COURSE DETAIL

MOLECULES AND ENERGETICS

Country
United Kingdom - England

Host Institution
Imperial College London

Program(s)
Imperial College London

UCEAP Course Level
Upper Division

UCEAP Subject Area(s)
Bioengineering

UCEAP Course Number
146

UCEAP Course Suffix
Y

UCEAP Official Title
MOLECULES AND ENERGETICS

UCEAP Transcript Title
MOLECULS&ENERGETICS

UCEAP Quarter Units
15.00

UCEAP Semester Units

10.00

Course Description

This course provides students with a fundamental understanding of the chemistry and materials science principles related to Bioengineering. It covers the main functional groups in organic molecules, their roles in building more complex structures and functionalizing surfaces; the main techniques for identifying and characterizing engineered molecules; the foundations of classical thermodynamics and applications in biomedical engineering and molecular sciences; chemical kinetics, Fick's laws and steady state diffusion; and the wet lab skills of students, including preparing a range of biomaterials and practice with the main techniques used for classifying such materials.

Language(s) of Instruction
English

Host Institution Course Number
BIOE40008

Host Institution Course Title
MOLECULES AND ENERGETICS

Host Institution Course Details
https://www.imperial.ac.uk/people/s.ladame/teaching.html

Host Institution Campus
Kensington

Host Institution Faculty

Host Institution Degree

Host Institution Department
Bioengineering

Course Last Reviewed

2023-2024

Print