

**Subject Name:**

Green Biotechnology

**Course Type:**

Lectures/case studies

**Outline:**

*The objectives are to allow the students to deepen their knowledge in the most recent aspects of plant biotechnologies in terms of strategies and methodologies. This includes GMO use and regulations, genome editing technologies or synthetic biology. The course will focus on examples as to better understand the various strategies that can be used to set up research or industrial projects in this domain..*

**Semester Schedule and Credit:**

<u>Subject</u>	<u>Year</u>	<u>Semester</u>	<u>Day/Period</u>	<u>Credit</u>
Green biotechnologies	2	Fall	12 x 2h	1.5

**Location:**

University of Bordeaux (UB)

**Instructor Information**

Prof. Philippe Gallusci (UB), Prof. Michel Hernould (UB), Assistant-Prof. Frédéric Delmas (UB)

**General Instructional Objective (GIO):**

Students will acquire fundamental and practical knowledge relating to the most recent advances in Plant Biotechnologies and application to crop improvement. They will gain advanced skills in various fields of Green biotechnologies.

**Specific Behavioral Objectives (SBO):**

- 1 . Students will be able to design/ evaluate strategies for metabolic engineering in plants;
- 2 . Students will be able to design/ evaluate strategies for plant engineering with the aim to improve plant productivity, crop production quality, resistance to pathogens, or any other objectives
- 3 . Students will be able to set up experimental design to evaluate the consequences of plant engineering on plant phenotypes;

**Course Overview/ Weekly Schedule:**

**Homework:**

Scientific papers and case study reports, as assigned

**Grading Method and Criteria:**

Students are evaluated by their attendance, report assignments and terminal written and/or oral examination

**Textbook/ Referenced Materials:** No prescribed materials

**Notes:** None