





STANDARD COURSE OUTLINE

Annex 3



Hashemite University	 	Animal Tissue Culture 2401042333
Faculty of Science		Pre-requisite: 110104102
Department of Biology and Biotechnology		
Course Syllabus		
Course Information		
Lecture's Time	Mon, Wed: 8:30-9:30 a.m.	
Lecture Room	Biology Building Room 241	
Instructor	Prof. Lubna Tahtamouni	
Office Location	Biology Building 110	
Office Hours	Sun, Tue: 1-2 p.m. or by appointment	
Text Book Culture of Animal Cells, A Manual of Basic Techniques, R. Ian Freshney, Wiley, 2000, 4 th edition.		
References(s)		

Grading Policy:

Theory		Practical	
1 st Exam	15%	Quizzes	10 %
2 nd Exam	15%	Midterm	40%
Other	30%	Reports	10%
Final Exam	40%	Final Exam	40%

Course Objectives

This course provides students with the skills and knowledge to work in a modern biological laboratory making use of cell culture techniques. Emphasis is placed on aseptic techniques for animal cell culture and the requirements for cell growth in vitro. Topics covered include sterile and aseptic techniques, media preparation, cell count and viability, cryopreservation, subculturing, and applications using cell cultures

Teaching and Learning Methods

Lectures

PowerPoint Slides

Textbook

Course Contents

Week	Topic
1	Introduction
2	Biology of Animal Cells
3	Tissue Culture Lab Design and Equipment
4	Tissue Culture Vessels and Consumables
5	Tissue Culture Medium
6	Aseptic Techniques and Contamination
7	Types of Culture
8	Primary Cultures
9	Cell Lines
10	Maintenance of Cultures
11	Cryopreservation
12	Applications of Tissue Culture- Introduction
13	Applications of Tissue Culture I
14	Applications of Tissue Culture II
15	Applications of Tissue Culture III
16	Final Examination