Ministry of Higher Education and Scientific Research



# **Course Catalogue**

## **Department of Biology (Medical)**

**College of Science** 

# Salahaddin University-Erbil

## Human Embryology

## **Second Stage - Second Semester**

## Lecturer's Name: Assist. Prof. Dr.Lana S. Al-Alem

## Assist. Lect. Azheen S. Abdulrahman

## Academic Year 2023/2024

## **1.** General information

Course Title: Human Embryology				
Department: Biology- Medical				
Course Level: Undergraduate				
Stage: Second				
Class hour/week: Theory: 2hrs Laboratory: 2hrs				
Duration: 14 weeks				
Course type: Compulsory				
Mode of Delivery: Face to Face				
Language: English and Kurdish (Sometimes Arabic)				
Course Coordinator: Dr.Lana S. AL-Alem				
Email: lana.alalem@su.edu.krd				
Azheen S. Abdulrahman				
Email: azheen.abdulrahman@su.edu.krd				
Office hours: To be Return to the schedule on the office door				
Course Policy:				
• Attendance: students are strongly encouraged to attend in class on a regular				
basis, as participation is important to understanding of the material. This is				
student's opportunity to ask questions.				
• The use of mobile phone during the class is prohibited.				
• Only the students who are officially enrolled can attend the class.				
• Daily participation and conducting assignments are required				
• Electronic devices: All cell phones are to be turned off at the beginning of				
class and put away during the entire class and don't allow to use internet				
The Course Keywords: Embryo, human development, organogenesis, fertilization.				

## 2. Course Description

This course provides an introduction to human development through the study reproduction, early embryology, histogenesis, organogenesis, of and The roles of determination, differentiation, morphogenesis. growth, morphogenesis, and pattern formation will be emphasized.

# 3. Course Teaching and Learning Activities (Pedagogical Approaches)

Various teaching style (Pedagogical methods) will be used during the course in order to reach the learning objectives of course to students: -

- a. Presentation use data show and power point
- b. Lecturing method oral presentation intended to present information to teach students about the topics
- c. Class discussion exchange information between and among teachers and students with the purpose of developing students' ability to expanding students' understanding.
- d. Lab base model blending method is a form of learning through practical experimentation.

# 4. Course Learning Outcomes

After completion of this course, students will be able to: -

- 1. Leads students toward understanding of the male and female reproductive system.
- 2. To identified gametes production and fertilization.
- 3. To know the different stage of development
- 4. Embryonic malformation.

## 5. Course Content

### Theory Topics

Week 1+2: Syllabus and introduction to embryology

Week 3+4: Male reproductive system

Week 5+6: Female reproductive system

Week 7: fertilization and implantation

Week 8: second and third week of gestation

Week 9: Organogenesis, Nervous system development

Week 10: Examination

Week 11: Circulatory system development

Week 12: : Digestive system development

Date	Weeks No.	Topics	Hrs.
	1	Course book	
	2	Introduction of embryology and Male reproductive system 1	2
	3	Male reproductive system 2	2
	4	Female reproductive system 1	2
	5	Female reproductive system 2	2
	6	Exam 1	1
	7	fertilization and implantation	
	8	second and third week of gestation	
	9	Organogenesis, Nervous system development	
	10	Circulatory system development	2
	11	Digestive system development	2
	12 Exam		1

#### **Practical Topics**

Directorate of Quality Assurance and Accreditation

## 6. Course Assessment Tools

## Theory

Exam No. 1 (Theory): 7.5% Exam No.2 (Theory) : 7.5% Mean Examination (Theory) : 7.5 % Practical Examination : 35% Total =50% Final examination: 50 theory

## Practical

Assessment	Descriptions	Weight			
Tools					
Quiz	Test during lecture	б			
Activity	Extracurricular activities provide a channel for reinforcing the lessons learned in the classroom, offering students the opportunity to apply academic skills in a real-world context, and are thus considered part of a well-rounded education.	6			
Seminar and Reports	Students discuss a topic and they will be encouraged to work as a group and will be participated to deliver the materials in the class. Students will choose a topic related to cell biology and make a academic report	8			
Mid-term examination	Students will have a written exam related to the previous lectures	15			
Total 35					

## 9. Textbooks and References

✓ Dixit, D. Human embryology (2004). CBS publishers and distributors

- ✓ Lopez-Gracia, M.L. and Ros, M. (2007). Advances in Anatomy ebryology and Cell Biology.Springer Berlin Heidelberg New York.
- ✓ Slack, J.M.W. (2006).Essential Developmental Biology.2<sup>nd</sup> ed. Blackwell Publishing Ltd.
- ✓ Sadler T. W. (2006). Medical embryology. 10 th edition. Lippincott
- ✓ Williams and Wilkins.
- ✓ SLACK, J.M.W. (1997). From egg to embryo regional specification in early development. 2<sup>nd</sup> ed. Cambridge university press Cambridge, New York, Melbourne
- $\checkmark\,$  E-books and research on the Internet.

Peer reviewed by: Mr. Mohammed Ali Salim Head of Biology Department