Syllabus for: BIOL-6: Human Anatomy – Hybrid

Semester & Year:	Spring 2024
Course ID and Section Number:	BIOL-6-E5838 Human Anatomy
Instructor's Name:	Gabriel Holtski, ND
Day/Time:	**Lecture:** Online (Canvas) **Lab:** Section E5838 in person M/W 8:20AM - 11:30AM
Number of Credits/Units:	4
Contact Information:	**Email**: gabriel-holtski@redwoods.edu
Textbook Information (Optional)	**Title & Edition** Human Anatomy, (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):

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.

Accessibility: Students will have access to online course materials that comply with the Americans with Disabilities Act of 1990 (ADA), Section 508 of the Rehabilitation Act of 1973, and College of the Redwoods policies. Students who discover access issues with this class should contact the instructor.
College of the Redwoods is also committed to making reasonable accommodations for qualified students with disabilities. If you have a disability or believe you might benefit from disability-related services and accommodations, please contact your instructor or Disability Services and Programs for Students (DSPS). Students may make requests for alternative media by contacting DSPS based on their campus location:

- Eureka: 707-476-4280, student services building, 1st floor
- Del Norte: 707-465-2324, main building near library
- Klamath-Trinity: 530-625-4821 Ext 103

During COVID19, approved accommodations for distance education classes will be emailed to the instructor by DSPS. In the case of face to face instruction, please present your written accommodation request to your instructor at least one week before the first test so that necessary arrangements can be made. Last-minute arrangements or post-test adjustments cannot usually be accommodated.

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.

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. 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.
2. (OPTIONAL) Leboffe, Photographic Atlas of Histology (2e) OR Eroschenko, di Fiore's Atlas of Histology, (9th or higher edition)
3. Lecture and lab packets (which are 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 try really hard, I'm not perfect 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.

Lab time will typically begin with a brief overview of the day's material, as well as time for any additional questions from the lecture content. Make sure to watch the lecture BEFORE coming to lab! This requires some advanced preparation, but will make your time in class vastly more valuable.

Daily Quiz: It is what it sounds like, a quiz that you take after each instructional day (2 per week). Quizzes will be available online the day of instruction and will remain available until the end of the week. Please do not ask for extensions.

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

Assessments

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

Lecture Notes and Discussions (15%)

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. This is also an opportunity to discuss the class topics, ask questions, and share ideas or resources. You will be expected to write at least one post relevant to that day's topics and/or respond to a fellow student's post in order to receive credit. This MUST be in your own words. Please keep this respectful and thoughtful. Simply responding, "Cool story, Bro" will not cut it!

Lab Assignments(15%)

Your lab points will come from completing a lab packet (which can be downloaded in the daily module) and resubmitting it on Canvas.

Daily Quizzes (10%)

These quizzes will cover topics from the lecture videos as well as lab activities. 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 (60%)

There will be four exams throughout the semester that cover material from both lecture and lab. These will take place during lab hours as outlined in the course schedule **There are no make-up exams of any kind**. That being said, there will be an opportunity for an *optional* cumulative 5th exam during finals week, which can replace the lowest grade from any one of the quarterly exams taken previously the semester (essentially, a redemption opportunity if you miss or bomb an earlier exam).

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

Grades

The purpose of grading is to get an idea of how well you are mastering the material in this course. They help you pinpoint troublesome topics that might trip you up in future courses. There are a billion grades in the gradebook, which means you have a billion opportunities to earn points and improve your grade. Everything in the gradebook is driven by your performance on the assessments in the course…and nothing else. In other words, it doesn't matter how much I like you…the grades you EARN on assignments will translate into the grade you EARN in the class.

I will use the following scale to determine the letter grade earned in this class:

100.0 – 93.00% = A	89.99 – 87.00% = B+	79.99 – 77.00% = C+	69.99 – 60.00% = D
92.99 – 90.00% = A-	86.99 – 83.00% = B	76.99 – 70.00% = C	< 59.99% = F
	82.99 – 80.00% = B-		

Extra Credit Policy

None. Enough said. Please don't ask for extra credit assignments or make-up work, neither will be provided. This is to ensure fairness to all students AND to preserve my precious sanity. There is ONE exception to this rule. If a student competes EVERY assignment (lecture notes uploads, labs, daily quizzes, etc) I will grant a one-time grade bump of no more than 1% to a student's final grade. All other requests for bonus points and/or grade bumps will result in immediate disciplinary sarcasm and dangerous levels of eye rolling.

Communication

Here are some guidelines to follow:

- **Might your question benefit other people in the class?** Then post it to the discussion board in the Canvas Modules. If you are concerned that I might forget to check the board (this is a legit concern), feel free to email me a reminder (gabriel-holtski@redwoods.edu)
- **Is your message private?** Send me an email or a message through Canvas (click on INBOX in the left menu)
- **Always be polite.** I work hard for you and the quickest way to NOT get your needs met is to be disrespectful. HOW you ask for something can determine the answer.

Academic Integrity

There is ZERO tolerance for any form of academic dishonesty, including cheating, helping others to cheat, falsification of data, or plagiarism. Academic dishonesty in any form WILL result in a formal report and details will be submitted to the appropriate authorities. Refer to the Student Code of Conduct and Disciplinary Procedures at http://www.redwoods.edu/District/Board/New/Chapter5/Ap5500.pdf for more information about CR policies.

Cheating is wrong and offensive and I take it very very personally. Be respectful of yourself, your classmates, and ME…and take responsibility for the grade you earn. **Don't cheat, it's NEVER worth it!!!**

Final Thoughts

Human anatomy is an extremely challenging course. There is a lot of new information. It can be a bit overwhelming, if you aren't on top of it. To help you with this challenge, I have compiled a list of suggestions that will help you learn the content. Please keep in mind that this list, while not exhaustive, is also not realistic. In other words, you probably won't have time to carry out every single suggestion. So choose from the list of suggestions below and get organized. Identify the grade you'd like to earn in this class and make a clear plan for the semester that will enable you to meet your goal. **Stick to your plan**, maximize your efficiency, and make the most of your time in this course. Anatomy is a difficult course, but the material is fascinating and easily applicable to your life and the careers you are interested in. The effort you make toward true understanding will be totally worth it.

Here are a couple resources that might be helpful:

- 20 minute video entitled: "Study Smarter, Not Harder: Ten Tips for Studying Physiology" http://www.screencast.com/t/l8BCXSlH66bH
- 4 week long class (FREE) through Coursera: "Learning How to Learn" https://www.coursera.org/learn/learning-how-to-learn/outline

Some advice on how to succeed in this class:

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.

Additional advice from previous students:

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

- This class 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.
- 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 print 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!