



Course Prefix/Number/Title: Dual Credit BIOL 221 Anatomy & Physiology II, Spring Semester 2025

Number of Credits: four

Course Description: This course emphasizes the structure and function of the human body.

Pre-/Co-requisites: none

Course Objectives:

- 1) Structure and Function integrates related facts, principles, and concepts from various areas, including cell biology, chemistry, biochemistry, and hemostasis.
- 2) Systems Covered: Throughout the course, you will study cells and tissues, as well as the following systems:
 - a. Endocrine System
 - b. Cardiovascular & Circulatory Systems
 - c. Lymphatic System & Immunity
 - d. Respiratory System
 - e. Digestive & Urinary Systems
 - f. Reproductive Systems

Instructor: Emily Schaefer

Office Hours: By appointment

Phone: 701-240-7782

Email: Emily.schaefer@dakotacollege.edu

IVN Lecture Schedule: MWF 7:30-8:15 am

Lab Schedule: TBD

Textbook(s): Need to be ordered/purchased from the DCB bookstore PRIOR to the start of class!

Lecture – Hole's Anatomy & Physiology by Charles Welsh, 16th Edition

Lab – Human Anatomy & Physiology Laboratory Manual, 5th Edition – Cynthia Prentice- Caver & Terry R. Martin

Course Requirements: Textbook, Lab Manual

Tentative Course Outline:

- ✓ Included below is a tentative course outline for the chapters covered as well as quizzes, exams, and lab activities. The schedule is subject to change. All assignments are due by 11:59 pm on the due date. Please see Blackboard for specific due dates for assignments.

Week		Unit	Chapters	Labs	Exams
1	Jan 13 - 17	Unit 4: Fluids & Transport	✓ 13 – Endocrine System	○ NO LABS THIS WEEK	
2	Jan 20 – 24		✓ 14 - Blood	○ Lab 39 – Endocrine Structure & Function	
3	Jan 27 – 31		✓ 15 – Cardiovascular System – The Heart	○ Lab 41 – Blood Cells ○ Lab 42 – Blood Typing	
4	Feb 3-7		✓ 15 – Cardiovascular System - Circulation	○ Lab 44 – Heart Structure ○ Lab 45 – Cardiac Cycle ○ Lab 47 – Blood Vessel Structure	
5	Feb 10-14		✓ 16 – Lymphatic System & Immunity	○ Lab 49 – Lymphatic System	Exam 1 – Chap 13-16
6	Feb 17 – 21	Unit 5: Energy & Maintenance	✓ 17 – Digestive System	○ Lab 54 – Digestive Organs	
7	Feb 24 – 28		✓ 18 – Nutrition & Metabolism	○ Lab 56 – Metabolism	
8	March 3 - 7		✓ 19 – Respiratory System	○ Lab 50 – Respiratory Organs ○ Lab 53 – Control of Breathing	Exam 2 – Mid-Term Chap 17 - 19
9	March 10 - 14		Spring Break		
10	March 17 – 21		✓ 20 – Urinary System	○ Lab 57 – Urinary Organs	
11	March 24 – 28		✓ 21 – Water, Electrolyte, & Acid-Base Balance	○ Lab 58 – Urinalysis	
12	March 31 – Apr 4		✓	○	Exam 3 – Chap 20 -21
13	April 7-11	Unit 6: Human Development	✓ 22 – Reproductive System - Male	○ Reproductive Systems - Male	
14	April 14 – 18		✓ 22 – Reproductive System - Female	○ Reproductive Systems - Female	
15	April 21 – 25		✓ 23 – Pregnancy, Growth & Development	○ Genetics	
16	April 28 – May 2		✓ 24 – Genetics & Genomics	○ Lab Final	
17	May 5 – 9	Finals	✓ Final Exam Review	○	Exam 4 – Final Chap 22-24

Class Policies & Expectations:

- 1) ***Classwork & Effort:*** You can expect to spend 3-6 hours per week working on this course outside of the lab and lecture. This course relies heavily on memorization of the information. Flash cards are an excellent way to assist in the memorization process. Please make sure that you have consistent access to the internet and the course materials for the whole course. **You** are directly responsible for the grade that you earn in this class.
 - ✓ I will create a link for a class Quizlet that will include study sets for each chapter, as an additional resources to help you study.
 - ✓ There are many study resources available on the online textbook website.
 - 2) ***Attendance:*** Your attendance in lecture is expected and will be included in your final grade. Each lecture includes participation questions that are part of the attendance grade in addition to you being physically present that day. If you are going to be gone for a school-related event, please let me know prior to your absence so that you can make arrangement to complete any missed work. If you are absent for an unexcused reason or you do not communicate with me prior to class, you will not be able to make up those points.
 - 3) ***Grades:*** The grades will be calculated based on total points for all activities. The breakdown of points is given below (this may change slightly):

