



Biology 1030: Human Anatomy and Physiology 1
 section 3
 3 units
 Bio 1030L: Human Anatomy and Physiology 1 lab
 sections 3A, 3B, 3C
 1 unit

Fall 2023

<p>Lecture time & location: Latter 1 MWF 11 am - 11:55 am * Note that Dr. Flietstra's A&P class meets at the same time in Latter 101. Choi's classroom is "Latter 1" which is downstairs.</p>	<p>Instructor title and name: Dr. Yoojin Choi</p>
<p>Laboratory time & location: Sator 117 section 3A: Thu 7:45 am – 10:45 am section 3B: Thu 10:55 am – 1:55 pm section 3C: Thu 2:30 pm – 5:30 pm</p>	<p>Phone: (619) 849-2654</p>
<p>Final Exam: Fri Dec 15 10:30 am 2023-24 Final Exam Schedule</p>	<p>Email: ychoi@pointloma.edu</p>
<p>Office location and hours: Rohr Science 188</p> <ul style="list-style-type: none"> • I have set aside Wed 1-2:30pm and Fri 8:30-9:30 am to sit in my office and wait for you to drop in (for any duration). But if my door is open at other times, you can come in and chat anytime. • I want you to succeed in this course! Take ownership of your learning, and I will help to the best of my ability. If you have questions, don't hesitate to shoot me an email. I can email back or set up a meeting – either Zoom or in person. 	

PLNU Mission

To Teach ~ To Shape ~ To Send

Point Loma Nazarene University exists to provide higher education in a vital Christian community where minds are engaged and challenged, character is modeled and formed, and service is an expression of faith. Being of Wesleyan heritage, we strive to be a learning community where grace is foundational, truth is pursued, and holiness is a way of life.

Course Description: Bio 1030

The first course of a two-semester sequence which examines the human body from an integrated perspective. Topics include an introduction to chemistry and cell function, tissue types, skeletal system, muscular system, and nervous system. 3 units

Co-requisite: Bio 1030L

This anatomy and physiology laboratory is a co-requisite for Bio 1030. Students enrolled in Bio 1030 must be enrolled in Bio 1030L, and vice versa. If Bio 1030 is dropped, Bio 1030L must also be dropped. Offered every year. Letter graded. Your grade for Bio 1030 and Bio 1030L will be calculated together and the same grade applied to both; see [Assessment and Grading](#) below. 1 unit

Pre-requisite or Co-requisite: Che 1003 or Che 1052

The [college catalog](#) specifically states that a **pre-** or **co-requisite** for this course is one semester of college level chemistry (such as **Che 1003** or **Che 1052**). If you are unsure about whether you meet this requirement, please talk to me. Students who do not have evidence of prior completion or current enrollment in an appropriate chemistry class will be de-enrolled from this course.

Course Learning Outcomes

1. You will be able to describe cell structure and function, and explain the underlying chemical principles that determine cellular anatomy and physiology.
2. You will be able to identify body tissues, their functions, and common locations.
3. You will be able to identify the bones of the human body and their major structures.
4. You will be able to identify key muscles of the human and of the cat; and the attachments, innervation, and associated movements of the human muscles.
5. You will understand the basic anatomy and physiology of bones, skeletal muscle, and the central nervous system.
6. You will be able to describe the symptoms and mechanisms of representative diseases and injuries, and explain how such pathophysiology relates to normal anatomy and physiology.

Required Texts and Materials

For each lecture there is an assigned reading (see [Tentative Lecture Schedule](#) below). Read both before and after the lecture. The following textbook is used both semesters of the Human Anatomy and Physiology sequence (Bio 1030 & 1040); the dissection kit is also used both semesters.

- Betts, DeSaix and Johnson, *Anatomy and Physiology* (2nd ed.), OpenStax, 2022. ISBN-13: 978-1-71149-406-7
<https://openstax.org/details/books/anatomy-and-physiology-2e>

You should download the free PDF on your devices now. Do not count on online access during class.

Or you can get a hardcopy through the website, Amazon, or the bookstore. Many prefer the hardcopy particularly in lab.

The following materials are required for work in various laboratories:

- Dissecting kit (available at bookstore)
- Safety glasses (also used in chemistry classes)
- Old shirt or lab coat for dissecting work

All course materials are posted on Canvas, and grades are kept on Canvas. Check Canvas and PLNU email at least daily.

Recommended Materials

These two items are for sale at the bookstore and may be helpful this semester and next semester.

