



Planning and Quality Assurance Affairs

Form (A)

Course Specifications

General Information

Cell and Histolgy Course name BIOL2355 Course number **Faculty Department** Major Needs Course type 2 Course level 3 **Credit hours (theoretical)** 0 **Credit hours (practical) Course Prerequisites**

Course Objectives

- 1 To learn an introduction to cell biology, Cell Organelles, Cell types, Cell components.
- 2 To learn the membrane Trafficking; Passive transport, Active transport and Traffic across membranes.
- 3 To understand Cell Growth and Division; Cell Cycle, Cell Growth, Control of Cell Division.
- 4 To Learn Cell Signaling; Primary and Secondary messengers, Ion, steroid, G-protein, enzyme-linked.
- 5 To discuss apoptosis (programmed cell death). Stem cells
- 6 To study the epithelium, connective tissue, cartilage, muscular nervous tissues.
- 7 To learn the microscopic anatomy of some organs (spleen, stomach, small and large intestine, liver, pancreas, islet of Langerhans, thyroid, adrenal, etc.) of the different body systems including their arrangement, structure and function in the organ.

Course Contents

- Introduction to cell biology, Cell Organelles, Cell types, Cell components
- 2 _ Membrane Trafficking; Passive transport, Active transport and Traffic across membranes
- 3 Cell Growth and Division; Cell Cycle, Cell Growth, Control of Cell Division
- 4 Cell Signaling; Primary and Secondary messengers, Ion, steroid, G-protein, enzyme-linked
- 5 Apoptosis :programmed cell death
- 6 Stem cells This course also study the epithelium, connective tissue, cartilage, muscular nervous tissues
- 7 The microscopic anatomy of some organs (spleen, stomach, small and large intestine, liver, pancreas, islet of Langerhans, thyroid, adrenal, etc.) of the different body systems including their arrangement, structure and function in the organ

Teaching and Learning Methods

- 1 Lectures
- 2 Discussion
- 3 Revision and Discussion sections

Teaching and Learning Methods for the Disabled Students

1 - Will be treated and addressed individually according to the type of disability.

Students Assessment

Assessment Method	<u>TIME</u>	<u>MARKS</u>
first hour exam	60 min	20
second hour exam	60 min	20
Attendance, participation and quizzes		10
final exam	120minutes	50

Books and References

Recommended books	Campbell, NA. (1996): Biology, 4th edition	
	Becker, WM and others. (2003): The world of the cell 5th edition.	
	Albertsl, B. and others. (2004): Essential cell biology, 2nd edition.	