

COURSE DETAIL

FROM MOLECULES TO CELLS AND ORGANISMS

Country

Australia

Host Institution

University of Sydney

Program(s)

University of Sydney

UCEAP Course Level

Lower Division

UCEAP Subject Area(s)

Biological Sciences

UCEAP Course Number

19

UCEAP Course Suffix**UCEAP Official Title**

FROM MOLECULES TO CELLS AND ORGANISMS

UCEAP Transcript Title

MOLECULE/CELL/OGNSM

UCEAP Quarter Units

6.00

UCEAP Semester Units

4.00

Course Description

This course examines scales of organization from molecules to cells and organisms. It begins the journey of life with the synthesis of biomolecules, follows on through the expression and regulation of genes, to the complex communication between molecules, and then to cells and how cells are integrated to form a complex organism. It covers how single cells divide and differentiate to create simple and complex multicellular organisms which experience disease and death. Concepts of cellular energy, communication, and enzymes, all of which combine to drive life processes, will be explored.

Language(s) of Instruction

English

Host Institution Course Number

BIOL1009

Host Institution Course Title

FROM MOLECULES TO CELLS AND ORGANISMS

Host Institution Course Details

<https://www.sydney.edu.au/units/BIOL1009>

Host Institution Campus

Camperdown/Darlington

Host Institution Faculty

Host Institution Degree

Host Institution Department

Life and Environmental Sciences

Course Last Reviewed

2025-2026

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