeal are as follows: circumstances affecting the candidate's performance which the examiners were not aware of at the *viva*; procedural irregularities that occurred in the conduct of the examination which give rise to doubt as to whether the same conclusion would have been reached had the irregularities not occurred; evidence of prejudice, bias, unfair or inadequate assessment in the examination process. Appeals may not be submitted on the basis of inadequate supervision; complaints of that nature should be lodged during the period of study and efore the submission of the thesis.

# SCHOLARSHIPS/AWARDS UNIVERSITY SCHOLAR SCHEME

Údarás na hOllscoile will confer the title University Scholar on students who obtain the minimum requirement at the relevant examination as specified at 5.2 below.

The title University Scholar may be held with other Scholarships or Grants awarded by the University or by an external body.

**Value -** An award of €250 will be made to each University Scholar.

**Tenure** The title is tenable only at National University of Ireland, Galway.

**Condition of Award -** To register as a student of the University in the College in which the title is awarded by the due registration date. Failure to complete the registration requirement will render the student ineligible without further notice.

### Basis of Award

5.1 The award will be made on the results of fulltime undergraduate degree examinations other than the degree examination itself.

5.2 In September 2013, the title will be awarded to students who obtained the following minimum standards in the session 2012/13.

College	Years /Stages	Minimum Requirement
The College of Medicine,	Medicine	
Nursing and Health		
Sciences	Foundation Year	First-class Honours – 80% or over
	First Medical Year	First-class Honours – 80% or over
Students whose	Second, Third and	First-class Honours – 70% or over
examination performance	Fourth	
meets the minimum	Nursing - First,	First-class Honours -70% or over
requirement <u>AND</u> is	Second and Third Year	
ranked in the top 7% of	Programmes in	
the year class <sup>2</sup>	Occupational	
	Therapy, Podiatry,	
	Speech and	
	Language Therapy	
	First, Second and	First-class Honours -70% or over
	Third Year	

<sup>&</sup>lt;sup>2</sup>Students meeting the minimum requirement who fall outside of the top 7% of the year class are not eligible for the award.

# THE COLLEGE OF MEDICINE, NURSING AND HEALTH SCIENCES UNDERGRADUATE AWARDS

## BANK OF IRELAND AWARDS: HONOURS BACHELOR OF NURSING SCIENCE (GENERAL): BEST RESEARCH PROJECT MARK

Awards are presented to students from the undergraduate programme honours Bachelor of Nursing Science (General) for the best research project mark. The awards are sponsored bythe Bank of Ireland.

#### DR REUBEN BERMAN PRIZES

Medical Informatics and Medical Education award each year two fourth year medical students with the Berman Prizes which consists of six weeks clinical attachments in the Hennepin County Medical Center in Minneapolis, Minnesota, USA. These awards are based on the results the students achieved in the subject Medical Informatics and Medical Education that year.

### GOLD MEDAL IN GENERAL PRACTICE

A Gold Medal will be awarded annually to the top performing student as determined by the Extern in General Practice during the penultimate medical year of the MB Degree Examination.

### IRISH ASSOCIATION OF SPEECH AND LANGUAGE THERAPISTS PRIZE

The annual Irish Association of Speech and Language Therapists (IASLT) Prize is awarded to the fourth year student with the highest mark in Clinical Education on the Speech and Language Therapy course at NUI Galway.

### TAVISTOCK PRIZE FOR APHASIA

The Tavistock Prize for Aphasia is awarded to either an undergraduate or postgraduate student who demonstrates 'excellence' in either academic or practical work (i.e. an essay, a piece of research, clinical practice, conversation partners or similar scheme) relating to Aphasia. The student will receive the equivalent of £300 in Euro, a certificate and a badge. http://www.aphasiatavistocktrust.org/aphasia/university-student-prizes/

## THE NOLAN MEDAL (Clinical Ophthalmology)

Ophthalmology, a discipline within the College of Medicine, Nursing and Health Sciences has awarded for many years the O'Malley Medal for the first placed student in the Ophthalmology Final Medical Part I Examination. In view of the outstanding

contributions made by Dr John Nolan, retired Consultant Ophthalmologist, to the development of Ophthalmology, both within the College and in the Western Health Board, his colleagues have agreed to sponsor a further prize for students taking the OphthalmologyExamination.

