

# Medical Human Embryology

## Course Syllabus

### Summer 2020

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**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 ([rarey@ufl.edu](mailto:rarey@ufl.edu)), Professor, Department of Anatomy & Cell Biology and Otolaryngology. For technical questions or concerns, contact Phi Nguyen ([pnguyen8080@ufl.edu](mailto:pnguyen8080@ufl.edu)).

**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, and overviews).

#### **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, 13<sup>th</sup> or 14<sup>th</sup> 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](mailto: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.

### 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. Exams will be secured and proctored using HonorLock. More about HonorLock: [Getting Started with HonorLock](#); [HonorLock Student Prep](#); [HonorLock Student Privacy](#)

4 module examinations = Total 400 possible points

### Grading Scale

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.

Information on current UF grading policies for assigning grade points can be found at:

<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
1-1	May 11 - 15	Online Lecture: Fertilization & Implantation Online Lecture: Bilaminar & Trilaminar Germ Discs Overview Session Post-lecture Quiz	Sadler, Chapters 3 & 4
1-2	May 18 - 22	Online Lecture: Differentiation of the Trilaminar Germ Disc Online Lecture: Anomalies of the Trilaminar Germ Disc Overview Session Post-lecture Quiz	Sadler, Chapters 5 & 6
1-3	May 25 - 29	Online Lecture: Fetal Development Online Lecture: Placenta Overview Session Post-lecture Quiz	Sadler, Chapter 8
1-4	June 1 - 5	Online Lecture: Development of Skeleton Online Lecture: Anomalies of Skeletal Development Overview Session Post-lecture Quiz	Sadler, Chapter 10
1-5	June 8 - 12	Online Lecture: Muscle & Dermatome Development Online Lecture: Development of the Limbs Overview Session Post-lecture Quiz	Sadler, Chapters 11 & 12
<b>Module 1 Examination (online) – Opens Friday, June 12</b>			

Module	Dates	Activity	Reading Assignment
2-1	June 15 - 19	Online Lecture: Head & Neck: Pharyngeal Arches and Clefts Online Lecture: Head & Neck: Pharyngeal Pouches Overview Session Post-lecture Quiz	Sadler, Chapter 17
2-2	June 22 - 26	Online Lecture: Head & Neck: Face and Palate Online Lecture: Brain & Cranial Nerves Overview Session Post-lecture Quiz	Sadler, Chapters 17 & 18
2-3 &	June 29 – July 3	Online Lecture: Spinal Cord & Spinal Nerves Online Lecture: Autonomic Nervous System	Sadler, Chapter 18

2-4		Overview Session Post-lecture Quiz	
		Online Lecture: Development of the Eye Online Lecture: Development of the Ear Overview Session Post-lecture Quiz	Sadler, Chapters 19 & 20
<b>Module 2 Examination (online) – Opens Friday, July 3</b>			

Module	Dates	Activity	Reading Assignment
3-1	July 6 – 10	Online Lecture: Development of the Thoracic Cavity Online Lecture: Development of the Lungs Overview Session Post-lecture Quiz	Sadler, Chapter 14
3-2	July 13 – 17	Online Lecture: Anomalies of the Respiratory System Online Lecture: Development of the Heart Overview Session Post-lecture Quiz	Sadler, Chapters 13 & 14
3-3 & 3-4	July 20 – 24	Online Lecture: Development of the Arteries Online Lecture: Development of the Veins & Lymphatics Overview Session Post-lecture Quiz	Sadler, Chapter 13
		Online Lecture: Development of the GI System Online Lecture: Anomalies of the Digestive System Overview Session Post-lecture Quiz	Sadler, Chapter 15
<b>Module 3 Examination (online) – Opens Friday, July 24</b>			

Module	Dates	Activity	Reading Assignment
4-1	July 27 – 31	Online Lecture: Development of the Urinary System Online Lecture: Anomalies of the Urinary System Overview Session Post-lecture Quiz	Sadler, Chapter 16
4-2	Aug 3 - 7	Online Lecture: Development of the Male Reproductive System Online Lecture: Anomalies of the Male Reproductive System Overview Session Post-lecture Quiz	Sadler, Chapter 16
4-3	Aug 10 – 14	Online Lecture: Development of the Female Reproductive System Online Lecture: Anomalies of the Female Reproductive System Overview Session Post-lecture Quiz	Sadler, Chapter 16
<b>Module 4 Examination (online) – Opens Friday, August 14</b>			

### 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: <https://regulations.ufl.edu/wp-content/uploads/2018/06/4.040-1.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: <http://guides.uflib.ufl.edu/copyright>

### **Accommodation Policy:**

Students requesting classroom accommodation must first register with the Dean of Students' office, 202 Peabody Hall, 352-392-1261. The DSO will provide documentation to the student who must then provide this documentation to the instructor.

### **Student Support Services**

As a student in a distance learning course or program you have access to the same student support services that on campus students have. For course content questions contact your instructor.

For any technical issues you encounter with your course please contact the UF computing Help Desk at 352-392-4357. For Help Desk hours visit: <http://helpdesk.ufl.edu/>. For a list of additional student support services links and information please visit: <http://www.distance.ufl.edu/student-services>

### **Special Accommodations**

Students requesting disability-related academic accommodations must first register with the Disability Resource Center. <https://disability.ufl.edu/>. The Disability Resource Center will provide documentation to the student who must then provide this documentation to the Instructor when requesting accommodation.

### **Complaints**

Should you have any complaints with your experience in this course please visit <http://www.distance.ufl.edu/student-complaints> to submit a complaint.

**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://ufl.bluera.com/ufl/>. 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>.

**Campus Resources:**

Health and Wellness

U Matter, We Care:

If you or a friend is in distress, please contact [umatter@ufl.edu](mailto:umatter@ufl.edu) or 352 392-1575 so that a team member can reach out to the student.

Counseling and Wellness Center: <http://www.counseling.ufl.edu/cwc/Default.aspx>, 392-1575; and the University Police Department: 392-1111 or 9-1-1 for emergencies.

*Sexual Assault Recovery Services (SARS)*

Student Health Care Center, 392-1161.

*University Police Department*, 392-1111 (or 9-1-1 for emergencies). <http://www.police.ufl.edu/>

Academic Resources

*E-learning technical support*, 352-392-4357 (select option 2) or e-mail to [Learning-support@ufl.edu](mailto:Learning-support@ufl.edu). <https://lss.at.ufl.edu/help.shtml>

*Career Resource Center*, Reitz Union, 392-1601. Career assistance and counseling.

<http://www.crc.ufl.edu/>

*Library Support*, <http://cms.uflib.ufl.edu/ask>. Various ways to receive assistance with respect to using the libraries or finding resources.