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;

**Key information**

<table>
<thead>
<tr>
<th><strong>Year</strong></th>
<th>2018/19</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Credit value</strong></td>
<td>15 (150 study hours)</td>
</tr>
<tr>
<td><strong>Delivery</strong></td>
<td>UG L6, Campus-based</td>
</tr>
<tr>
<td><strong>Reading List</strong></td>
<td>[View on UCL website]</td>
</tr>
<tr>
<td><strong>Tutor</strong></td>
<td>Dr Terence Leung</td>
</tr>
<tr>
<td><strong>Term</strong></td>
<td>Term 2</td>
</tr>
<tr>
<td><strong>Timetable</strong></td>
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</tr>
</tbody>
</table>

**Assessment**

- Written examination (main exam period): 100%

**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)
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**Key information**

- **Year**: 2018/19
- **Credit value**: 15 (150 study hours)
- **Delivery**: PGT L7, Campus-based
- **Reading List**: [View on UCL website](#)
- **Tutor**: Dr Terence Leung
- **Term**: Term 2
- **Timetable**: [View on UCL website](#)

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