



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 2022/2023

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 of reproduction, early embryology, histogenesis, organogenesis, and morphogenesis. The roles of determination, differentiation, 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

Practical Topics

Date	Weeks No.	Topics	Hrs.
	1	Course book	2
	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	2
	8	second and third week of gestation	2
	9	Organogenesis, Nervous system development	2
	10	Circulatory system development	2
	11	Digestive system development	2
	12	Exam	1

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 Tools	Descriptions	Weight
Quiz	Test during lecture	5
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.	5
Mid-term examination	Students will have a written exam related to the previous lectures	25
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 ebriology and Cell Biology.Springer Berlin Heidelberg New York.
- ✓ Slack, J.M.W. (2006).Essential Developmental Biology.2nd 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. 2nd ed. Cambridge university press Cambridge, New York, Melbourne
- ✓ E-books and research on the Internet.

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