DAKOTA COLLEGE AT BOTTINEAU

COURSE SYLLABUS

Course Information:

Course Prefix/Number/Title: BIOL 221 Anatomy and Physiology II (Dual-Credit)

Number of Credits: 4

Course Description: A study of the structure and function of the human body.

Pre-/Co-requisites: BIOL 220

Instructors	Emily Schaefer – Lecture	Zach Lessig – DCB Lab	Raquel Dugan-Dibble, MSU Lab
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Class Schedule

- MWF: 7:40 – 8:20 am, IVN
- MSU Lab: Wednesday from 3:00 – 4:50 pm
- DCB Lab: Tuesday from 11:00 am – 12:50 pm

Course Required Text (both available through Dakota College Bookstore):

✓ Textbook: Anatomy and Physiology, 9th, or 10th edition; Patton and Thibodeau

✓ Laboratory Manual: Anatomy and Physiology, 10th edition; Patton and Thibodeau

Course Objectives

1. Students gain a more thorough understanding of the inter-relationships and organizational hierarchy among the systems of the body.
2. Students will gain a more thorough understanding of the role of feedback systems, osmosis/diffusion, electrolyte balance, acidosis/alkalosis in maintaining homeostasis.
3. Diagnostic procedures & Treatments of disease
4. Organ systems that can be covered include musculoskeletal, respiratory, circulatory, nervous, integumentary, endocrine, lymphatic, digestive, reproductive, and urinary.

Grading

- Grades will be calculated based on total points and will be weighted accordingly:
  - **Lecture – 90%,** including:
    - Daily Attendance Grade 5%
    - Quizzes (10) 35%
    - Exams (6) 40%
  - **Lab – 10%,** including:
    - Lab Reports
    - Lab Quizzes (5)
    - Lab Exams (4)
- The following grading scale will apply to both lecture & lab grades:
  - A = 89.5 - 100% of the total points
  - B = 79.5 - <89.5% of the total points
  - C = 69.5 - <79.5% of the total points
  - D = 59.5 - <69.5% of the total points
  - F = <59.5% of the total points

The information in this syllabus is not all encompassing of class policies and procedures. They are subject to change at any time at the discretion of the instructor, which will be communicated in a timely manner.

To the students

Quizzes & Exams

- There will be a total of 10 quizzes for this lecture, with each quiz being worth 20-30 points.
    - Quizzes will be made available at the end of class on Fridays and will be due at the end of the day the following Monday. It is your responsibility to plan accordingly to complete the quizzes on time.
- There will be 6 total exams, with each exam being worth 100 points.
    - The Mid-Term and the Final exam will be completed on paper **IN** the classroom.
    - The reaming 4 exams will be completed online through Blackboard Ultra.
        - The day of the exam, there will not be class, so students are able to use that time to complete the exam.
    - Students will have 24 hours to complete the exam on the scheduled date, it will open at midnight on that day, and due at the end of the day.
- There is a three-day grace period to make up any missed exam (that has not been previously arranged) or assignment with a 10% deduction for each day it is late. Any missed exam/work not made up within the allotted time will be given a zero. It is the **responsibility of the student** to schedule make-up work within an acceptable period due to extenuating circumstances.

Attendance & Communication Expectations

- Students are expected to attend all lectures and lab classes.
    - Students are expected to come to lectures and lab classes prepared for the class, with all the required materials as well as pre-reading assignments completed.
- Communication will be through **DCB email**, Blackboard Announcements, and class announcements.
    - If you need to miss either a lecture or lab class, you will need to reach out to your instructor PRIOR to missing the class to plan to complete the assignments they missed.
    - It is **YOUR responsibility** to reach out to your instructors if a situation arises that prevents you from attending the lecture or lab class.

Class Policies

- For each lecture and lab class, the following expectations will be in place. If you choose not to follow these expectations, you may be asked to leave:
    - **Be Respectful** – treat all students, teachers, and class materials with respect.
    - **Be Responsible** – keep track of the course schedule and complete assignments.
    - **Be Safe** – follow all lab safety procedures and instruction directions.
    - **Be Ready to Learn** – come to lecture and lab prepared.

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 essential information conveyed via campus email rests with the student.