The student who obtains first place in the clinical section of the Ophthalmology Examination at the Summer M.B. Degree Examination will be awarded the Nolan Medal for Clinical Opthalmology. The first award was made to graduates of 2003.

## DOCTORS SAL AND CONOR O'MALLEY MEDAL (Ophthalmology)

A Gold Medal will be awarded annually to the student who obtains the highest marks in Ophthalmology at the Summer M.B. Degree Examination.

#### JAMES P. MURRAY MEMORIAL GOLD MEDAL IN RADIOLOGY

The James P. Murray Memorial Gold Medal is awarded for the best presentation from registered medical students (undergraduate and postgraduate) made at the College of Medicine, Nursing and Health Sciences Medical Students' Research Meeting.

#### SIEMENS AWARD IN RADIOLOGY

The Siemens Award is given to the student who obtains the highest marks in the Radiology attachment in Final Medical.

### **Postgraduate Awards**

## THE AGFA-GEVAERT TRAVELLING SCHOLARSHIP IN RADIOLOGY

This Scholarship has been endowed by Agfa-Gevaert (Ireland) Limited and is awarded to enable a young Galway, Graduate to pursue a short course of study or research abroad, as part of his/her post-graduate training in Radiology. Graduates of National University of Ireland, Galway, up to 10 years after graduation, are eligible for this award, which will be decided by a University Committee representative of the Medical, Nursing and Health Sciences College. In the event of a suitable applicant not being available in any year, the interest available may be carried over to augment the funds available in the subsequent year. Further information and details concerning application are available from the Professor of Radiology, University College Hospital, Galway.

The value of the Scholarship is  $\leq 1,200$ .

## DR TONY CARNEY GOLD MEDAL (MSc (SPORTS AND EXERCISE MEDICINE))

The Gold Medal is awarded to the student who achieves the best overall result in the MSc (Sports and Exercise Medicine) Degree Programme.

## MARY COSTELLO GOLD MEDAL (MSc (SPORTS AND EXERCISE PHYSIOTHERAPY))

The Gold Medal is awarded to the student who achieves the best overall result in the MSc (Sports and Exercise Physiotherapy) Degree Programme.

## THE PROFESSORIAL POSTGRADUATE TRAVEL PRIZE IN OBSTETRICS AND GYNAECOLOGY SUPPORTED BY ETHICON LIMITED

Ethicon Limited have agreed to award a sum of approximately €777 (£500 sterling) per annum over the next five years to help fund a short course abroad for a postgraduate trainee in Obstetrics and Gynaecology, to be known as "The Professorial Postgraduate Travel Prize".

### THE DOCTOR JOHN F. KEENAN TRAVELLING SCHOLARSHIP

This Scholarship is endowed by the late John F. Keenan, B.A., MB BCh BAO (a graduate of the University 1892-1897), who by his Will bequeathed to the University certain portions of his estate for the promotion of Medical Research. The original Endowment, as ascertained by the Executors of the donor on the seventh day of March, 1947, consisted of securities and cash valued at €7063 (approx.).

The present value of the Scholarship is €12,500.

Údarás na hOllscoile, having accepted the Bequest has founded the above Scholarship, and has adopted the following rules in regard to it:—

- 1. The value of the Scholarship shall be as determined by Údarás na hOllscoile.
- 2. The Scholarship is available to a graduate in Medicine and Health Sciences of the University of either sex of Irish parentage, who has:—
  - (a) obtained Honours in the MB BCh BAO Examination;
  - (b) presented for the MB BCh BAO Examination not later than the month of December in the sixth year of medical study;
  - (c) been adjudged by the College of Medicine, Nursing and Health Sciences to have attained an adequate Honours Standard in the undergraduate course as a whole;
  - (d) been adjudged by the College of Medicine, Nursing and Health Sciences to have shown special aptitude for research during the undergraduate course.

