



University of Wisconsin-Milwaukee



Biological Sciences Course 202: Anatomy and Physiology I

Nicolet High School
Fall 2022
F204

Instructor Information

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UWM Course Description

This course will introduce the structure and function of the human body. We will explore the cellular organization of the body and the integration of those cells into tissues, organs, and systems. Students will engage in a variety of learning activities in the classroom, in laboratory exercises and investigations, and in reflective inquiry to explore and master the concepts in the course.

The expectation is that students are responsible for their own learning and that the instructor's role is to provide context and perspective that will enhance student learning. The assignments and in-class activities are designed to achieve that goal.

4 credits: Undergraduate at a rate of \$100 per credit hour (\$400 total for the course bill to Skyward).
Assistance is available for students who qualify for free lunch.

Course outcomes: Upon completion of this course, students will

1. Articulate the anatomical and physiologic features of cells and tissues, including basic genetic and inheritance concepts.
2. Demonstrate knowledge of biology as it pertains to human body structure, function, and homeostasis.
3. Explain the structure and function of organs and body systems.
 - Integumentary
 - Muscular
 - Skeletal
 - Nervous
4. Evaluate the anatomical features of organs and body system in a laboratory setting and evaluate effective learning strategies.

Departmental Outcomes relevant to this course:

1. Apply scientific method to biological questions
2. Retrieve scientific information
3. Synthesize, integrate, and communicate scientific information
4. Describe/apply biological information and concepts

Short-Term Virtual Learning Information

If Nicolet shifts to a virtual learning day because of weather or other short-term reason, we will continue our learning on Canvas. All the information that you will need for this class on a virtual learning day will be found in the announcement that will appear in our Canvas course. You must submit the work assigned for this day by 11:59 to verify your attendance, but we encourage you to begin your work early enough so that you can use the designated office hour time during the school day for any questions that you might have.

Course Components and Grade Weightings

In-Class Activities/quizzing: assessed by attendance, participation, and accuracy. ("Classwork" in Skyward)	5%
Assignments: accessed through McGraw-Hill <i>Connect</i> and Canvas ("Assignments" in Skyward)	10%
Pre-Exam quizzes: accessed through McGraw-Hill <i>Connect</i> ("Formative" in Skyward)	5%
Lecture Exams ("Summative" in Skyward) <ul style="list-style-type: none"> ● Exam 1 = 6% ● Exam 2 = 6% ● Exam 3 = 6% ● Exam 4 = 6% ● Final Exam = 6% 	30%
Laboratory Component ("Labs" in Skyward) <ul style="list-style-type: none"> Pre-lab assignments (~10% of lab grade) Lab Assignments (~30% of lab grade) Post Lab Quizzes (~10% of lab grade) Lab Practical Quizzes (~50% of lab grade) 	50%
Total	100%

Laboratory grading:

*The final laboratory grade is combined with the lecture grade at a 50/50% weighting.

*A student must earn a final grade of at least 60% in the laboratory to pass **FOR UWM CREDIT**. If a 60% or greater average is achieved in lab, the lecture and lab grades will be combined for a total final grade in the course.

- Weighted grades are calculated to determine the final grade.
- Students must complete *all* requirements to receive a comprehensive grade.
- No assessments (quizzes or practical exams) will be dropped.
- All work in the lecture and laboratory sections must be the student's own work.
- Students may not submit assignments with answers cut and pasted directly from the instructor's PowerPoint or other class resources (ex. Muscle tables). This includes both lecture and lab assignments. If answers are not submitted in the student's own words, a zero will be given with no opportunity to resubmit the assignment.

Extra credit work is not accepted; this means that material that is not assigned as a part of the course cannot substitute for work that is assigned. Students in need of additional assistance or accommodations should contact the instructor as soon as possible.

