Introduction to Biophysics (MPHY0006)

**Description**

This course provides an introduction to biophysics of the human body.

It forms part of the Physics with Medical Physics (BSc), Medical Physics (MSci) and Natural Sciences (BSc and MSci) undergraduate degrees.

**The aims of this course are three-fold:**

1. To explore the biophysics of signalling and movement at the cellular level;
2. To introduce mathematical modelling in biophysics;
3. To appreciate how biophysical measurements can be acquired and used in clinical environments;

**At the cellular level, topics will include:**

- diffusion, membrane potentials, ion channels, synapses, action potentials, contraction of muscle cells, and neural coding.
- Guest lectures from clinicians will cover electrocardiography (ECG), electromyography (EMG), and anaesthesia.

**Key information**

- **Year**: 2018/19
- **Credit value**: 15 (150 study hours)
- **Delivery**: UG L5, Campus-based
- **Reading List**: [View on UCL website](#)
- **Tutor**: Dr Adrien Desjardins
- **Term**: Term 2
- **Timetable**: [View on UCL website](#)

**Assessment**

- Written examination (main exam period): 80%
- Coursework: 20%

**Find out more**

For more information about the department, programmes, relevant open days and to browse other modules, visit [ucl.ac.uk](http://ucl.ac.uk)