Medical Physics and Biomedical Engineering

Treatment with Ionising Radiation (MPHY0038)

**Description**

The course is intended to provide the basic knowledge which a medical physicist working in a radiotherapy department would be expected to have. This includes: a knowledge of how quantities of radiation and radiation doses are measures, including the theory of radiation detectors and dosemeters; a knowledge of how cells are affected by exposure to ionising radiation and the mechanisms involved; knowledge of how the treatment plan for a patient is developed and carried out; a knowledge of the risks involved in the use of ionising radiation; and the concept of risk and radiation protection.

**Key information**

- **Year**: 2019/20
- **Credit value**: 15 (150 study hours)
- **Delivery**: UG L6, Campus-based
- **Reading List**: View on UCL website
- **Tutor**: Prof Gary Royle
- **Term**: Term 1
- **Timetable**: View on UCL website

**Assessment**

- Written examination (main exam period): 60%
- Group coursework: 40%

**Find out more**

For more information about the department, programmes, relevant open days and to browse other modules, visit ucl.ac.uk

Disclaimer: All information correct as of December 2018. Please note that aspects of the module may be subject to change. UCL will make best efforts to inform applicants of major changes.
# Treatment with Ionising Radiation (MPHY0038)

## Description

The course is intended to provide the basic knowledge which a medical physicist working in a radiotherapy department would be expected to have. This includes: a knowledge of how quantities of radiation and radiation doses are measures, including the theory of radiation detectors and dosemeters; a knowledge of how cells are affected by exposure to ionising radiation and the mechanisms involved; knowledge of how the treatment plan for a patient is developed and carried out; a knowledge of the risks involved in the use of ionising radiation; and the concept of risk and radiation protection.

## Key information

<table>
<thead>
<tr>
<th>Key Information</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Year</strong></td>
<td>2019/20</td>
</tr>
<tr>
<td><strong>Credit value</strong></td>
<td>15 (150 study hours)</td>
</tr>
<tr>
<td><strong>Delivery</strong></td>
<td>UGM L7, Campus-based</td>
</tr>
<tr>
<td><strong>Reading List</strong></td>
<td><a href="https://www.ucl.ac.uk">View on UCL website</a></td>
</tr>
<tr>
<td><strong>Tutor</strong></td>
<td>Prof Gary Royle</td>
</tr>
<tr>
<td><strong>Term</strong></td>
<td>Term 1</td>
</tr>
<tr>
<td><strong>Timetable</strong></td>
<td><a href="https://www.ucl.ac.uk">View on UCL website</a></td>
</tr>
</tbody>
</table>

## Assessment

- **Written examination (main exam period):** 50%
- **Group coursework:** 50%

## Find out more

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

**Disclaimer:** All information correct as of December 2018. Please note that aspects of the module may be subject to change. UCL will make best efforts to inform applicants of major changes.