<ul style="list-style-type: none">✓ Chapter Comprehension Checks (12)✓ Attendance✓ Quizzes✓ Labs✓ Exams (4)	<p>Grading Scale will be as follows:</p> <p>A: 90 – 100% of total points</p> <p>B: 80 – 89% of total points</p> <p>C: 70 – 79% of total points</p> <p>D: 60 – 69% of total points</p> <p>F: 59% or below of total points</p>
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- 4) ***Assignments*** - Assignments that not turned in by the due date will automatically be given a 'zero'. It is the student's responsibility to complete all assignments and keep track of due dates set up with in the course. If a student does miss the deadline, they must reach out to me within one week to make up the assignment and will result in a reduction in grade of up to 20%.
 - ✓ Chapter Comprehensions Checks – There will be a twenty questions quiz for every chapter. Those 10 questions being pulled from a pool of questions for the chapter. Students have unlimited tries for each chapter quiz, and the highest attempt will be recorded. Use these assignments as study tools for the larger unit exams, and to review the readings.
 - ✓ Quizzes – There will be 1 – 2 quizzes per chapter, depending on the pace that we follow for the course. You will be notified at least one class period prior to the quiz. Quizzes will be composed of multiple choice or matching and are designed to help prepare you for the exam. You will have two chances to complete each quiz, and the higher of the two scores will be kept. Quizzes will be opened after class on the day they are assigned and will be open for 48 hours.
 - ✓ Labs – Your lab instructor will have more specific details on grading.
 - Timely lab attendance is required and expected each week. Setting up labs for each week is very time intensive and this makes it difficult to find time for make-up labs due to student absences. If you miss a lab due to an illness, you will need to provide a doctor's note to your lab instructor to be able to make up a missed lab.
 - ✓ Exams – There will be 4 exams throughout the course, including the final exam. Each exam will be worth 75 - 100 points and students will be given one attempt at the exam. The exams will be online

via Blackboard and will be completed during our scheduled class time. You MUST be present in class to complete the exam unless you have made arrangements with me prior to the exam date.

- 5) **Communication:** Communication via email and Blackboard messages will my main way of communicating. If you are having questions with any assignments or accessing the course, please reach out to me as soon as possible, so I can help you find a solution to those problems. Technical problems will not be accepted as a reason for not completing assignments. Please reach out to me with any questions. Check the Blackboard class regularly, as I will post updates or adjustments to the weekly schedule.
- ✓ If you need a faster response from me, please either email or text me. Please include your name and which class you are in with the email. I can normally respond within 1 – 2 hours of the message if sent between 7 am to 7 pm M-F. Any messages after 7 pm may not be responded to until the next day. Also, messages sent on weekends may not be answered until Monday.
 - ✓ You can message me in Blackboard, but I do not get notifications of those messages immediately. You can select the option to send me an email copy, which then will send me a notification.

General Education Competency/Learning Outcome(s) OR CTE Competency/Department Learning Outcome(s):

- 1) To learn and retain information essential to a broad knowledge of human anatomy and physiology.
- 2) Demonstrate the application of the scientific methods of inquiry.
- 3) Practice sound, safe, and sensible laboratory techniques.
- 4) Demonstrate knowledge of the natural environment
- 5) Demonstrate an awareness of the role of science in everyday life.

Relationship to Campus Focus:

- This course addresses the campus theme by incorporating the latest diagnostic procedures, treatments, and other technologies that are used to identify and treat human diseases and disorders.

Student Email Policy:

Dakota College at Bottineau is increasingly dependent upon email as an official form of communication. A student's campus-assigned email address will be the only one recognized by the Campus for official mailings. The liability for missing or not acting upon important information conveyed via campus email rests with the student.

Academic Integrity:

According to the DCB Student Handbook, students are responsible for submitting their own work. Students who cooperate on oral or written examinations or work without authorization share the responsibility for violation of academic principles, and the students are subject to disciplinary action even when one of the students is not enrolled in the course where the violation occurred. The Code detailed in the Academic Honesty/Dishonesty section of the Student Handbook will serve as the guideline for cases where cheating, plagiarism or other academic improprieties have occurred.

Disabilities or Special Needs:

Students with disabilities or special needs (academic or otherwise) are encouraged to contact the instructor and Disability Support Services.

Title IX:

Dakota College at Bottineau (DCB) faculty are committed to helping create a safe learning environment for all students and for the College as a whole. Please be aware that all DCB employees (other than those designated as confidential resources such as advocates, counselors, clergy and healthcare providers) are required to report information about such discrimination and harassment to the College Title IX Coordinator. This means that if a student tells a faculty member about a situation of sexual harassment or sexual violence, or other related misconduct, the faculty member must share that information with the College's Title IX Coordinator. Students wishing to speak to a confidential employee who does not have this reporting responsibility can find a list of resources on the DCB Title IX webpage.

AI Student Policy:

Unless otherwise indicated in the course syllabus, or in individual instructions for course assignments, or in the absence of the express consent of the course instructor, students are not allowed to utilize generative AI to help produce any of their academic work. Any violation of this policy will be considered an act of academic dishonesty as outlined within the Dakota College Code of Student Life.

RESPONSIBILITIES

Students	<ul style="list-style-type: none">• Responsible to follow the syllabus and assignment instructions regarding use of generative AI for all academic work.• Obtain permission of the instructor prior to the use of generative AI that is outside of the syllabus or assignment instructions. Provide appropriate rationale for how the use of generative AI will enhance the learning experience for the assignment.• In instances where generative AI is permissible, appropriately cite the generative AI program used and indicate where in the assignment it was used, in a brief submission statement.
Faculty	<ul style="list-style-type: none">• Determine if the use of generative AI could enhance student learning in any assignment or project.• Clearly indicate in all course syllabi if generative AI is allowable for any academic work.• If allowable, give specific parameters for how and when generative AI may be used.• If a violation of generative AI for the individual course/syllabus is suspected, discuss the concern with the student. If violation is still suspected, inform the appropriate semester coordinator/program director.