- Krieger, *A Visual Analogy Guide to Human Anatomy & Physiology*, Morton, 2013
- Hansen, *Netter's Anatomy Coloring Book*, Elsevier, 2010

[Visible Body Courseware](#): used in the College of Health Sciences. Visible Body is a for-pay subscription service. Use the code **PLNU-ALI** for a discounted rate of \$39.99 per year. (\$52 for 2yr access, and \$72 for 3yr access) If you find it useful and/or your future courses require it, you can extend your subscription at the end of the first year.

Spiritual Care

Please be aware PLNU strives to be a place where you grow as whole persons. To this end, we provide resources for our students to encounter God and grow in their Christian faith. If you have questions or prayer requests and you feel comfortable talking to me, you are welcome to do so. "Office Hours" are drop-in time for students to have conversations about all topics, not just academics.

If you have questions, a desire to meet with the chaplain or have prayer requests you can also contact the [Office of Spiritual Life and Formation](#).

Language and Belonging

PLNU faculty are committed to helping create a safe and hospitable learning environment for all students. As Christian scholars we are keenly aware of the power of language and believe in treating others with dignity. As such, it is important that our language be equitable, inclusive, and prejudice free. Inclusive/Bias-free language is the standard outlined by all major academic style guides, including MLA and APA, and it is the expected norm in university-level work. Good writing and speaking do not use unsubstantiated or irrelevant generalizations about personal qualities such as age, disability, economic class, ethnicity, marital status, parentage, political or religious beliefs, race, gender, sex, or sexual orientation. Inclusive language also avoids using stereotypes or terminology that demeans persons or groups based on age, disability, class, ethnicity, gender, race, language, or national origin. Respectful use of language is particularly important when

referring to those outside of the religious and lifestyle commitments of those in the PLNU community. By working toward precision and clarity of language, we mark ourselves as serious and respectful scholars, and we model the Christ-like quality of hospitality. You may report an incident(s) using the [Bias Incident Reporting Form](#).

Dr. Choi's Teaching and Learning Philosophy

You are the main player in your learning, not a spectator of my teaching. The responsibility to learn is yours. For learning to happen, you must take an active role in the process. However, you are not alone in the process: I am here to work with you. Extending the sports analogy, I'm your coach and your classmates are teammates, and we learn together in community.

You are expected to come to class prepared, which requires you to read, study, and learn *before* class. Of course, you're expected to keep reading, studying, and practicing after class, too. There will be a lot of interactive learning in both lecture and lab. I expect you to pull your weight and collaborate actively. Let us all help in each other's learning.

Learning Opportunities and Expectations

Reading Before Class:

Reading the assigned pages in the textbook is essential for success in this course. The assigned pages are noted in the [class schedule](#), and you should read the pages before class to give you context for the lecture and boost your confidence for classroom participation. This will ensure you are giving yourself the best chance for success in this course. Also, note on the Lecture Schedule below that there are things you need to learn on your own outside of class time.

- *Helpful Tip: To prioritize more important content, refer to the lecture outline as you read.*

Taking Notes in Class:

Lecture outlines are provided on Canvas. Print, bring to class in an organized manner (e.g. three-ring binder), and take notes. For each class I will also make the PowerPoint presentation available on Canvas so you can have it in color as well. I will try my best to video-capture every lecture and upload the recordings on Canvas, as a studying tool for everyone and in case someone has to miss class.

- *Helpful Tip: Use different colored pens to take notes. E.g. pre-class skimming notes in pencil vs in-class notes in black pen; main theme in red vs other notes in black; your questions in blue vs my comments in black.*

Studying:

It is highly recommended that you study at least 2-3 hours for every credit hour. Since Bio 1030 is a four-credit course, you should be studying 8-12 hours every single week—and not just the week prior to an exam. This studying should also be spread out during each week, not simply occurring before quizzes.

Note that “studying” is a separate section from “reading.” Studying needs to be **active**. If you need to re-read the textbook, of course you should. However, *simply* re-reading the textbook or watching recorded lectures is passive. Make sure that you not only **memorize** but that you also **understand** the material. For example, many students' favorite technique for active memorizing is making and using flashcards. Make them yourself. Test yourself often. Shuffle the cards. Sort into 'done' vs 'work on' piles. Have someone else test you with their flashcards.

To understand the material, model in-class activities of quizzing each other and teaching each other; write your understanding of a topic and swap it with a classmate to see how it can be phrased differently; make a practice quiz and swap it with a classmate for authentic practice; etc. Note that the best active studying involves working together in community.

Additional Tools for Success:

Weekly Review Session will be offered by an experienced peer leader. Ryan Learning Center also provides individual and group tutoring. Peer tutors have been assigned to this course. More information will be coming from me and the library.

