Medical Physics and Biomedical Engineering

Computing in Medicine (MPHY0020)

**Description**

Students completing this course will be able to: Critically evaluate a computer's major hardware and software components. Describe and demonstrate an understanding of the major uses of computers in a clinical setting. Evaluate and justify technical, ethical, and legal aspects that need to be taken into account when implementing and using a hospital PACS system (e.g. data security). Demonstrate an understanding of the fundamentals of computer programming. Write a MATLAB program to perform simple analysis and visualisation of medical data. Demonstrate an understanding of basic MATLAB commands and programming concepts. Demonstrate an understanding of basic principles of digital signal and image processing.

**Key information**

- **Year**: 2019/20
- **Credit value**: 15 (150 study hours)
- **Delivery**: UG L6, Campus-based
- **Reading List**: [View on UCL website](#)
- **Tutor**: Dr Dean Barratt
- **Term**: Term 1
- **Timetable**: [View on UCL website](#)

**Assessment**

- Written examination (main exam period): 66%
- Coursework: 34%

**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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