

# 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) biotic 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](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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