

#### Planning and Quality Assurance Affairs

#### Form (A)

## **Course Specifications**

#### **General Information**

Course name Plant Physiology

Course number BIOL4324

**Faculty** 

**Department** 

Course type Major Needs

Course level

Credit hours (theoretical) 2

Credit hours (practical) 1

**Course Prerequisites** 

### **Course Objectives**

- 1 To learnthe plant cell, cell organelles
- 2 to study Types of membranes, the transport through plasma membrane.
- 3 study the solutions types and the relationship between colloidal solution & cytoplasm
- 4 To Known Biological processes as transpiration types, Photosynthesis, Calvin cycle, respiration. Kreps cycle.
- 5 study plant nutrition, physiological diseases, sand culture, water culture
- 6 study plant enzymes & Hormones

#### **Course Contents**

- 1 provide Introduction to plant physiology
- 2 Plant cell & cell organelles
- 3 Plant cell & cell organelles
- 4 \_ Types of membranes & the transport through plasma membrane
- 5 Types of solutions
- 6 Types of solutions. The relationship between colloidal solution & cytoplasm .The colloidal properties
- 7 Experiments on colloidal properties
- 8 Experiments on colloidal properties
- 9 \_ Transpiration types
- 10 Photosynthesis, Calvin cycle
- 11 Respiration. Kreps cycle
- 12 plant nutrition, physiological diseases
- 13. sand culture, water culture plant enzymes & Hormones plant enzymes & Hormones

### **Teaching and Learning Methods**

- 1 lectures
- 2 Discussion
- 3 presentations

### **Students Assessment**

Assessment Method	<u>TIME</u>	<u>MARKS</u>
First hour exam		20
Second hour exam		20
Attendence		10
Final Exam		50

# **Books and References**

Essential books	Eduardo Zeiger (2013)Plant Physiology, fourth Edition	
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