*Note:* For the purpose of (*b*) above there shall not be counted:

- (i) an extra year spent in taking a Medical B.Sc. Degree;
- (ii) time lost owing to illness properly certified.
- 3. The Scholarship shall be awarded by Údarás na hOllscoile on the recommendation of the Academic Council made after consultation with the College of Medicine, Nursing and Health Sciences. The College of Medicine, Nursing and Health Sciences shall, for the purpose, consider the report of the Professor of Medicine and of the Extern

Examiner in Medicine. Údarás na hOllscoile may withhold the Scholarship if sufficient merit be not shown.

- 4. (a) The Scholarship shall be awarded once only in every four years, shall be awarded in the month of January, and was first awarded in January, 1951;
- (b) If the Scholarship be not awarded in the official year of award, it may be awarded in any one of the three succeeding years of a four-year period;
- (c) Should no award be made in a four-year period, more than one Scholarship may be subsequently offered.
- 5. Only Graduates in Medicine and Health Sciences of the four years preceding the first day of January of the year of award, are eligible for the Scholarship.
- 6. The Candidate to whom the Scholarship is awarded shall before being permitted to take up the Scholarship first serve as a House Physician in a Recognised General Hospital for a period of not less than six months or more than twelve months, unless he/she has already done so. He/she shall then pursue a Course of Research in Medicine and Health Sciences at some centre abroad approved by the Professor of Medicine in the University.
- 7. The Scholarship is tenable by the Scholar for a period of two consecutive years. The said two-year period shall commence from the day of termination of period of service as House Physician or (in the case of a candidate who has already served as House Physician) from the date of award of the Scholarship. The Scholarship shall in the first instance be awarded for one year only, but may be continued by Údarás na hOllscoile for a second year on the recommendation of the Academic Council. Before making such recommendation, the Academic Council must be satisfied of the progress of the scholar and shall consider the report of the College of Medicine, Nursing and Health Sciences and the report of the Head of the Research School in which the Scholar is engaged.
- 8. Candidates shall lodge their applications for the Scholarship with the Admissions Office of the University not later than the first day of December of the year immediately preceding the year of award.
- 9. The Scholarship will be paid in equal half-yearly instalments. The first instalment will be paid on receipt of official notification from a Research Centre abroad to the effect that the Scholar has commenced work there.

### FINAL MEDICAL MEDALS 2018

ANAESTHESIA:

(12321751) Ryan, Ciara

**BACTERIOLOGY:** 

(12300466) Macken, Esther (Professor John Flynn Medal)

**MEDICINE:** 

(13311821) McCabe, Fergus

**OBSTETRICS & GYNAECOLOGY:** 

(12300466) Macken, Esther

OTO-RHINO-LARYNGOLOGY:

(12300466) Macken, Esther

**OPHTHALMOLOGY:** 

(12312541) Browne, Darragh(12310496) Maher, Michelle(Drs Sal and Conor O'Malley Medal)

**PATHOLOGY:** 

(12300466) Macken, Esther (John D. Kennedy Medal)

**PAEDIATRICS:** 

(12321751) Ryan, Ciara

**PSYCHIATRY:** 

(12300466) Macken, Esther

RADIOLOGY:

(12312541) Browne, Darragh

**SURGERY:** 

(12310496) Maher, Michelle

**GENERAL PRACTICE:** 

(12315896) Piggott, Raymond Simon

**CKI for Community Contribution:** 

(10318669) Fennelly, Evelyn

**IUMC Comerford Medal:** 

(13100311) Yee, Kuan Hao

## The College of Medicine, Nursing and Health Sciences /

Coláiste an Leighis, an Altranais agus na nEolaíochtaí Sláinte

# Undergraduate Prizes/Scholarships (other than Excellence/University Scholarships)/

Duaiseanna/ Scoláireachtaí Fochéime (seachas Scoláireachtaí Sármhaitheasa/ Ollscoile)

## Inter College Scholarship –

**Dr James Massey Keegan Scholarship** 

### 2017-18

First Medicine (1MB3)

