

# COURSE DETAIL

## PLANT BIOLOGY II

**Country**

Australia

**Host Institution**

University of Queensland

**Program(s)**

University of Queensland

**UCEAP Course Level**

Upper Division

**UCEAP Subject Area(s)**

Biological Sciences

**UCEAP Course Number**

128

**UCEAP Course Suffix****UCEAP Official Title**

PLANT BIOLOGY II

**UCEAP Transcript Title**

PLANT BIOLOGY II

**UCEAP Quarter Units**

6.00

**UCEAP Semester Units**

4.00

## **Course Description**

Plants are responsible for turning the energy of the sun into biomass - so they underpin life on earth. You know plants do this via photosynthesis, but how did photosynthesis evolve? And how is it still evolving, both in nature and in labs around the world? How do you end up getting a whole plant with all the structures such as flowers and branches from a single cell? How do the cells know what structure to form and when to form these structures? How can we understand the molecular basis of these processes? Plant development and cell biology is the discipline in which one learns about how the genetic programming of a cell links to cell biology and ultimately to the development of the whole plant. Applying this knowledge to plant crops is one of the central goals of plant biotechnology where it seeks to increase crop yields and adaptation of crops to particular environments. This course also covers molecular aspects of plant biology including next generation sequencing, understanding the roles of epigenetic regulation and polyploidy in plant evolution, and implications for plant improvement.

## **Language(s) of Instruction**

English

## **Host Institution Course Number**

BIOL3202

## **Host Institution Course Title**

PLANT BIOLOGY II

## **Host Institution Course Details**

## **Host Institution Campus**

Queensland

## **Host Institution Faculty**

## **Host Institution Degree**

## **Host Institution Department**

Agriculture

**Course Last Reviewed**

[Print](#)