

# SULTAN QABOOS UNIVERSITY

## COURSE OUTLINE

## **PROGRAM: Bachelor of Science in Plant Sciences**

1. Course Code	PLNT4542				
2. Course Title	Diseases of Economic Crops				
3. Credits	3 Cr Hrs, 12 Cr Points, 6 ECTS				
4. <b>Pre-requisite</b> Course(s)	PLNT3522; BIOL2101, CHEM2101, CAMS3000, CAMS3001, CAMS2003, CAMS2000				
5. Co-requisite Course(s)	None				
6. Equivalent Course(s)	CROP4542, PROT4542				
7. Incompatible Course(s)	None				
8. Course Category	University Requirement	University Elective			
	College Requirement	College Elective			
	Department Requirement	Department Elective			
	Specialization Requirement	Specialization Elective			
	Other (specify):				
9. Course Owner	College: CAMS	Department: Plant Sciences			
10. Course Type		Lecture/Lab			
	Lecture/Seminar	Lecture/Studio			
	Lecture/Tutorial	Lecture/Lab/Tutorial or Seminar			
	Tutorial	Laboratory (Practical)			
	Field or Work Placement	Studio			
		Internship			
	Workshop	Project			
11. Language of Instruction English					
12. Course Description					
This course aims to give advanced information about the nature, causes and management of plant diseases in Oman and other parts of the world. It will cover major diseases of fruit crops, vegetable crops, field crops, ornamental plants and native Omani plants as well as their causal agents (fungi, bacteria, viruses, phytoplasma, nematodes, etc)					
13. Teaching/Learning Strategies					
Lectures Laboratory Assignments Tests Presentation and Fact sheet					
14. Assessment Components and Weight [%]					
Quizzes 10	Practical 10	Other (specify):			
Homework assignments 20	Project				
$\square$ In-term examination(s) 20	$\boxtimes$ Final examination 40				
15. Grading Method					
A-F Scale Pass/Not passed					
16. Textbook(s) and Supplemental Material					
Agrios, G.N. (2005). Plant Pathology (5th edition). Academic Press, NY					

17. M	17. Matching Course Objectives with Program Outcomes and SQU Graduate Attributes						
SQU Graduate Attributes							
<ul> <li>A. SQU graduates should be able to: <ol> <li>apply the knowledge and skills relevant to the specialization</li> <li>communicate effectively and use information and communication technologies</li> <li>critically analyze complex information and present it in simple clear manner</li> <li>work ethics intellectual in</li> <li>teamwork sk leadership que</li> </ol> </li> </ul>		uates possessC. SQU graduanal communication skills and with culture of international tket to assist them in practical living successfully motivation for independent and engagement in lifelong nd research cs and positive values, and l independence and autonomy skills and display potential qualitiesC. SQU gradua relish good qualities, be of their nation and be responsible, community be mind contemporary		duates should ood citizenship be conscious of tional identity be socially le, engage in ty affairs and nindful of orary issues.			
#	Intended Student Learning	Outcome	Relevant Program Outcome(s)		Applicable		
1.	/Course Learning Objective           Demonstrate an understanding of different types of plant diseases in Oman and other parts of the world		A.1.1 Graduates will have knowledge and skills in crop sciences		A.1		
2.	Develop skills to diagnose diseases of crop plants by using traditional and modern tools		A.1.1 Graduates will have knowledge and skills in crop sciences		A.1		
3.	Develop skills in isolation and cha plant pathogens from diseased plant	aracterization of materials	<ul> <li>A.1.1 Graduates will have k skills in crop sciences</li> <li>A.1.4 Graduates will be able analyze problems related to cr systems, and formulate realis</li> <li>B.1 Graduates will be able to high standards of academic professionalism on the international scenes</li> </ul>	nowledge and to identify and cop production tic solutions compete with integrity and national and	A.1 A.1 B.1		
4.	Explain how plant diseases can be controlled based on integrated disease management strategies		A.1.1 Graduates will have knowledge and skills in crop sciences		А.		
5.	Develop skills to collect scientific original research papers and to im oral presentation and to write scienti	literature, study prove skills for ific reports	A.2.1 Graduates will hav effectively communicate of writing	e ability to rally and in	A.2		
6.	Demonstrate the ability to work in a team		B.4 Graduates will have the ability to build teams and work in team for target oriented tasks		B.4		
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#### 16. Student Responsibilities

It is the student's responsibility to know and comply with all University Academic Regulations relevant to participation in this course. These regulations specifically include attendance requirement and students' academic code of conduct.

For attendance, it is the student's responsibility to be punctual and to attend all classes.

Students are expected to perform their work with honesty and avoid any academic misconduct, which is defined as the use of any dishonest or deceitful means to gain some academic advantage or benefit. This can take many forms, including but not limited to, the following: copying, plagiarism, collusion and forging documents. For full details, please refer to the Undergraduate Academic Regulations and to the Student Academic Misconduct Policy.

Additionally, this course requires that you:

COURSE INFORMATION				
Course Code	de PLNT4542 Course Title Diseases of Economic Crops			
Semester/Year Spring Section(s)		10,11		
Day, Time, and Place TBD				
Course Coordinator Velazhahan Rethinasamy				
Office Location	AGR212	Office Hours		
Office Tel. Ext.	3646	Email	velazhahan@squ.edu.om	

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Tentative Schedule				
Week	Lecture #	Topic/Material to be covered	Assessment	
1	Lec 1	Introduction to the course		
2	Lec 2	Diseases of Date Palm		
	Lab 1	Preparation of culture media		
3	Lec 3	Diseases of Citrus, Mango		
	Lab 2	Field trip to AES		
4	Lec 4	Diseases of Banana, Papaya		
	Lab 3	Diseases of date palm and fruit crops +Lab		
5	Lec 5	Diseases of Cucurbits, Cruciferous vegetables	Quiz 5%	
	Lab 4	Isolation of pathogens		
6	Lec 6	Diseases of Egg plant, Tomato		
	Lab 5	Diseases of Vegetables + Lab		
7	Lec 7	Diseases of Okra, Onion, Chilli		
	Lab 6	Submission of disease specimens (6 Nos.)		
8	Lec 8	Diseases of Wheat, Maize, Sorghum	Mid term 20%	
	Lab 7	Field trip		
9	Lec 9	Diseases of Sugarcane		
	Lab 8	Isolation of pathogens		
10	Lec 10	Diseases of Rose, Chrysanthemum, Jasmine		
	Lab 9	Presentations		
		Submission of disease specimens		
11	Lec 11	Postharvest diseases		
	Lab 10	Postharvest diseases		
		Presentations		
12	Lec 12	Plant diseases of international importance-I	Quiz 5%	
	Lab 11	Submission of disease specimens		
13	Lec 13	Plant diseases of international importance-II		
	Lab 12	Presentations		
14	Lec 14	Management of crop diseases	Assignments 20%	
	Lab 13	Final lab exam	Final lab exam 10%	
			Final theory exam	
			40%	
15				
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APPENDIX A: INSTRUCTORS OF MULTIPLE SECTIONS					
Section	Instructor	Day, Time, and Place	Office Location and Extension	Email	Office Hours

### APPENDIX B: ADDITIONAL INFORMATION