The University of Jordan
School of Science

Department

☐ **Math** ☐ **Chem** ☐ **Phys**

☑ **Bio** ☐ **Geo** ☐ **Clin. Lab**

Course File

Course Name :Plant Biology	**Course No.:** 0324251	**Course level: 3rd year**
Academic Year: 2019 l2020 /		**Semester: 2nd semester**
Comments:		
Course Coordinator:		
Prof. Dr. Sawsan a. Oran	**Section(s) No. 1**	**Office No. & +962-6 Ext. 22226 Extension**
Instructors		
Instructor Nam	**Section(s) No. 1**	**Office No. & Extension**
1. Prof. Dr. Sawsan A. Oran		**22226, Office Bio. 106**
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		

This File contains the following documents:

Document	Attached?(✓/×)
Course Syllabus	✓
Midterm/ (First and Second) Exam(s)	✓
Midterm/ (First and Second) Exam(s) Answer Key	✓
Midterm/ (First and Second) Exam(s) Moderation and Double Checking form	✓
Midterm/ (First and Second) Exam(s) Evaluation Report	✓
Midterm/ (First and Second) Exam(s) samples: • *Student Exam sample for the max grade* • *Student Exam sample for the min grade* • *Student Exam sample for the average grade*	x
Other Exams (Quiz, practical exam, etc.)	x
Answer Key	x
Moderation and Double Checking form (optional)	x
Evaluation Report (optional)	x
samples: • *Student Exam sample for the max grade* • *Student Exam sample for the min grade* • *Student Exam sample for the average grade*	x
Final Exam	✓
Final Exam Answer Key	
Final Exam Moderation and Double Checking form	
Final Exam Evaluation Report	✓
Final Exam samples: • *Student Exam sample for the max grade* • *Student Exam sample for the min grade* • *Student Exam sample for the average grade*	
Assignments and Projects samples: • *One sample for the best Assignment/ project* • *One sample for the worst Assignment/ project* • *One sample for the average Assignment/ project*	×
Course Report	✓

Table of Contents

Course syllabus

Course objective:

This course is basic biology course designed for the students at the B. Sc. Level. It is also suggested by other branches of agriculture sciences. The main objectives of this course are to link structure with function. Therefore, it concentrates on the organization of tissues from the embryo, then studying each type of fundamental tissue types, functions, characterizations, their locations. Then studying dermal tissue especially epidermis organization cell types, functions, developmental type and various trichomes types. Then a special concentration on the vascular tissue xylem, phloem and vascular cambium, especially cell types and their functions, developmental aspects and uses in identification of wood. Then Periderm characteristics, various types, cell types, functions and different Periderm aspects including lenticels, leaf abscission, wound healing and so on. Then study of roots stems and leaves, different types, tissues, primary, secondary and anomalous growth types. Then nodal anatomy and apical meristems organization of both shoot and root tips.

The practical part is the most important side of this course since it is based mostly on fresh preparation of wet mounts of various plant parts and tissue. The samples used for study are taken from local plants either wild or cultivated, picked by students every class from around the university. Plant parts, roots stems, periderm, lenticels, buds, fibers and other aspects are taught directly as a demonstration time taken from the class after the brief introduction which gives the students the chance to refresh themselves and to see thing actually rather than learning only from text books.

Full Course syllabus

The course syllabus is attached in Appendix A.

Please click here.

Course Exams

The following Exams were held for this course:

Exam	*Date*
Midterm	**04. 03. 2020**
Quiz	**20.4.2020-**
Final	**20.5.2020**

The University of Jordan

Accreditation & Quality Assurance Center

[Department Name]

Course Report

1	School	School of Science
2	Department	Department of Biological Sciences
3	Program title	BSc. Of Biology
4	Program code	
5	Course title	Plant Biology
6	Course number	0324251
7	Credit hours (theory, practical)	4 hrs.
	Contact hours (theory, practical)	3 hrs. theory, 1 hr. practical
8	Level of course	2nd year
9	Year of study and semester (s)	2nd semester 2019/2020
10	Date of report (academic year, semester)	15.6.202012.1.20
11	Course Coordinator/other instructors	Prof. Sawsan Oran

12: Content delivery

✓	All topics were covered as planned	
⊡	Not all topics were covered	Reasons for variation: Consequences: *Suggested compensation:*
⊡	Modifications to the content were made	Reasons for variation:

