

## Faculty of Oral & Dental Medicine

### Botany & Genetics

#### Information :

**Course Code :** SGS 131

**Level :** Undergraduate

**Course Hours :** 3.00- Hours

**Department :** Faculty of Oral & Dental Medicine

#### Area Of Study :

- To raise awareness of the students to plant cell physiology
- To distinguish between different plant cell components microscopically
- Conduct experiments and be able to write a report
- Understand the use of plants in medicine

#### Description :

molecular biology (proteins, enzymes, DNA mutation, regulation of protein synthesis) genetics (genetic material, gene) and anatomy & morphology of seed plants (general structure of seed plants, variations in structure and development , seeds & seed germination)

#### Course outcomes :

##### a.Knowledge and Understanding: :

1 -	Provide the basic knowledge needed for botany science.
2 -	Identify the plant cell structure
3 -	Differentiate between living and nonliving components of the cell
4 -	Raise awareness of the students to plant cell physiology

##### b.Intellectual Skills: :

1 -	Viewing the cellular world
2 -	Distinguish between different plant cell components microscopically.
3 -	Use the library and internet resources to develop independent study skills through assignments.

##### c.Professional and Practical Skills: :

1 -	Identify cell structure of the plant.
2 -	Be able to use the microscope
3 -	Be able to draw specimens up to the microscopic scale
4 -	Conduct experiments and be able to write a report

##### d.General and Transferable Skills: :

1 -	Apply the study of plant physiology and cell structure in the production of medicine.
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**Course Topic And Contents :**

Topic	No. of hours	Lecture	Tutorial / Practical
Plant cell structure	4	Plant cell structure	Plant cell structure
Living and non living components	4	Living and non living components	Living and non living components
Living and non living components	4	Living and non living components	Living and non living components
Physiology	4	Physiology	Physiology
Colloids	4	Colloids	Colloids
Colloids	4	Colloids	Colloids
Water transport	4	Water transport	Water transport
Water transport	4	Water transport	Water transport
Solute and solvent transport	4	Solute and solvent transport	Water transport
Solute and solvent transport	4	Solute and solvent transport	Solute and solvent transport
Enzymes	4	Enzymes	Enzymes

**Teaching And Learning Methodologies :**

Lectures
Practical training
Demonstrations
Small group discussion

**Course Assessment :**

Methods of assessment	Relative weight %	Week No	Assess What
1st Mid Term Examination	20.00	6	
2nd Mid Term Examination	20.00	10	
class work	20.00		
Final Written Examination	30.00		
Practical Examination	10.00		

**Recommended books :**

Principles of Botany by Uno et al., 2007  
Biology of plants by Peter Raven 2008