Incompletes. A notation of "incomplete" may be given temporarily as a final grade to a student who has performed successfully in the course, but who, because of illness or other unusual and

documented cause beyond the student's control, has been unable to take or complete some limited amount of the term's coursework. <http://www4.uwm.edu/secu/docs/other/S31.pdf>

Course Grading Scale:

A: 93 - 100

A-: 90 - 92.99

B+: 87 - 89.99

B: 83 - 86.99

B-: 80 - 82.99

C+: 77 - 79.99

C: 73 - 76.99

C-: 70 - 72.99

D+: 67 - 69.99

D: 63 - 66.99

D-: 60 - 62.99

F: 0 - 59.99

*Remember that the grades from various parts of the course are **weighted**, so they figure into the course average in different ways. (see weighted components above).*

Students must pass this course with a final average of 73% (C) or better to gain entry to Bio. Sci. 203, Anatomy & Physiology II. Although a 73% is a passing average, students are encouraged to check with their individual programs for specific grade requirements.

Lecture and laboratory grades are combined to calculate each student's total final grade if the student earns at least a 60% (D-) or better in their laboratory. Students MUST earn at least a 60% in laboratory to pass the course **FOR UWM CREDIT**. If a student does not earn at least a 60% in lab, the student will fail the course **FOR UWM**.

Final course grades are calculated with lecture weighted as 50% of the overall grade and lab weighted at 50% of the final grade. To calculate an estimate of your combined grade:
(lecture % x 0.5) + (lab % x 0.5) = combined average

Grades are never rounded. As there will always be a cutoff to all percentage values of a certain letter grade. Please do not ask that your final grade be rounded-up no matter how small you may think the percentage difference to the next grade in the scale. Ex: If your final average is 79.97%, your letter grade is a C+.

Canvas Gradebook:

Canvas is programmed to maintain a running *estimate* of your total course grade. Look in the "final grade" column. This is an estimate only, and it will change as more assignments are added. Your actual grade will be kept and available in SKYWARD.

*This estimate in Canvas does not tell you what your final grade **WILL** be, but only the approximate level of your performance in the course up to that point. In the end, the final grade depends on the score that you earn as the values from all areas of the course are added. From time-to-time revisions must be made to grades stored in the Canvas gradebook. Revisions are done in case of submission errors, downloading errors, errors in weighting components of the course, testing center errors etc. If there is a revision to a grade found listed in Canvas, the instructor will communicate why the change was necessary. All instructors in the course will maintain the most accurate gradebook in Canvas as possible. Corrected errors to grades found in the Canvas gradebook are not a valid reason to argue for a grade entered erroneously or a late course drop.*

Safety Policies: Lab

The laboratory component of the course may require special instruction in safety procedures for working with equipment and materials. Students will only be allowed to participate in the laboratory activity when the section's laboratory instructor is satisfied that students have learned and are following appropriate safety procedures.

Lecture Assignments Policies

- ❖ Due dates for course work are listed in Canvas.
 - ▣ Unless due dates are changed by *mutual agreement* in class, the work is due as indicated. If due dates are changed, you will find an announcement on Canvas and/or an announcement will be made in class by the instructor.
 - ▣ **Online assignments are accessed through McGraw-Hill's Connect learning platform or through Canvas. These assignments must be submitted by the due date found in Connect and Canvas.**
- ❖ **Students must register for Connect with their textbook access code. Instructions for registration/use of Connect are presented during lecture and will be posted on Canvas.**
- ❖ The only exception granted for late work is an emergency situation. For emergency situations, the student must submit, via email, documentation to the instructor within 24 hours of the emergency event. It is the instructor's decision to allow that student to submit a late assignment no matter what.
- ❖ Depending on the situation, a penalty for late assignments may be added. The penalty will be assessed by the instructor depending on the situation.

For questions and concerns about assignment due dates, please make an appointment, or email Mr. Houck.