Assessment and Grading

Based on 1250 total points

Your grade for Bio 1030 and Bio 1030L will be calculated together and the same grade will be applied to both.

Lecture points: **865 points**

- 1) Participation and Collaboration (40 points in person + 10 points online) = 50 points
- 2) In-class quizzes (15 points/quiz x 6 quizzes) = 90 points
- 3) Non-cumulative exams (100 points/exam x 5 exams) = 500 points
- 4) Cumulative Final Exam = 150 points
- 5) various small assignments = 75 points

Laboratory points: **385 points**

- 1) 10 lab quizzes (10 points/quiz + 10 points) = 110 points
- 2) 4 lab worksheets (25 points/worksheet x 4 worksheets) = 100 points
- 3) Skeleton Practical exam = 75 points
- 4) Muscle Practical exam = 100 points

Your letter grade will be determined from your cumulative percent score as follows. There is no “rounding up”:

A:	93.0—100%	B-:	80.0—82.99	D+:	67.0—69.99
A-:	90.0—92.99	C+:	77.0—79.99	D:	63.0—66.99
B+:	87.0—89.99	C:	73.0—76.99	D-:	60.0—62.99
B:	83.0—86.99	C-:	70.0—72.99	F:	≤ 59.99

- To model professionalism, I strive for honest and timely feedback, and transparency and fairness in grading. Grades on individual assessments are posted on Canvas Grades. Please ask about grades as soon as you have a question, rather than waiting until the end of the semester. The course follows a straightforward point system, so there should be no need for “negotiating” over letter grades at the end of the semester.
- Records are kept for one year from the end of the semester.

Lecture Grading (865 points total)

1) Participation and Collaboration:

We are expected to respect each other, have an openness of mind toward new points of view, and have curiosity for learning new material. You are expected to participate actively in all class activities in collaboration with classmates from diverse backgrounds.

Your active participation in class is critical to our collective understanding and growth. Make sure you prepare for every class in order to participate well. Simply attending class does not earn you 5 out of 5 points for a given recorded class. See [Appendix 1](#): Participation and Collaboration Rubric (last page) to understand how you will be graded. Note that you can come to class and still get a 2 or 3 out of 5 points.

Participation and Collaboration will be recorded every class, then eight random records will be entered into Canvas Grades at the end of the semester (5 pts x 8 = 40 pts). If you are absent for a class meeting that happens to be selected, a zero will be entered. If the absence is excused due an official University obligation (requiring prior notification from the administration and the student), you will receive a 3 out of 5. You can make up the two points by participating on Canvas; see below. There are no other forms of excused absences. I would appreciate a courtesy email about absences for illness, doctor’s appointments, family circumstances, etc; but you are not required to, and these are not considered excused absences. You can make up the five points by participating on Canvas; see below.

In addition to in-person participation and collaboration, *online* participation and collaboration is *required* (10pts). Post questions and answer other students' questions on the Canvas Discussion "Muddiest Point" (link on Canvas). The minimum requirement is that everyone posts at least one question (must be done by Week 8) and one answer (anytime before the Final Exam). See "Muddiest Point" on Canvas for further instructions and grading guide.

There are several reasons for including online participation, which I implemented long before COVID. Having to think about what to ask has learning benefits, so everyone is required to ask at least one question (first one is worth 4 pts; see Canvas for details). Explaining your answers to each other's questions in writing is a great practice for quizzes and exams, so everyone is required to answer at least once (first one is worth 4 pts; see Canvas for details). You should not use artificial intelligence (like ChatGPT) on these explanations, because that defeats the purpose of having you think about the answer. The online student-to-student conversation has been very useful for many past students who listed a variety of reasons (e.g. get extra help with questions, feel like they're not alone in not knowing something, use it as a study guide). I also respect individual differences in comfort levels about speaking up in person, so if you choose to not speak up in front of the whole class in person, you can participate online instead.

Extra online participation will make up for in-person participation for students who do not want to speak in class or must miss some classes. If you earned anything less than 5pts from in-class Participation and Collaboration on a given day for any reason, you can earn back those points by participating online. Everyone is required to participate at a minimum level, and above that, active online participation will make up for low in-person participation. For example, if you choose not to speak up but pay good attention in class, you will probably end up with a 32 out of 40 in the in-person category. If you want to bring that up to a 40 out of 40, you can be more active on Muddiest Point with questions and/or answers. See Canvas for more details.

I hope you can tell from the large amount of information in this section that I truly care about active participation from individual students and about collaboration between students. You are an active agent in your own learning, and we are learning together in community.

