

Masters in Exercise Physiology and its Application in Therapy
College of Medicine, Nursing, & Health Sciences,

PAC Code: GYM92

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 REPs Ireland/ACSM**
- **Pursue a career as an EXERCISE SPECIALIST/THERAPIST**

Course Facts

Course Level: 9

Duration: 3 Semesters in one year or 12 months – September - August (Flexible options are also available). Semester 1-2 available as taught and online options.

Entry Requirements: NFQ level 8 (Bachelors degree) with minimum score of 2.2 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 (Bachelors degree) is also accepted** (a bridging module in Humn Body Functions is available for conversion).

Places available: 35

Fees: € 8500 full time EU, € 17000 Full Time Non-EU

Application: www.pac.ie/nuigalway (Application is OPEN)

For more information please contact – ananya.gupta@nuigalway.ie

Course Start date: September 2018

Course Overview

Topics featured in the lecture series include nerve-muscle physiology, cardiorespiratory physiology, kinesiology, integrated physiological responses to exercise and methods of evaluation, metabolism and nutrition in exercise, scientific principles of exercise prescription, methods of physiological assessment during exercise in healthy and clinical populations.

Students will gain **hands on experience** in conducting exercise tests and physiological assessment of fitness. Semester 1–2 will be taught through lectures. **Blended learning:** All modules (1–6) will also be available online via podcasts and will be delivered via the medium of blackboard collaborate ultra virtual classrooms. (This will ensure that international students need to travel to NUI Galway only for four months Mid May-August).

Online students will engage with pre-recorded lectures on blackboard on a weekly basis. To support engagement, discussion and interaction, **weekly online meetings will follow lectures** with the course director.

All students will engage with **continuous assessments**. Students will be assessed during each semester by continuous assessments and end of semester exams. In module 7 in semester 2, students will attend a three week long hands-on training workshop to gain practical experience in exercise testing and physiological methods of evaluating performance and exercise prescription and application of their knowledge. Students will also attend a two-day workshop on

professionalism and learn about the roles and responsibilities of an exercise specialist.

Professional Recognition and Accreditation Opportunities

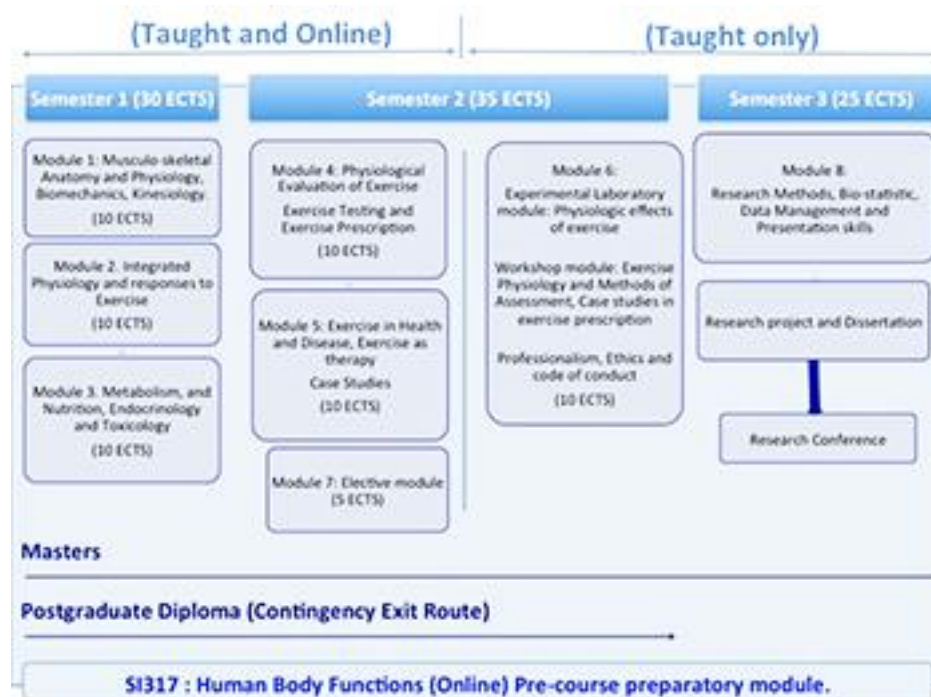
Course is aligned to the **European Health and Fitness Association Guidelines** and is **FULLY ACCREDITED** by **Registered Exercise Professionals (REPs)** Ireland and **American College of Sports Medicine (ACSM)**. Upon completion students will become registered members of REPs Ireland and will be eligible for certification from ACSM.

In Semester 3, students will complete a research project on a related topic under the supervision of a member of faculty. Student will receive a **Masters degree** on successful completion of all three semesters and successful defense of their project dissertation.

Conference

At the end of Semester 3 there will be a one-day **conference** organized by the course director where students will have an opportunity to showcase their work.

Course Table



Students will also be eligible for accreditation and registration offered by REPs Ireland and American College of Sports Medicine (ACSM).

Who Teaches this Course:

Dr. Ananya Gupta

Ananya is a Lecturer (Above the Bar) in the Discipline of Physiology.

Prof. Antony Wheatley

Head of Department of Physiology, School of Medicine, NUI Galway

Dr. Michael Newell

Michael is a Lecturer in the Discipline of Medical Informatics and Medical Education.

Dr. Nicole Burns

Nicole is a lecturer in the Discipline of Physiology at NUI Galway.

Other contributing lecturers (NUI Galway):

- Prof. Garry Duffy—Professor in Anatomy, School of Medicine
- Dr. Brendan Higgins—Lecturer in Physiology, School of Medicine
- Dr. Karl McCullagh—Lecturer in Physiology, School of Medicine
- Dr. Brian McDonagh—Lecturer in Physiology, School of Medicine
- Dr. Louise Horrigan—Lecturer in Physiology, School of Medicine
- Dr. Karen Doyle—Senior Lecturer in Physiology, School of Medicine
- Dr. Michelle Roche—Lecturer in Physiology, School of Medicine
- Dr. Louise Cambell—Lecturer in General Practice, School of Medicine
- Prof. David Finn—Professor in Pharmacology, School of Medicine
- Dr. Eva Szegezdi—Lecturer in Biochemistry, College of Science
- Dr. Amir Shafat—Senior Lecturer in Physiology, School of Medicine

Discipline of Physiology Exercise Laboratory and Teaching Facility

Students will attend lectures and laboratory sessions in the state-of-the-art teaching facility equipped with modern audiovisual and laboratory equipment in the Human Biology Building, School of Medicine, NUI Galway.

1. Physiology Teaching Labs, Discipline of Physiology, HBB Building, NUI Galway
2. Physiology Exercise Suite, Discipline of Physiology, HBB Building, NUI Galway
3. Human Performance and Locomotion Laboratory, Discipline of Engineering, NUI Galway