Course Specifications

General Information

Course name	Plant Anatomy
Course number	BIOL3320
Faculty	
Department	
Course type	Major Needs
Course level	3
Credit hours (theoretical)	3
Credit hours (practical)	0
Course Prerequisites	

Course Objectives

1 - study the plant cell , cell organelles, Types of membranes, the transport through plasma membrane

2 - study the solutions types and the relationship between colloidal solution & cytoplasm

3 - Discussion some Biological processes as transpiration types, Photosynthesis, Calvin cycle, respiration. Kreps cycle

4 - study plant nutrition, physiological diseases , sand culture, water culture

5 - study plant enzymes & Hormones

Course Contents

1 - 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 - The relationship between colloidal solution & cytoplasm . The colloidal properties
7 - Transpiration types
8 - Photosynthesis, Calvin cycle
9 - Respiration. Kreps cycle
10 - plant nutrition
11 - physiological diseases
12 - sand culture, water culture
13 - Plant enzymes & Hormones

Teaching and Learning Methods

1 - lectures
2 - Discussion
3 - presentations

Students Assessment

Assessment Method	TIME	MARKS
First hour exam	60minutes	20
Second hour exam	60minutes	20
presentations		10
Final exam	120minutes	50

Books and References

Essential books	Robert E. Blankenship (2010) Plant physiology