

BIOL 285 (Anatomy and Physiology Principles)
University of Wisconsin–Stevens Point at Wausau and
University of Wisconsin–Stevens Point at Marshfield
Fall 2022, 4 Credits

Instructor:

Dr. Kristine Prah

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Office Hours: 8:30-10:30 AM on Wednesdays and Fridays, and other times by appointment (in person in 285B in Wausau or by Zoom at <https://wisconsin-edu.zoom.us/j/9042747100>)

Lecture: 3:30PM – 4:45PM Tuesdays & Thursdays in Room 220 (Wausau) and Room 130 (Marshfield)

Laboratory in Wausau: 2:15PM – 5:05PM on Mondays in Room 281 for students in section 81891. This section meets once every two weeks beginning on September 12.

Laboratory in Marshfield: 2:15PM – 5:05PM on Mondays in Room 526 for students in section 81889. This section meets once every two weeks beginning on September 19.

Textbook: *Hole's Human Anatomy and Physiology* 16th edition (2022). Charles Welsh and Cynthia Prentice-Craver (authors). Publisher: McGraw Hill. ISBN: 9781260265224. Additional readings which offer more information and additional perspectives will also be provided.

Course Description:

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, focusing on body organization, support, movement, and neural control. Lecture, lab, and may also include demonstrations, discussion, and field trips. Does not count toward the Biology major. Class Attributes: Lab Science (AD) and Natural World (AD)

Course Prerequisite:

One of the following: BIOL 101, BIOL 110, BIOL 111, BIOL 130, BIOL 160, or Instructor Consent

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. Analyze and interpret data using scientific/quantitative methods to solve a problem or answer a question, and draw appropriate conclusions.
8. Communicate scientific information in a clear and concise manner.
9. Know the applications of anatomy and physiology to health care.

10. Appreciate how knowledge of anatomy and physiology can improve your everyday life and the lives of others.

Course Expectations and Attendance Policy

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. Prior to missing any class session, 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 or cell phones 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 and quizzes shall 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, you should 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.

Exams, Quizzes & Assignments

1. **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. The exams will be in-person, closed-book and closed-notes.
2. **Lab Exams (100 points each for a total of 200 points):** Two lab exams will be given on the dates indicated in the class schedule below. The exams will be in-person, closed-book and closed-notes.
3. **Assignments: (190 points total):** Throughout the semester you will work on various lecture and laboratory 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.
4. **Quizzes (110 points total):** There will be eleven 10-point quizzes covering new (since the last quiz) material. The quizzes will be open-book and open-notes. The quizzes will be given in Canvas and due on the following Mondays:

• September 12	• October 17	• November 28
• September 19	• October 31	• December 5
• September 26	• November 7	• December 12
• October 3	• November 14	
5. **Final Examination (100 points):** On Monday December 19, there will be a *comprehensive* final exam on *lecture* material. This exam will be in-person, closed-book and closed-notes. *Note the time: 8:00 – 10:00AM.*

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-
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+	

Laboratory Safety

Closed-toe shoes that cover the top of the foot are required at all times when you are in the laboratory classroom. You must also wear long pants instead of shorts in the laboratory classroom. You will be required to wear chemical splash safety goggles during some of the laboratory sessions this semester. You may use goggles that are in the lab room, or you may bring your own goggles. 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.

Tutoring-Learning Centers (TLC) at Wausau and Marshfield

The Tutoring-Learning Centers on each campus promote and support the academic environment by providing free, student-centered academic support.

For additional information about the *Wausau* TLC, check the TLC website at <https://www.uwsp.edu/wausau/tlc/> or contact Dr. Lori at lorandal@uwsp.edu | 715-261-6148 | Library Room 256

For additional information about the *Marshfield* TLC, please visit this [website](#) or contact Ryan O'Leary, Academic Coach, Room 404C, email roleary@uwsp.edu or phone 715-898-6036.

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 instructors, we may contact the Office of the Dean of Students if we sense you are in need of additional support which individually we 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>

Equal Access for Students with Disabilities

The University has a legal responsibility to provide accommodations and program access as mandated by Section 54 and the Americans with Disabilities Act (ADA). The university's philosophy is to not only provide what is mandated but also convey its genuine concern for one's total well-being. If accommodations are needed, please contact the instructor as well as the Disability and Assistive Technology Center (DATC), located on the Stevens Point campus. Students can also pick up an application for accommodations packet in the Solution Center.

DATC contact information:

(715) 346-3365 (Voice)

(715) 346-3362 (TDD only)

or via email at datctr@uwsp.edu

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>

Make-Up Labs and Exams

If you must miss a class session, please contact your instructor and also get notes from a classmate. Please notify your instructor in advance if you cannot attend a laboratory period. A make-up lab or alternate activity will be scheduled if an acceptable reason for rescheduling is given to the instructor prior to the class session. Before handing in lab assignments, you must complete the associated activity in lab.

Notify the instructor in advance if you need to reschedule an examination. 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 December 10.