Pre-exam Quizzes: Four pre-exam quizzes are assigned during the semester. These pre-exam quizzes are completed through the McGraw-Hill Connect learning tool. These quizzes are used to help students review some of the material, get exposure to question format, and practice test taking strategies prior to the exam. Students are given multiple days to complete these quizzes. There are no extensions to the quizzes unless the student

has a documented emergency take place in which they would be unavailable to complete the quiz through the entire assignment period (usually 5-7 days).

As the due dates for the pre-exam quizzes are clearly marked in Canvas and Connect, no late submissions are accepted. If you have a valid excuse, you must submit documentation stating that you were incapacitated the entire time the quiz was open to make-up the pre-exam quiz for credit.

Course Exam Policies

Exams are given on the day as noted in the syllabus unless the instructor makes a written documented change to this date. The change will be reflected as an announcement on Canvas.

The following policies apply to make-up exams:

- ☐ The student must contact his/her instructor (within 24 hours) when an absence occurs and the decision to be allowed to make-up an exam is at the sole discretion of the instructor.
- ☐ Written documentation for emergency situations (example: doctor's note) will be required to make-up an exam. This must be provided BEFORE being allowed to complete the quiz/exam.
- ☐ Only 1 opportunity will be given to make up an exam. You are expected to arrange a make-up session with your instructor within one week of the missed exam.
- ☐ If a scantron is used on an exam, your grade will be based on the scantron. You will not get credit for any transfer mistakes you make from the exam packet to the scantron.
- ☐ If you are late to an exam, you will not be allowed the full amount of time to complete the assessment. If you show up after an assessment has been collected, you will not be allowed to complete the assessment.

Lab quizzes

- Lab quizzes will include material covered in the previous week's lab PowerPoint, readings, and activities.
- They will be completed during the first 20 minutes of lab.
- If a student is late to class, the lab instructor will determine if a student is allowed to take the quiz.
- They serve as check of your understanding of concepts presented previously
- Format: Fill-in-the-blank, identification and short answer

Laboratory PowerPoint presentations

- The presentation is not intended to cover every aspect of what was in the reading, nor will it address everything on the next week's quiz or the unit practical; it is the student's responsibility to study all the weekly resources on their own time to be prepared for assessments
- Each PowerPoint will be uploaded to Canvas for student accessibility.

- Discussion is intended for:
 - Presentation of study techniques
 - Clarification of student questions and common misconceptions

Group learning activities

- Instructions and procedures as indicated by your lab instructor
 - Hands-on lab activities and clean up
 - Explanation of lab exercises and upcoming assignments
 - Feedback on graded assessments and lab exercises
 - Wrap-up

Practical Exams

- Covers all the content from an associated unit
- Students will have 60 minutes to complete questions from 25 stations per practical exam
- Will include lab station work and paper-and-pencil (no electronics)
- Students may be allowed to make up a missed practical exam only if there is a legitimate reason. It is the discretion of your lab instructor on whether you may make-up the practical exam regardless of the situation. Students should contact their instructor as soon as possible after a missed practical exam to discuss the possibility of an extension.

Lab Practical Quizzes

- Covers all the content from the previous two weeks of lab.
- Depending on the topics covered, they may be progressive in nature, meaning that pertinent information from weeks previous may be included if that information builds to the topics covered in the quiz of material being assessed. (ex. Landmarks of the bones being covered again during the muscle unit if they are an attachment point, cell structure reviewed on the quiz relating to histology). Your lab instructor will instruct you of information that could be included on these progressive quizzes.
- Students will have 30-40 minutes to complete the quizzes.
- Will include questions related to models, images, prepared slides, and specimens.
- Students may be allowed to make up a missed practical exam only if there is a legitimate reason. It is the discretion of your lab instructor on whether you may make-up the practical exam regardless of the situation. Students should contact their instructor as soon as possible after a missed practical exam to discuss the possibility of an extension.