2) In-class Quizzes:

Research shows that frequent quizzing is an effective learning tool. Every Friday unless there is an exam, you will take a 15-point quiz. Multiple-choice questions and short-answer questions will be given, in the same style as exams. Don't worry if you happen to miss a quiz or do poorly on a couple; only your six best scores out of nine total quizzes will count toward the semester grade. Consider the rest as additional practice. Quizzes cannot be made up. Quizzes and exams are taken on paper.

3) Lecture Exams:

A non-cumulative "unit" exam worth 100 points will be given for each of the five Topics (listed and color coded in [Lecture Schedule](#) below). The dates on which exams will be administered are indicated in the schedule. Exams can only be rescheduled for an official University obligation (requiring prior notification from the administration and the student).

Each exam has 40 multiple-choice questions (80 pts total) and 20 points worth of short answer/essay questions.

4) Final Exam:

The Final Exam is cumulative and worth 150 points (which is only 12% of the final grade). According to the University's [2023-24 Final Exam Schedule](#), ours is scheduled for Friday, December 15 at 10:30am.

5) Small Assignments:

Several small assignments (each one 5 to 10 points) will be given throughout the semester as encouragement to read before class, for formative assessment, and to provide constructive feedback. They may include at-home and open-book pre-class reading quizzes on Canvas, worksheets, etc. Most assignments are due on Canvas. Late work is accepted, but Canvas is set up to take 10% off for being late, starting from the second it is late and taking 10% off more every 24 hours. More information given on Canvas.

Lab Grading (385 points total) and other information about lab

Attendance:

Attendance in laboratory is mandatory. You are expected to stay for the **entire scheduled laboratory period**. If you do not attend or fail to complete the scheduled laboratory, you will not receive any credit for that particular lab. This penalty also applies to the dissection labs; individuals who do not fully participate in the dissection labs will have 25 points subtracted from their lab practical score for each laboratory dissection period missed. If participation in a school-sponsored activity or illness prevents you from attending your scheduled lab section, you *might* be able to attend another lab section during that same week. Such a switch requires **prior** permission (because I may need to ask another instructor to fit you in) and should not be viewed as an automatic privilege.

Textbook and Lecture Notes:

Lab exercises and write-up often refer to material found in your textbook and in the lecture notes. Both sources, therefore, should be brought to lab each week.

1) Laboratory Quizzes:

As indicated on the [Laboratory Schedule](#) below, quizzes will be administered at the start of most labs. The topic of the quiz is indicated in the schedule. If you are late for lab, you will have less or no time to take the quiz. Missed quizzes cannot be made up.

2) Laboratory Worksheets:

Prepare for the laboratory by reading the materials ahead of time. Laboratory PDFs containing background information, procedures, and worksheet will be posted on Canvas at least one week prior to the lab. Canvas posting will specify which pages to print and bring to each lab.

The 25-point worksheet will be due at the end of the lab period. You **cannot** submit a worksheet for a lab you did not attend. It is important that you recognize that these laboratory write-ups must **reflect your own work**, and not someone else's. You should discuss the assignment with your classmates, but you cannot copy their answers. Students who hand in identical answers will not be given any credit for that assignment. You must submit all your lab worksheets on a full-size printed handout.

3) Skeleton Practical:

A "practical" is an exam in which you demonstrate knowledge by doing something. In the skeletal system practical, you will write down names of bones and bone structures while moving around the lab. More information will be given in lab prior to the practical. The Skeleton Practical is given during the normal lab time and is worth 75 points.

4) Muscle Practical:

The muscular system practical is scheduled for all laboratory sections (regardless of normally scheduled day and time) on **Tuesday, November 21**. The Muscle Practical will be administered in one-hour blocks during school hours. There will be a sign-up process prior to the exam. Note that Nov 21 is two days before Thanksgiving. PLNU classes are held through Nov 21, and Thanksgiving Break begins on Wednesday, Nov 22. The muscle laboratory practical is worth 100 points.

Laboratory Safety and Clean-Up:

- **No food (including gum) or water in the laboratory.**
- **Keep all backpacks and other personal materials completely under the lab bench, such that no one could possibly trip over these items. (The cubbies are for cat storage.)**
- **Enclosed shoes are mandatory. Open-toed shoes, clogs, or sandals are not permitted. You also cannot wear shoes that expose the top of the foot.**

- **On dissection days:**
 - **Mandatory: Safety glasses**
 - Wear a lab coat or old clothing that you do not mind getting dirty. Tie long hair and remove or tuck in any loose-hanging accessories (e.g. lanyard, necklace, hoodie strings, bracelets). Bring a writing utensil that you don't mind getting dirty from the cat preservatives.
- At the end of each laboratory period make sure that your table and the equipment you've used have been **cleaned and returned** to its appropriate place. Points are deducted for messes not cleaned up.

