

## Course Syllabus

1	Course title	Botany lab
2	Course number	5501242
3	Credit hours (theory, practical)	1
	Contact hours (theory, practical)	-
4	Prerequisites/corequisites	
5	Program title	Biology
6	Program code	
7	Awarding institution	The University of Jordan
8	School	Marine Sciences
9	Department	Marine biology
10	Level of course	½
11	Year of study and semester (s)	2019/2020
12	Final Qualification	bachelor
13	Other department (s) involved in teaching the course	-
14	Language of Instruction	English
15	Date of production/revision	September 2019

### 16. Course Coordinator:

Office numbers, office hours, phone numbers, and email addresses should be listed.  
*Wednesday 12.30-2.00, email: m.wahsha@ju.edu.jo*

### 17. Other instructors:

Office numbers, office hours, phone numbers, and email addresses should be listed.  
*The same as in section n.16.*

### 18. Course Description:

*As stated in the approved study plan.*

## 19. Course aims and outcomes:

<p>A- Aims:  <i>in Botany laboratory students will analyze the growth, development, vegetative, and reproductive characteristics of organisms presented in Botany lecture. Students will be able to recognize the characteristics and classification of various fungal and plant groups</i></p> <p>B- Intended Learning Outcomes (ILOs): Upon successful completion of this course students will be able to</p> <ol style="list-style-type: none"> <li>1. <i>Apply critical thinking and problem-solving skills to everyday situations.</i></li> <li>2. <i>Apply life skills in areas such as teamwork, interpersonal relationships, ethics, and study habits.</i></li> <li>3. <i>Students will learn to communicate clearly in written and oral formats.</i></li> <li>4. <i>Students will use technology appropriate for learning.</i></li> <li>5. <i>Students will learn of the importance of discussing and understanding issues of a diverse global society.</i></li> </ol>
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## 20. Topic Outline and Schedule:

Topic	Week	Instructor	Achieved ILOs	Evaluation Methods	Reference
Introduction, Lab Safety, Plant Cells and Structure, Plastids and Pigments	1	Dr. Wahsha	Rating scale		Plant Anatomy (2008) by James D. Mauseth Blackburn Press, 560 pages
Vegetative Morphology	2	Dr. Wahsha	Rating scale	Homework	
Plant Growth and Development	3	Dr. Wahsha	by evaluating the Homework results		
Basic Taxonomy: Collecting, Nomenclature, and Identification, Local Field Trip	4	Dr. Wahsha	Rating scale	Quiz	
Reproductive Characteristics (Floral)	5	Dr. Wahsha	by evaluating the quiz results		
Reproductive Characteristic	6	Dr. Wahsha		Midterm	

s (Fruits)					
Representative Gymnosperms and Angiosperm Families I	7	Dr. Wahsha	by evaluating the Midterm results		
Representative Gymnosperms and Angiosperm Families II	8	Dr. Wahsha	Rating scale		

## 21. Teaching Methods and Assignments:

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

- *The primary method of instruction will be video lecture presentations coupled with student learning techniques. Student learning will be enhanced through small group discussions through discussion forums of relevant topics. Key components of topics will be reinforced using quizzes and exams. Presentations and discussions attempt to relate concepts presented to our own lives, society in general, and/or the environment when possible. Internet assignments, article summaries, and homework assignments made up of critical thought questions, thinking like a scientist and science, technology, and society questions will also be used.*

## 22. Evaluation Methods and Course Requirements:

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

- *The thinking skills will be developed by encouraging students to conclude answers to different questions that the instructor intends to use during the presentation of the scientific material.*
- *The instructor intend to stimulate the student`s analytical thinking side via connections with general aspects in daily life or through questions, net searching, and home works.*

### 23. Course Policies:

A- Attendance policies:

*Absence from lectures and/or tutorials shall not exceed 15%. Students who exceed the 15% limit without a medical or emergency excuse acceptable to and approved by the Dean, the student shall be considered to have withdrawn from the course.*

B- Absences from exams and handing in assignments on time:

C- Health and safety procedures:

*fulfil with the university requirements. students in the laboratory have to follow the safety guidelines and working cooperatively and collaboratively with other students*

D- Honesty policy regarding cheating, plagiarism, misbehavior:

*Anyone caught cheating on a quiz or exam; more than 30 % of plagiarism in a given homework, the student will receive a failing grade and will be reported to the dean. In order to guarantee that you are not suspected of cheating, please keep your eyes on your own materials and do not converse with others during the quizzes and exams.*

E- Grading policy:

<b>Assessment Instruments</b>	<b>Mark</b>
<b>Mid Term examination</b>	25%
<b>Reports</b>	20%
<b>Quizzes</b>	10%
<b>Participation</b>	5%
<b>Final Examination</b>	40%
<b>Total</b>	100%

F- Available university services that support achievement in the course:

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

- *Computer, data show, teaching room and board*


**25. References:**

Required book (s), assigned reading and audio-visuals:  
*Lab book - Stern. Introductory Plant Biology, 13/e. 2014. (ISBN:978-0-07-750878-4)*

Recommended books, materials, and media:  
*Dickison, W. C. 2000. Integrative Plant Anatomy. Academic Press*  
*Photographic Atlas for the Botany Laboratory by Van De Graaff, Rushforth, and Crawley is recommended for laboratory work.*

**26. Additional information:**

*On average students need to spend 2 hours of study and preparations for each 60-minutes lecture*

Name of Course Coordinator: --Dr. Mohammad Wahsha -Signature:  Date: 6/10/2019

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

Head of Department: ----- Signature: -----

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

Dean: ----- -Signature: -----

