

# COURSE DETAIL

## NEUROMUSCULAR AND MEMBRANE BIOLOGY

**Country**

Ireland

**Host Institution**

University College Dublin

**Program(s)**

University College Dublin

**UCEAP Course Level**

Upper Division

**UCEAP Subject Area(s)**

Biological Sciences Biochemistry

**UCEAP Course Number**

165

**UCEAP Course Suffix****UCEAP Official Title**

NEUROMUSCULAR AND MEMBRANE BIOLOGY

**UCEAP Transcript Title**

NEUROMUSCULAR BIO

**UCEAP Quarter Units**

5.00

**UCEAP Semester Units**

3.30

## **Course Description**

This course is designed to give an in-depth knowledge of structure and function of neurons, neuronal communication and muscle. Major topics include a) The detailed structure of neurones and muscle cells, b) The biophysical membrane properties of these cells, c) Ion fluxes and permeabilities, d) Synaptic transmission, e) Excitation/contraction coupling and cell signalling. Parallel computer simulated assignments complement the lecture material in addition to an assignment on muscle function and EMG measurements.

### **Language(s) of Instruction**

English

### **Host Institution Course Number**

NEUR30080

### **Host Institution Course Title**

NEUROMUSCULAR AND MEMBRANE BIOLOGY

### **Host Institution Course Details**

[https://hub.ucd.ie/usis/!W\\_HU\\_MENU.P\\_PUBLISH?p\\_tag=MODULE&MODULE=NEUR30080&ARCH...](https://hub.ucd.ie/usis/!W_HU_MENU.P_PUBLISH?p_tag=MODULE&MODULE=NEUR30080&ARCH...)

### **Host Institution Campus**

### **Host Institution Faculty**

Biomolecular & Biomedical Science

### **Host Institution Degree**

### **Host Institution Department**

### **Course Last Reviewed**

2025-2026

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