Laptop Policy:

On occasion, we will use laptop computers in the lab. In the classroom, however, laptops interfere with your education and distract your neighbors. Numerous studies (some highlighted here) have confirmed that classroom laptop use can be detrimental to learning. Students do not learn as well when they type their notes as opposed to hand-writing. Easy access to the internet is distracting. For these reasons, I do not allow the use of laptops, phones, or other internet-accessing electronic devices in the classroom. An exception to the "no device" rule is if you use the inking function on your tablet device.

1. Laptops and other electronic devices enable more than just note-taking, introducing numerous distractions (web-surfing, homework for other classes, social media, etc.) for you and your neighbors. You may think that you can multitask, but studies show you can't.
http://www.slate.com/articles/health_and_science/science/2013/05/multitasking_while_studying_divided_attention_and_technological_gadgets.html
2. As already mentioned, using your laptop in class is bad for those around you. Your classmates' grades can also suffer due to the distracting pull of the laptop.
<https://www.sciencedirect.com/science/article/pii/S0360131512002254>
3. Writing is a more effective way of learning material than is typing. With typing, each letter is pretty much the same thing for the brain. Writing, however, uses different muscle groups with each word and encourages the brain to think during the writing process. Typing may be easy and fast, but by making the brain passive, it discourages learning.
<https://www.npr.org/2016/04/17/474525392/attention-students-put-your-laptops-away>
4. Using electronic devices in class also impairs long-term retention, with one study suggesting that cellphone use in class can lower one's grade by half a letter grade.
<https://www.insidehighered.com/news/2018/07/27/class-cellphone-and-laptop-use-lowers-exam-scores-new-study-shows>

Content Warning

I acknowledge that each of you comes to PLNU with your own unique life experiences. This contributes to the way you perceive various types of information. In Bio 1030 all the class content, including that which may be intellectually or emotionally challenging, has been intentionally curated to achieve the learning goals for this course. The decision to include such material is not taken lightly. These topics include several diseases which may have affected you, family members or friends. We will also examine human cadavers in lab. If you encounter a topic that is challenging for you, it can manifest in feelings of discomfort and being upset. In response, I encourage you to come talk to me about it. Class topics are discussed for the purpose of expanding your intellectual engagement in Human Anatomy and Physiology, and I will support you throughout your learning in this course.

Other Academic Issues:

PLNU COPYRIGHT POLICY

Point Loma Nazarene University, as a non-profit educational institution, is entitled by law to use materials protected by the US Copyright Act for classroom education. Any use of those materials outside the class may violate the law.

PLNU ACADEMIC HONESTY POLICY

Students should demonstrate academic honesty by doing original work and by giving appropriate credit to the ideas of others. Academic dishonesty is the act of presenting information, ideas, and/or concepts as one's own when in reality they are the results of another person's creativity and effort. A faculty member who believes a situation involving academic dishonesty has been detected may assign a failing grade for that assignment or examination, or, depending on the seriousness of the offense, for the course. Faculty should follow and students may appeal using the procedure in the university Catalog. See [Academic Policies](#) for definitions of kinds of academic dishonesty and for further policy information.

The laboratory portion of the course has two practical exams. Since these exams are administered in the lab, they cannot be given to the entire class at once, but must instead be given to smaller groups of students at separate times. Any discussion of the content of the exam between a student who has taken the practical exam with another student who has yet to take the exam will be considered to be cheating on the part of both students, and dealt with as described above.

PLNU ACADEMIC ACCOMMODATIONS POLICY

PLNU is committed to providing equal opportunity for participation in all its programs, services, and activities. Students with disabilities may request course-related accommodations by contacting the Educational Access Center (EAC), located in the Bond Academic Center (EAC@pointloma.edu or 619-849-2486). Once a student's eligibility for an accommodation has been determined, the EAC will issue an academic accommodation plan ("AP") to all faculty who teach courses in which the student is enrolled each semester.

PLNU highly recommends that students speak with their professors during the first two weeks of each semester/term about the implementation of their AP in that particular course and/or if they do not wish to utilize some or all of the elements of their AP in that course.

Students who need accommodations for a disability should contact the EAC as early as possible (i.e., ideally before the beginning of the semester) to assure appropriate accommodations can be provided. It is the student's responsibility to make the first contact with the EAC.

PLNU ATTENDANCE AND PARTICIPATION POLICY

Regular and punctual attendance at all class sessions is considered essential to optimum academic achievement. If the student is absent for more than 10 percent of class sessions, the faculty member will issue a written warning of de-enrollment. If the absences exceed 20 percent, the student may be de-enrolled without notice until the university withdrawal date or, after that date, receive the appropriate grade for their work and participation. See [Appendix 2](#) for details.

