Medical Physics and Biomedical Engineering

Applications of Biomedical Engineering (MPHY0039)

**Description**
This module illustrates how the foundation knowledge of biomedical engineering is used in the provision of clinical services. Topics include:
1. electrophysiology: electroencephalography (EEG), electrical impedance tomography (EIT) and electromyography (EMG);
2. respiratory measurement: mechanics of breathing, diffusing capacity, whole body plethysmography;
3. urology: lower urinary tract, bladder, incontinence technology;
4. rehabilitation robotics and assistive technology: manual wheelchair, robots;
5. rehabilitation engineering: prosthetic leg, functional electrical stimulation.

A video description can be found at the UCL Media Central.

**Key information**
- **Year**: 2020/21
- **Credit value**: 15 (150 study hours)
- **Delivery**: UG L6, Campus-based
- **Reading List**: [View on UCL website](#)
- **Tutor**: Dr Terence Leung
- **Term**: Term 2
- **Timetable**: [View on UCL website](#)

**Assessment**
- Written examination (main exam period): 100.0%

**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)

Disclaimer: All information correct as of March 2020. Please note that aspects of the module may be subject to change. UCL will make best efforts to inform applicants of major changes.
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Key information
- Year: 2020/21
- Credit value: 15 (150 study hours)
- Delivery: PGT L7, Campus-based
- Tutor: Dr Terence Leung
- Term: Term 2

Assessment
- Written examination (main exam period): 100.0%

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