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 Campus Oueensland

Queensianu

Host Institution Faculty

Host Institution Degree

Host Institution Department

Agriculture

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