SEXUAL MISCONDUCT AND DISCRIMINATION

Point Loma Nazarene University faculty are committed to helping create a safe learning environment for all students. If you (or someone you know) have experienced any form of sexual discrimination or misconduct, including sexual assault, dating or domestic violence, or stalking, know that help and support are available through the Title IX Office at pointloma.edu/Title-IX. Please be aware that under Title IX of the Education Amendments of 1972, it is required to disclose information about such misconduct to the Title IX Office.

If you wish to speak to a confidential employee who does not have this reporting responsibility, you can contact Counseling Services at counselingservices@pointloma.edu or find a list of campus pastors at pointloma.edu/title-ix

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Tentative Lecture Schedule

Topic 1	Chemistry and Cell Biology
Topic 2	Histology
Topic 3	Skeletal Anatomy and Physiology
Topic 4	Muscular Anatomy and Physiology
Topic 5	Nervous System

Wk#	Date (day of wk)	Topic	Corresponding textbook pgs
1	Aug 28 (M)	Introduction to Anatomy and Physiology Elements and Atoms	chp. 1 pp. 7-31 chp. 2 pp. 39-46
	On Your Own	Anatomical Terms	
	Aug 30 (W)	Chemical Bonds and Reactions; pH	chp. 2 pp. 47-61
	Sep 1 (F)	Solutions, Cytoplasm, Diffusion & Osmosis	chp. 2 pp. 55-56 chp. 3 pp. 85-88, 97-98
2	Sep 4 (M)	LABOR DAY	
	Sep 6 (W)	Organic Chemistry; Membrane Proteins	chp. 2 pp. 61-74 chp. 3 pp. 83-85
	Sep 8 (F)	Cell Membranes, Vesicles; Organelles	chp. 3 pp. 82-96 chp. 4 p. 131-133
3	Sep 11 (M)	Nucleus and DNA; Transcription and Translation	chp. 3 pp. 98-107
	Sep 13 (W)	Genetic Inheritance	chp. 28 pp. 1256-1265
	Sep 15 (F)	Exam 1 <i>Covers lecture & on your own material 8/28—9/11</i>	
4	Sep 18 (M)	Genetic Inheritance	chp. 28 pp. 1256-1265
	Sep 20 (W)	Histology; Epithelial Tissue	chp. 4 pp. 126-140
	Sep 22 (F)	Connective Tissue	chp. 4 pp. 140-147
5	Sep 25 (M)	Serous Membrane Integumentary System	chp. 1 pp. 26-28 chp. 5 pp. 163-170
	Sep 27 (W)	Integumentary System	chp. 5 pp. 171-183
	Sep 29 (F)	Bone Classifications & Histology	chp. 6 pp. 191-205
6	Oct 2 (M)	Bone Development and Homeostasis	chp. 6 pp. 206-220
	Oct 4 (W)	Articulations	chp. 8 pp. 313-332
	Oct 6 (F)	Exam 2 <i>Covers lecture & on your own material 9/13—10/2</i>	
7	Oct 9 (M)	Synovial Joints	chp. 9 pp. 320-325
	Oct 11 (W)	Specific Synovial Joints; Joint Disorders	chp. 9 pp. 323-327, 332-344
	Oct 13 (F)	Gross Muscle Anatomy	chp. 11 pp. 395-403
	On Your Own	Gluteal and Posterior Hip Muscles	
8	Oct 16 (M)	Muscle Histology and Cytology	chp. 10 pp. 357-362, 381-386
	On Your Own	Anterior Thigh Muscles; Posterior Thigh Muscles	
	Oct 18 (W)	Excitation and Sliding Filament Mechanism	chp. 10 pp. 362-369
	On Your Own	Medial Thigh Muscles	
	Oct 20 (F)	HOLIDAY: FALL BREAK	

