



Embryology

ANAT 304

Course Description

This course provides the students with lectures and comprehensive overview of the human embryology, including features and major events of the development of specific organs and systems of human in embryonic and fetal periods, the current understanding of some of the molecular events that guide development of the embryo.

Credit: 1 semester credits

Repeatable: No

Course Structure

The course includes 15 lectures, 2 quizzes and 2 unified exams.

Objectives:

By the end of the course, students should be able to:

- describe the scientific basis of embryology;
- explain the features related to development of each system and structure;
- link the embryonic structures with the corresponding adult anatomy;
- recognize common abnormalities;
- apply the knowledge for interpretation of symptoms and signs of common congenital and developmental anomalies;
- communicate information about human development using language appropriate to professional colleagues and to the lay person;
- accurately advise patients on many issues in future (such as reproduction, birth defects, prenatal development, in vitro fertilization, stem cells, and cloning).

Students have to pursue independent, self-directed and critical learning.

Schedule: To be posted at the beginning of the term on the online calendar.

Assignments: online Kaplan lectures.

Textbooks and Reference Materials:

Textbook: *Langman's Medical Embryology*,
Thomas W. Sadler, 13th edition (2015).Walter Kumels. ISBN-13: 978-1451191646, ISBN-10: 1451191642

Optional Readings:

Larsen's Human Embryology, Gary C. Schoenwolf et al., 4th edition,
Elsevier. ISBN-13: 978-0443068119, ISBN-10: 0443068119

The Developing Human: Clinically Oriented Embryology 10th edition
Keith L. Moore, T.V.N. Persaud, Mark G. Torchia. Elsevier. ISBN-13: 978-1437720020, ISBN-10: 1437720021

Evaluation: Two quizzes and two unified exams will be taken throughout the term.

Quizzes I and II will be conducted before the unified exam I and II respectively.

The two unified exams will be taken on Friday in week # 5, and # 10. Each exam will include the entire topics covered in each block.

Quizzes and exams will be on USMLE (multiple choice) format. According to USMLE procedures, the time allocated for completing an exam will be approximately one minute per number of exam questions. Exams will be revised in full after examination.

The value of each question is the same for both the quizzes and exams.

The final grade is expressed as the percentage of the correct answers to the questions in all the quizzes and exams.

Grade:

Percent of Points	Letter Grade
95-100%	A+
90-94%	A
85-89%	B+
80-84%	B
75-79%	C+
70-74%	C
<70%	F

Attendance: in accordance with the Student Handbook.

Policies: The Course Syllabus may be modified at the discretion of the Course director to accommodate the changes that normally take place throughout the semester. Students will be notified each time a change to the Course Syllabus is required. Some topics might be assigned as independent study. Students will be notified when a topic is assigned as independent study

Faculty: Dr. Iuliia Zhuravlova MD, PhD, Associate professor of Gross Anatomy, Embryology and Early Human Development.