Lyons, Rachel

### Duais Acadamh na Lianna

2016-17

First Medicine (1MB3)

Doyle, Aoife

### **Dr Reuben Berman Fellowship**

2018-19

Browne, Ferdia (4MB)

Ho, Min Yun (4MB)

**Professor James P. Murray Memorial** 

**Gold Medal** 

### 2018-19

Murphy, Sarah (3MB)

### Postgraduate Prizes/Scholarships/ Duaiseanna/Scoláireachtaí Iarchéime

Mary Costello Gold Medal (MSc) (Sports and Exercise Physiotherapy)

### 2012-13

Master of Science (Sports and Exercise Physiotherapy) (2MSP1)

Hoare Eimear Marie

University Scholars /

Scoláirí Ollscoile 2018-19 Honours Bachelor of Medicine,

Bachelor of Surgery and Bachelor of Obstetrics (MB BCh BAO)

Foundation Year (0MB3)

BOURKE Colin
KELLY Joseph
MARLAND Harry
MARREN Conan
MCMAHON Rachel
REILLY Brianna
YASSA Carol

**Year 1 (1MB3)** 

ABBAS SYED Raza

DUFFY Annie

LIE KEN JIE Christopher

**Year 2 (2MB3)** 

ALKANDARI Bader
BURKE Sinead

BUTLER Dominic
CALLAGHAN Emma
CHAI Shang Yuin

**CURRAN** Sean **FITZPATRICK** Aoife Kate **HANLEY** HUTTON Celeste **K**EATING Muireann Deirdre **McDermott MCKENNA** Sinéad Orla MORAN O'CONNOR Niamh Ellen **ORMSBY PITTMAN** Jenna **RYAN** Sinead SANADI Christine **S**COTT Hannah **VYAS** Vedang

**Year 3 (3MB3)** 

ADLY Marco
CLEMENTS Nicolle
COMERFORD Saidhbh
COSGRAVE John
DERVAN Louise
HEHIR Aoife
KASSIR Noor

LEE Justin Guang Jie

MAHER Elizabeth
MOHAMMED Nida

MOHD NASRI Farah Aliyah
NÍ CHAOIMH Dearbhail
ONG Wei Bin
OREDEGBE Al-Ameen

Roy Cozette Monisha

SELIMAN Maryam
TIERNEY Clara
WILLIS Jessica

**Year 4 (4MB3)** 

FLAHERTY Emma **K**ELLY Fearghus LOWRY Jessica Niamh MOLONEY MULLIGAN Martin O CONNELL Niall **RABBITT** Laurann Kate **RIGNEY** 

Prizes already presented

The College of Medicine, Nursing & Health Sciences

Coláiste an Leighis, an

Altranais agus na nEolaíochtaí

Sláinte

Undergraduate Prizes/Scholarships (other than Excellence/University Scholarships)/ Duaiseanna/ Scoláireachtaí Fochéime (seachas Scoláireachtaí Sármhaitheasa/ Ollscoile)

The Dr Henry Hutchinson Stewart Medical Scholarship in Midwifery

O'Shaughnessy Joyce

The Dr Henry Hutchinson Stewart Medical Scholarship in Nursing

Third Prize
McDaid Teresa

The Dr Henry Hutchinson Stewart Medical Scholarship in Occupational Therapy

First Prize Halpin Laura

Second Prize
Cleary Saoirse
The Dr Henry Hutchinson Stewart
Medical Scholarship in Podiatry
Camier Sarah
Second Prize
McGuire Daly Marcus

The Dr Henry Hutchinson Stewart Scholarship in Speech and Language Therapy

Second Prize
Larkin Meadhbh

## Dr Henry Hutchinson Stewart Medical Scholarships and Prizes 2018

The Dr Henry Hutchinson Stewart Medical Scholarship in **Anaesthesia** 

Second Prize
Ní Chaoimh, Dearbhail

The Dr Henry Hutchinson Stewart Medical Scholarship in **Anatomy** 

## Scholarship First Prize

Duffy, Annie

The Dr Henry Hutchinson Stewart Medical Scholarship in **Biochemistry** 

Second Prize
THOMPSON, Brian

The Dr Henry Hutchinson Stewart Medical Scholarship in **Clinical Radiology** 

## Scholarship First Prize

Julius, Barbara

The Dr Henry Hutchinson Stewart Medical Scholarship in **General Practice** 

### Scholarship First Prize

MULLIGAN, Martin

The Dr Henry Hutchinson Stewart Medical Scholarship in **Gynaecology & Obstetrics** 

