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Advanced Plant Growth and Development - Course Syllabus

Course Number: PS301

Course Title: Advanced Plant Growth and Development

Academic Semester: Spring **Academic Year:** 2015/ 2016
Semester Start Date: Jan 24, 2016 **Semester End Date:** May 19, 2016

Class Schedule: every second Monday, 9-12

Classroom Number:

Instructor(s) Name(s): Heribert Hirt
Email: heribert.hirt@kaust.edu.sa

Office Location: B2, L3, R3235
Office Hours: 9am-5pm

Teaching Assistant name:
Email:

COURSE DESCRIPTION FROM PROGRAM GUIDE

Advanced concepts will be tested on how specific plant organs develop as the plant grows from an embryo to a flowering plant. What is the concept of the cell cycle, What role it plays in plant development and how is it controlled, and why it is important for growth and development?

COMPREHENSIVE COURSE DESCRIPTION

The course will include latest methods to analyze genes involved in and regulating plant growth and development, in particular, latest developments in the control of cell cycle and cell expansion at the cellular, tissue, and organismic level. Furthermore, the role of hormones and environmental factors on the development of roots, leaves and flowers will be discussed in a seminar style.

GOALS AND OBJECTIVES

The goal of the course is that the students have a broad knowledge in plant growth and development. The objectives are that students know how to obtain and process latest knowledge in this rapidly developing field of research.

REQUIRED KNOWLEDGE

Minimal requirements for the course are passes of PS201 and PS202 or their equivalent at other institutions.

REFERENCE TEXTS

Biochemistry and Molecular Biology of Plants, 2nd Edition

Bob B. Buchanan (Editor), Wilhelm Gruissem (Editor), Russell L. Jones (Editor)

ISBN: 978-0-470-71421-8

METHOD OF EVALUATION

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| Graded content |
| Passes are obtained for attendance, participation, assignment and seminar presentation |

COURSE REQUIREMENTS

Assignments

Chapter readings, project presentations and discussions

Course Policies

80 % presence is required

chapter-based assignment and presentations form the basis of the course discussions

Additional Information

NOTE

The instructor reserves the right to make changes to this syllabus as necessary.