

Semester & Year:	Fall 2020
Course ID and Section Number:	BIOL-6-E9875 Human Anatomy
Instructor's Name:	Richard Wright
Day/Time:	Lecture: Online Videos Lab Discussion: Tuesday and Thursday at 6pm on ZOOM
Number of Credits/Units:	4
Contact Information:	Office Hours: By appointment Email: richard-wright@redwoods.edu
Textbook Information (Optional)	Title & Edition <u>Human Anatomy</u> , (any edition)
	Author McKinley and O'Loughlin
	ISBN 0073525731
Course Description (as described in course outline): An introduction to human anatomy. The course includes the study of the gross and microscopic structure of all organ systems of the human body with emphasis on the relationship between structure and function. Laboratory work includes virtual microscopy and digital dissections.	
Student Learning Outcomes (as described in course outline): <ol style="list-style-type: none"> 1. Describe key structural features of different human cell and major tissue types 2. Identify and describe the anatomy of the systems of the human body. 3. Relate structure and function at the cellular through system levels of organization of human body systems. 4. Describe structural or anatomical changes that occur in disease, injury or aging of the human body systems. 	
Special accommodations: College of the Redwoods complies with the Americans with Disabilities Act in making reasonable accommodations for qualified students with disabilities. Please present your accommodation request at least one week before the first test so that necessary arrangements can be made. No last-minute arrangements or post-test adjustments will be made. If you have a disability or believe you might benefit from disability related services and may need accommodations, please see me or contact Disabled Students Programs and Services . Students may make requests for alternative media by contacting DSPS at 707-476-4280.	
Academic Support: Academic support is available at Counseling and Advising and includes academic advising and educational planning, Academic Support Center for tutoring and proctored tests, and Extended Opportunity Programs & Services , for eligible students, with advising, assistance, tutoring, and more.	
Academic Honesty: In the academic community, the high value placed on truth implies a corresponding intolerance of scholastic dishonesty. In cases involving academic dishonesty, determination of the grade and of the student's status in the course is left primarily to the discretion of the faculty member. In such cases, where the instructor determines that a student has demonstrated academic dishonesty, the student may receive a failing grade for the assignment and/or exam and may be reported to the Chief Student Services Officer or designee. The Student Code of Conduct (AP 5500) is available on the College of the Redwoods website at: www.redwoods.edu/district/board/new/chapter5/documents/AP5500StudentConductCodeandDisciplinaryProceduresrev1.pdf Additional information about the rights and responsibilities of students, Board policies, and administrative procedures is located in the college catalog and on the College of the Redwoods website.	
Disruptive Classroom Behavior: Student behavior or speech that disrupts the instructional setting will not be tolerated. Disruptive conduct may include, but is not limited to: unwarranted interruptions; failure to adhere to instructor's directions; vulgar or obscene language; slurs or other forms of intimidation; and physically or verbally abusive behavior. In such cases where the instructor determines that a student has disrupted the educational process a disruptive student may be temporarily removed from class. In addition, he or she may be reported to the Chief Student Services Officer or designee. The Student Code of Conduct (AP 5500) is available on the College of the Redwoods website at: www.redwoods.edu/district/board/new/chapter5/documents/AP5500StudentConductCodeandDisciplinaryProceduresrev1.pdf	

Additional information about the rights and responsibilities of students, Board policies, and administrative procedures is located in the college catalog and on the College of the Redwoods website.

College of the Redwoods is committed to equal opportunity in employment, admission to the college, and in the conduct of all of its programs and activities.

Other Business

- **The CR Nursing Program’s “Repeatability Rule”:** Students must earn a cumulative 2.5 GPA in BIOL-2, BIOL-6, and BIOL-7 in order to apply to the CR nursing program. If you pass these classes with C’s, you will not earn a 2.5 GPA. Additionally, if you pass a class with a C, you cannot retake it at CR to improve your grade. The only way you can retake a class at CR is if you fail it (with a D or F). Keep this in mind when deciding whether or not to drop one of these 3 biology courses.
- **Students must have at least a cumulative 2.5 GPA** for all their college classes.
- The prerequisites for BIOL-7 (Human Physiology) include: BIOL-6, and CHEM-2 (or 1A). You cannot register for BIOL-7 unless you’ve taken AND PASSED the prerequisites.
- Before you can register for BIOL-2 (Microbiology), you must be taking (or have taken) CHEM-2 or CHEM-1A.
- While CHEM-2 is required for the previous courses, CHEM-1A will also meet the requirement. However, you must have taken either high school chemistry OR CHEM-100 if you want to register for CHEM-1A.
- If you have special needs regarding this course, please let me know as soon as possible so we can make any necessary arrangements. If you have a verified disability and need accommodation, or suspect you have a disability and wish to be evaluated for eligibility, you can **contact the DSPS office (476-4280)** regarding your specific concerns.