13. Teaching and Learning strategies

✓	Were effective for the specified ILOs of the course	
⊡	Not all effective	Reasons for ineffectiveness: *Suggested modifications to improve:*

14. Assessment strategies

✓	Were effective for the specified ILOs of the course.	
⊡	Not all effective	Reasons for ineffectiveness: *Suggested modifications to improve:*

15. Course Results

1. Number of students registered in the course: 34
2. Number of students attended the Final examination: 34
3. Grades:

Grade	A	A-	B+	B	B-	C+	C	C-	D+	D	D-	F	**Total**
No. of students	90-100	85-89	80-84	75-79	70-74	65-69	60-64	55-59	50-54	40 49-	30-39	0-39	
Percentage	-	7	18	8	-	1	-	-	-	-	-	-	100%
	Passed 34										Failed: 0		

[Fill Either point 4 or 5]

4. Student Performance values according to **ABET** student outcomes.

ABET outcome	1	2	3	4	5	6
Tripwire						
Student Performance						

5. Student Performance values according to **Program** Outcomes.

Program outcome	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Tripwire																	
Student Performance																	

1. How are the results of the course as compared to previous/expected results?

2. Feedback of marks accreditation commission/department:

16. Facilities, resources, and administrative issues:

Difficulties (if any)	**Consequences on student learning**
In facilities and resources	Computer and data show devices
In organization/administration	

17. Course Evaluation:

Evaluator	Most important criticisms & strengths	Response of instructor/s to this evaluation
Student evaluation (Attach survey results)	**Attached**	**Attached**
Head of department		
Peers/colleagues		
External examiners/visiting reviewers.		

18. Plans/Actions for Improving the Course:

Measures proposed in previous report	(Suggested measures to improve the quality of the course, implemented or not, and its impact on course if undertaken or not)
Measures taken this semester/year	(Measures taken and results achieved)
Action plan for next semester/year	(Measures will be taken, responsibility for implementing measures, deadline for completion)

Recommendations to Head of Department:

19. Focus Group Report (Optional)

Pre-requisite(s) (Course Name and Number):

Q.	Question	Appropriate	Needs Minor Change	Needs Major Change	Comments
1	Course Objectives	✓			
2	Duplication with other courses	✓			
3	Course content to teaching hours	✓			
4	course material relation to program objectives (POs)	✓			

Additional Comments: _____

_____

Focus Group Members Name(s) and Signature(s):

(1)	(2)
(3)	(4)
(5)	(6)

20. Date and Signature

Date: 16.6.2020

Name of Course Coordinator: **Prof. Sawsan Oran**. Signature: ----------

Program Director: ---------- Signature: ----------

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

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

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

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

Appendices

Appendix A: Course Syllabus
Appendix B: Exam Moderation and Double-Checking form
Appendix C: Exam Evaluation Report
Appendix D: Exam Questions, Key Answer and Samples.
Appendix E: Assignments and Projects Samples

Appendix A

Course Syllabus

Please fill the following syllabus form…

The University of Jordan

Accreditation & Quality Assurance Center

COURSE Syllabus

1.	**Course title**	Plant Biology
2.	**Course number**	0334251
3.	Credit hours (theory, practical)	4 hrs.
	Contact hours (theory, practical)	3 hrs. theory, 1 hr. practical
4.	**Prerequisites/corequisites**	None
5.	**Program title**	BSc.
6.	**Program code**	
7.	**Awarding Institution**	
8.	**School**	School of Science
9.	**Department**	Department of Biological Sciences
10.	**Level of Course**	2nd year
11.	**Year of study and semester (s)**	2019, Ist 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.

Office no. 106, **Office hrs**. Sun. 12- 1 PM, Mon. 10 -11 AM, Tue. 12- 1 PM.

oransaw@ju.edu.jo

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 course is designed to deliver the main basics of plant science, the structure of cells for plant cells compared with prokaryotes cell and animal cells, studying plant tissues, organs and systems, classification and diversification of plant kingdom , learning how to propagate and conserve plants, and convey the economic and commercial benefits of plant groups to human and other organisms.

19. Course aims and outcomes:

A- Aims:

This course will enable students to get knowledge about plant structure, cells , types of plant tissues , Anatomy of different plant organs from embryonic stage until mature plant, as well as the developmental phases of plant tissues and organs.

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

Upon successful completion of this course students will be able to get knowledge about plant life and diversity of plant kingdom and its relationship to human
, also gest to know how to protect and conserve plants and their commercial and economic values.

