

## 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 Campus

University College Dublin

## Host Institution Faculty

## Host Institution Degree

## Host Institution Department

Biology & Environment Science

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