## Biology 3446-002/003, Human Anatomy Lab, Fall 2013 Monday & Wednesday 2:00-4:50 pm, LS 437

<u>Lab Instructor:</u> Daren Card

Office: Engineering and Research Building (ERB) 444

Office Hours: MW 5:00-6:30pm or by appointment

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<u>Course administrator:</u> Dr. Malgosia Wilk, M.D., Ph.D. (M.A. Wilk-Blaszczak)

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#### **Required Textbook:**

No formal laboratory manual or text is required.

The text you will use for lecture will also be used heavily in lab. Refer to the lecture syllabus for details on the course textbook.

**Course Content:** Study of human anatomical structures from the cellular through organismal levels. Attention will be paid to the interrelationships between anatomical structure and function and their relation to health. This course will give students extensive knowledge of the basic principles of structure, function and functional integration of human tissues and organs.

**Student Learning Outcomes:** Upon completion of this course students will meet the following learning objectives:

- 1. Master the anatomical knowledge and vocabulary necessary to effectively communicate with colleagues and professionals in fields that require knowledge of human anatomy (i.e., human healthcare).
- 2. Identify and describe the anatomy, basic functions, and common pathologies of various human body tissues, structures, organs, and systems.
- 3. Develop a three-dimensional understanding of the human body, which will allow for anatomy to be diagnosed from diagrams, models, and photographs portraying the human body in several different perspectives.
- 4. Learn the basic principles behind various popular medicinal imaging techniques and technology and acquire a basic understanding in how to view and interpret their output.
- 5. Develop critical thinking and problem solving skills that are vital for any student pursuing a career in a field that uses human anatomy and in the biological sciences in general.

### Major lab assignments and examinations:

**Attendance:** Although attendance is not calculated into your course grade it is highly suggested that you attend all lab sessions in order to stay abreast of the course material. Additionally, you **MUST** attend the lab section you have enrolled in and switching between sections without prior permission is strictly prohibited. The lab will be intensive and hands-on so any absences will likely have extremely detrimental effects on comprehension of the material. I reserve the right to test on any and all material mentioned during lab.

#### **Grading:**

<u>Lab 50% of final grade - 4</u> practical exams (worth 12.5 each) Lecture 50% of final grade Grades: A = 89.5-100; B = 79.5-89.49; C = 69.5-79.49; D = 59.5-69.49; F = below 59.49.

**Expectations for Out-of-Class Study**: Beyond the time required to attend each class meeting, students enrolled in this course should expect to spend at least an additional 9 hours per week of out-of-class time in course-related activities. As a rule, for every credit hour earned, a student should spend 3 hours per week working outside of class. Hence, a 3-credit course will have a minimum expectation of 9 hours of out-of-class work. Human Anatomy is a junior/senior level class that requires a great level of preparation. Mastery of both lecture and lab material requires a great deal of time and effort. In addition, I teach this class with modern pedagogy methods, including active learning and quite a dose of independent study. This is especially true during lab sessions and students will be required to take an active roll in their education.

Make-up Practicals: Practicals are in class so make-up exams will be given only in exceptional circumstances.

**Grade Grievances:** Students are expected to keep track of their performance throughout the semester and seek guidance from available sources (including the instructor and teaching assistant) if their performance drops below satisfactory levels.

Incomplete grades may be assigned for a course if, in the opinion of the instructor, there are extenuating documented circumstances which prevent the student from completing the required work. The incomplete must be removed by the end of the final examination period of the following semester, excluding the summer session, for the student to receive credit for the course. If the incomplete is not removed during the allotted time it will revert automatically to an F.

**Drop Policy:** Students may drop or swap (adding and dropping a class concurrently) classes through self-service in MyMav from the beginning of the registration period through the late registration period. After the late registration period, students must see their academic advisor to drop a class or withdraw. Undeclared students must see an advisor in the University Advising Center. Drops can continue through a point two-thirds of the way through the term or session. It is the student's responsibility to officially withdraw if they do not plan to attend after registering. **Students will not be automatically dropped for non-attendance**. Repayment of certain types of financial aid administered through the University may be required as the result of dropping classes or withdrawing. For more information, contact the Office of Financial Aid and Scholarships (http://wweb.uta.edu/aao/fao/).