Assignments and lab activities

- All laboratory assignments must be completed by the due dates given to them by their laboratory instructor.
- Late work will not be accepted unless the student has an extenuating circumstance which makes it impossible to complete the assigned materials. Students should contact their instructor as soon as possible following the missed assignment to discuss their situation and confirm an extension is necessary.
- If a student has a situation that qualifies for an extension, they must have the extension approved by their lab instructor before they submit for credit.

- Depending on the situation, a penalty for late assignments may be added. The penalty will be assessed by the instructor depending on the situation. If the situation does not qualify for full credit, typical late penalties are listed here.
 - **Weeks 2-5 (Unit 1)** = one late assignment with 0% penalty, **per instructor approval**.
 - **Weeks 6-11 (Unit 2)** = 25% penalty **per approval**
 - **Weeks 12-15 (Unit 3)** = 50% penalty **per approval**
- A student will earn a zero for any lab assignment/activity left incomplete by the due date unless an extension has been granted by their instructor.
- All documents submitted via Canvas. UWM students receive FREE access to downloadable Microsoft Office products during their tenure as a student. For more information, please visit the UWM page (<https://uwm.edu/o365/>).
- If a blank assignment is submitted to Canvas, a zero will be added to the grade book even if it is submitted by the due date. It is imperative that students check that they are submitting a completed version of the assignment before final submission.
- Assignments are graded for correctness not by completion.

Portable Electronic Devices

Portable media players and recorders are prohibited, except for students who require them for documented disabilities. Use of cellular phones, tablets, smartwatches, and related electronic devices during in-person exams will constitute a presumptive case of academic dishonesty. Improper use of computers, cell phones or other electronic devices during online exams will also be viewed as academic dishonesty. Your instructor will clearly indicate how to complete online exams using your electronic devices properly. Students may use laptop computers, tablets, and so on for viewing the pre-posted lecture presentation, for making notes and annotations during the lectures, for participating in on-line chats related to the lecture material, and for on-line classroom response questions.

Course organization: The course is organized to align with key learning objectives. Students will demonstrate mastery of these objectives by completing course assignments, quizzes, in-class activities, and exams.

Time commitment: For *each* credit hour earned in the course, students are expected to invest **at least 2-3 hours of work per week in addition to their time in lecture and laboratory sections**. For this 4-credit course, students are expected to complete **at least 8-12 hours of outside of class** study time *per week* to meet the learning goals of this course. This follows UWM policies:

- “Study leading to one credit represents an investment of time by the average student of not fewer than 48 hours outside of class for each class contact hour in lectures, for laboratories, examinations, tutorials and recitations, and for preparation and study; or a demonstration by the student of learning equivalent to that established as the expected product of such a period of study.”
- (UWM Faculty Document #2838;
http://www4.uwm.edu/secu/docs/faculty/2838_Credit_Hour_Policy.pdf)

UWM Student Resources

Dual enrollment students have access to some, but not all, of the student resources on campus. Here are a few resources that you can access. You will need your ePanther ID (email address) and password.

- [Dean of Students Office](#)
- [Student Success Center](#)
- [Accessibility Resource Center](#)
- [Career Planning and Resource Center](#)
- [UWM Libraries](#)
- [The Writing Center](#)

University Policies

Be aware that you will receive a regular, official grade on your UWM transcript for this class. If you want to talk more about that or the possibility of dropping or withdrawing from this class, contact Kathleen Breuer at kbreuer@uwm.edu. Your ability to drop or withdraw is time sensitive (there are deadlines), so make sure you check in early if you are thinking about this.

[Complete description of UWM Policies can be found here](#). You should contact UWM's Office of Dual Enrollment for questions about University policies.

Academic Misconduct

Because you are enrolled in a UWM class, any academic misconduct will need to be handled both by your high school and by UWM. Academic misconduct is taken very seriously at UW-Milwaukee. Students who engage in cheating of any sort may be required to repeat the assignment, get a failing grade for the assignment or course, or be removed from the class. [Details here on UWM's policies and procedures](#).

