



#### **Course Syllabus**

1	Course title	Advanced Plant Physiology
2	Course number	0304751
3	Credit hours (theory, practical)	3
	Contact hours (theory, practical)	3 theory
4	Prerequisites/corequisites	
5	Program title	Master of Science
6	Program code	
7	Awarding institution	The University of Jordan
8	School	Science
9	Department	Biological Sciences
10	Level of course	2 year
11	Year of study and semester (s)	2018-2019 Second semester
12	Final Qualification	
13	Other department (s) involved in teaching the course	
14	Language of Instruction	English
15	Date of production/revision	

#### **16. Course Coordinator:**

Office numbers, office hours, phone numbers, and email addresses should be listed. Prof. Dr. Samih Tamimi, GH building tamimi@ju.edu.jo, 22227

#### **17.** Other instructors:

Office numbers, office hours, phone numbers, and email addresses should be listed.

#### **18. Course Description:**

As stated in the approved study plan.

The emphasis of the course is on plant water interactions, plant light interactions, Carbon and Nitrogen metabolism, Control of growth and development and interaction between plants and environment.

#### 19. Course aims and outcomes:

A- Aims:

B- Intended Learning Outcomes (ILOs): Upon successful completion of this course students will be able to

1. Understand the relationship between structure and function as it relates to plant macromolecules, cells, and tissues

Understand the interaction between the environment and plant growth and development
 Gain an appreciation of the metabolic and physiological processes unique to plants

## 20. Topic Outline and Schedule:

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Topic	Week	Instructor	Achieved ILOs	Evaluation Methods	Reference
Introduction	1				.Plant
1.Water relations of plants	1-4				Physiology by Taiz and Zeiger. 4th edition. The Benjamin/Cu mmings publishing Co., 2010
2.Plant light interaction	5-7				
3. Plant Metaboilsm	8-10				
4Phytohormo nes and the control of plant growth and development	11-13				

5.Plant	14			
physiology				
and its role in				
Biotechnology				
6. Surface	14-16			
protection and				
secondary				
defence				
compounds				
				]

## 21. Teaching Methods and Assignments:

Development of ILOs is promoted through the following teaching and learning methods:

Lectures, Demonstrations, term paper

## 22. Evaluation Methods and Course Requirements:

Opportunities to demonstrate achievement of the ILOs are provided through the following assessment methods and requirements:

Exams, term paper evaluation

## 23. Course Policies:

- A- Attendance policies:
- B- Absences from exams and handing in assignments on time:
- C- Health and safety procedures:
- D- Honesty policy regarding cheating, plagiarism, misbehavior:
- E- Grading policy:
- F- Available university services that support achievement in the course:

# 24. Required equipment: (Facilities, Tools, Labs, Training....)

## 25. References:

Required book (s), assigned reading and audio-visuals:
1.Plant Physiology by Taiz and Zeiger. 4th edition. The Benjamin/Cummings publishing Co., 2010. (ISBN 0-8053-0153-4). Book companion Web site: http://5e.plantphys.net/
Recommended books, materials, and media:
<ol> <li>Advanced plant physiology, 1984, edited by Malcolm B. Wilkins. Pitman press.(ISBN 0-273-01853-1).</li> <li>Other references/ Suggested readings (from the book companion site)</li> <li>Suggested Journals</li> </ol>
Many plant physiology journals can be viewed via the net. The URL of one of the sites listing these journals is:
<u>http://www.e-journals.org/botany/</u> If you need to do a literature search please go to the site:
http://www.bioseminar491.blogspot.com
Gourse mornation website. <u>http://www.masterphysiology11.biogspot.com</u>

## 26. Additional information:

Name of Course Coordinator: -Prof. Dr. Samih Tamimi-----Signature: -SMT---- Date: -22.4.2019---

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Head of curriculum committee/Department:	Signature:
Head of Department:	Signature:
Head of curriculum committee/Faculty:	Signature:
Dean:	-Signature: