

Biology 287: Essentials of Human Anatomy Syllabus – Spring 2022

Course Overview:

<i>Spring Times:</i>	Lecture:	CBB 131	MWF	1:00 p.m. – 1:50 p.m.
	Lab 1:	CBB 320	W	9:00 a.m. – 11:50 a.m.

Exams: Exams take place Wednesday 2/23, 3/16, 4/20, & 5/18. **All exams / finals take place in the lab!**

Instructor: Lindsay R. Dresang, Ph.D.
Office: CBB 313
Office hours: Tuesdays and Thursdays @ 11:00 a.m. (in person or via zoom),
or schedule an appointment / drop by the lab or my office
E-mail: LDresang@uwsp.edu
Phone: not currently available

F.Y.I.: There are three anatomy classes offered by the Biology department. The highest level, BIOL 487–Survey of Human Dissection, is only offered to students who have completed BIO 387–Human Anatomy with a grade of B+ or better, or for those students who have completed BIOL 385–Human Physiology or BIOL 287 (this course) with a grade of A- or better *and* an essay written by the student as to why the course would be of benefit, as well as a recommendation from the instructor. BIOL 287 teaches anatomy system-by-system, whereas BIOL 387 teaches anatomy regionally and to a much greater depth (with many more required structures). If you aren't sure which course(s) you should take, please contact me sooner rather than later, or consult your advisor.

Formal Course Description: (Prereq.: BIOL 101, 110, or 160) Examine human anatomy using models, diagrams, and digital media. Provides a foundational introduction to human structure and function. Recommended for students interested in physical education, nursing, health promotion and wellness, or for students planning to take BIOL 387 who have minimal background knowledge in human anatomy. Does not count towards the Biology major or minor.

Course Objectives: In this class you will:

- 1) Learn and apply the language(s) of anatomy, including how to define spatial relationships between different structures in anatomical position;
- 2) Identify major anatomical structures within each major body system;
- 3) Recognize how each major organ's structure, histology, and/or overall position is related to its function; and
- 4) Apply structure and function relationships in various clinically-relevant pathologies, common injuries, sources of pain and damage, or related pertinent contexts.

Required Materials: Have these materials available for class every day.

Course Packet “BIO 287: Human Anatomy” by your instructor, available at the bookstore (ZERO profits are made from the sale of this course packet per regulation under copyright fair use agreements; its price is for printing and shelving)

Human Anatomy by Marieb, Wilhelm, and Mallat, 8th Ed.

If you have a copy with a different edition, I have not yet noticed a difference in any of the pages per reading assignments outlined in the course packet...you should still be OK.

Both the textbook and the documents on canvas are your primary course resources. I will be drawing on blank paper for most recordings; while you don't need to match my drawings, it is useful for you to still take notes and make some rough attempts at sketching yourself, as it improves retention.

The study of anatomy requires your outside commitment to the material *in addition* to what is covered in class. If you are used to reading content from textbooks without taking notes, and not preparing for exams by reviewing your own notes and those you take in class, you are in for a rude awakening. Human Anatomy requires learning many terms in Latin & Greek, as well as recognizing functions related to form. What might work for studying in other classes just might not work for this one.

Your greatest resource is each other. While I recognize that studying with your peers will be a challenge while also social distancing, consider setting up zoom meetings with others and participate in digital tutoring opportunities. Alternatively, see if you can attend my digital office hours with a group of other students so that you can meet other students and learn from questions that others may have had. The course is never curved, so you are not in competition with each other. **There may also be some OPTIONAL open lab sessions available this term, but they will require attendance and proper lab attire (including face masks).**

Highly Suggested Resources:

A Visual Analogy Guide to Human Anatomy by Krieger, 4th Ed.

I used to require it, but decided to just make it optional. It is really, really useful!

A Photographic Atlas for Anatomy & Physiology by Hebert, Heisler, Krabbenhoft, Malakhova, and Chinn, 1st

Ed. (the only reason this resource is not required is that it is a paper, unbound copy that does not lend well to the text rental system)

Optional Resources: There are many different reference textbooks, or even digital applications, which you may find useful while studying this topic. The only app I have tested out is called **3D4Medical**, but I haven't used it often. Apps can really get expensive, so I'd recommend skipping them unless you're *really* into 3D-interaction software. Here are some resources which are available at the bookstore:

An Atlas of Human Anatomy by Netter, 5th Ed., but ANY edition will do fine (this supplemental atlas is used frequently in many medical/health programs; it comprehensively highlights structures in a particular view, which can be intimidating; even the coloring book is fairly useful)

Lippencott Williams & Wilkens Atlas of Anatomy by Tank and Gest, 1st Ed. (an alternate supplemental atlas which focuses on a select group of structures in a particular view at a time; it is less comprehensive than the Netter series, but that can have its advantages at times)

The Anatomy Coloring Book by Kapit and Elson 4th Ed. (somewhere between a coloring book and a full textbook; it is helpful if you really love to draw/fill in drawings to learn; others may find the resource way too dense)

Class Recordings: For class recordings I will discuss materials from the textbook, course packet word documents / powerpoints / websites on Canvas, and provide demonstrations with anatomical models, X-rays, cadaveric images, and other materials. Most recordings are delivered via Kaltura Capture with two screens using a picture-in-picture format. This format allows me to draw under the document camera or demonstrate structures on the models used for your exams while simultaneously being able to jump to the digital content.

Course Requirements and Grading:

Letter Grades (rounded at the hundredths):

	A = 100-94%	A- = 93.9-90%
B+ = 89.9-86%	B = 85.9-82%	B- = 81.9-78%
C+ = 77.9-74%	C = 73.9-70%	C- = 69.9-66%
D+ = 65.9-62%	D = 61.9-60%	F ≤ 59.9%

Point Distribution (pts = points):

Your grade will be based out of **400 points**; it will be *possible to earn 440 points* in this class. Here are your possible itemized points:

Graded Item	“Out of”	(Available)	Frequency	Base Pts	(Possible)
Exams	@ ~75 pts	(~81 pts)	× 4		
<hr/>					
<u>Conceptual questions using diagrams, matching, multiple-multiple choice, etc.</u>					
	@ ~37.5 pts	(~40.5 pts)	× 4	= 150 pts	(162 pts)
<u>Practical-style fill-in-the-blank questions</u>					
	@ ~37.5 pts	(~40.5 pts)	× 4	= 150 pts	(162 pts)
Quizzes	@ ~12.5 pts	(same)	× 8	= 100 pts	(100 pts)
Worksheets	@ #-6 to 0 pts	(~1pt each)	× ~10-ish	= 0 pts	(8 to -60 pts)
Outside Extra Credit	*optional*	(4 pts each)	× 2	= 0 pts	(8 pts)
Final				400 pts	(440 pts)

**Individual quizzes will vary in points and question number by topic; some quizzes may be merged per unit. However, for any given unit there will be ~25pts assigned to quizzes. #Unattempted / incomplete worksheets can result in a loss of 6 points per worksheet!!!*

Exams: Each exam is split in half points-wise, though it is taken all as one combined exam per unit. Exam content may build on prior content, but other than that the last exam is not a comprehensive final.

Practical: One component will involve the identification of structures using an image of an anatomical model, X-ray, or other medium to be reported in a fill-in-the-blank format. For each questions you may be required to list the feature *AND* the organ, or a function, or some other multifaceted aspect of that structure. On one hand, that might seem like there are more places to get mixed up...on the other hand, that means there is a TON of partial credit possible! There may be multiple terms for a particular structure, or multiple spellings...then again, there might not. A single letter difference may drastically change the meaning of a term (like abduct and adduct, which are opposing terms!). Therefore, your answers must be spelled correctly for credit. I can't give you a hard and fast rule regarding how many letter differences will equate to a certain amount of partial credit, or no credit at all. It comes down to a case-by-case scenario. My judgement calls are final.

Scantron-Conceptual: The other component will involve your recall, application, evaluation, etc. in a format which can be assessed using matching questions (either using terms, descriptions, or diagrams), ordinal questions (placing things in order), multiple-multiple choice questions (you select the number of correct options based on a number requested), or other format. You might still need to recognize structures practically on occasion.

Quizzes: Most quiz questions will involve a combination of identifications (especially using the online model/X-ray library), translations, position relationships, function assignments, etc. forms of questions. Most questions will match those you may encounter on exams...they may even be recycled for exams.

Warning: The autograded score after every quiz will likely be the minimum obtainable score. The canvas software is very picky! Any differences in plural/singular form, capitalization, term sequencing, or even spacing relative to the way I registered acceptable answers on my end will result in an auto-grade of zero for that question. I add back part of the points later on if there was an error, and potentially all of the points if there was just a simple case of accidentally using ALL CAPS with a correct entry. I will need to manually check all practical answers, so you will need patience before I announce corrected grades.

Since I will need to review all practical-style questions manual, you will only be allowed two attempts on each quiz. I will keep the higher of the two scores. **You CAN use your notes AND work in groups when completing quizzes!!!** I encourage you to collaborate with others (via zoom, for instance) and discuss which resources you used to answer different questions. These assignments are intended to best prepare you for the exams and learn which topics may need your further attention. However, you cannot submit a group quiz; all students must login and submit their own quiz responses. Questions will randomize options; unfortunately, this means some drop-down menus with letters A-Z might not be arranged in that order...sorry, I can't change that.

Worksheets: Worksheets usually involve an activity assigned in lab/lecture (group or individual) which gets you out of the habit of only looking at the pictures, and ensures an immersed study of anatomical structures. Examples include identification exercises, clinical application problem solving, pathway recognition, etc. Worksheets are graded more heavily on their completeness and attempt to answer all questions, not *necessarily* accuracy. They are intended to provide focus to a particular set of structures tackled in lab/lecture. Too often students review material in their books and leave early, or figure they will master as much as they can on just the upper limb bones and then have very little time to try and cram in lower limb bones. I am trying to break these habits.

If you miss an activities-based worksheet due to quarantine, illness, or another acceptable excuse (Dr. apt., sick child, military training day, a family wedding, you know, stuff you can't exactly plan/control the dates) it will be possible to make up the activity either in an online format or a pre-arranged alternate lab. Please let me know if you need to attend a different lab section. **#Failure to complete a worksheet results in a deduction of up to 6 points!** Select questions may be graded for correctness; they will not be highlighted for you to tell which require accuracy.

Extra Credit Write-ups/Talks/Activities: It is possible for you to earn outside extra credit, up to a maximum of 8 points. Specific details will be posted on Canvas.

Requests for Accommodations / Altered Schedules / Altered Content:

In compliance with the Americans with Disabilities Act (ADA), I will make every effort to honor requests for reasonable accommodations made by individuals with disabilities. If you have a disability and require accommodations, please register with the Disability and Assistive Technology Center (6th floor Learning Resource Center in the Library) and *let me know as soon as possible*. Requests for accommodations, including university-sanctioned extra-curricular event conflicts, can be responded to most effectively if I receive the requests early. Examples of accommodations include alternate exam durations, assignment make-ups, etc. Such requests are confidential. More information about ADA at UWSP can be found on the human resources webpage <https://www.uwsp.edu/hr/Pages/Affirmative%20Action/ADA.aspx>.

If you are colorblind, even red-green colorblind, it does help to bring this information to my attention. I will try and avoid conflicting color combinations and change up the types of writing utensils I use to still distinguish different content I am highlighting, but you might occasionally need a re-print of a note page. Just let me know if you do. If you are hard of hearing, UWSP has resources on campus to assist with closed-captioning, signing, etc., but do still let me know. If you require any clarification from me or altered note formats from me directly, also let me know.

UWSP Community Bill of Rights and Responsibilities:

UWSP values a safe, honest, respectful, and inviting learning environment. A set of expectations for students and instructors, known as Student Rights and Responsibilities, is intended to help establish a positive living and learning environment. For more information go to the webpage for the Dean of Students, which outlines expectations for a respectful learning environment, as well as the an overview on school policies regarding academic misconduct. The *minimum* penalty for violating this policy is a recorded zero for the assignment in question. The Dean of Students webpage is found at: <https://www.uwsp.edu/dos/Pages/default.aspx>.

In addition to these standard words on rights and responsibilities, it is prudent to formally discuss class conduct. Specific topics in this class are of a sensitive nature. Please be conscientious of what you say/post and be respectful of each other. I want to maintain a comfortable learning environment, and also prepare you for appropriate conduct in your future health professions (certain conduct could get you kicked out of a graduate program, for instance). Inappropriate conduct in this class (including in online discussion threads) will get you kicked off of class access without re-entry until appropriate conduct is sincerely assured and provided in writing (the length of such writings will be dependent upon the extent of misconduct). **PLEASE, DO NOT TEST ME ON THIS POLICY.**

Additional food-for-thought: when you are studying several topics in this class, it is prudent to use terminology "as scientific as possible" when conducting searches (your search may still return more than you bargained for). This point is also a good reminder that certain topics that you study maybe shouldn't be reviewed in public areas...most passers-by at a local coffee shop do not want to see cadaver images. Finally, any images taken in lab of the various materials *may* be subject to copyright. Posting images on an academic course page restricted to the instructors/students/TAs/tutors permitted to use these models is allowed under fair use laws, but doing the same on a public, shared site outside of class does not fall under fair use (in other words, think before you post, or better yet, don't post at all).