Course Specifications

Course Title:	**Plant Kingdom**
Course Code:	**23072205-3**
Program:	**BSc Biology.**
Department:	**Biology**
College:	**Aljumum University College**
Institution:	**Umm Al-Qura university**

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A. Course Identification

1. Credit hours: **3 hours**
2. Course type **a.** University ☐ College ☐ Department ■ Others ☐ **b.** Required ■ Elective ☐
3. Level/year at which this course is offered: **3rd Level / 2nd year**
4. Pre-requisites for this course (if any)**:** **General Biology (23071101-4)**
5. Co-requisites for this course (if any)**:**

6. Mode of Instruction (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	**Traditional classroom**		70 %
2	**Blended**		
3	**E-learning**		10 %
4	**Correspondence**		10 %
5	**Other**		10 %

7. Actual Learning Hours (based on academic semester)

No	Activity	Learning Hours
Contact Hours		
1	**Lecture**	**30**
2	**Laboratory/Studio**	**45**
3	**Tutorial**	**6**
4	Practical/Field work/Internship	**6**
5	**Others** (specify)	**10**
	Total	**97**
Other Learning Hours*		
1	**Study**	
2	**Assignments**	
3	**Library**	
4	**Projects/Research Essays/Theses**	
5	**Others** (specify)	
	Total	

* The length of time that a learner takes to complete learning activities that lead to achievement of course learning outcomes, such as study time, homework assignments, projects, preparing presentations, library times

B. Course Objectives and Learning Outcomes

1. Course Description

The course will cover a comprehensive knowledge of seed structure and seed germination, and different examples for seed germination, Viruses structure and types that pathogen for plants, describe Bacteria, Actinomycetes, Cyanobacteria. Discribe Kingdom Chromista (Albugo, Diatoms), Phaeophyta (Fucus), Fungi (Ascomyctes, Zygomycetes, Basidiomycetes, Chresophyta, Lichens & chlorophyta, Archegoniatae (Bryophyta (Hepaticae, Musci), Pteridophyta, Spermatophyta.

2. Course Main Objective

After completing this course student should be able to:

1. To provide students with skills necessary for study of plant kingdom.
2. To develop in the students' an awareness of the significance of plant kingdom .
3. Evaluate the students to use the morphology in reclassification of plant kingdom based on the plant morphology and other characters.
4. To train students in the proper use of the compound light microscope and to give them experience in interpreting images that they see through the microscope in terms of how plant structure is related to function.
5. To provide students with skills in modern microscopic digital image capture, processing and analysis techniques useful in plant kingdom like alge, fungai, bryophyta studies.
6. To instill in students an appreciation for the complexity of tissue organization that exists within plant bodies that allow pl.

3. Course Learning Outcomes

	CLOs	Aligned PLOs
1	**Knowledge:**	
1.1	Upon successful completion of this course the student will be able to: 1. Understanding basic information of the plant kingdom. 2. Gain more about the systematic and evolution of the plant kingdom. 3. Learning about Virus, Fungi, Algai, and their modifications. 4. Identifying the species based on morphology. 5. Knowing more the difference between different parts of plant kingdom 6. How many differences between archegoniate and	
1.2		
1.3		
1...		

	CLOs	Aligned PLOs
	Spermatophyta. 7. The ability to get involve with computer internet and its programs	
2	**Skills :**	
2.1	**Cognitive Skills:** - Learning about Fungi, Bacteria and Algae identification - Numerical analysis of different characters. - How we can used morphology in reclassification of plant Kingdom - Developing a large skill of thinking through using morphology in studying Plant kingdom.	
2.2	**Interpersonal Skills and Responsibility** At the end of the course, the student will be able to: - Work in a team work and also independently in course work. - Consider the members of the group in the class and the time of lecture. - Cooperation with class member in discussing the results of work in class. -	
2.3	**Communication, Information Technology and Numerical Skill** **The student is able to propose solutions to some problems:** - Arrange excursion for collecting plants - Preserving Bacteria, Fungi, and Algae - Make different slides sections in the various of plant kingdom. - Report writing.	
2.4	- Skills, oral and written communication - Using computer and search the Web for information sources - Use a power point for Proposals Group - The use of statistical methods in the analysis of information	
	Psychomotor Skills (if applicable) - Description of the psychomotor skills to be developed and the level of performance required - Collecting samples from environment - Examining samples in lab	
3	**Competence:**	
3.1	- Developing oral presentations.	
3.2	- Communicating personal ideas and thoughts.	
3.3	- Work independently and as part of a team to finish some assignments.	
3...	- Communicate results of work to others	

C. Course Content

#	List of Topics	No. of weeks	Contact Hours
1	Introduction,	**1**	**2**

2	Viruses	**1**	**2**
3	Bacteria & Cyanobacteria	**2**	**4**
4	Actinomycetes	**1**	**2**
5	Kingdom Chromista (Albugo, Diatoms)	**1**	**2**
6	Chresophyta	**1**	**2**
7	Phaeophyta (Fucus)	**1**	**2**
8	Fungi (Ascomyctes, Zygomycetes, Basidiomycetes)	**2**	**4**
9	Lichens & chlorophyta	**1**	**2**
10	Archegoniatae (Bryophyta (Hepaticae, Musci)	**2**	**4**
11	Pteridophyta	**1**	**2**
12	Spermatophyta	**1**	**2**

D. Teaching and Assessment

1. Alignment of Course Learning Outcomes with Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
1.0	**Knowledge**		
1.1 1.2 ….	Upon successful completion of this course the student will be able to: Upon successful completion of this course the student will be able to: - Understanding basic information of the plant kingdom. - Gain more about the systematic and evolution of the plant kingdom. - Learning about Virus, Fungi, Algai, and their modifications. - Identifying the species based on morphology. - Knowing more the difference between different parts of plant kingdom - How many differences between archegoniate and Spermatophyta. - The ability to get involve with computer internet and its programs -	-linkage between the previous and current information in the class. -Homework assignments -Discussions -Seminar and Report.	-Quizzes during the class for short time. -Mid Term Test. -Homework's Assignment. -Final Exams. -Report Evaluation
2.0	**Skills**		
2.1	**Cognitive Skills**:		
	1. Learning about Fungi, Bacteria and Algae	1. Homework assignments 2. Problem solving in the tutorial	1. Short quizzes at the time of class. 2. Mid-term and

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
	identification 2. Numerical analysis of different characters. 3. How we can used morphology in reclassification of plant Kingdom 4. Developing a large skill of thinking through using morphology in studying Plant kingdom	hours. 3. Internet Exploring.	final exams 3. Following the homework assignments. 4. Research groups, and seminars
2.2	**Interpersonal Skills and Responsibility**		
	Description of the interpersonal skills and capacity to carry responsibility to be developed 1. Work in a team work and also independently in course work. 2. Consider the members of the group in the class and the time of lecture. 3. Cooperation with class member in discussing the results of work in class.	- Writing group reports and discussed - Solving problems in groups during tutorial / presentation sessions	-Mid-Term and final exams. -Assessment of the Research topics. -Grading homework assignments
2.3	**Communication, Information Technology and Numerical Skills**		
	1. Arrange excursion for collecting plants 2. Preserving Bacteria, Fungi, and Algae 3. Make different slides sections in the various of plant kingdom. 4. Working with computer for topic research and processing the updating data. 5. Use different computer programs. 6. Report writing	1. Writing reports for some topics and excursions related to the course name. 2. Incorporating the use and utilization of computer in the course requirements. 3. Writing reports for experimental techniques	1. Evaluating the written reports. 2. Discussion the reports in a group.
2.4	**Psychomotor**		
	Description of the psychomotor skills to be developed and the level of performance **required:** - To draw some examples of plant, bacteria, viruses, etc.. - Microscopic examination for fungi,	- Laboratory exercises and anatomy. - Activities and homework. - Community	-- Evaluating the laboratory written reports. - Evaluating the community participation