Absences and Tardiness

You are responsible for material covered in all class sessions, including class sessions that you miss partially or entirely. If you miss part or all of a class session, please check with your instructor. 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.

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 have 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 late penalty will usually be a loss of 10% of the points per day.

Proper Use of Course Materials

Course materials for BIOL 285 are protected intellectual property at UW-Stevens Point. Students in this course may use the materials for their personal use related to participation in this class. Students may also take notes solely for their personal use. Students may not copy or share course materials outside of class, including posting on internet sites or selling to commercial entities. Students are also prohibited from providing or selling their personal notes to anyone else or being paid for taking notes by any person or commercial firm without the instructor's express written permission. Unauthorized use of these copyrighted lecture materials constitutes copyright infringement and may be addressed under the university's policies, UWS Chapters 14 and 17, governing student academic and non-academic misconduct.

Incomplete Grade

If you are unable to complete your work in a course due to extenuating circumstances or if you need to extend your research or performance beyond the normal limits of a term, you may ask for a temporary grade of "incomplete" in the course. An "incomplete" should be reserved for the completion of a definable amount of work (for example, one term paper or one exam) that occurs near the end of the semester. The "incomplete" gives you more time to complete a limited amount of missing work defined by your instructor.

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.

Navigate Student App

For those of you looking to connect with other students in the course for study groups, the Navigate student app has a feature called **Study Buddies**. Here, you can find a list of other students who have indicated they are interested in forming a study group. If you are the first, you will be sent notifications when other students join. You can select who you want to connect with and can leave the group at any time. Additionally, the Navigate student app can help you with the following at UWSP:

- Schedule appointments
- Remove Holds from your account
- Find important resources
- Learn of key dates and important to-dos on campus
- View your class schedule

Accessing the Navigate student app: For students who have already downloaded the Navigate smart phone app, choose the **Study Buddies** icon, and a full list of your courses will appear. Each section shows how many buddies are in the group. The free Navigate app is available to download from any mobile operating system. For students without a smart device, a desktop version of the app is available here: <https://uwsp.navigate.eab.com/app>

Lab Schedule (Subject to Reasonable Changes)

Day (Wausau/Marshfield)	Topic	References
Sept. 12/19	Data Analysis & Scientific Method; Body Organization & Anatomical Terminology; Enzymology Experiments	Handouts; Chapters 1 & 2; Textbook Appendix A on page 947
Sept. 26/Oct. 3	Cellular Metabolism Experiments; Microscopy	Handouts; Chapter 4
Oct. 10/17	Cells & Histology	Handouts; Chapter 5
Oct. 24/31	Lab Practical Exam on Labs from September 12 through October 17	
Nov. 7/14	Integumentary System; Skeletal System & Joints; Muscular System	Chapters 6, 7, 8 & 9; Study Guides
Nov. 21/28	Nervous System and Sensory Systems	Chapters 11 & 12; Study Guides
Dec. 5/12	Lab Practical Exam on Labs from November 7 through November 28	

Lecture Schedule (Subject to Reasonable Changes)

Day	Topic	Reading
Sept. 6	Introduction to Anatomy & Physiology	Chapter 1
Sept. 8	Anatomical Terminology & Body Organization	Chapter 1
Sept. 13	Biochemistry	Chapter 2
Sept. 15	Biochemistry (continued) & Enzymology	Chapter 2 & 4.2
Sept. 20	Cell Biology	Chapter 3
Sept. 22	Cell Biology (continued)	Chapter 3
Sept. 27	Cell Biology (continued)	Chapter 3
Sept. 29	Cellular Metabolism	Chapter 4
Oct. 4	Cellular Metabolism (continued)	Chapter 4
Oct. 6	Cellular Metabolism (continued)	Chapter 4
Oct. 11	Histology	Chapter 5
Oct. 13	Histology (continued)	Chapter 5
Oct. 18	Histology (continued)	Chapter 5
Oct. 20	Lecture Exam One on Chapters 1-5	
Oct. 25	Integumentary System	Chapter 6
Oct. 27	Integumentary System (continued)	Chapter 6
Nov. 1	Skeletal System	Chapter 7
Nov. 3	Skeletal System (continued)	Chapter 7
Nov. 8	Joints	Chapter 8
Nov. 10	Joints (continued)	Chapter 8
Nov. 15	Muscular System	Chapter 9
Nov. 17	Muscular System (continued)	Chapter 9
Nov. 22	Lecture Exam Two on Chapters 6-9	
Nov. 29	Nervous System	Chapter 10
Dec. 1	Nervous System (continued)	Chapter 10
Dec. 6	Nervous system (continued)	Chapter 11
Dec. 8	Nervous System (continued)	Chapter 11
Dec. 13	Sensory Systems	Chapter 12
Dec. 15	Sensory Systems (continued)	Chapter 12
Dec. 19	Comprehensive Final Lecture Exam on Chapters 1 -12 Note: This exam is on a Monday Note the exam time: 8:00 – 10:00AM	