9	Oct 23 (M)	Motor Units and Force Generation	chp. 10	pp. 371-377
	On Your Own	Posterior Leg Muscles Anterolateral Leg Muscles		
	Oct 25 (W)	Walking	chp. 11	pp. 432-439
	On Your Own	Posterior Shoulder Girdle Muscles Anterior Shoulder Girdle Muscles		
	Oct 27 (F)	Exam 3 <i>Covers lecture & on your own material 10/4—10/23</i>		
10	Oct 30 (M)	Muscle Metabolism	chp. 10 chp. 24	pp. 369-371 pp. 1063-1086
	On Your Own	Intrinsic Shoulder Muscles		
	Nov 1 (W)	Skeletal Muscle Performance; Muscle Fiber Types	chp. 10	pp. 377-381
	Nov 3 (F)	Muscle Pathologies		
	On Your Own	Anterior Forearm Muscles; Posterior Forearm Muscles		
	On Your Own	Anterior Arm Muscles; Posterior Arm Muscles		
11	Nov 6 (M)	Scapular Movement Shoulder (Arm) Movement Elbow (Forearm) Movement Wrist Movement	chp. 11	pp. 421-429
	On Your Own	Anterolateral Abdominal Muscles; Neck Muscles		
	Nov 8 (W)	Spinal Nerves	chp. 13	pp. 518-526
	Nov 10 (F)	Exam 4 <i>Covers lecture & on your own material 10/25—11/6</i>		
12	Nov 13 (M)	Neurohistology and Neurophysiology	chp. 12	pp. 452-471
	Nov 15 (W)	Action Potentials	chp. 12	pp. 468-477
	Nov 17 (F)	Synapses and Neurotransmitters	chp. 12	pp. 478-482
13	Nov 20 (M)	FREE DAY – Use it wisely.		
	Nov 21 (Tu)	Laboratory Exam 2: Muscle Practical—all sections		
	Nov 22-24	HOLIDAY: THANKSGIVING BREAK		
14	Nov 27 (M)	Central Nervous System: Brain	chp. 13	pp. 493-508
	Nov 29 (W)	Cranial Nerves	chp. 13	pp. 522-525
	Dec 1 (F)	Exam 5 <i>Covers lecture & on your own material 11/8—11/27</i>		
15	Dec 4 (M)	CNS: Spinal Cord and Protection of the CNS	chp. 13	pp. 509-510, 513-517
	Dec 6 (W)	Central Nervous System Disorders	chp. 12 chp. 13	pp. 464-465, 482 pp. 510-511, 515, 517-518
	Dec 8 (F)	Catch-up, wrap-up, and review		
16	Dec 15 (F)	FINAL EXAM, 10:30 am – 12:30 pm		

Laboratory Schedule for Bio 1030, Fall 2023

Week of:	Thu date	(packet #) Lab Exercise	Quiz
1 Aug. 28	8/31	(1) Skeletal System: Appendicular Skeleton	<i>1 bone terminology</i>
2 Sep. 4	9/7	(2) Basic Chemical Principles	<i>2 appendicular skeleton + pre-quiz</i>
3 Sep. 11	9/14	(1) Skeletal System: Axial Skeleton	<i>3 basic chemical principles + pre-quiz</i>
4 Sep. 18	9/21	(1) Skeleton—Review	<i>4 appendicular & axial skeleton</i>
5 Sept. 25	<u>9/28</u>	<u>Laboratory Exam 1: Skeleton Practical</u> (3) Cat Dissection: Muscles: Lower Extremity	
6 Oct. 2	10/5	(3) Cat Dissection: Muscles: Lower Extremity 2	<i>no quiz</i>
7 Oct. 9	10/12	(3) Cat Dissection: Muscles: Upper Extremity 1 (3) Cadaver Examination: Muscles: Lower Extremity	<i>5 muscles of cat lower extremity + pre-quiz</i>
8 Oct. 16	N/A	NO LAB—FALL BREAK	
9 Oct. 23	10/26	(4) Muscle Physiology	6 14 pt quiz: <i>·cat muscles—upper body</i> <i>·human muscles—lower body</i> <i>·pre-quiz</i>
10 Oct. 30	11/2	(3) Cat Dissection: Muscles: Upper Extremity 2 (3) Cadaver Examination: Muscles: Upper Extremity	<i>7 muscle physiology + pre-quiz</i>
11 Nov. 6	11/9	(5) Muscle Function	8 16 pt quiz: <i>·cat muscles—upper body</i> <i>·human muscles—upper body</i> <i>·pre-quiz</i>
12 Nov. 13	11/16	(3) Cat Dissection: Muscles—Review (3) Cadaver Examination: Muscles—Review	<i>9 muscle function + muscles</i>
13 Nov. 20	<u>N/A:</u> No Regularly Scheduled Laboratory Sections	<u>Laboratory Exam 2: Muscle Practical</u> <u>Tuesday, November 21 for all sections</u>	
14 Nov. 27	11/30	(6) Brain and Cranial Nerves	<i>10 pre-quiz</i>
15 Dec. 4	12/7	Optional Final Exam review session	

Appendix 1: Participation and Collaboration Rubric

adopted from Kendra Hearn, PhD (U of Michigan, Ann-Arbor)