Americans with Disabilities Act: The University of Texas at Arlington is on record as being committed to both the spirit and letter of all federal equal opportunity legislation, including the *Americans with Disabilities Act (ADA)*. All instructors at UT Arlington are required by law to provide "reasonable accommodations" to students with disabilities, so as not to discriminate on the basis of that disability. Any student requiring an accommodation for this course must provide the instructor with official documentation in the form of a letter certified by the staff in the Office for Students with Disabilities, University Hall 102. Only those students who have officially documented a need for an accommodation will have their request honored. Information regarding diagnostic criteria and policies for obtaining disability-based academic accommodations can be found at <a href="https://www.uta.edu/disability">www.uta.edu/disability</a> or by calling the Office for Students with Disabilities at (817) 272-3364.

Academic Integrity: Students enrolled in this course are expected to adhere to the UT Arlington Honor Code:

I pledge, on my honor, to uphold UT Arlington's tradition of academic integrity, a tradition that values hard work and honest effort in the pursuit of academic excellence.

I promise that I will submit only work that I personally create or contribute to group collaborations, and I will appropriately reference any work from other sources. I will follow the highest standards of integrity and uphold the spirit of the Honor Code.

UT Arlington faculty members may employ the Honor Code as they see fit in their courses, including (but not limited to) having students acknowledge the honor code as part of an examination or requiring students to incorporate the honor code into any work submitted. Per UT System *Regents' Rule* 50101, §2.2, suspected violations of university's standards for academic integrity (including the Honor Code) will be referred to the Office of Student Conduct. Violators will be disciplined in accordance with University policy, which may result in the student's suspension or expulsion from the University.

**Student Support Services**: UT Arlington provides a variety of resources and programs designed to help students develop academic skills, deal with personal situations, and better understand concepts and information related to their courses. Resources include tutoring, major-based learning centers, developmental education, advising and mentoring, personal counseling, and federally funded programs. For individualized referrals, students may visit the reception desk at University College (Ransom Hall), call the Maverick Resource Hotline at 817-272-6107, send a message to resources@uta.edu, or view the information at www.uta.edu/resources.

Lab Safety Training: Students registered for this course must complete all required lab safety training prior to entering the lab and undertaking any activities. Once completed, Lab Safety Training is valid for the remainder of the same academic year (i.e., through the following August) and must be completed anew in subsequent years. There are no exceptions to this University policy. Failure to complete the required training will preclude participation in any lab activities, including those for which a grade is assigned.

**Electronic Communication:** UT Arlington has adopted MavMail as its official means to communicate with students about important deadlines and events, as well as to transact university-related business regarding financial aid, tuition, grades, graduation, etc. All students are assigned a MavMail account and are responsible for checking the inbox regularly. There is no additional charge to students for using this account, which remains active even after graduation. Information about activating and using MavMail is available at <a href="http://www.uta.edu/oit/cs/email/mavmail.php">http://www.uta.edu/oit/cs/email/mavmail.php</a>.

**Student Feedback Survey:** At the end of each term, students enrolled in classes categorized as "lecture," "seminar," or "laboratory" shall be directed to complete an online Student Feedback Survey (SFS). Instructions on how to access the SFS for this course will be sent directly to each student through MavMail approximately 10 days before the end of the term. Each student's feedback enters the SFS database anonymously and is aggregated with that of other students enrolled in the course. UT Arlington's effort to solicit, gather, tabulate, and publish student feedback is required by state law; students are strongly urged to participate. For more information, visit <a href="http://www.uta.edu/sfs">http://www.uta.edu/sfs</a>.

