

# Medical Anatomy by Diagnostic Imaging

## Course Syllabus

### Fall 2017

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**Course Number:** GMS 5613

**Credit Hours:** Two (2) credit hours

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

#### **Course Description:**

The Medical Anatomy by Diagnostic Imaging will be taught using a systematic approach to visualize the organization of the major structures within the thorax, abdomen, head/neck, and back/limbs regions of the human body. Anatomical imaging will be correlated to transverse, sagittal, and coronal human sections. Medical-based scenarios will be used to promote retention and recall.

#### **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 expected to have already taken GMS5605 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 90 hours of time, or about 6 hours per week, allocated between different course activities (i.e., lectures, quizzes, assignments, etc.).

#### **Course Goals:**

The goals of this course are threefold: (1) to further enhance a foundation of the fundamental concepts and terminology of the anatomy of the human body. (2) to discuss anatomical organization into functional systems related to medical correlations; and (3) to promote critical thinking of the clinical consequences of the anatomical injuries, musculoskeletal disorders, pulmonary diseases, gastrointestinal abnormalities, and renal pathophysiology.

#### **Learning Outcomes:**

Upon completion of this online laboratory course, students will be able to:

1. demonstrate an understanding of the basic anatomical terminology as it relates to its organization to form the functional systems of the human body;
2. describe the anatomical structures of the human body relative to systems, location, and planes of the body by use of radiographic imaging;
3. demonstrate an understanding of the primary functions of the major systems of the human body;
4. develop problem solving skills to describe possible pathologic outcomes of system dysfunction;
5. demonstrate critical thinking skills to evaluate how alterations in anatomical structures and

changes in system function will lead to medical conditions.

### **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. **Anatomy for Diagnostic Imaging 3<sup>rd</sup> Edition, Ryan, Stephanie, et al.**
  - B. **Visible Human Dissector Program, Touch of Life Technologies.** This software program can only be purchased by contacting Linda Rinaldi, Touch of Life Technologies, 305-200-9098, [Linda.Rinaldi@toltech.net](mailto:Linda.Rinaldi@toltech.net)

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

3. Practice on-line quizzes that consist of fill-in-the-blank 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.

### **Syllabus:**

Review the course Syllabus. You can download an Adobe PDF or a Microsoft Word version.

### **Course Participation**

Points may be earned per module by actively posting fill-in-the-blank questions (FITBQs) at the discussion site and the assignment site. Each FITBQ must have the rationales for the correct answer. 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 (3FITBQs × 2pts × 16wks)

### **Examinations and Grading:**

One examination consisting of 50 fill-in-the-blank 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 FITBQs = 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 fill-in-the-blank 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 Fill-in-the-blank 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:

Module	Date	Activity	Reading Assignment	Learning Opportunities
1-1	Aug 21 – 25	Online Lecture: Overview of Imaging Post-lecture Quiz	Ryan, Exercise 1	FITBQs due Friday 12pm EST
1-2	Aug 28 – Sept 1	Online Lecture: Upper Extremity, Osteology, Muscles Post-lecture Quiz	Ryan, Exercise 7	FITBQs due Friday 12pm EST
1-3	Sept 4 – Sept 8	Online Lecture: Upper Extremities, Vessels, Joints Post-lecture Quiz	Ryan, Exercise 7	FITBQs due Friday 12pm EST
1-4	Sept 11 – Sept 15	Online Lecture: Lower Extremities, Osteology, Muscles Post-lecture Quiz	Ryan, Exercise 8	FITBQs due Friday 12pm EST
1-5	Sept 18 – Sept 22	Online Lecture: Lower Extremities, Vessels, Joints Post-lecture Quiz	Ryan, Exercise 8	FITBQs due Friday 12pm EST
<b>Module 1 Examination (online) – Opens Friday, Sept 22, 2017</b>				

Module	Date	Activity	Reading Assignment	Learning Opportunities
2-1	Sept 25 – Sept 29	Online Lecture: Head and Neck Post-lecture Quiz	Ryan, Exercise 1	FITBQs due Friday 12pm EST
2-2	Oct 2 – Oct 6	Online Lecture: Brain, Meninges Post-lecture Quiz	Ryan, Exercise 2	FITBQs due Friday 12pm EST
2-3	Oct 9 – Oct 13	Online Lecture: Spinal Cord Post-lecture Quiz	Ryan, Exercise 3	FITBQs due Friday 12pm EST
2-4	Oct 16 – Oct 20	Online Lecture: Spine Post-lecture Quiz	Ryan, Exercise 3	FITBQs due Friday 12pm EST
<b>Module 2 Examination (online) – Opens Friday, Oct 20, 2017</b>				

Module	Date	Activity	Reading Assignment	Learning Opportunities
3-1	Oct 23 – Oct 27	Online Lecture: Respiratory System Post-lecture Quiz	Ryan, Exercise 4	FITBQs due Friday 12pm EST
3-2	Oct 30 – Nov 3	Online Lecture: Heart Post-lecture Quiz	Ryan, Exercise 4	FITBQs due Friday 12pm EST
3-3	Nov 6 – Nov 10	Online Lecture: Vessels Post-lecture Quiz	Ryan, Exercise 4	FITBQs due Friday 12pm EST
3-4	Nov 13 – Nov 17	Online Lecture: Abdomen Post-lecture Quiz	Ryan, Exercise 5	FITBQs due Friday 12pm EST
<b>Module 3 Examination (online) – Opens Friday, Nov 17, 2017</b>				

Module	Dates	Activity	Reading Assignment	Learning Opportunities
4-1	Nov 20 – Nov 24	Online Lecture: Pelvis, Male Post-lecture Quiz	Ryan, Exercise 6	FITBQs due Friday 12pm EST
4-2	Nov 27 – Dec 1	Online Lecture: Pelvis, Female Post-lecture Quiz	Ryan, Exercise 6	FITBQs due Friday 12pm EST
4-3	Dec 4 – Dec 8	Online Lecture: Breast Post-lecture Quiz	Ryan, Exercise 9	FITBQs due Friday 12pm EST
<b>Module 4 Examination (online) – Opens Friday, Dec 8, 2017</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: <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>.