Environmental Systems (CEGE0015)

Description
This module aims to provide students with knowledge and understanding of different environmental systems and how they interact with each other, as well as practical skills to monitor and assess environmental quality. This is an introductory course where students will learn the basics of environmental engineering sciences and the methods to analyse and manage environmental problems. In this course, we focus on five different environmental systems: air, energy, water, land and waste. Students will learn practical skills such as air quality assessment and visit environmental sites to learn how complex environmental problems are managed with a systems approach. Through guest lectures from academics and industry, students will also learn how theoretical knowledge can be applied in practice with case studies in particular environmental problems.

Learning outcomes
At the end of this module, students will be able to:

- Discuss how environmental pollutants impact on ecosystems
- Discuss how different environmental systems interact with each other
- Explain the sources and characteristics of key air pollutants
- Explain the factors that drive air pollution
- Discuss environmental management options for energy systems
- Discuss energy supply issues, energy sources and technologies
- Perform basic indoor air quality sampling techniques
- Write a technical laboratory report
- Explain the framework used in life cycle assessment
- Explain the concept of microbiological risk assessment and why it is necessary

Key information
Year: 2019/20
Credit value: 15 (150 study hours)
Delivery: UG L6, Campus-based
Reading List: View on UCL website
Tutor: Dr Lena Ciric
Term: Term 1
Timetable: View on UCL website

Assessment

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 August 2019. Please note that aspects of the module may be subject to change. UCL will make best efforts to inform applicants of major changes.
• Explain the hydrologic water cycle, water availability and sources
• Explain the causes and consequences of eutrophication and acidification of natural waters
• Discuss water supply strategies and water treatment technologies
• Describe the characteristics of contaminated land, and contaminated land remediation technologies
• Describe the characteristics of contaminated groundwater and remediation technologies
• Discuss sources and management options for municipal and industrial solid waste
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- Reading List: View on UCL website
- Tutor: Dr Lena Ciric
- Term: Term 1
- Timetable: View on UCL website

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