

Medical Human Embryology

Course Syllabus

Fall 2017

Course Number: GMS 5604

Credit Hours: Three (3) credit hours

Course Format: This online course is tailored for asynchronous distance learners.

Course Description:

This Medical Human Embryology course is designed to provide the understanding of the anatomical relationships of major structures within the thorax, abdomen, head/neck, and back/limbs regions of the body. Congenital malformations associated with given organ systems will also be discussed.

Prerequisites:

This advanced medical anatomy course will require a strong science foundation of five (5) full-semester science courses related to Biology, Chemistry, and/or Physics. Students are encouraged to have already taken GMS 5605 Online Medical Human Anatomy.

Contacts:

If you have questions about the course or its content contact the **Course Coordinator**, Dr. Kyle E. Rarey, Professor, Department of Anatomy & Cell Biology.

Schedule: The course is offered every semester, including the summer.

Time Commitment: This course will require about 150 hours of time, or about 10 hours per week, allocated between different course activities (i.e., lectures, quizzes, chat sessions, concept maps, etc.).

Course Goals:

The goals of this online course are to:

1. identify the major developmental events associated with each organ system of the human body
2. discuss mechanisms that lead to malformations associated with each organ system.

Learning Outcomes:

At the end of the course, students will be able to:

1. describe the sequence of events leading in implantation and organogenesis.
2. describe developmental processes associated with each organ system
3. list and describe the major malformations associated with each organ system.

Learning Resources:

1. Unit overviews, recorded lectures with PowerPoint presentations, and other multimedia resources will be provided on the course web site.
2. Required resources:
 - a. **Sadler, TW, Langman's Medical Embryology, 12th ed, Lippincott Williams & Wilkins**
 - b. **Rarey, K.E., Romrell, LJ, Clinical Human Embryology, Online DxR.**

Use this link and password to purchase the software online with a credit card:

<http://www.dxrgroup.com/product/cheufl/>

Password: betime8

Contact Person: Diane Tennyson, Vice President/Administration & Sales, DxR Development Group, Inc., 1840 Innovation Drive, Suite 112, Carbondale, IL 62903, P: 618-453-1140, F: 618-453-5309, diane.tennyson@dxrgroup.com

The information in the required text and workbook are coordinated with online lecture materials.

3. Practice on-line quizzes that consist of multiple-choice questions will be available for each module of study.
4. Clinical exercises in anatomical injuries, musculoskeletal disorders, pulmonary diseases, gastrointestinal abnormalities, and renal pathophysiology will be used to promote critical thinking.

Course Participation

Points may be earned per module by actively posting multiple choice questions (MCQs) at the discussion site and the assignment site. Each MCQ must have the rationales for the correct answers and rationales for the incorrect choices. Each question with rationales will count as 2 points. One can submit a maximum of three questions per week. Questions should be published before the weekly due date. Late submissions will be valued less. Total possible participation points = 96 (3MCQs × 2pts × 16wks)

Examinations and Grading:

One examination consisting of 50 multiple-choice questions (each valued of 2 points) will be given for each module. Each exam will be worth 100 points and will be timed. Students will have to take all examinations at a computer with a web camera. A proctor will remotely monitor each student during the exams. See the ProctorU Student FAQs for more information.

4 module examinations = Total 400 possible points

Participation points from MCQs = Total 96 possible points

The final grade will be calculated as follows:

Scores on 4 module examinations (a total of 400 points)
+ Scores on submitted multiple-choice questions (a total of 96 points)
= Total points possible: 496 points.

In summary, the final grade will be the total number of points earned/496 (%). The final grade is broken down as follows:

- Module Exams: 80%
- Submitted Multiple-Choice Questions: 20%

Grading Scale (Correct out of a possible 496 points)

A	=	93-100%	C+	=	77-79%
A-	=	90-92%	C	=	73-76%
B+	=	87-89%	C-	=	70-72%
B	=	83-86%	D+	=	67-69%
B-	=	80-82%	D	=	63-66%
			D-	=	59-62%
			E	<	59%

I = An incomplete grade will be given if a student fails to complete the course as scheduled. For more information about UF grading policies see:

<https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx>.