**Final Review Week:** A period of five class days prior to the first day of final examinations in the long sessions shall be designated as Final Review Week. The purpose of this week is to allow students sufficient time to prepare for final examinations. During this week, there shall be no scheduled activities such as required field trips or performances; and no instructor shall assign any themes, research problems or exercises of similar scope that have a completion date during or following this week *unless specified in the class syllabus*. During Final Review Week, an instructor shall not give any examinations constituting 10% or more of the final grade, except makeup tests and laboratory examinations. In addition, no instructor shall give any portion of the final examination during Final Review Week. During this week, classes are held as scheduled. In addition, instructors

are not required to limit content to topics that have been previously covered; they may introduce new concepts as appropriate.

Emergency Exit Procedures: Should we experience an emergency event that requires us to vacate the building, students should exit the room and move toward the nearest exit, Students in the front half of the lecture hall will exit to the front doors on their left, then will make an immediate left and exit out the building. Students in the rear half of the lecture hall will exit out the rear door(s) and take an immediate left and exit out of the building. When exiting the building during an emergency, one should never take an elevator but should use the stairwells. Faculty members and instructional staff will assist students in selecting the safest route for evacuation and will make arrangements to assist handicapped individuals.

#### **General Lab Rules**

1) Students registered for this course must complete the University's required "Lab Safety Training" prior to entering the lab and undertaking any activities. Students will be notified via MavMail when their online training is available. Once notified, students should complete the required module(s) as soon as possible, but no later than their first lab meeting. Until all required Lab Safety Training is completed, a student will not be given access to lab facilities, will not be able to participate in any lab activities, and will earn a grade of zero for any uncompleted work.

Once completed, Lab Safety Training is valid for the remainder of the same academic year (i.e., through next August) for all courses that include a lab. If a student enrolls in a lab course in a subsequent academic year, he/she must complete the required training again.

To access your training, you must use your UT Arlington NetID and password. It is recommended that you complete the training using either Internet Explorer or Firefox. Technical questions about the training website should be directed to the University Compliance Services training helpline, 817-272 -5100, or to compliance@uta.edu.

- 2) Although attendance is not annotated, it is highly suggested that you attend your scheduled lab time. This laboratory course is fast paced and self-driven; it will be very difficult to keep up if you are not present.
- 3) Student discussion and collaboration is encouraged during regular (non-practical) lab days.
- 4) Closed toe shoes are required for admittance to lab as dictated in the laboratory safety course that you are required to take prior to admittance in the lab.
- 5) Horse-play and other obvious inappropriate behaviors will not be tolerated and students engaged in such acts will be required to leave the lab.
- 6) Lab starts promptly at 2 pm on your section's appointed day; you are adults and are expected to be punctual. If you do arrive late to lab enter quietly and respectful so as to not disrupt others from learning. Additionally, you must attend lab with the section you enrolled in and switching sections without prior consent is prohibited.

Note: Students should review the lecture/lab schedule. If you foresee a legitimate issue that would prevent you from being present in lab/lecture on an identified test/practical date as dictated herein, inform the course instructor and TA's by the end of the third week of classes (Friday, Sept. 6, 2013) and we will do our best to accommodate your schedule. An example of a legitimate issue would be that a test/ practical falls on a religious holiday that you recognize. All cases will be dealt with individually and course instructor will determine the final decision. Previous travel plans or family gatherings, weddings and such do not qualify.

#### **Lab Practical Guidelines**

- 1) You must take your practical on the scheduled date with your assigned section unless previous arrangements have been approved by the instructor.
- 2) Practicals will begin promptly at 2:00p on the scheduled day, it is suggested that you arrive early to the lab so you will not be late. Students that arrive after the practical has begun will not be admitted to the lab. Doing so would interrupt other students who were on time and would add stress to an already stressful situation. Once the lab practical is complete any student that was late will be allowed to enter the lab to conduct the remainder of the scheduled work in the laboratory that day. Students that fall into this category will have an opportunity to present their circumstances that caused them to be late for lab. Based on these circumstances the course instructor will decide if the student will be allowed to make up the practical.
- 3) All backpacks, notebooks, multimedia devices, etc. will be turned off and placed in the center or periphery of the room out of sight and reach. Usage of these items during a lab practical will be considered academic dishonesty and will be reported with the Biology department and the University accordingly.