Tentative Schedule

Below is a tentative schedule of the material that will be covered in lecture and in lab. This schedule is subject to change at the discretion of the instructor:

Week	Date	Lecture Schedule	Lab Schedule
Week 1 – Unit 4.1	Jan 8	No Class	Lab Week 1 No Lab this week
	Jan 10	Intro, Syllabus, Start Ch. 27 – Blood	
	Jan 12	Complete Ch 27 Notes (Quiz #1)	
Week 2 – Unit 4.2	**Jan 15**	**NO CLASS**	Lab Week 2 Lab Intro & Safety Lab 34: Blood Lab 35: The Heart
	Jan 17	Chapter 28 - Heart	
	Jan 19	Chapter 29 – Blood Vessels (Quiz #2)	
Week 3 – Unit 4.3	Jan 22	Chapter 30 – Blood Circulation	Lab Week 3 Lab Quiz #1 Lab: 37: Pulse & Blood Pressure Lab 38: Circulatory Pathway
	Jan 24	Exam 1 Review in Class	
	Jan 26	**Exam 1: Chp27-30**	
Week 4 – Unit 4.4	Jan 29	Chapter 31 – Lymphatic System	Lab Week 4 Lab 39 & 40: Lymphatic System
	Jan 31	Chapter 31 – Lymphatic System	
	Feb 2	Chapter 32 – Innate Immunity (Quiz #3)	
Week 5 – Unit 4.5	Feb 5	Chapter 33 – Adaptive Immunity	Lab Week 5: **Lab Exam #1**
	Feb 7	Chapter 34 – Stress	
	Feb 9	Chapter 34 – Stress (Quiz #4)	
Week 6 – Unit 5.1	Feb 12	Exam Review In Class	Lab Week 6 Lab 41 & 42: Respiratory System
	Feb 14	**Exam 2 – Ch 31-34**	
	Feb 16	Chapter 35 – Respiratory Tract	
Week 7 – Unit 5.2	Feb 19	**No Class**	Lab Week 7 Lab 43: Pulmonary Volumes & Capacities
	Feb 21	Chapter 36 – Ventilation	
	Feb 23	Chapter 36 – Ventilation (Quiz #5)	
Week 8 – Unit 5.3	Feb 26	Chapter 37- Gas Exchange	Lab Week 8 Lab Quiz #2 Lab 44 & 45: Digestive Structures
	Feb 28	Chapter 37 – Gas Exchange/Exam 3 Review In Class	
	Mar 1	**Exam 3 – Ch 35-37 (mid-term)**	
Week 9 March 4 – 8: Spring Break, NO CLASS!!!			

Week 10 – Unit 5.4	Mar 11	Chapter 38 – Upper Digestive Tract	Lab Week 10 Lab Quiz #3 Lab 46: Enzymes & Digestion
	Mar 13	Chapter 38 – Upper Digestive Tract	
	Mar 15	Chapter 39 – Lower Digestive Tract (Quiz #6)	
Week 11 – Unit 5.5	Mar 18	Complete Chapter 38/39 Notes	Lab Week 11 Lab 47 & 48: Urinary System
	Mar 20	Chapter 40 – Digestion & Absorption	
	Mar 22	Chapter 41 – Nutrition & Metabolism (Quiz #7)	
Week 12 – Unit 5.6	Mar 25	Exam 4 Review In Class	Lab Week 12 Lab Quiz #4 Lab 49: Urinary Analysis
	March 27	**Exam 4: Ch 38-41**	
	March 29	No Class	
Week 13 - Unit 5.7	April 1	No Class	Lab Week 13 **Lab Exam #2**
	April 3	Chapter 42 – Urinary System	
	April 5	Chapter 43 – Fluid & Electrolyte Balance (Quiz #8)	
Week 14 - Unit 5.8	April 8	Chapter 44 – Acid/Base Balance	Lab Week 14 Lab 50 & 51: Reproductive Systems
	April 10	Chapter 44 – Acid/Base Balance	
	April 12	Exam 5 Review In Class	
Week 15 – Unit 6.1	April 15	**Exam 5 Ch 42-44**	Lab Week 15 Lab Quiz #5 Lab 53: Development Lab 54: Genetics
	April 17	Chapter 45 – Male Reproductive System	
	April 19	Chapter 46 – Female Reproductive System (Quiz #9)	
Week 16 – Unit 6.2	April 22	Chapter 47 – Growth, Development, & Aging	Lab Week 16 Review/Make-Up Labs
	April 24	Chapter 47 – Growth, Development, & Aging	
	April 26	Chapter 48 – Genetics & Heredity (Quiz 10)	
Week 17 – Final Week	April 29	Exam 6 Review in Class	Lab Week 17 **Lab Exam #3 (Final)**
	May 1		
	May 3	**Exam 6: Ch 45-48 (FINAL EXAM)**	

Relationship to Campus Focus/Theme

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.

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 the College. 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.