

COURSE DETAIL

PLANT CELL BIOLOGY

Country

Ireland

Host Institution

University College Dublin

Program(s)

University College Dublin

UCEAP Course Level

Upper Division

UCEAP Subject Area(s)

Biological Sciences

UCEAP Course Number

162

UCEAP Course Suffix**UCEAP Official Title**

PLANT CELL BIOLOGY

UCEAP Transcript Title

PLANT CELL BIOLOGY

UCEAP Quarter Units

5.00

UCEAP Semester Units

3.30

Course Description

The cell is the basic building block of eukaryotic organisms, and understanding how cells develop and their physiological responses to the environment are key to our understanding of plant growth and development. This course expands on basic cell biology by using the stomatal guard cell as the system to understand plant cell biology. Lectures explore the genetic and molecular regulation of stomatal development and how stomatal guard cells respond to internal and external signals through changes in ion transport to effect changes in stomatal guard cell turgor. Practical components of this course include demonstrations of (i) advanced microscopy techniques (including laser scanning confocal microscopy), (ii) biolistic transformation, and (iii) techniques to assay for stomatal function and stomatal development.

Language(s) of Instruction

English

Host Institution Course Number

CELB30110

Host Institution Course Title

PLANT CELL BIOLOGY

Host Institution Course Details

https://hub.ucd.ie/usis/!W_HU_MENU.P_PUBLISH?p_tag=MODULE&MODULE=CELB30110

Host Institution Campus

University College Dublin

Host Institution Faculty

Host Institution Degree

Host Institution Department

Biology & Environment Science

Course Last Reviewed

2024-2025

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