	2	3	4	5**
Active Listening*	Student has incurred 2 or more instances of unprofessional or inattentive behavior during class. On multiple occasions, s/he uses technology for purposes not related to the course and/or in ways that are distracting to peers and/or the instructor. S/he often has side conversations that are distracting to those around him/her. S/he does not track the speaker with his/her eyes (e.g. head down on desk).	Students is typically professional and attentive during class. S/he has uses technology for purposes not related to the course and/or in a way that is distracting. S/he has occasional side conversations that are sometimes distracting to those around him/her. S/he rarely tracks the speaker with his/her eyes or use non-verbal cues to engage with the speaker.	Student is always professional and attentive during class. S/he uses technology for the purposes of the course and is not distracting. S/he limits side conversations; those in which she may engage are always about what is currently occurring in the class. S/he often tracks the speaker with his/her eyes.	Student is always professional and attentive during class. S/he uses technology for the purposes of the course and is not distracting or easily distracted. S/he doesn't have side conversations. S/he routinely tracks the speaker with his/her eyes, and uses non-verbal cues to engage with the speaker. S/he routinely uses techniques to ensure understanding, such as asking or answering questions. Student responds to iClicker prompts.
Contributions to Discussion and Activities	Student's contributions are disrespectful or shows unwillingness to learn, or s/he does not contribute.	Student's contributions are respectful and inclusive. S/he may, however, contribute rarely or contributes often but dominates the 'air' time. When s/he speaks, his/her comments may be tangential or confusing to the current direction of the group.	Student's contributions are respectful and inclusive. They position him/her as active learner of the topic. S/he watches his/her 'air' time by not dominating the discussion.	Student's contributions are respectful and inclusive. They position him/her as an active learner of the topic. S/he watches his/her 'air' time by not dominating the discussion. His/her comments and questions often improve the thinking of the group.
Preparedness	Student exhibits minimal preparedness in that it is apparent that s/he has read little or none of the materials prior to class as evidenced by no references to the required materials during discussion. S/he does not bring appropriate notes.	Student exhibits moderate preparedness in that it is apparent that s/he has read some of the materials prior to class as evidenced by nominal references to the required materials and bringing appropriate notes.	Student exhibits sufficient preparedness in that it is apparent that s/he has read the materials prior to class by citing references to those materials during class. S/he brings appropriate notes to class.	Student exhibits good preparedness in that it is apparent that s/he has read all materials prior to class by accurately citing references to those materials during discussions and bringing annotated notes to class. It is clearly apparent that s/he has given depth of thought to the topic as his/her comments, questions, and ability to respond to questions.

* Merely attending class does not merit 5 out of 5 points.

** Asking questions is a type of contribution.

Appendix 2: PLNU Academic Policies

❖ The Course Drop and Course Withdrawal Policy

- Course Drop
 - Dropping a course means the student should no longer attend. The drop action results in the course being removed from the transcript.
 - The course drop deadline is at the end of Week 2 (Sep 8 in Fall 2023).
- Course Withdrawal
 - Withdrawing from a course means the student should no longer attend. The withdrawal action results in a “W” appearing on the transcript.
- The course withdrawal deadline is at the end of Week 10 (Nov 10 in Fall 2023).

❖ Academic Behavior Policy <https://pointloma-public.courseleaf.com/tug-catalog/academic-general-policies/#academicbehavior>

❖ Academic Honesty <https://pointloma-public.courseleaf.com/tug-catalog/academic-general-policies/#academic honesty>

❖ Academic Standing <https://pointloma-public.courseleaf.com/tug-catalog/academic-general-policies/#academicstanding>

❖ Class Attendance <https://pointloma-public.courseleaf.com/tug-catalog/academic-general-policies/#classattendance>

❖ Course Drop dates

- updated to be in alignment with the 100% refund date
- see <https://www.pointloma.edu/offices/records/traditional-undergraduate-records>
- Fall 2023 EXAMPLES: Last day to drop semester-long classes is **Friday, September 8**. Last day to drop Quad I classes is **Friday, September 1**.

❖ Grading: [W] Withdrawn <https://pointloma-public.courseleaf.com/tug-catalog/academic-general-policies/#grading>

❖ Non-Registered Individuals

<https://pointloma-public.courseleaf.com/tug-catalog/academic-general-policies/#nonregistered>

❖ Ombudsperson - Student Advocacy

<https://pointloma-public.courseleaf.com/tug-catalog/academic-general-policies/#ombudsperson>

❖ Withdrawal from a Course

- ◆ <https://pointloma-public.courseleaf.com/tug-catalog/academic-general-policies/#withdrawal>