Student Accommodations for Dual Enrollment Students

The University of Wisconsin Milwaukee (UWM) supports the right of all enrolled students to a full and equal educational opportunity. The Americans with Disabilities Act (ADA), Wisconsin State Statute (36.12) requires that students with disabilities be reasonably accommodated in instruction and campus life. Reasonable accommodations for students with disabilities are a shared faculty and student responsibility.

When a student is accepted into a dual enrollment program provided by UWM, the student, in collaboration with the K-12 school district, must contact the Accessibility Resource Center (ARC) in order to formally request services and provide the necessary disability-related documentation.

ARC will not provide modifications if the modifications would alter the essential elements of a course. It is possible that accommodations available to a student in the high school setting will not be allowed in college-level courses. College credits earned through a dual enrollment option become part of a student's college transcript and may be transferable to other colleges. For that reason, a course taken for college credit must maintain the integrity of and fidelity of college-level work.

Students must work with UWM's Accessibility Resource Center (ARC) to establish an Accommodation Plan for any dual-enrolled course. Students, or their high school teacher, should start by completing the Dual Enrollment Form at <https://uwm.edu/arc/dualform/>

Once the Dual Enrollment Form is completed, and disability documentation has been submitted, a UWM ARC Access Specialist will create an ARConnect profile for the student. Once an Accommodation Plan has been created, the instructor will be notified, via email, of accommodations for the student in the course.

Instructors will work either directly with students or in coordination with the UWM ARC to provide reasonable academic accommodations.

Agreement

Remaining in this class means you understand and agree to be held responsible for all of the policies and procedures outlined in this syllabus. These course policies are subject to revision at the instructor's discretion. If policies are changed, you will be notified by e-mail and in class.

UNIT 1 — THE ORGANIZATION OF THE BODY

Topic 1:

Essential Question: What is anatomy and how do we understand it?

Review: Lecture Syllabus, found in this week's Canvas module and the syllabus module on Canvas

Readings: Chapter 1, sections 1.1-1.3, (skip section 1.4) 1.5-1.6

Lecture: Introduction to the course, Body organization, Terminology, homeostasis

Assignment: SmartBook Chapter 1:

**** All SmartBook assignments are accessed through McGraw-Hill Connect**

Topic 2:

Essential Question: How do cells work?

Readings: Chapter 3, Sections 3.1, 3.3-3.10

Lecture: Complete lecture on homeostasis, Cell membrane/transport, Gene Expression

Online Lecture materials: Cellular organelles—view the recorded lecture materials on cell organelles found in this week's Canvas module.

Assignment: SmartBook Chapter 3:

****all SmartBook assignments are accessed through McGraw-Hill Connect**

Topic 3:

Essential Question: How do dividing cells preserve and transmit their information and features?

Read: **Chapter 3**, section 3.10; **Chapter 29**, section 29.7: pages 1110-1117 up to "Genetic disorders"

ONLY

Lecture: Biologic variation and continuity; the cell cycle, Heredity.

SmartBook Chapter 29:

Topic 4:

Essential Questions: What is a tissue? How does the anatomy of each tissue type relate to its functions?

Read: **Chapter 4, sections 4.1-4.4 and 4.8-4.9**

Lecture: Tissue classes and functions.

SmartBook Chapter 4:

Pre-Exam Quiz #1 Covering material from Chapters 1, 2, 3, 29, and 4:

****Pre-Exam quizzes are completed through McGraw-Hill Connect**

*****Last day to withdraw without record---Oct. 3**

UNIT 2----Support and Movement

Topic 5:

Essential Question: What is the integument and why is it so important?

Read: **Chapter 5, sections 5.1-5.5-- Integumentary System**

Lecture: Integument, skin color, glands

EXAM #1: Unit 1, Chapters 1, 3, 29, and 4. Taken online through McGraw-Hill Connect

SmartBook Chapter 5:

Topic 6:

Essential Question: How is the living skeleton integrated into the body's other systems?

