Summary:
The purpose of this module is to describe the problems presented in orthopaedics from an engineering and materials perspective, and discuss available solutions and current research.

Aim:
1. To be familiar with orthopaedic treatments for various diseases;
2. To be able to describe the properties of bone and biomaterials;
3. To be able to describe in detail biocompatibility and tissue engineering (in the context of orthopaedics);
4. To understand in detail the problems associated with hip implants;
5. To have an understanding of biomechanical aspects of the hip and knee joints;
6. To be familiar with a number of lower limb orthotic devices and current research related to prosthetic limbs;
7. To be able to describe the purpose and principles of gait analysis;
8. To be familiar with medical device regulations associated with orthopaedic medical devices;
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**Key information**

**Year**
2018/19

**Credit value**
15 (150 study hours)

**Delivery**
UGM L7, Campus-based

**Reading List**
[View on UCL website](#)

**Tutor**
Dr Lynsey Duffell

**Term**
Term 1

**Timetable**
[View on UCL website](#)

**Assessment**

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

**Find out more**

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