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
	bacteria, plant sections - To dissect some examples of animals. - To use computers and internet.	participation Follow up students the students in lab and during carryout all the laboratory experiments	
3.0	**Competence**		
3.1 ….	-Use information and communication technology -Use IT and communication technology in gathering and interpreting information and ideas -Use the internet as a means of communication and a source of information.	-Oral presentations. -Internet search assignments and essays. -Incorporating the use and utilization of computer in the course requirements. -Students will be asked for delivering a summary regarding certain topics related to the course.	-Evaluation of student essays and assignments. - Evaluating the laboratory written reports. -Marks given to for good reports and presentations -Evaluating during the discussion in lecture and reports. Part of the grad is put for student's written participation

2. Assessment Tasks for Students

#	Assessment task*	Week Due	Percentage of Total Assessment Score
1	**Home works, search or presentation**	**4th and 8th weeks**	**10 %**
2	**Midterm "Written Test (1)"**	**8th week**	**30%**
3	**Final Exam "Practical Test"**	**15th week**	**20%**
4	**Final Exam Written Test**		**40%**

***Assessment task** (i.e., written test, oral test, oral presentation, group project, essay, etc.)

E. Student Academic Counseling and Support

Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice :

F. Learning Resources and Facilities

1.Learning Resources

Required Textbooks	**Lecture notes prepared by faculty member responsible for the** course. Campbell, *Mosses and Ferns* (London, 1906) -Pearson, *The Hepaticae of the British Isles* (London, 1902) Dixon and Jameson, *The Student's Handbook of British Mosses* (London, 1896) Braithwaite, *British Moss Flora* (London, 1887-1905). (W. H. L.)

	David L. Jones and Stephen C. Clemesha. Australian Ferns and Fern Allies. Richard Deakin. Florigraphia Britannica; Or, Engravings an Description Flowering Plants and Ferns of Britain, Volume 3 Richard Deakin. Florigraphia Britannica, Or, Engravings and Descriptio Flowering Plants and Ferns of Britain (Volume 2) Richard Deakin. Florigraphia Britannica, Or, Engravings and Descriptio Flowering Plants and Ferns of Britain (Volume 1) . **هـ / د. عبدالله بن رشيد الدعيجي1416**
Essential References Materials	Plant Microtechnique and Microscopy. Steven E. Ruzin. Oxford University Press. 1999. This is an excellent handbook full of methods, stains, optics, and how-to. As a resource it would be useful to grad school and beyond.
Recommended Books and Reference Material	Acta Botanica Fennica American Journal of Botany Biologia Plantarum
Electronic Materials	**http://www.1911encyclopedia.org/Bryophyta** **http://www.1911encyclopedia.org/Pteridophyta** **Core Literature Project: Historical Monographs in Botanical Sciences** **Glossary in preservation** **IBC Symposium** **http://www3.austincc.edu/catalog/descbiol.htm** **Links to professional organizations and associations** **Links for plant libraries and archives resources**
Other Learning Materials	Multimedia associated with the text book and the relevant websites

2. Facilities Required

Item	Resources
Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.)	Classrooms, laboratories
Technology Resources (AV, data show, Smart Board, software, etc.)	data show, Smart Board
Other Resources (Specify, e.g. if specific laboratory equipment is required, list requirements or attach a list)	Microscopes,

G. Course Quality Evaluation

Evaluation Areas/Issues	Evaluators	Evaluation Methods

Evaluation areas (e.g., Effectiveness of teaching and assessment, Extent of achievement of course learning outcomes, Quality of learning resources, etc.)
Evaluators (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify)
Assessment Methods (Direct, Indirect)

H. Specification Approval Data

Council / Committee	
Reference No.	
Date	

Head of Department

Dr. Wessam M. Filfilan

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