

Physiology

CAO code: DN200 Option: Biological, Biomedical and Biomolecular Science (BBB)

Sample pathway for a degree in Physiology *

YEAR 1

ENGAGE WITH THE PRINCIPLES

BIOLOGY

Topics include:

- ▶ Biology in Action
- ▶ Diversity of Life
- ▶ Cell Biology & Genetics
- ▶ Biomedical Sciences

CHEMISTRY

Topics include:

- ▶ The Basis of Organic and Biological Chemistry

MATHEMATICS

Topics include:

- ▶ Mathematics for the Biological & Chemical Sciences

- ▶ Two Elective modules
- ▶ One Small-Group Project



Physiology students working on an experiment in the Conway Institute. Image by Niall Hayes © UCD

YEAR 2

CHOOSE YOUR SUBJECTS

PHYSIOLOGY

Topics include:

- ▶ Chemistry for Biologists
- ▶ Molecular Genetics and Biotechnology
- ▶ Biomolecular Laboratory Skills
- ▶ Introduction to Physiology
- ▶ Organs and Systems Physiology
- ▶ Metabolic and Immune systems
- ▶ Neurophysiology

NEUROSCIENCE

Topics include:

- ▶ Principles of Neuroscience

MICROBIOLOGY

Topics include:

- ▶ Principles of Microbiology: Medicine, Environment and Biotechnology

- ▶ Two Elective modules

- Understand normal and abnormal processes within the body in health and disease
- Explore various body organs and their functions as well as an understanding of the structure and function of key biomolecules

YEAR 3

FOCUS ON YOUR CHOSEN SUBJECT

PHYSIOLOGY – Topics include:

- ▶ Cardiovascular System
- ▶ Biostatistics
- ▶ Experimental Physiology
- ▶ Endocrine/Reproductive Physiology

- ▶ Digestion, Absorption and Excretion
- ▶ Membrane Biology
- ▶ Higher Cortical Function
- ▶ Respiratory Physiology

- ▶ Two Elective modules

YEAR 4

REFINE YOUR KNOWLEDGE

PHYSIOLOGY – Topics include:

- ▶ Lung Function Under Stress
- ▶ Control of Vascular Resistance
- ▶ Physiology Research Project

- ▶ Physiological Basis of Disease
- ▶ Haemostasis and Thrombosis
- ▶ Adaptation to Hypoxia

- ▶ Integrated Animal Physiology

BSc (Honours) Physiology

MSc

- ▶ Students can pursue a Taught Masters or Research Masters in universities in Ireland or abroad in any physiological discipline or a diverse range of medical or other biological areas

PhD

- ▶ Students can pursue a PhD in universities in Ireland or abroad in any physiological discipline or a diverse range of medical or other biological areas

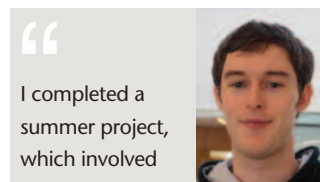
Industry

- ▶ Pharmaceutical Research (Laboratory)
- ▶ Clinical Research Associate
- ▶ Pharmaceutical Industry Sales

Conversion Courses

- ▶ Professional Master of Education (PME)
- ▶ Graduate Entry Veterinary Medicine
- ▶ Graduate Entry Medicine
- ▶ Graduate Entry Physiotherapy

*See pages 4 and 5 for information on the terminology used above. Potential combinations shown here are examples only and are not guaranteed by UCD. Topics are subject to change each year.



I completed a summer project, which involved learning essential lab skills and gaining experience in a laboratory setting by looking for a new experimental technique to identify changes to lung structure in an animal model of lung disease. The biggest benefit of completing the summer project was gaining essential lab experience, which has now developed my enthusiasm for research.

Stephen Murphy, Student

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