Make-Up Exam Policy:

Students are required to take all four modular examinations. Make-up exams are given only under special circumstances. If the student is unable to take a scheduled modular examination, the course director must be notified before the examination. In addition, a written letter of explanation, requesting that the absence from the exam be excused, must be presented before the exam or immediately afterwards. An excused absence is allowable when: 1) the student is hospitalized and/or has been advised by a licensed medical practitioner or hospital not to attend the exam, 2) if there is a documented death of an immediate family member, or 3) the examination falls on a religious holiday. All excused absences will be considered on an individual basis by the course director. With the exception of highly extenuating circumstances, failure to follow the prescribed procedures will result in a grade of zero for that exam. Further information about the policies for attendance and religious holidays for The University of Florida can be found at:

<https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx>.

Assignments:

The course is divided into 4 modules. Each module consists of selected chapters with specific reading assignments. For each module students will: (1) review the learning objectives and corresponding lecture notes; (2) read and complete the assignments as given; (3) complete interactive exercises associated with each module; (4) take online practice examinations; and (5) take the scheduled, online module examination.

Course Schedule:

*all times are eastern standard

Module	Dates	Activity	Reading Assignment	Learning Opportunities
1-1	Aug 21 – 25	Online Lecture: Fertilization & Implantation Online Lecture: Bilaminar & Trilaminar Germ Discs Post-lecture Quiz	Sadler, Chapters 3 & 4	MCQs Due, Friday, 12 Noon
1-2	Aug 28 – Sept 1	Online Lecture: Differentiation of the Trilaminar Germ Disc Online Lecture: Anomalies of the Trilaminar Germ Disc Post-lecture Quiz	Sadler, Chapters 5 & 6	MCQs Due, Friday, 12 Noon
1-3	Sept 4 – Sept 8	Online Lecture: Fetal Development Online Lecture: Placenta Post-lecture Quiz	Sadler, Chapter 8	MCQs Due, Friday, 12 Noon
1-4	Sept 11 – Sept 15	Online Lecture: Development of Skeleton Online Lecture: Anomalies of Skeletal Development	Sadler, Chapter 10	MCQs Due, Friday, 12 Noon

		Post-lecture Quiz		
1-5	Sept 18 – Sept 22	Online Lecture: Muscle & Dermatome Development Online Lecture: Development of the Limbs Post-lecture Quiz	Sadler, Chapters 11 & 12	MCQs Due, Friday, 12 Noon
Module 1 Examination (online) – Opens Friday, Sept 22, 2016				

Module	Dates	Activity	Reading Assignment	Learning Opportunities
2-1	Sept 25 – Sept 29	Online Lecture: Head & Neck: Pharyngeal Arches and Clefts Online Lecture: Head & Neck: Pharyngeal Pouches Post-lecture Quiz	Sadler, Chapter 17	MCQs Due, Friday, 12 Noon
2-2	Oct 2 – Oct 6	Online Lecture: Head & Neck: Face and Palate Online Lecture: Brain & Cranial Nerves Post-lecture Quiz	Sadler, Chapters 17 & 18 1	MCQs Due, Friday, 12 Noon
2-3	Oct 9 – Oct 13	Online Lecture: Spinal Cord & Spinal Nerves Online Lecture: Autonomic Nervous System Post-lecture Quiz	Sadler, Chapter 18	MCQs Due, Friday, 12 Noon
2-4	Oct 16 – Oct 20	Online Lecture: Development of the Eye Online Lecture: Development of the Ear Post-lecture Quiz	Sadler, Chapters 19 & 20	MCQs Due, Friday, 12 Noon
Module 2 Examination (online) – Opens Friday, Oct 20, 2016				