20. Topic Outline and Schedule:

Topic	Week	Instructor	Achieved ILOs	Evaluation Methods	Reference
Introduction	1	Prof. Sawsan Oran	✓	Exams Reports	Introductory Plant Biology 2017 Fourteneeth Edition by: James E. Bidlackl Shelley H. Jansky Mc Graw-Hill
Definition of plant Biology	2		✓	Exams Reports	
Cells	3		✓	Exams Reports	
Tissues	4		✓	Exams Reports	
Roots and soils	5		✓	Reports	
Stems	6		✓	Exams Reports	
Leaves	7		✓	Exams Reports	
Flowers, Fruits and Seeds	8		✓	Exams Reports	
First Hour Exam			✓	Exams	
Plant Breeding and Propagation	9		✓	Exams Reports	
Plant names and	10		✓	Exams	

classification				Reports	
Classification of the major groups , Cladistics	11		✓	Exams Reports	
Kingdom Protista , phylum(chlorophyta)	12		✓	Exams Reports	
Phylum Chromophyta, Xanthophyta, Chrysophyta, Bacillariophyta (Diatoms)	13		✓	Exams Reports	
Phylum Phaeophyta, and phylum Rhodophyta	14		✓	Exams Reports	
The stem (types, growth and secondary structure	15		✓	Exams Reports	
Phylum Euglenophyta, and Dinophyta	16		✓	Exams Reports	
Phylum Charophyta	17				
Other members of kingdom Protista : phylum Myxomycetes, Phylum Dictyosteliomycetes, and Oomycetes.	18				
Introduction to plant kingdom Bryophytes (Hepatophytes and Mosses).	19				
Second Hour Exam					
The seedless Vascular Plants: Ferns and their relatives	20				
phylum Equisetophyta, and phylum polypodiaceae	21				
Introduction to seed plants : Gymnosperms	22				
Flowering plants and Civilizations					
Final exam			✓	Exams	

21. Teaching Methods and Assignments:

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

Interactive lecture using the white board mainly and in some cases the data show.
Office hour discussions
Lab reports
Voluntary work at the Herbarium and Botany Labs

22. Evaluation Methods and Course Requirements:

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

Short answer questions during the lectures and interaction with the students through involving them in questions and answers related to the different topics of the course of Plant anatomy.
Exams

20. Course Policies:

A- Attendance policies: Regular class *attendance* is expected, *attendance* by seating number.

B- Absences from exams and handing in assignments on time: Reporting a valid reason of absence is accepted.

C- Health and safety procedures: Provided.

D- Honesty policy regarding cheating, plagiarism, misbehavior: the student is treated according to the University rules.

E- Grading policy + Weighting (i.e. weight assigned to exams as well as other student work): Is adopted.

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

G- Statement on Students with disabilities

Students with Disabilities: Students with disabilities who need special accommodations for this class are encouraged to meet with the instructor and/or their academic advisor as soon as possible. In order to receive accommodations for academic work in this course, students must inform the course instructor and/or their academic advisor, preferably in a written format, about their needs no later than the 4th week of classes. To be followed by.

21. Required equipment: (Facilities, Tools, Labs, Training….)

Data Show, *internet access* Botany labs for practical sessions Tours at the University to show the available plant groups, also visits to the **Herbarium** and the **green** house to look at the native plants and others

22. References:

Required book (s), assigned reading and audio-visuals: Introductory Plant Biology 2017 Fourteneeth Edition by: James E. Bidlackl Shelley H. Jansky Mc Graw-Hill Recommended books, materials, and media:

23. Additional information:

Date: 20. 10. 2019

Name of Course Coordinator: Prof. Sawsan a. Oran. Signature: ----------

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

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

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

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

Appendix B

Exam Moderation and Double Checking

Please use the following Moderation and Double Checking form –peer review- every time you make an exam for your course, create one form for each exam and attach all Moderation and Double Checking forms here …

The University of Jordan
School of Science

Department

☐ **Math** ☐ **Chem** ☐ **Phys**

☑ **Bio** ☐ **Geo** ☐ **Clin. Lab**

Exam Moderation and Double-Checking Form

Type of Exam	◯ **Midterm** ◯ **Final** ◯ **Other: _____**	**Questions Type**	◯ **Essay/Written** ◯ **MCQ** ◯ **Mix**	**Count of questions**		**Exam Weight**	
Course Name:				**Course No.:**			
Exam Date:		**Exam Time:**			**Author:**		

