Biochemistry and Molecular Biology (BENG0004)

**Description**

The module aims to equip students with an understanding of basic biochemistry, molecular biology and molecular genetics and of how the science underpins bioprocess operations. Students gain in-depth learning about the properties of various small and macromolecules and how these build the cell structures and cell types they will be using and studying in their Biochemical Engineering degree.

Upon completion of the course, a student should be able to:

- Become familiar with the biological molecules, their structure and function.
- Understand the properties of enzymes and enzyme kinetics and their function in metabolic pathways.
- Characterise the major metabolic pathways of cell growth and metabolism.
- Know the cellular structures of bacteria, yeast and mammalian cells.
- Learn the fundamentals of genetics and how it leads into the construction and use of recombinant DNA.
- Understand how proteins are expressed and how they can be purified for analysis.

**Key information**

Year: 2018/19  
Credit value: 15 (150 study hours)  
Delivery: UG L4, Campus-based  
Reading List: View on UCL website  
Tutor: Prof John Ward  
Term: Term 2  
Timetable: View on UCL website

**Assessment**

- Coursework: 100%

**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.