Read: **Chapter 6, sections 6.1-6.10: Skeletal System Bones and Bone Tissue**

Lecture: Organization of the skeleton; physiology of bone maintenance, growth, and repair.

Topic 7:

Essential Questions: What features of bones allow the skeleton to function? How does the skeleton move?

Read: Chapter 8—Joints and Movement

Review: Review the list of features and markings of the bones of the skeleton (this should be a review of what's covered in lab). The list is given in this week's Canvas module, it is the same list as lab. You will not be tested on all the features of the bones from the list only the features that are involved in the articulations of any of the joints covered in lecture. A list of the anatomical features of the joints you need to know for the exam will be given in this week's module.

Recorded Lectures: Classifications and Movements of Joints

SmartBook Chap. 6, Bone, and bone Tissue:

Topic 8:

Essential Question: How do muscles produce movement?

Read: Chapter 9: Muscular system Histology and Physiology

Lecture: Skeletal muscle physiology, Energy sources.

**SmartBook Chap. 9 Muscle Histology and Physiology:
Pre-Exam Quiz #2 Covering material from chapters 5, 6, and 8:
**All Pre-exam quizzes are completed through McGraw-Hill Connect
Chapter 9 will not be included on Exam #2. It will be included on Exam #3.**

Topic 9:

Essential Question: How do muscles produce movement?

Read: Chapter 10--Muscular System: Gross Anatomy

Lecture: Muscle shape, size, and orientation; origins and insertions. Skeletal muscle histology.

**Exam #2: Unit 2, Chapters 5, 6, and 8. Chapter 7 is not included on Exam #2.
Chapter 9 will not be included on Exam #2.
Exam #2 taken online via McGraw-Hill Connect
There is no SmartBook assignment for Chapter 10.**

Topic 10:

Essential Questions: What are nerves, and how do they work?

Read: **Chapter 11**—Functional organization of Nervous Tissue

Lecture: Nervous system cells, chemical communication, synapses.

SmartBook Chap. 11 Functional Organization of Nervous Tissue

*****Nov. 13--Last Day to Withdraw With 'W' on Transcript*****

Topic 11:

Essential Questions: How does the spinal cord process and deliver information?

Read: **Chapter 12:** Spinal Cord and Spinal Nerves

Lecture: Spinal cord anatomy, spinal nerves, plexuses. Start lecturing on Brain anatomy/physiology, Cranial nerves.

SmartBook Chapter 12 Spinal cord and Spinal Nerves: Open Nov. 7—Due by Nov. 11

Topic 12:

Essential Questions: What features allow the brain to function?

Read: **Chapter 13**---Brain and Cranial Nerves

Lecture: Brain anatomy/physiology, Cranial nerves.

SmartBook Chap. 13 Brain and Cranial Nerves:

Pre-Exam Quiz #3 covering material from chapters 9, 10, 11, and 12:

****All -Pre-exam quizzes are completed through McGraw-Hill Connect**

Topic 13:

Essential Questions: Why are the senses important in maintaining homeostasis?

Read: **Chapter 14:** Integration of the Nervous system Functions

Lecture: General senses, Classification and histological features of receptors; the interpretation of the signals, and pathways for receptor output, ascending and descending spinal tract pathways.

Exam #3: Chapters 9, 10, 11, and 12 taken online via McGraw-Hill Connect on Nov. 21, open 12:00 am-11:59 pm. Chapter 13 will not be included on Exam #3.

SmartBook Chap. 14 Integration of Nervous System Functions:

Topic 14:

Essential Questions: Why are the senses important in maintaining homeostasis?

Read: **Chapter 15:** The Special Senses

Lecture: Finish General senses, start Special senses part I, features of the special sense receptors, the interpretation of the signals and pathways.