Required Materials

It is my opinion that the cost of materials for a course should NOT exceed the cost of the course itself. That is why there is a tremendous amount of flexibility on the required materials lists for my courses. If you have questions or want to check a book you already have, let me know. In most cases, what you have will work perfectly!

1. (Optional) textbook: McKinley and O’Loughlin, Human Anatomy, (any edition).
Note: 20 copies of this text are available in the library for semester checkout. First come-first served...so get over there if you want to borrow copies of the required texts for free.
OR
Anatomy and Physiology. OpenStax College. This book is available **free online** in Canvas and at http://cnx.org/contents/14fb4ad7-39a1-4eee-ab6e-3ef2482e3e22/Anatomy_&_Physiology. Or purchase a print version from Amazon for about \$50. http://www.amazon.com/Anatomy-Physiology-OpenStax-College/dp/1938168135/ref=aag_m_pw_dp?ie=UTF8&m=A1540JPBBI3F06
2. Leboffe, Photographic Atlas of Histology (2e) OR Eroschenko, di Fiore’s Atlas of Histology, (9th or higher edition)
3. **Course copy packet (which is available FREE in Canvas)**
4. Three ring binder (or other notebook) to hold your lecture, discussion, and lab notes.

Other items you might find helpful

- Colored pencils or pens for note taking
- 3x5" index cards (any color) for lab and class activities.
- Krieger, A Visual Analogy Guide to Anatomy and Physiology. This coloring activity book is useful for both anatomy and physiology (Biol 7).
- Van De Graaff, A Photographic Atlas for the Anatomy and Physiology Laboratory. This book of pictures might be useful for studying on your own time.
- Anatomy and Physiology Revealed: This is a pretty cool computer program to examine dead people and their parts.

Active Learning: The Flipped Class

Learning happens when your brain changes. If your brain does not actually change the way neurons communicate with each other, then you are not learning anything. And the best way to **change your brain** is to **DO SOMETHING**. This is the fundamental assumption that informs the methods, or pedagogy, I use in my classes.

Research about how people learn (or how they change their brains!) overwhelmingly indicates that the most successful teaching methods get students to be **active participants** in the learning process. Collaboration and problem solving are just a few ways to engage you more fully in your own learning. To facilitate active learning, my job moves away from

passive delivery of content (usually via lecture) and toward the creation of engaging activities that motivate YOU to take charge of, and fully participate in, your own educational processes.

My efforts to increase active learning in my classroom involve “The FLIP.” In a flipped course, students acquire lecture content on their own time, before coming to class. In my class, this is done through video lectures. Then, during online group discussions, you’ll participate in activities to ensure you truly understand the content. These activities are very fluid and often involve lengthy Q&A sessions guided by YOU. This enables much more efficient use of my expertise (as a biologist AND educator) and encourages a more individualized and interactive use of class time.

The flipped class requires you to change how you think about learning. Instead of receiving information passively during class, you receive the same information ON YOUR OWN TIME. This gives you the space to really process the information during class time while receiving targeted feedback from ME! The amount of time required for my flipped classes is no different than the time required for my unflipped classes; for each hour of class, you are still expected to put in 2-3 extra hours, studying. The use of that time simply becomes more efficient. Human Anatomy is an incredibly challenging class. The flip (combined with your discipline and commitment) will help you maximize your learning.

Learning is Social

One of the best ways to become an active learner is to TALK about what you are learning. In this class, you are expected to TALK to your classmates. The more you engage with each other, the more you engage with the content. In a class like this, the more people you are connected to, the more opportunities you will have to really cement the material into your new neural networks! So please don't be shy. Form study groups and lecture groups and lab groups and find people to work with. You'll be happy you did.

