

Biology 285 (Anatomy & Physiology I)
University of Wisconsin – Stevens Point at Wausau and
University of Wisconsin – Stevens Point at Marshfield
Fall 2019, 4 Credits

Lecture Instructor and Wausau Lab Instructor:

Dr. Kristine Prahll

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Office hours: 10 a.m. – 11 a.m. on Mondays, Tuesdays and Thursdays

1:30 p.m. – 3:30 p.m. on Wednesdays

Also, feel free to make scheduled and/or unscheduled office visits at any other time.

Marshfield Lab Instructor:

Roberta White

Office: Room 524 in Marshfield

Phone number: (715) 346-2159 or (715) 316-7805

Office hours: 1:00PM – 1:50 Wednesdays, or other times by request

Lecture: 3:30PM – 4:45PM Tuesdays & Thursdays in Room 240 (Wausau) and Room 466 (Marshfield)

Laboratory in Marshfield: 2:00PM – 4:50PM Wednesday in Room 526 for students in section 83013

Laboratory in Wausau: 2:00PM – 4:50PM Monday in Room 281 for students in section 81998

Textbook: *Hole's Human Anatomy and Physiology 14th ed.* (2016) David Shier, Ricki Lewis & Jackie Butler. McGraw Hill. ISBN: 9780078024290. Additional readings which offer more information and additional perspectives will also be provided.

Course Description and Prerequisites:

An examination of the structure and function of the human body at the molecular, cellular, tissue, organ, and system levels of organization. The integration of these levels of organization within the human organism is emphasized. This is the first semester of a two-semester sequence. Lecture, lab, and may also include demonstrations, discussion, and field trips. Does not count toward the Biology major.

Prerequisites: BIOL 101 or BIOL 130 or BIOL 160 or consent of the instructor.

Course Objectives and Learning Outcomes

1. Describe the structures and functions of the major molecules of a cell
2. Describe how the molecules of a cell work together in structure and function.
3. Understand the roles of the various cells in the human body
4. Describe the structure and role of DNA.
5. Describe the structure and function of skin, bones, joints, muscles, and nerves.
6. Be able to use vocabulary associated with human anatomy and physiology.
7. Design and safely carry out experiments to answer specific scientific questions.
8. Understand how to appropriately use scientific equipment for studying anatomy and physiology.
9. Communicate scientific information in a clear and concise manner.
10. Know the application of anatomy and physiology to health care.
11. Appreciate how knowledge of anatomy and physiology can improve their everyday lives and the lives of others.

Course Expectations

Students are expected to be present at all lecture and laboratory class sessions. Some discussion-based assignments will be done in some class sessions. So, unexcused class absences may negatively affect a student's course grade. Please discuss with your instructor the reason for any absences which you feel should be excused, so that you can be given the opportunity to make up any in-class work that you will miss. Students should not use ear buds, laptop computers, cell phones or other electronic devices in class unless they have spoken with the instructor about this first. Respect should be shown for property of the college. Laboratory safety guidelines will be given to students and must be followed completely. The instructor and students are expected to show respect for everyone in the class. Textbook reading assignments should be completed before the designated class meeting time. Students should come to the labs prepared, having read the introductory material (if any) before the designated time. Students are encouraged to discuss assignments together, but the work that each student hands in should be in his or her own words. Examinations should be completed independently without using any books or notes. The policies found in chapter UWS 14 of the Wisconsin Administrative Code will be used in the case of suspected academic misconduct. For effective communication, students are expected to type and spell-check your work on assignments unless notified otherwise. Students should daily check their student email account and Canvas as some class announcements and some handouts and some reading assignments will be given using these technologies. Scores on assignments and examinations will be posted on Canvas, and an estimation of your course grade will be kept updated during the semester on Canvas.

Care Team

The University of Wisconsin-Stevens Point is committed to the safety and success of all students. The Office of the Dean of Students supports the campus community by reaching out and providing resources in areas where a student may be struggling or experiencing barriers to their success. Faculty and staff are asked to be proactive, supportive, and involved in facilitating the success of our students through early detection, reporting, and intervention. As your instructor, I may contact the Office of the Dean of Students if I sense you are in need of additional support which individually I may not be able to provide. You may also share a concern if you or another member of our campus community needs support, is distressed, or exhibits concerning behavior that is interfering with the academic or personal success or the safety of others, by reporting here: <https://www.uwsp.edu/dos/Pages/Anonymous-Report.aspx>.