Module	Dates	Activity	Reading Assignment	Learning Opportunities
3-1	Oct 23 – Oct 27	Online Lecture: Development of the Thoracic Cavity Online Lecture: Development of the Lungs Post-lecture Quiz	Sadler, Chapter 14	MCQs Due, Friday, 12 Noon
3-2	Oct 30 – Nov 3	Online Lecture: Anomalies of the Respiratory System Online Lecture: Development of the Heart Post-lecture Quiz	Sadler, Chapters 13 & 14	MCQs Due, Friday, 12 Noon
3-3	Nov 6 – Nov 10	Online Lecture: Development of the Arteries Online Lecture: Development of the Veins & Lymphatics Post-lecture Quiz	Sadler, Chapter 13	MCQs Due, Friday, 12 Noon
3-4	Nov 13 – Nov 17	Online Lecture: Development of the GI System Online Lecture: Anomalies of the Digestive System Post-lecture Quiz	Sadler, Chapter 15	MCQs Due, Friday, 12 Noon
Module 3 Examination (online) – Opens Friday, Nov 17, 2016				

Module	Dates	Activity	Reading Assignment	Learning Opportunities
4-1	Nov 20 – Nov 24	Online Lecture: Development of the Urinary System Online Lecture: Anomalies of the Urinary System Post-lecture Quiz	Sadler, Chapter 16	MCQs Due, Friday, 12 Noon
4-2	Nov 27 – Dec 1	Online Lecture: Development of the Male Reproductive System Online Lecture: Anomalies of the Male Reproductive System Post-lecture Quiz	Sadler, Chapter 16	MCQs Due, Friday, 12 Noon

4-3	Dec 4 - Dec 8	Online Lecture: Development of the Female Reproductive System Online Lecture: Anomalies of the Female Reproductive System Post-lecture Quiz	Sadler, Chapter 16	MCQs Due, Friday, 12 Noon
Module 4 Examination (online) – Opens Friday, Dec 8, 2016				

Attendance:

Requirements for class attendance and make-up exams, assignments, and other work in this course are consistent with university policies that can be found in the online catalog at: <https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx>. A student's overall success, however, is based upon following the course schedule for learning the assigned readings and practicing the recommended exercises. Students are strongly encouraged to develop self-discipline to complete all text readings and online exercises, including the practice examinations.

Academic Integrity:

Please review the University's complete policy regarding academic dishonesty, found online in the student handbook: <http://www.dso.ufl.edu/judicial/pdf/files/handbook2003.pdf>

Students are expected to abide by the University's Academic Honesty Policy, and to adhere to the following pledge:

“We, the member of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity.”

On all work submitted for credit by students at the University of Florida, the following pledge is either required or implied:

“On my honor, I have neither given nor received unauthorized aid in doing this assignment.”

According to the UF Student Guide, Academic dishonesty includes the following:

- Cheating - copying another's work for academic gain.
- Plagiarism - representing another's work as your own.
- Bribery - offering, giving, soliciting, or receiving goods or services of value for academic gain.
- Misrepresentation - altering facts (e.g., signing an absent classmate's name to an attendance sheet).
- Conspiracy - planning with others to commit academic dishonesty.
- Fabrication - making up information to avoid punishment or other difficulty.

Copyright Information:

Please also review the use of copyrighted materials, which can be found on the Health Science Center Library's web page: <http://www.library.health.ufl.edu/services/copyright.htm>

Accommodation Policy:

Students requesting classroom accommodation must first register with the Dean of Students' office, 202 Peabody Hall, 392-1261. The DSO will provide documentation to the student who must then provide this documentation to the instructor.

Online Course Evaluation Process:

Students are expected to provide feedback on the quality of instruction in this course based on 10 criteria. These evaluations are conducted online at <https://evaluations.ufl.edu>. Evaluations are typically open during the last two or three weeks of the semester, but students will be given specific times when they are open. Summary results of these assessments are available to students at <https://evaluations.ufl.edu/results>.