ATTACHMENT 2 (e)

**Course Specifications** 

### Kingdom of Saudi Arabia

## The National Commission for Academic Accreditation & Assessment

Course Specifications (CS) **Course Specifications** 

# Plant physiology(1) Institution Date Dammam university 17\1\1436 College/Department :college of science - biology department

A. Course Identification and General Information

1. Course title and code: Plant physiclegy(1)						
2 Credit hours2+1						
2. Creat nours2+1 3. Program(s) in which the course is offered <b>Biology program</b>						
(If general elective available in many programs indicate this rather than list programs)						
Rachalar of Science degree in Riology						
4. Name of faculty member responsible for the course						
A specific team from the Biology Department						
5. Level/vear at which this course is offered : semester 5						
6. Pre-requisites for this course (if any)						
Cvtology nlant kingdom						
7. Co-requisites for this course (if any) <b>nothing</b>						
8. Location if not on main campus: in dammam campus						
9. Mode of Instruction (mark all that apply)						
a. traditional classroom :50% What What						
b. blended (traditional and online) What percentage?						
c. e-learning 25% What						
percentage? d. correspondence 25%						
What percentage? f. other						
What percentage?						
Comments:						

#### **B** Objectives

1. What is the main purpose for this course?

-1, the student learns the basics of plant Physiology
-2 Training on dealing with green plants and breeding<sup>1</sup>

-3 Study of the most important operations of the plant cell and how to produce the internal components of the primary and secondary

#### -4 knowing the impact of environmental stresses on the growth of green plants.

2. Briefly describe any plans for developing and improving the course that are being implemented. (e.g. increased use of IT or web based reference material, changes in content as a result of new research in the field).

increased use of IT or web based reference material: by doing 2 paper research from the online books and webs.

C. Course Description (Note: General description in the form used in Bulletin or handbook)

## Course Description: the basics of plant physiology part 1 containing the processed reaction to build new product and secondary product and plant stress.

1. Topics to be Covered		
List of Topics	No. of Weeks	Contact hours
enzymology	1	2
photosynthesis	2-3	4
respiration	5-4	4
Plant water relation :	6	2
Water- soil	7	2
Absorption- Transpiration-	9-8	4
plant stress	10-11	4
secondary product	12-13	4

2. Course components (total contact hours and credits per semester):						
	Lecture	Tutorial	Laboratory or Studio	Practical	Other:	Total

Contact Hours	1:50	20-10-20- 10-20-10-1 5	1 differnt experime nt in lab	3-2 week home experiment	Paper about one subject(gr	4
Credit						3

3. Additional private study/learning hours expected for students per week. 2-4	 

4. Course Learning Outcomes in NQF Domains of Learning and Alignment with Assessment Methods and Teaching Strategy

On the table below are the five NQF Learning Domains, numbered in the left column.

**First**, insert the suitable and measurable course learning outcomes required in the appropriate learning domains (see suggestions below the table). **Second**, insert supporting teaching strategies that fit and align with the assessment methods and intended learning outcomes. **Third**, insert appropriate assessment methods that accurately measure and evaluate the learning outcome. Each course learning outcomes, assessment method, and teaching strategy ought to reasonably fit and flow together as an integrated learning and teaching process. (Courses are not required to include learning outcomes from each domain.)

Cod e	NQF Learning Domains	Course Teaching	Course Assessment
1.0	Knowledge		
1.1	Understanding the most important changes and interactions in plant cells	lacture	2 test
1.2	Link between these changes and the operations plant Member. Influence of environmental factors on growth rates	3-2 week home experiment	2 research paper
2.0	Cognitive Skills	1	
2.1	by the end of the course the student is expected to develop higher order skills that are reflected in the student ability to: 1. use different types of lab instrument. 2. analyze the factors affecting on plant growth.	discussions and explanation. the paper of the experiment they done.	group work
2.2	. use the suitable methods to establish a good green plant. 4. correlate between plant growth and stress		
3.0	Interpersonal Skills & Responsibility		
3.1	students should demonstrate their sense of responsibility for learning by completing both reading and writing assignments in due time.		

	students should act responsibly and ethically in carrying out individual as well as group projects. Students should participate in class discussion.		
32			
4.0	Communication, Information Technology, Numerical		
4.1	ability to use information technology in communication and research projects .	reserch project	
4.2	how to put result in tabel with writing discution	self evalution	
5.0	Psychomotor		
5.1	N/A	N/A	N/A
52			

5. Map course LOs with the program LOs. (Place course LO #s in the left column and program LO #s \_\_across the top )

Course LOs #	Program Learning Outcomes (Use Program LO Code #s provided in the Program							
	1.1	1.2		2.1		3.2	4.1	
1.1								
2.1								

6.8	chedule of Assessment Tasks for Students During the Semester.		
	Assessment task (e.g. essay, test, group project, examination,	Week Due	Proportion of Total
1	first test	4 <sup>th</sup> week	10
2	home plant experiment	5th	10( lab record)
3	paper work sheet(group project)	8th	10
4	oral and group	9th	+2
5	2 <sup>nd</sup> test	10	10
6	lab test	11	10( lab record)
7	final lab test	15	20
8	final test	17	40

D. Student Academic Counseling and Support

1. Arrangements for availability of faculty and teaching staff for individual student consultations

and academic advice. (include amount of time teaching staff are expected to be available each week):1 hour a week for advice.

#### E Learning Resources

1. List Required Textbooks:

2. List Essential References Materials (Journals, Reports, etc.):

3. List Recommended Textbooks and Reference Material (Journals, Reports, etc): weiki pedia.google.flicker

4. List Electronic Materials, Web Sites, Facebook, Twitter, etc.

Web sites . university library . You tube scientific film.

5. Other learning material such as computer-based programs/CD, professional standards or

#### F. Facilities Required

Indicate requirements for the course including size of classrooms and laboratories (i.e. number of seats in classrooms and laboratories extent of computer access etc.)

1. Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.)

Classrooms,2 h every week

teaching room equipped with teaching facilities and a minimum of 20 seats.

laboratories, 2 h every week with required supplies and instruments to accommodate

10 domanstration reams and time in connector

2. Computing resources (AV, data show, Smart Board, software, etc.)

data show, in lecture and lab

<u>black\_Roard-Computer room with Internet access\_enough for 20-30 students</u>

3. Other resources (specify, e.g. if specific laboratory equipment is required, list requirements or attach list) N/A.

G Course Evaluation and Improvement Processes

1 Strategies for Obtaining Student Feedback on Effectiveness of Teaching

1- Teachers-students periodical meetings.

2- Students representatives in Faculty Committees.

3- Students' group discussions .with leader to improve their work together

2 Other Strategies for Evaluation of Teaching by the Instructor or by the Department:

internet in classes.

3 Processes for Improvement of Teaching:

black board not active with all student.

4. Processes for Verifying Standards of Student Achievement (e.g. check marking by an independent member teaching staff of a sample of student work, periodic exchange and remarking of tests or a sample of assignments with staff at another institution):

## check marking by especial teaching staff of a sample of student work and result and research.

5 Describe the planning arrangements for periodically reviewing course effectiveness and planning for improvement.:

Self-assessment at every two years and the external assessment by the invited faculty member at every four years will be carried out. The feedback received from these assessments will be used to plant for further improvement in the course syllabus, teaching method, and delivery of course materials.