Learning is a PROCESS

Every single class I teach is HARD. There is a TON of new content and this includes not only new vocabulary, but also new CONCEPTS. My goal is that you TRULY LEARN the material, and this requires you to not only memorize new terms, but also THINK about what those terms MEAN. But here is the awesome part. LEARNING IS A PROCESS. My courses are set up to offer plenty of opportunities to capitalize on learning opportunities and IMPROVE YOUR UNDERSTANDING OVER TIME (and consequently, your grade). Please embrace a GROWTH MINDSET in this class. Take feedback and grades as opportunities to improve yourself. Set out to truly UNDERSTAND the material, and your grade will reflect that understanding.

CANVAS

All content is available to you in Canvas, the official Learning Management System (LMS) of College of the Redwoods.

1. To log into Canvas, go to <https://redwoods.instructure.com>. Your login is the same as your webadvisor login. Your password is your 6 digit birth date. For tech help, email its@redwoods.edu or call 476-4160.
2. You will use Canvas EVERY DAY. You can access an incredible number of resources through Canvas. Take advantage!
3. All content is organized in weekly MODULES. Each module has the same structure.
4. Each week’s module will be available at least 1 week before it is “due.” If there is content you are looking for but can’t find, PLEASE email me ASAP. There are probably other folks looking for the same thing (and even though I am really amazing, I’m not perfect (YET) and I sometimes forget to publish things).
5. There are also many resources available in FILES. For example, you can find:
 - a. FREE digital anatomy tools and applications
 - b. FREE review and quiz materials
 - c. All course packets as they become available

A Sample CANVAS Module

Week # (Please consult the course schedule for the specific dates associated with each week)

MONDAY

Video lecture (Click on this to watch the YouTube video lecture inside a Canvas discussion. Also found in this page is a list of possibly helpful tools for the day, as well as the day’s packet, including lecture notes and lab handout.

Upload your lecture notes from the video lecture. Why? It’s imperative with a fast-paced class like this that you don’t fall behind and try to “cram” the material into one or two days per week. This class is a FULLTIME job! Full-time jobs aren’t done in a day. These notes show me that you’re keeping up with the class content AND it gives me another way to award points other than quizzes and tests.

Join us for an online discussion Monday, Wednesday, and Friday from 2-3pm. We'll review the materials that you took notes on from the video lecture and work on thought provoking anatomy questions (that you might see on your quizzes and tests, wink!)

Daily Quiz: It is what it sounds like, a quiz that you take after each instructional day (3 per week). Quizzes will be available online the day of instruction and will remain available until the next instructional day.

Daily Discussion Post: This is an opportunity to discuss what you've learned or what you're struggling with. Full details on posting requirements and etiquette are listed on the assignment page. Additionally, you'll also need to respond to a fellow student's post to receive full credit. Please keep your responses respectful and thoughtful. Simply responding, "Cool story, Bro!" will not cut it!

WEDNESDAY / FRIDAY (*same as Monday, but with the next day's content*)

Online (Flipped) Video Lectures

You **MUST** watch the video lectures before coming to class. If you do not watch the videos, you are basically CHOOSING to skip class. Now...if you feel you can pass the class while skipping class every day, more power to you (although you are probably wrong). But please make an informed decision about this, as it is always highly inadvisable to skip lectures for the courses you take.

You will be able to access the video lectures in several ways. Choose the way that works best for you.

- **Canvas modules:** Most of the time, the lecture videos will be directly embedded into a Canvas discussion forum, so if you have questions about the video, you can ask them immediately.
- **YouTube:** If for some reason you cannot access the video lecture in Canvas, you can ALWAYS go to YouTube and watch the lectures there. YouTube lectures are close-captioned and can be watched on almost any device. Each lecture clip is found on YouTube as a separate video, which makes finding the correct ones rather tricky if you don't navigate there from Canvas, or locate the playlists found on my YouTube channel:
<https://www.youtube.com/channel/UC-yQpFb89u7qb-duWMZvoog>

Assessment

Your performance in the course will be assessed based on your execution of the following requirements:

Lecture Notes (10%)

Awesome! You get points for doing something that you SHOULD be doing anyway (i.e. taking good notes on your video lectures). You'll be required to turn these in BEFORE the next day's lecture. For example, lecture notes for Tuesday's lecture can be turned in anytime before our 6pm class on Tuesday. Lectures notes turned in late will NOT be accepted under any circumstance other than medical or family emergency.

