

BIOL 286 (Anatomy & Physiology Connections)
University of Wisconsin–Stevens Point at Wausau and
University of Wisconsin–Stevens Point at Marshfield
Spring 2022, 4 Credits

Instructor:

Dr. Kristine Prah

Office: Room 285-B in Wausau

E-mail: kprahl@uwsp.edu

Office Hours: Room 285-B in Wausau or by Zoom (<https://wisconsin-edu.zoom.us/j/9042747100>)

8:00AM to 10:00AM on Mondays and Wednesdays. Other times by appointment.

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

Laboratory in Wausau: 2:00PM – 4:50PM on designated Mondays in Room 281 for students in section 41849. The Wausau lab section meets on the following dates: 1/24, 2/7, 2/21, 3/7, 3/28, 4/11, and 4/25.

Laboratory in Marshfield: 2:00PM – 4:50PM on designated Mondays in Room 526 for students in section 41847. The Marshfield lab section meets on the following dates: 1/31, 2/14, 2/28, 3/14, 4/4, 4/18 and 5/2.

Textbook: *Hole's Human Anatomy and Physiology* 16th edition (2022) by Charles Welsh and Cynthia Prentice-Craver. 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. This is the second semester of a two-semester sequence. Lecture, lab, and may also include demonstrations, discussion, and field trips. Does not count toward the Biology major.

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. Explain the functions of the following human body systems: endocrine, cardiovascular, lymphatic, immune, digestive, respiratory, urinary and reproductive.
2. Describe the structure and functions of the major parts of the following human body systems: endocrine, cardiovascular, lymphatic, immune, digestive, respiratory, urinary and reproductive.
3. Explain the importance of maintaining water, pH and electrolyte balance.
4. Be able to use vocabulary associated with human anatomy and physiology.
5. Design and safely carry out experiments to answer specific scientific questions.
6. Understand how to appropriately use scientific equipment for studying anatomy and physiology.
7. Communicate scientific information in a clear and concise manner.
8. Know the application of anatomy and physiology to health care.
9. Know the applications of genetics and genomics to health care.

10. 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 meetings and all meetings of their laboratory cohort. 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 as soon as possible 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. 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.

Laboratory Safety and Clothing

Closed-toe shoes that cover the top of the foot are required for participation in all of the laboratory sessions. 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 and functional clothing that completely covers your legs. Goggles will be provided to you when needed, or you may bring your own laboratory splash goggles to use.

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.
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.
3. **Quizzes (110 points total):** There will be eleven 10-point quizzes covering recent (since the last quiz) material. The quizzes will be online, open-book and open-notes. The quizzes will due on the following Mondays:
 - January 31
 - February 7
 - February 14
 - February 28
 - March 7
 - March 14
 - March 28
 - April 4
 - April 18
 - April 25
 - May 9
4. **Pathophysiology Project (80 points):** This is described in a handout on Canvas. This project involves an oral presentation and a paper.
5. **Other Assignments: (110 points total):** Throughout the semester you will work on various assignments, including clinical case studies, data analysis and other kinds of activities intended to improve your problem-solving and critical-thinking skills and your ability to apply course material.
6. **Final Examination (100 points):** May 16 at 10:15 AM, *comprehensive* final exam on *lecture* material

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+
Pathophysiology Project	80	82-87% = B	60-67% = D
Other Assignments	110	80-81% = B-	<60 % = F
Final Exam	100	78-79% = C+	
Total	800		

Face Coverings

At all UW-Stevens Point campus locations, the wearing of face coverings is mandatory in all buildings, including classrooms, laboratories, studios, and other instructional spaces. Any student with a condition that impacts their use of a face covering should contact the [Disability and Assistive Technology Center](#) to discuss accommodations in classes. Please note that unless everyone is wearing a face covering, in-person classes cannot take place. This is university policy and not up to the discretion of individual instructors. Failure to adhere to this requirement could result in formal withdrawal from the course.

Health Guidance

1. Please monitor your own health each day using [this screening tool](#). If you are not feeling well or believe you have been exposed to COVID-19, do not come to class; email your instructor and contact Student Health Service (715-346-4646). As with any type of absence, students are expected to communicate their need to be absent and complete the course requirements as outlined in the syllabus.
2. Maintain a minimum of 6 feet of physical distance from others whenever possible.
3. Do not congregate in groups before or after class; stagger your arrival and departure from the classroom, lab, or meeting room.
4. Wash your hands or use appropriate hand sanitizer regularly and avoid touching your face.
5. Please maintain these same healthy practices outside the classroom.