Exam Question	Yes	No	Comments
The exam evaluates ILOs	✓		
The questions are free of typos	✓		
Questions are clear, complete, and not misleading	✓		
Covers various level of difficulties	✓		
Number of questions and length are appropriate to the allocated exam time	✓		
Exam instructions are written clearly at the beginning of the exam	✓		
The weights of marks are assigned on each question	✓		
The exam adheres to the approved exam form	✓		

Additional Comments: _____

_____

_____

_____

Reviewer(s) Name(s) and Signature(s):

This form should be filled by one or more Focus Group member(s) related to the course.

Appendix C

Exam Evaluation Report

Please use the following Evaluation Report every time you make an exam for your course, create one report ***for each exam*** *and for* ***all sections*** *and attach all Evaluation reports here …*

The University of Jordan
School of Science

Department

☐ **Math** ☐ **Chem** ☐ **Phys**

☑ **Bio** ☐ **Geo** ☐ **Clin. Lab**

Exam Evaluation Report

Type of Exam	◯ **Midterm** ◯ **Final** ◯ **Other: _____**	**Questions Type**	◯ **Essay/Written** ◯ **MCQ** ✓ **Mix**	**Count of questions**		**Exam Weight**	
Course Name:				**Course No.:**			
Exam Date:		**Exam Time:**			**Author:**		
Coordinator:							

Section	**Instructor**	**No. Of Registered Students**	**No. Of Attendees**	**No. Of Absentees**	**Highest Grade**	**Lowest Grade**	**Average Grade**	**Total%**
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								
…								
…								
All Sections								

Instructors Notes:

Instructor/ Coordinator Signature _____

Appendix D

Exam questions, answer key and samples

Please attach your exam questions, answer key and samples here…

- *Exam question*
- *Answer key*
- *Students Sample exams for max/ min / average marks.*

Please attach previous documents to all exams

- *Midterm exam*
- *Final exam*
- *Quiz*

Use the following exam cover pages templates (please note that there are two templates for cover pages; the first one is a multiple-choice questions exam template, and the second one is an essay questions exam temple, use the exam sample that fits your exam type or mix both templates together).

The University of Jordan
School of Science
Department of ……..
Exam Cover Page

Course Name				**Course No.**	
Academic Year		**Semester**		**Exam Type**	
Exam Date			**Exam Time**		

الرقم الجامعي:		**اسم الطالب(بالعربي):**	
الرقم المتسلسل:	**وقت المحاضرة:**	**رقم الشعبة:**	**اسم المدرس:**

Important Instructions

- This is a closed (opened) book exam; all related material must be placed away from your desk.
- Cell phone use is prohibited for any purpose: Your cell phone must be turned off and placed on the desk. Cell phones must not be accessed during the exam. Failure to comply may be treated as a violation of the Honor Code.
- Headphones of any kind are not permitted.
- Make sure that you have ( ) pages including this page.
- This exam has ( ) essay questions. Read each question carefully before answering.
- Calculators can (*not*) be used but can (*not*) be shared.
- When you finish, you must:
  - Check that you have written your information in the spaces provided.
  - Give the exam package (all papers) to the proctor before you leave.

For Teacher's Use Only / For Proctor's Remarks

QN	Mark	Weight
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
Total		

The University of Jordan
School of Science
Department of ……..

Course Name				**Course No.**	
Academic Year		**Semester**		**Exam Type**	
Exam Date			**Exam Time**		

Instructor Name				
Lecture Time	**S/T/Th:**	**M/W:**	**Section #**	

Important Information

- This is a closed (opened) book exam.
- Make sure that you have ( ) pages including this page.
- This exam has ( ) essay questions. Read each question carefully before answering.

For Teacher's Use Only / For Proctor's Remarks

QN	ILO	SO	BTL	Mark	Weight
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
Total					

ILO: Intended Learning Outcomes; SO: ABET Student Outcomes; BTL: Bloom's Taxonomy Level: (1: Remembering, 2: Understanding, 3: Applying, 4: Analyzing, 5: Evaluating, 6: Creating)

Appendix E

Assignments and Projects Samples

Please attach students sample assignments and projects here, as follows:

- *Students Sample assignments for best / worst / average*
- *Students sample project statements for best / worst / average.*