4) The practical will be set-up with stations throughout the laboratory. Each station will have 2 questions. You will each begin at a separate station and end at that same station once the lab practical is complete. The first round you will be given 30 seconds per station and then the proctor will announce for the class to move to the next station. The second round you will be given 15 seconds at each station. Once the students have completed the second round the practical answer sheets will be taken up.

For example a 20 station practical containing 40 questions (two questions per station) should take:

20 x 30 seconds = 600 seconds / 60 seconds = 10 minutes 20 x 15 seconds = 300 seconds / 60 seconds = <u>5 minutes</u> Total = 15 minutes

\* Add ~ 3 minutes for station transitions during the practical

5) Students are not to speak, signal, and otherwise communicate with other students during the practical. Such practice is considered academic dishonesty and will be reported with the Biology department and the university accordingly.

# HUMAN ANATOMY LAB, BIOL 3446-002/003, FALL 2013 SCHEDULE AS THE INSTRUCTOR FOR THIS COURSE, I RESERVE THE RIGHT TO ADJUST THIS SCHEDULE IN ANY WAY THAT SERVES THE EDUCATIONAL NEEDS OF THE STUDENTS ENROLLED IN THIS COURSE.

Week	Date	Day	Lab Topic	Lab Notes
1	8/23/13	FRI		
2	8/26/13	MON	Anatomical Terminology	
	8/28/13	WED	Integumentary & Select Skeletal Structures	
	8/30/13	FRI		
3	9/2/13	MON	No Lab Scheduled Due to Labor Day	
	9/4/13	WED		
	9/6/13	FRI		
4	9/9/13	MON	Surface and cross sectional anatomy	Emphasis on medical
	9/11/13	WED		imaging techniques
	9/13/13	FRI		
5	9/16/13	MON	Lab Practical 1 (2:00 - 3:00pm)	Material from Weeks
	9/18/13	WED	Select Muscle groups (3:00 - 4:50pm)	2-4
	9/20/13	FRI		
6	9/23/13	MON	Nervous System: Spinal Cord, Spinal Nerves,	
	9/25/13	WED	& Brain	
	9/27/13	FRI		
7	9/30/13	MON	Nervous System: Cranial Nerves, Species	
	10/2/13	WED	Senses	
	10/4/13	FRI		
8	10/7/13	MON	Endocrine Structures	
	10/9/13	WED		
	10/11/13	FRI		
9	10/14/13	MON	Lab Practical 2 (2:00 - 3:00pm)	Material from Weeks
	10/16/20	WED	Cardiovascular: arteries & blood vessels (3:00 - 4:50pm)	5-8
	10/18/13	FRI		
10	10/21/13	MON	Cardiovascular system: Heart, Internal vs.	
	10/23/13	WED	external respiration	
	10/25/13	FRI		
11	10/28/13	MON	Respiratory System	
	10/30/13	WED		
	11/1/13	FRI		
12	11/4/13	MON	Lab Practical 3 (2:00 - 3:00pm)	Material from Weeks
	11/6/13	WED	Digestive System (3:00 - 4:50pm)	9-11
	11/8/13	FRI		
13	11/11/13	MON	Urinary System: Male and Female	
	11/13/13	WED		
	11/15/13	FRI		

14	11/18/13	MON	Reproductive System: Male and Female	
	11/20/13	WED		
	11/22/13	FRI		
15	11/25/13	MON	Lab Practical 4	Material from Weeks
	11/27/13	WED		12-14
	11/29/13	FRI		
16	12/2/13	MON		
	12/4/13	WED		
17	12/9/13	MON		