Course Specification
(Bachelor)

Course Title:	**Animal histology**
Course Code:	**BIOL-214**
Program:	**Bachelors of Science (B.Sc.,) Biology**
Department:	**BIOLOGY**
College:	**College of Science, Al Zulfi**
Institution:	**Majmaah University**
Version:	**# 4th**
Last Revision Date:	**29/12/2023**

Table of Contents

A. General information about the course:

1. Course Identification

1. Credit hours: 3 (2+1)					
Equivalent to ECTS credit points:4.5					
2. Course type					
A.	☐University	☐College	☒ Department	☐Track	☐Others
B.	☒ Required		☐Elective		
3. Level/year at which this course is offered: (3rd Level / 2nd Year)					

4. Course General Description:

This course aims to provide the students the basic information about the characteristics and functions of the four major tissue types; namely Epithelial tissue, Connective tissue, Muscular tissue and Nervous tissue and compare between them. Identifying different body tissues under a microscope and relating them to their function.

5. Pre-requirements for this course (if any)**:**

BIOL-102

6. Co-requisites for this course (if any)**:**

N/A

7. Course Main Objective(s):

- **Student will be able to explain the structural characteristics of the four basic tissue types and differentiate of each tissues type and their structure.**
- **This course aims to recognize the composition of each tissues type and the functional and capabilities to its specific functions.**
- **This course Foucus on describe the normal histological structure of various body systems (respiratory, digestive, endocrine, urinary, male & female reproductive, blood, eye, ear, and central nervous system…ecs)**

and distinguish structural features of organs and relate the structural variations to differences in organ function.

2. Teaching mode (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	Traditional classroom	60	83%
2	E-learning	12	17 %
3	Hybrid • Traditional classroom • E-learning		
4	Distance learning		

3. Contact Hours (based on the academic semester)

No	Activity	Contact Hours
1.	**Lectures**	**30**
2.	**Laboratory/Studio**	**30**
3.	**Field**	**0**
4.	**Tutorial**	**0**
5.	**Others (specify)**	**0**
Total Contact Hours		**60**

No	Activity	Workload (in hours
1.	**Contact Hours**	**60**
2.	**Self – study hours or Academic learning hours (Assignments, Quizzes, reports, Discussions, Library, research …….)**	**60**
	Total Workload	**120 hours**
	Equivalent to ECTS credit points	**4.5**

B. Course Learning Outcomes (CLOs), Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Code of PLOs aligned with the program	Teaching Strategies	Assessment Methods
1.0	**Knowledge and understanding**			
1.1				
1.2	**List the types of animal tissues and the characteristics of each type.**	K2	**Lectures, individual and group discussion presentation and videos.**	**Quizzes, Midterm and final exams**
...				
2.0	**Skills**			
2.1	**Compare between the different types of animal tissues, their structure and functions.**	S1	**Lectures, individual and group discussion presentation and videos.**	**Quizzes, Midterm and final exams**
2.4	**Examine the Specimens (Microscopic slides and photos) for different animal tissues**	S4	**Lectures, videos, Hands on practical trainings.**	**Practical exams** **Lab report**
3.0	**Values, autonomy, and responsibility**			
3.1	**Prepare the scientific research and presentation about any tasks related to histology.**	V1	**Lectures, videos, Homework, Research**	**-Research work** **-Written participations.** **-Oral question**
3.2				
...				

C. Course Content

No	List of Topics	Contact Hours (Lecture+Practical)
1.	**Introduction to Histology techniques & MICROSCOPE**	**4**

2.	Cytoplasmic Organelles, Cytoplasmic Inclusions and The Cell Cycle	4
3.	The epithelial tissues • General Features of Epithelium • Functions of epithelial tissue Classification of epithelium	4
4.	• Simple squamous epithelium • Simple cuboidal epithelium Simple columnar epithelium	4
5.	• Stratified squamous epithelium • Stratified Columnar Epithelium • Stratified Columnar Ciliated Epithelium Stratified Cuboidal Epithelium	4
6.	<u>Special epithelial tissues</u> • Pseudostratified columnar epithelium • Transitional epithelium • Neuro-Epithelium Myoepithelium	4
7.	Glandular epithelium	4
8.	▪ Connective Tissue Connective tissue proper which has a soft matrix	4
9.	Cartilage which has a rubbery matrix	4
10.	Bone which has a solid matrix	4
11.	Blood	4
12.	<u>Muscular tissue</u> ▪ Skeletal muscles ▪ Cardiac muscle Smooth muscle	4
13.	<u>Nervous tissue</u> ▪ Central nervous system Peripheral nervous system	4
14.	<u>Short Description for:</u> ▪ Respiratory system ▪ Digestive system Urinary system	4
15.	<u>Short Description for:</u> ▪ Male and female genital system ▪ Integument system ▪ Endocrine system Nervous system	4

Total	60 (30L+30P)

D. Students Assessment Activities

No	Assessment Activities *	Assessment timing (in week no)	Percentage of Total Assessment Score
1.	Quiz's, Assignments, Homework	Once every 2 weeks	10%
2.	Mid-term Exam-1	5th week	10%
3.	Mid-term Exam-2	9th week	10%
4.	Black Board, E-Exam	12th week	10%
5.	Practical Exam	15th week	20%
6.	Final Exam	17th week	40%
...			

*Assessment Activities (i.e., Written test, oral test, oral presentation, group project, essay, etc.).

E. Learning Resources and Facilities

1. References and Learning Resources

Essential References	• Electron Microscopic Atlas of Mammalian Tissues (2001). H. Jastrow. Work shop Anatomy of the internet. • Basic histology Text and Atlas (2010). Junqueira. L. C. 12 th edition. McGraw-Hill Companies, Inc. • Atlas of histology (2004). Di Fiore.10 th edition. Lippincott Williams & Wilkins. Functional Histology (2005) .Wheater'sText & Atlas of Histology. 5 th edition. Churchill Livingstone.
Supportive References	Journal of Botany.
Electronic Materials	http://www.histology-world.com/ **https://www.bu.edu/phpbin/medlib/histology/**
Other Learning Materials	

2. Required Facilities and equipment

Items	Resources
facilities (Classrooms, laboratories, exhibition rooms, simulation rooms, etc.)	**Existing facilities are satisfactory** (Classrooms and other facilities).

Items	Resources
Technology equipment (projector, smart board, software)	**Existing facilities are satisfactory** (smart board and e-podium are available**)**
Other equipment (depending on the nature of the specialty)	Nil

F. Assessment of Course Quality

Assessment Areas/Issues	Assessor	Assessment Methods
Effectiveness of teaching	Students	Direct assessment
Effectiveness of Students assessment	Program Leader	Direct assessment
Quality of learning resources	Students	Indirect assessment
The extent to which CLOs have been achieved	Faculty	Direct supervision
Other		

Assessors (Students, Faculty, Program Leaders, Peer Reviewers, Others (specify)

Assessment Methods (Direct, Indirect)

G. Specification Approval

COUNCIL /COMMITTEE	**Biology Department Council**
REFERENCE NO.	**7**
DATE	**04/ 04/ 1446H __ 07/10/2024**