SmartBook Chap. 15: The special senses,

Topic 15:

Essential Questions: What are the functions of the Autonomic Nervous system?

Read: Chapter 16: The Autonomic Nervous system (ANS)

Lecture: Autonomic Nervous System anatomy and physiology found as a recorded lecture/s in Canvas

SmartBook Chap. 16: The ANS

Pre-Exam Quiz #4 covering material from chapters 13, 14, 15, and 16:

****All Pre-exam quizzes are completed through McGraw-Hill Connect**

Exam #4: Chapters 13, 14, 15, and 16. Taken online via McGraw-Hill Connect on Dec. 14, open 12:00 am-Due by 11:59 pm

******Dec. 15--Study Day---No classes meet.**

******A Cumulative Assessment (Final Exam) will be completed online via Connect.**

Laboratory Schedule: Tracking calendar

TOPIC	Due Before Class	Assessment	Concepts Covered	Lab Activities
Unit 1: Organization of the Body				
1	<p>Syllabus Acknowledgement Form</p> <p>Lab safety quiz</p> <p>Pre-lab assignment: Body organization</p> <p>Pre-lab: Cell organelles</p>	None	<ul style="list-style-type: none"> - Body organization - Directional terminology - Cell organelles 	<ul style="list-style-type: none"> - Body Organization Activity - Cell Anatomy Activity - Post-lab quiz <p style="color: red;">LearnSmart Labs (2)</p>
2	<p>Week 2 Lab activities and post-lab quiz</p> <p>Pre-lab assignment: Movement of materials</p> <p>Pre-lab assignment: Cell cycle</p>	None	<ul style="list-style-type: none"> - Cell transport: active & passive - Concentration gradients - Cell cycle - Lab Practical quiz 1 review 	<ul style="list-style-type: none"> - Movement of Materials Activity - Cell Cycle Activity - Post-lab quiz <p style="color: red;">LearnSmart Labs (4)</p>
3	<p>Week 3 Lab Activities and post-lab quiz</p> <p>Pre-lab assignment: Histology of Epithelial tissues</p>	<p>Lab practical quiz #1: Body organization, directional terminology, cell anatomy, cell cycle, and Movement of materials</p>	<ul style="list-style-type: none"> - Microscopy: components & functions - Histology 1: Epithelial tissue types & characteristics 	<ul style="list-style-type: none"> - Histology Activity - Post-lab quiz <p style="color: red;">LearnSmart Labs (4)</p>

	Week 3 Background			
4	<p>Week 4 Lab Activities and post-lab quiz</p> <p>Pre-lab assignment: Histology of Connective, Nervous, and Muscular tissues</p> <p>Week 4 Background</p>	None	<p>Histology 2: Connective, nervous, and muscular tissue types & characteristics</p>	<p>Histology Activity 2</p> <p>-Post-lab quiz</p> <p>- LearnSmart Labs (4)</p>
Unit 2: Support and Movement				
5	<p>Week 5 Lab Activities and post-lab quiz</p> <p>Pre-lab assignment: Axial skeleton</p>	Lab practical quiz #2: Histology	<p>Skeleton Intro: Organization and roles</p> <p>-Axial skeleton</p>	<p>- Axial skeleton activity</p> <p>-Post-lab quiz</p>
6	<p>Week 6 lab activities and post-lab quiz</p> <p>Pre-lab assignment: Appendicular skeleton</p> <p>Week 7 Background</p>	None	- Appendicular skeleton	<p>- Appendicular skeleton activity</p> <p>-Post-lab quiz</p>
7	<p>Week 7 Lab Activities and post-lab quiz</p> <p>Pre-lab assignment: first 10 muscles</p>	<p>Lab practical Quiz 3: Axial and Appendicular skeleton</p>	<p>- Joints</p> <p>-Muscles: cells, organs, organs system</p> <p>-First 10 muscles</p>	<p>- Joints Activity</p> <p>- First 10 muscles anatomy in clay activity</p>