Third Prize

### Scholarship First Prize

Lowry, Jessica

Second Prize

TIMON, Jennifer

The Dr Henry Hutchinson Stewart Medical Scholarship in **Ophthalmology** 

Second Prize

MAHER, Michelle

The Dr Henry Hutchinson Stewart Medical Scholarship in Midwifery

Scholarship First Prize

Claire Beecher

Third Prize

Elaine Finucane

The Dr Henry Hutchinson Stewart Medical Scholarship in Nursing

Scholarship First Prize

Nicola Hyde

Second Prize

Tracy McHugh

Linda McNulty

# The Dr Henry Hutchinson Stewart Medical Scholarship in Nursing Scholarship First Prize

Nicola Hyde

Second Prize

Tracy McHugh

Third Prize

Linda McNulty

The Dr Henry Hutchinson Stewart Medical Scholarship in Psychiatric Nursing

Second Prize Máire Mullooly

Third Prize
Lisa McKeon

The Dr Henry Hutchinson Stewart Medical Scholarship in **Paediatrics** 

## Scholarship First Prize

O'Brien, Stephen

 $Third\ Prize$ 

RIGNEY, Kate

The Dr Henry Hutchinson Stewart Medical Scholarship in **Pathology** 

The Dr Henry Hutchinson Stewart Medical Scholarship in *Third Prize* GEORGE, Simi

### Commendation

Ní Chaoimh, Dearbhail

The Dr Henry Hutchinson Stewart Medical Scholarship in Surgery

Third Prize

Scholarship First Prize

MACKEN, ESTHER

Commendation

MAHER. Michelle

The Dr Henry Hutchinson Stewart Medical Scholarship in **Physiology** 

Second Prize

MCKENNA, Sinéad

Scholarship First Prize

Olga Carey

Second Prize

Marie Hegarty

The Dr Henry Hutchinson Stewart Amy Curran

McCabe, Fergus

Yeats College, Yeats House, College Road, Galway

## **EXCELLENCE SCHOLARSHIPS 2017-18**

The College of Medicine, Nursing and Health Sciences / Coláiste an Leighis, an Altranais agus na nEolaíochtaí Sláinte

RAZA	<b>ABBAS SYED</b>	1MB3	WOODVILLE LODGE,LACKA,CASTLECONNELL,CO LIMERICK
CONOR	BLEAHENE	0MB3	CLONULTY,BALLYDANGAN,ATHLONE,CO ROSCOMMON
KAREN	GARVEY	0MB3	IRISH HOUSE,GLENAMADDY VIA CASTLEREA,CO GALWAY
OISIN	<b>GIBBONS</b>	0MB3	2 THE ROW, SPIDDAL VILLAGE, AN SPIDEAL, CO GALWAY
JOSEPH	KELLY	0MB3	ARD ABHANN, RIVERSTOWN, BIRR, CO OFFALY
RACHEL	LYONS	1MB3	SHANVAGHERA,KNOCK,CLAREMORRIS,CO MAYO
	MC		
DIARMAID	CAUGHEY	1MB3	3 BODONEY ROAD,TRILLICK,OMAGH,CO. TYRONE BT78 3SQ,N IRELAND
AISLING	MC GRATH	1MB3	32 BEECHFIELD,MONALEEN,CASTLETROY,CO LIMERICK
MARIA	RUDDY	0MB3	58 KNOCKAPHUNTA PARK,WESTPORT ROAD,CASTLEBAR,CO MAYO
AOIFE	SHORTEN	1MB3	KILOUGHTER,MENLO,GALWAY,CO GALWAY