

PLBI 401 Course Profile

The course description for Plant Biology 401 (Plant Biotechnology) can be found here.

Generally offered in: Winter semester

Prerequisite(s): Biology 331, 371, and 3 units from Biochemistry 341 or 393.

Antirequisite(s): None

Interview with Dr. Peter Facchini

In your own words, can you give a brief summary about what this course is about?

This course is about the crossover between science and the real world. Students are exposed to key plant biotechnologies in order to learn the science behind these various technologies and what their applications are in industry. A main component of the course is a presentation given by groups of students that focus on a theoretical or practical concept more in depth than is provided by the course textbook.

What is the main skill you want students to take away from this course?

The course is primarily focused on understanding essential concepts, such as how DNA is currently sequenced as opposed to what students typically see in most textbooks, and what CRISPR is and how it works. The course also updates students on the latest technologies. Students should be able to take what they have learned about these key biotechnological techniques and use it to gain a deeper understanding of the most recent developments in the field of plant biotechnology.

What aspect of the course do you think students struggle with the most?

Many students come into the course with a bit of a shaky understanding of fundamental concepts concerning, for example, the structure and function of DNA, that are necessary to succeed in this course. Consolidating basic concepts before attempting to take on more complex ones allows students to gain confidence and build a solid foundation from which to work.

What can students do to be successful in this course besides attending lectures?

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Does this course have a lab or tutorial component?

There is no lab or tutorial component for this course.



What do you think is the most effective way that students can prepare for an examination in the course?

Attend lectures, read the textbook and learn the concepts as they are covered in the class. Waiting until just before the examinations isn't an effective strategy in this course.

Aside from the textbook and lecture notes, are there any other resources that you recommend students use?

Students are encouraged to consult the internet, especially Wikipedia, when they want to learn more about any topic. A challenge for many students is distinguishing between essential information covered in the course and extra details contained in these external sources.

Do you have any other advice for incoming students taking this course?

Review your basic molecular biology and think about the vast importance of plant-based technologies in our world.

What is your favorite part about teaching this course?

The student-led lectures.

This interview transcript was edited for clarity and brevity