Lab Assignments(10%)

Even though this class is online, we will have a virtual lab each instructional day (i.e. 3 times per week). Half your lab points will come from completing a lab packet (which can be downloaded in the daily module) and resubmitting it on Canvas. The other half of your lab points will come from completing a virtual lab assignment through the Visible Body online application. Instructions on how to login and utilize Visible Body are listed on the daily module.

Daily Discussion) (5%)

This is an opportunity to apply what you've learned to a real-life scenario. Students will be expected to write a post about a disease relevant to that day's topics. This **MUST** be in your own words. Additionally, you'll also need to respond to a fellow student's post to receive full credit. Please keep your responses respectful and thoughtful. Simply responding, "Cool story, Bro!" will not cut it!

Daily Quizzes (20%)

These quizzes will cover topics from the lecture videos, labs activities, and our online discussions. You will have multiple attempts, unlimited time, and they are open note. For this reason, **there are no make-up quizzes of any kind!** At the end of the semester, your lowest quiz score will be dropped. If you missed a quiz, this will count as your lowest score.

Exams (55%)

There will be four online proctored exams throughout the semester that cover material from both lecture and lab. You will need to set up the Proctorio application before you'll be able to attempt the exam. If this is not possible, you will be responsible for setting up another option with CR's testing center or a private proctoring service. **There are no make-up exams of any kind.**

***All assessment criteria and percentages are subject to change at the discretion of your instructor.

Advice from Richard and Riggs

1. Study anatomy every single day. Some suggestions...
 - a. Watch the video lectures and TAKE GOOD NOTES.
 - b. Review your notes shortly after finishing, 3 hours after finishing, and then 3 days after. This is a proven method for retaining complex information long-term.
 - c. Explain anatomy topics to your dog, friends, kids, and neighbors.
 - d. Make note cards, and carry them around with you, everywhere you go.
 - e. Draw lots of pictures and hang them on the fridge.
2. **Be conscious during video lectures. Make lists of your questions and bring them to the discussion.**
3. Stay ahead of the game. Don't miss lectures or labs. Also utilize all the study aids offered through Canvas.
4. Form study groups with your classmates (online or over the phone).
5. Make up practice exams based on the discussion questions. Share them with your classmates!
6. If the going gets tough, READ one of the optional textbooks!
7. And if the going is still tough, buckle down and repeat after me: "I can do anything for 8 weeks." You CAN do this class. All you need to do is find the time to make it happen.

Advice from previous students

In an anonymous survey, Human Anatomy students offered advice for future students taking a flipped class from me. Here are some of their suggestions:

- This class it is not a game; you can't get behind, there is NO time to get behind. Spend as much time as possible learning the material and if you do this you will pass. It requires dedication and lots of time.
- Watch videos and prepare prior to class. There is no time to slack off, period!
- Be realistic about how much time you have available to dedicate to this class. It takes a lot of time.
- Don't take it- YOU DO NOT KNOW WHAT ARE YOU GETTING YOUR SELF IN TO!!! Hahaha!!! I will probably advise to start watching the lectures on youtube weeks before class actually begins. If you have a job better ask for some less days because you will need all the time you can to study. Also try your best to make it to lab if Wendy is having some open lab, this is the time were you get a little one on one time with her and that helps a lot.
- Have your coffee ready!!!!!!
- Ask questions, even when you think they are silly.
- Do not get behind! Watch every lecture before class. Don't miss any class. Don't freak out too much.
- Don't take any other classes while taking this class. Especially if you are working too. Don't stress. Draw and label pictures, don't just printing the pictures online and then label them.
- Flip your content on the weekend before any open labs. Don't show up without getting your stuff done, or you WILL FAIL!!!! :)
- Be prepared to be confused, don't have a job, kids, dogs, cats, beer, girlfriends/boyfriends, responsibilities, other classes. Have nothing going on!!!!!!!!!!!!!! You have to sell your soul to this class.
- Watch all the lectures and really keep up with studying because its A LOT of content!
- Always watch the lecture with the lab notes and add in your own summaries, reminders, abbreviations. Go through the lab structures with the text before going to lab.
- WATCH THE LECTURES AND LOCATE ALL STRUCTURES BEFORE CLASS.

Onward! This will be fun!

Everything in this syllabus is subject to change...but I'll let you know if it does!