	Week 8 Background			
8	Week 8 Lab Activities and post-lab quiz Pre-lab assignment: Second 10 muscles Week 9 Background	None	- Muscles: - Second 10 muscles	--Second 10 muscles anatomy in clay activity
Unit 3: Integration and Control				
9	Week 9 Lab activities and post-lab quiz Pre-lab assignment: Nervous system Week 10 Background	Lab practical Quiz 4: Muscular anatomy (top 20 muscles)	- Nervous system: cells, tissues, organs - Reflex arcs	- Modeling an action potential activity - Reflexes activity - LearnSmart Lab (1)
10	Week 10 Lab Activities and post-lab quiz Pre-lab assignment: Brain and cranial nerves Week 11 Background	None	- Brain structure + functions - Cranial nerves + functions	- Sheep brain dissection activity
11	Week 11 Lab Activities and post-lab quiz Pre-lab assignment: senses Week 15 Background	Quiz 5: Nervous system physiology, reflex arc, brain and cranial nerves	-Senses: cells, tissues, organs; organ systems of vision, hearing & equilibrium	- Eye dissection activity - Touch receptors activity - Smell activity - LearnSmart Lab (1)

12	Quiz #6: General senses, systems of vision, hearing and equilibrium, eye dissection, two-point discrimination
13	

* Class schedule is subject to change - week timelines are approximate

* LearnSmart lab assignments are indicated in red

Strategies for success in A&P 202 lab

- **Reading**
 - You may have to reread a section more than once to understand it
 - Look up unfamiliar words immediately
 - Write questions as you read to ask your instructor; if you do not write them down immediately, you may forget them
- **Attention**
 - “Multi-tasking” has been scientifically discredited, so focus only on A&P when studying: no internet surfing, phone, video, side conversations, etc.
- **Time**
 - Take your time on assignments and re-read any material that may be confusing. Take notes during the recorded lectures and review them as you study for your quizzes and practical exams.
- **Study strategies**
 - Flash cards
 - i. Works well for details you are not able to remember easily
 - ii. If you can get a card right several times in a row, remove it from the deck to focus on problem content
 - Completion of diagrams and lists/tables from texts
 - i. Cover up text labels with a piece of paper and attempt to write in the correct labels from memory on this paper
 - ii. Advantage: Much faster than making flash cards
 - Diagramming from scratch
 - i. See if you can make a sketch of a structure or system
 - ii. Does not need to be artistic or overly detailed; simple shapes and lines can work well
 - iii. Examples: diagram the anatomy of the heart and the flow of blood through it; diagram the sensation and perception of sound in the ear
 - Use of instructor slideshows
 - i. These are available on Canvas
 - ii. Study each slide, then look away from it and see if you can summarize all the important points on it aloud to yourself, then look back at the slide and make a note of what you missed
 - iii. Can be used to make flashcards as well
 - Assessment metacognition
 - i. Look over EACH question you got wrong on tests and quizzes, and decide WHY you got the question wrong, and HOW you will prevent the problem from occurring in the future.
 - ii. If you do not know HOW to prevent the problem, see your instructor for thoughts on a good approach to try

iii. Example: reasons you might have gotten a question wrong: didn't know a fact; misread or misunderstood the question; made a random silly mistake; anxiety prevented you from thinking clearly; etc.

- Quizzing with classmates
- Creation of acronyms and mnemonics can be extremely valuable; develop ones that you know will stick in your head
- Use of etymology (the study of word derivations)
 - i. Memorization of commonly used prefixes, suffixes, and word roots
- Use of academic support services (SI leaders)

Directions: Fill in your information on this page.

Then, remove it from the syllabus, and hand the completed form to your instructor.

I have read, understand, and will abide by the conditions listed in this BIOSCI 202 FALL 2022 syllabus.

Student name (print legibly):

Student signature:

Guardian signature:

Date: _____