Title IX

UW-Stevens Point is committed to fostering a safe, productive learning environment. Title IX and institutional policy prohibit discrimination on the basis of sex, which includes harassment, domestic and dating violence, sexual assault, and stalking. In the event that you choose to disclose information about having survived sexual violence, including harassment, rape, sexual assault, dating violence, domestic violence, or stalking, and specify that this violence occurred while a student at UWSP, federal and state laws mandate that I, as your instructor, notify the Title IX Coordinator/Office of the Dean of Students. Please see the information on the Dean of Students webpage for information on making confidential reports of misconduct or interpersonal violence, as well as campus and community resources available to students. Dean of Students: <https://www.uwsp.edu/DOS/sexualassault> Title IX page: <https://www.uwsp.edu/hr/Pages/Affirmative%20Action/Title-IX.aspx>

Disability and Accommodations

In accordance with [federal law and UW System policies](#), UWSP strives to make all learning experiences as accessible as possible. If you need accommodations for a disability (including mental health, chronic or temporary medical conditions), please visit with the [Disability and Assistive Technology Center](#) to

determine reasonable accommodations and notify faculty. After notification, please discuss your accommodations with me so that they may be implemented in a timely fashion. **DATC contact info:** datctr@uwsp.edu; 715/346-3365; 609 Albertson Hall, 900 Reserve Street

Academic Integrity

Academic Integrity is an expectation of each UW-Stevens Point student. Campus community members are responsible for fostering and upholding an environment in which student learning is fair, just, and honest. Through your studies as a student, it is essential to exhibit the highest level of personal honesty and respect for the intellectual property of others. Academic misconduct is unacceptable. It compromises and disrespects the integrity of our university and those who study here. To maintain academic integrity, a student must only claim work which is the authentic work solely of their own, providing correct citations and credit to others as needed. Cheating, fabrication, plagiarism, unauthorized collaboration, and/or helping others commit these acts are examples of academic misconduct, which can result in disciplinary action. Failure to understand what constitutes academic misconduct does not exempt responsibility from engaging in it. For more information on UWS chapter 14 visit: <https://www.uwsp.edu/dos/Pages/Student-Conduct.aspx>

Recording of Lectures

Audio recordings of the class lecture periods will be made and posted on our class Canvas site.

Absences and Tardiness

If you must miss or come late to a lecture or lab session, please get notes from another student. Also, please see your instructor for handouts and announcements you may have missed. You are responsible for material covered in all class sessions, including class sessions that you miss. Assignments must be handed in on time (this includes lecture and laboratory assignments that were given or due in your absence) unless your instructor has given you permission beforehand to hand in the assignment late. Students are expected to arrive on time for exams.

Make-Up Labs and Exams

If you must miss a class session, please get notes from another student. Notify the instructor in advance if you will miss an examination. You may leave messages on your instructor's telephone answering machine. An acceptable reason must be given for needing to reschedule the testing time. Your instructor will determine if the reason for rescheduling the examination is acceptable. Make-up examinations must be taken within 48 hours of the original test date unless unusual circumstances exist. If you have a reason to reschedule the final exam, please notify your instructor by May 15. Please notify your instructor in advance if you cannot attend a laboratory period, and a make-up lab or alternative activity will be scheduled if an acceptable reason for absence is given prior to the class session.

Late Assignments

Hand in assignments on time. If you are unable to hand in a lecture assignment or laboratory assignment on time, notify the instructor prior to the time it is due. You must provide an acceptable excuse for handing in an assignment late. You will not be allowed to make up in-class discussion assignments unless you have an acceptable reason for missing the class session. Your instructor will determine if an absence is excused. Failure to hand in assignments on time may delay the grading of your work. You may lose some or all of the points from a late assignment if your instructor has not given you permission to hand in the assignment late. The standard late penalty will be a loss of 10% of the points per day.

Participation in Co- and Extracurricular Activities

You are encouraged to participate in co- and extracurricular activities as you are interested and able. You are responsible for material covered in class sessions that you miss because of participation in co- or extracurricular activities. You are also responsible for assignments given and/or due during class sessions that you miss because of such activities. These assignments must be handed in on time. If you must miss an exam because of participation in co- or extracurricular activities, you are responsible for notifying the instructor in advance of the exam. The terms of make-up exams and late assignments as stated in above sections of this syllabus apply.

Laboratory Safety Goggles and Laboratory Clothing

Beginning on September 18, students are required to have chemical splash safety goggles for use in some of the laboratory sessions this semester. Closed-toe shoes that cover the top of the foot are required for participation in all of the laboratory sessions this semester. You must also wear long pants or long skirt during lab classes. You will not be able to participate in the lab class without having appropriate shoes, functional clothing that completely covers legs and, when required, goggles.

Exams, Quizzes & Assignments

- Lecture Exams (100 points each for a total of 200 points):** Two lecture exams will be given on the dates indicated in the class schedule below.
- Lab Exams (100 points each for a total of 200 points):** Two lab practical exams will be given on the dates indicated in the class schedule below. You must take lab exams during your regular lab session.
- Weekly Quizzes (110 points total):** Most weeks, there will be a 10-point quiz covering material *through the previous week's lectures and lab. Each quiz will be comprehensive.* The purpose of these quizzes is to keep you studying consistently. Dates for quizzes are in the class schedule below. The quizzes are scheduled during lab class sessions but will cover lecture and lab material.
- Assignments: (190 points total):** Throughout the semester, in lecture and in lab and as homework you will work on various assignments, including clinical case studies, data analysis or other kinds of activities intended to improve your problem-solving and critical-thinking skills and ability to apply course material.
- Final Examination (100 points):** There will be a *comprehensive* final exam on *lecture* material given on the date indicated in the class schedule.