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>.

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 Centers on the Marshfield and Wausau campuses.

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>

Tutoring-Learning Centers (TLC)

The Tutoring-Learning Centers (on all UWSP campuses) promote and support the academic environment by providing free, confidential, student-centered academic support. The TLC offers one-on-one tutoring services and one-on-one academic coaching appointments. Here are some campus-specific details:

- For additional information about the Marshfield TLC, please visit this [website](#) or contact Laurie Petri, Room 404B, email lpetri@uwsp.edu or phone (715) 389-6512.
- For additional information about the Wausau TLC, please visit this [website](#) or contact Lori Randall at (715) 261-6148 or wautlc@uwsp.edu.

DUO Center

The DUO Center, located in room 224 on the Wausau campus and room 107 on the Marshfield campus, is open to first-generation students, Pell Grant-eligible students, and students with disabilities on the Marshfield and Wausau campuses. It provides students with access to professional tutors in Math and writing. DUO staff meet one-on-one with students to answer questions, prepare for assignments/exams/papers, and simply as a resource to students. Students can meet with the tutor/s regularly or on an as-needed basis – in other words, they support individual students in individualized ways. To learn more about DUO, contact your adviser or stop by the DUO Center.

Proper Use of Course Materials

Course materials for BIOL 286 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 and recordings constitutes copyright infringement and may be addressed under the university's policies, UWS Chapters 14 and 17, governing student academic and non-academic misconduct.

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 reason 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.

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 a class session, please check with your instructor in advance of the meeting. 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.

Make-Up Exams

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 May 12.

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.

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.

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>

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 we, 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>

Lecture Schedule (Subject to Reasonable Change with Notification)

Day	Topic	Reading
Jan. 25	Course Introduction; Endocrine System	Chapter 13
Jan. 27	Endocrine System, continued	Chapter 13
Feb. 1	Blood	Chapter 14
Feb. 3	Blood, continued	Chapter 14
Feb. 8	Cardiac Muscle and Cardiovascular System	Section 9.5 and Chapter 15
Feb. 10	Cardiovascular System, continued	Chapter 15
Feb. 15	Lymphatic & Immune Systems	Chapter 16
Feb. 17	Lymphatic & Immune Systems, continued	Chapter 16
Feb. 22	Lecture Exam 1 on Chapters 13 – 16 and Section 9.5	
Feb. 24	Digestive System	Chapter 17
March 1	Digestive System	Chapter 17
March 3	Nutrition & Metabolism	Chapter 18
March 8	Nutrition & Metabolism	Chapter 18
March 10	Respiratory System	Chapter 19
March 15	Respiratory System	Chapter 19
March 17	Urinary System	Chapter 20
March 29	Urinary System	Chapter 20
March 31	Water, Electrolyte & pH Balance	Chapter 21
April 5	Water, Electrolyte & pH Balance	Chapter 21
April 7	Water, Electrolyte & pH Balance	Chapter 21
April 12	Lecture Exam 2 on Chapters 17 – 21	
April 14	Male Reproductive System	Chapter 22
April 19	Male Reproductive System	Chapter 22
April 21	Female Reproductive System	Chapter 22
April 26	Female Reproductive System	Chapter 22
April 28	Pregnancy, Growth & Development	Chapter 23
May 3	Pregnancy, Growth & Development	Chapter 23
May 5	Genetics and Genomics	Chapter 24
May 10	Genetics and Genomics	Chapter 24
May 12	Course Wrap-Up and Review	
May 16	Comprehensive Final Lecture Exam (Note time – 10:15 AM)	

Lab Schedule (Subject to Reasonable Change with Notification)

<u>Date (Wausau/Marshfield)</u>	<u>Topic</u>
January 24/January 31	Laboratory Safety; Scientific Literature; Endocrine System
February 7/February 14	Blood Typing; Cardiovascular System
February 21/February 28	Lymphatic System; Digestive System
March 7/March 14	Laboratory Exam One
March 28/April 4	Respiratory System; Spirometry; Urinary System
April 11/April 18	Male and Female Reproductive Systems; Pathophysiology Presentations
April 25/May 2	Laboratory Exam Two