DAKOTA COLLEGE AT BOTTINEAU

COURSE SYLLABUS

Course Prefix/Number/Title: BIOL 220 Anatomy & Physiology I, Spring Semester 2025

Number of Credits: 4

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'll study cells and tissues, as well as the following systems:
    a. Levels of Organization of the Body (Biomolecules, Cells, Tissues)
    b. Integumentary System: The skin and its functions.
    c. Skeletal System: Bones, joints, and their roles.
    d. Nervous System: Neurons, brain, spinal cord, and peripheral nerves.
    e. Muscular System: Muscles and their functions.

Instructor: Emily Schaefer
Office Hours: By appointment
Phone: 701-240-7782
Email: Emily.schaefer@dakotacollege.edu
Lecture/Lab Schedule: Online

Textbook(s):

Lecture – **Anatomy and Physiology, 2e published by OpenStax**

- This textbook is fully online and can be accessed via this link: Anatomy and Physiology, 2e. Using this link and setting up an account will allow you to save highlights and notes you add throughout the course. There is no cost to access this book.
- There is also a PDF version available to download in the Blackboard course. You can also find a link to order a print copy of the textbook here or through the bookstore.

Lab – **Science Interactive Lab Kit**

- The lab materials for this course are a kit available through Science Interactive. You will need to purchase the kit from the DCB bookstore and you will need to make sure you have received your kit **PRIOR** to the start of the class. Plan for 3-5 days for the kit to arrive once you have ordered it from the bookstore.
- All labs will be submitted via the Science Interactive Platform, which will link to the gradebook in Blackboard.

Course Requirements: Textbook, Science Interactive Lab Kit

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.

Class Policies & Expectations:

Week		Unit	Chapters	Labs	Exams
1	Jan 13 - 17	**Unit 1: Levels of Organization**	✓ 1 - An Introduction to the Human Body	▪ Lab 1-4 ▪ Lab 5 – Anatomical Orentations	
2	Jan 20 – 24		✓ 2 - Chemical Level of Organization	▪ Lab 6 – Biomolecules	
3	Jan 27 – 31		✓ 3 - Cellular Level of Organization	▪ Lab 7 – Cell Types ▪ Lab 8 – Diffusion & Osmosis	
4	Feb 3-7		✓ 4 - Tissue Level of Organization	▪ Lab 9 – Tissues and Histology	**Exam 1: Chap 1 – 4**
5	Feb 10 – 14	**Unit 2: Support and Movement**	✓ 5 - Integumentary System	▪ Lab 10 – Integumentary System	
6	Feb 17 – 21		✓ 6 - Bone Tissue & the Skeletal System	▪ Lab 11 – Overview of the Skeletal System	
7	Feb 24 – 28		✓ 7 - Axial Skeleton	▪	
8	March 3 - 7		✓ 8 - Appendicular Skeleton	▪ Lab 12 – Axial and Appendicular Skeleton	**Exam 2: Mid-Term Chap 5 – 8**
9	**March 10 - 14**		**Spring Break**		
10	March 17 – 21		✓ 9 - Joints	▪ Lab 13 – Joints	
11	March 24 – 28		✓ 10 - Muscle Tissue	▪	
12	March 31 – Apr 4		✓ 11 - Muscular System	▪ Lab 14 – Gross Anatomy of the Muscular System	
13	April 7-11	**Unit 3: Regulation, Integration, and Control**	✓ 12 - Nervous System & Nervous Tissue	▪	**Exam 3: Chapter 9 – 11**
14	April 14 – 18		✓ 13 - Anatomy of Nervous System	▪ Lab 15 – The Central Nervous System	
15	April 21 – 25		✓ 14 - Somatic Nervous System	▪ Lab 16 – The Perpherial Nervous System	
16	April 28 – May 2		✓ 15 - Autonomic Nervous System	▪ Lab 17 – Senses	
17	May 5 – 9		✓ 16 - Neurological Exam	▪	
18	May 12 – 16		✓	▪	**Exam 4: Final Chap 12 – 16**

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. **<u>You</u>** are directly responsible for the grade that you earn in this class.
   - ✓ The OpenStax textbook website has a lot of great resources to help study, so please take advantage of those. The quiz and exam questions will be based on those questions from your textbook. There are also links to videos that can help explain concepts.
   - ✓ 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. Flash cards are a great way to help you study, and there are many other resources online as well.
   - ✓ I will also post a PowerPoint of notes for each chapter to help you study and learn the material.
2) *Grades*: The grades will be calculated based on total points for all activities. The breakdown of points is given below (this may change slightly):

   - ✓ Reading Quizzes (16)
   - ✓ Quizzes (12)
   - ✓ Labs (12)
   - ✓ Exams (4)
   - ✓ **Total:**

   Grading Scale will be as follows:

   A: 90 – 100% of total points
   B: 80 – 89% of total points
   C: 70 – 79% of total points
   D: 60 – 69% of total points
   F: 59% or below of total points

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3) ***Assignments***: Please keep track of due dates in Blackboard. The chapter comprehensions checks and Labs will not have a penalty for being turned in late. Quizzes and Exams will be subject to a 10% reduction in the overall grade for each day they are turned in past the due date. You will have a MAX of 3 days to reach out to me to plan for completing those assignments.
   - ✓ <u>Chapter Comprehension Checks</u> – There will be a 10-20 multiple choice question assignment for every chapter. Those questions are 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 quizzes as study tools for the larger unit exams, and as a way to review the readings.
   - ✓ <u>Quizzes</u> – There will be 1 – 2 quizzes each week covering the material from that chapter, depending on the content. The quizzes will be open for 48 hours, and you will have two tries for each quiz. The better of the two scores will be kept. You will be notified at least a week before the quiz and what it will cover.
   - ✓ <u>Labs</u> – You will need to have purchased and received your kit from Science Interactive in order to access the lab materials. ALL lab assignments will be completed in the Science Interactive online platform. The lab assignment due dates to meant to help you keep pace in the class and there is no penalty for completing them late, but information from them will appear on the exams, so it will be important to follow the schedule to keep the
   - ✓ <u>Exams</u> – 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 open for a period of 48 hours, so please make sure you plan accordingly to complete the exams within that time window. These will include information from both lecture & the lab activities.
4) ***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.

5) ***Class meetings***: I will hold a weekly class meeting to allow for students to ask questions, and for a short review of the material from me. I will send out a poll during the first week to determine the best day and time for those meetings. They are not mandatory, but students have found them helpful in the past.

General Education Competency/Learning Outcome(s) <u>OR</u> 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	• 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	• Determine if the use of generative AI could enhance student learning in any assignment of 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.