

Physiology

BSc [Hons] [NFQ Level 8]



Science SCU1

Length of Course 4 Years

Guideline Entry Requirements

IB - International Baccalaureate Diploma
 IB Total 30
 Subject Requirements:
 Maths: 4 at Higher Level/ 6 at Standard Level
 Lab Science: 4 at Higher Level/ 6 at Standard Level

Cambridge A Level (+ GCSE O Level)
 AAB
 Subject Requirements:
 Maths: GCSE Grade B/ A Level Grade D
 Lab Science: GCSE Grade B/ A Level Grade D

Other Examinations For country specific information see page 157

UCD International Foundation Year Yes, see www.dublinisc.com/university-college-dublin



Physiology students Myles Patterson, David Brandon and Katie Thursfield working on an experiment in the Conway institute
 Photo by Niall Hayes © UCD 2014

Why is this course for me?

Physiology is an area of biology. Physiologists are interested in how the cells and organs of the body operate and how their incredible array of processes co-operate to enable our bodies to function under normal and challenging circumstances. Physiologists are therefore at the forefront of medical research and the search for a better understanding of disease processes. At UCD, Physiology students acquire a thorough understanding of the components of the body and how it senses and responds to the internal and external environments.

What will I study?

This is a sample pathway for a degree in Physiology. Topics include neurophysiology, metabolic biochemistry, membrane biology, respiratory physiology and cardiovascular physiology.

First Year

Biology • Chemistry • Physics • Mathematics •
 Optional Science modules • Elective modules

Second Year

Physiology • + 2 other Science subjects • Elective modules

Third Year

Physiology • Elective modules

Fourth Year

Physiology (includes a research project in a laboratory setting)
 All Science courses are full time, with many student timetables running from 9.00am to 5.00pm or later. Depending on the subject choices, a weekly timetable can include lectures, practicals and tutorials.

Assessment varies with each module but may comprise continuous assessment of practicals, written exams and online learning activities.

Career & Graduate Study Opportunities

Physiology graduates go on to establish careers in the following areas:

- Biomedical research in the university system or other government-run operations
- Pharmaceutical industry-based research and development
- Clinical trials
- Pharmaceutical industry sales

Physiology graduates regularly gain places on graduate-entry Medicine and other allied healthcare degree courses. UCD provides opportunities for graduate physiological research at the master's or PhD level. Research into basic physiological mechanisms takes place but the research focus is on translational research, i.e. the research that enhances our understanding of human disease that leads to advances in the improvement of human health.

International Study Opportunities

Physiology students have spent time studying at the following universities:

- San Jose State University, USA
- University of Queensland, Australia



Keith Siew
 GRADUATE

I was delighted when I got into the science degree programme at UCD. I was very fortunate to be involved with an *in vivo* research project in my final year where I got to investigate the role of a group of proteins in diabetes and obesity using genetically modified mice. I got to present my research findings at a scientific conference and won a prize for my presentation, helping me to secure a PhD position at the University of Cambridge researching my favourite subject, kidney physiology. The knowledge and skills I acquired at UCD

have allowed me to pursue a career in research which I'm passionate about, contributing to scientific knowledge and enhancing human health.

PhD Student, University of Cambridge

Find out more

www.ucd.ie/international

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facebook.com/UCDScience

UCD School of Medicine & Medical Science

UCD Conway Institute of Biomolecular & Biomedical Research, Belfield, Dublin 4

Other courses of interest

Pharmacology →104

Biomedical, Health & Life Sciences →85