Summary of Graded Activities & Grading Scale

<u>Graded Activity</u>	<u>Points</u>	<u>Grading Scale</u>	
Lecture Exams	200	≥92% = A	72-77% = C
Lab Exams	200	90-91% = A-	70-71% = C-
Weekly Quizzes	110	88-89% = B+	68-69% = D+
Assignments	190	82-87% = B	60-67% = D
Final Exam	100	80-81% = B-	<60 % = F
Total	800	78-79% = C+	

Achieving Course Objectives:

There is a tremendous amount of information presented to you in your textbook and lectures. In general, the lecture portion of the course will tend to emphasize physiology and the lab portion will tend to emphasize anatomy, although physiology exercises will be done in lab as well as various physiology-related assignments. To help you sort things out and know what you are responsible for, keep the following in mind:

Physiology: Use your lecture notes and lecture slides as a study guide. Unless your instructor indicates otherwise, all the physiology information you need to know for *lecture* exams and weekly quizzes will be in your lecture notes and on lecture slides.

Anatomy: You will receive a study guide for each anatomy topic we cover in lab. The study guide will list all the anatomical features and vocabulary you are responsible for on lab exams and weekly quizzes as well as a list of relevant figures and tables from your text. *NOTE: If an anatomical feature is not listed on the study guide, you don't need to know it, even if it is part of an assigned figure.*

Physiology exercises in lab: In lab you will also be making observations or doing experiments where you collect and interpret or describe data. For each of these, the lab handout will have a list of things you are responsible for on lab practical exams.

Lecture Schedule (Subject to Reasonable Changes)

Day	Topic	Reading
Sept. 3	Introduction to Anatomy & Physiology	Chapter 1
Sept. 5	Anatomical Terminology & Body Organization	Chapter 1
Sept. 10	Biochemistry	Chapter 2
Sept. 12	Biochemistry & Enzymology	Chapter 2 & 4.2
Sept. 17	Cell Biology	Chapter 3
Sept. 19	Cell Biology	Chapter 3
Sept. 24	Cell Biology	Chapter 3
Sept. 26	Cellular Metabolism	Chapter 4
Oct. 1	Cellular Metabolism	Chapter 4
Oct. 3	Cellular Metabolism	Chapter 4
Oct. 8	Histology	Chapter 5
Oct. 10	Histology	Chapter 5
Oct. 15	Lecture Exam I on Chapters 1 – 5	
Oct. 17	Integumentary System	Chapter 6
Oct. 22	Integumentary System	Chapter 6
Oct. 24	Skeletal System	Chapter 7
Oct. 29	Skeletal System	Chapter 7
Oct. 31	Joints	Chapter 8
Nov. 5	Muscular System	Chapter 9
Nov. 7	Muscular System	Chapter 9
Nov. 12	Lecture Exam II on Chapters 6 - 9	
Nov. 14	Nervous System	Chapter 10
Nov. 19	Nervous System	Chapter 10
Nov. 21	Nervous System	Chapter 11
Nov. 26	Nervous system	Chapter 11
Dec. 3	Nervous System	Chapter 11
Dec. 5	Sensory Systems	Chapter 12
Dec. 10	Sensory Systems	Chapter 12
Dec. 12	Course Wrap Up and Review	
Dec. 19	8:00AM – 10:00AM Comprehensive Final <i>Lecture</i> Exam on Chapters 1 -12	

Lab Schedule (Subject to Reasonable Changes)

Day	Topic	Reading
Sept. 4/9	Lab 1: Data Analysis & Scientific Method	Handout
Sept. 11/16	Lab 2: Body Organization & Anatomical Terminology; Quiz 1	Chapter 1/Study Guide
Sept. 18/23	Lab 3: Enzymology Planning & Experimental Design; Quiz 2	Handout/ Chapter 2 & 4.2
Sept. 25/30	Lab 4: Enzymology Data Collection & Analysis; Quiz 3	Handout/ Chapter 2 & 4.2
Oct. 2/7	Lab 5: Cellular Metabolism Planning & Experimental Design; Quiz 4	Chapter 4/Handout
Oct. 9/14	Lab 6: Cellular Metabolism Data Collection & Analysis; Quiz 5	Chapter 4/Handout
Oct. 16/21	Lab 7: Microscopy, Cells & Histology; Quiz 6	Chapter 5/Study Guide
Oct. 23/28	Lab: Lab Practical Exam on Labs 1 – 7	
Oct 30/Nov. 4	Lab 8: Integumentary System - Anatomy; Quiz 7	Chapter 6/Study Guide
Nov. 6/11	Lab 9: Skeletal System & Joints – Gross Anatomy; Quiz 8	Chapters 8 & 9/Study Guide
Nov. 13/18	Lab 10: Muscular System – Anatomy; Quiz 9	Chapter 10/Study Guide/Handout
Nov. 20/25	Lab 11: Nervous System – Gross Anatomy; Quiz 10	Chapter 10/Handout
Nov. 27/Dec. 2	Lab 12: Sensory Systems – Anatomy & Physiology; Quiz 11	Chapter 12/Study Guide/Handout
Dec. 4	Lab: Review/Study Time	
Dec. 9/11	Lab: Lab Practical Exam on Labs 8 – 12	