



BIOL 221\_A&P II\_Online\_Syllabus

**Course Prefix/Number/Title:** BIOL 221 - Anatomy and Physiology II-Online

**Number of Credits:** 4 semester credits

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

**Course Objective:**

Upon completion of this course students will be able to: 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 role of feedback systems, osmosis/diffusion, electrolyte balance, acidosis/alkalosis in maintaining homeostasis. 3. Diagnostic procedures 4. Treatments of disease 5. Organ systems that can be covered include musculoskeletal, respiratory, circulatory, nervous, integumentary, endocrine, lymphatic, digestive, reproductive, and urinary.

**Pre-/Co-requisites:** BIOL 220

**Instructor:** Janelle Green

**Office:** NSC 113    **Office Hours:** By appointment

**Phone:** (701)-228-5472

**Email:** Janelle.a.green@dakotacollege.edu

**Lecture Schedule:** Online

**Lab Schedule:** Online

**Textbook:** Anatomy and Physiology, Patton and Thibodeau, 9<sup>th</sup>/10<sup>th</sup> Edition

**Lab Manual:** Hands on Labs- student ordered through <http://holscience.com/>

**General Education Competency/Goal # 1:** Identifies the interrelationships between humans and their environment.

**LO # 3:** Applies scientific information in everyday life

**Course Requirements:** Grading is based on a standard college curve, where students earn a grade based upon the percent of total possible points they obtain. Although subject to slight modification based on the discretion of the instructor, this course will consist of approximately 1000 points (chapter notes 5 points each, 14 quizzes worth 10-30 points each, 1 mid-term, and 1 final exam worth 200 points each). Laboratory and assignment points are worth approximately

480 points and discussions 45 points to obtain the total points possible for the course (approximately 1000). Late work is not accepted for any reason. It is the responsibility of the student to practice good time management and work ethic. Final letter grades are assigned based on the following criteria:

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

### Tentative Course and Lab Outline:

This schedule is subject to change at the instructor's discretion:

Week 1:

- Labs (15 pts): Getting Started (5 pts) & Laboratory Safety (10 pts)
- Discussion (5 pts)
- Quiz (5 pts): Attest to reading Syllabus

Week 2:

- Reading: Blood (Ch.27) and the Heart (Ch.28)
- Chapter 27 and 28 Notes (5 pts)
- Blood Typing and Antibody Recognition Table (10 pts)
- Begin Lab (60 pts): Cardiovascular Lab
- Discussion (5 pts)
- Quiz (25 pts): Ch. 27 & Ch. 28

Week 3:

- Reading: Blood Vessels (Ch.29) and the Circulation of Blood (Ch.30)
- Chapter 29 and 30 notes (5 pts)
- Lab Due: Cardiovascular Lab
- Discussion (5 pts)
- Quiz (25 pts): Ch. 29 & Ch. 30

Week 4:

- Reading: Lymphatic System (Ch.31) and Innate Immunity (Ch.32)
- Chapter 31 and 32 notes (5 pts)
- Begin Lab (60 pts): Lymphatic System Assignment
- Discussion (5 pts)
- Quiz (25 pts): Ch. 31 & Ch. 32

Week 5:

- Reading: Adaptive Immunity (Ch.33) and Stress (Ch.34)
- Chapter 33 and 34 notes (5 pts)
- Lab Due: Lymphatic System Assignment
- Discussion (5 pts)
- Quiz (20 pts): Ch. 33 & Ch. 34

Week 6:

- Reading: Respiratory Tract (Ch.35)
- Ch 25 notes (5 pts)
- Lab (60 pts): Anatomy of Respiratory Lab

- Discussion (5 pts)
  - Quiz (10 pts): Ch. 35
- Week 7:
- Reading: Ventilation (Ch. 36) and Gas Exchange (Ch. 37)
  - Chapter notes 36 and 37 notes (5 pts)
  - Begin Lab (60 pts): Respiratory Physiology Lab
  - Discussion (5 pts)
  - Quiz (20 pts): Ch. 36 & Ch. 37
- Week 8:
- Lab Due: Respiratory Physiology Lab
  - Discussion (5 pts)
  - Midterm (200 pts)
- Week 9:
- Reading: Upper Digestive Tract (Ch. 38)
  - Ch 38 notes (5 pts)
  - Lab (60 pts): Digestive System Lab
  - Discussion (5 pts)
  - Quiz (10 pts): Ch. 38
- Week 10:
- Reading: Lower Digestive Tract (Ch. 39) and Digestion and Absorption (Ch. 40)
  - Chapter 39 and 40 notes (5 pts)
  - Lab Due: Digestive System
  - Discussion (5 pts)
  - Quiz (20 pts): Ch. 39 & 40
- Week 11:
- Reading: Nutrition and Metabolism (Ch. 41) and Urinary Tract (Ch. 42)
  - Chapter 41 and 42 notes (5 pts)
  - Begin Lab (60 pts): Urinary Tract System
  - Discussion (5 pts)
  - Quiz (20 pts): Ch. 41 & Ch. 42
- Week 12:
- Reading: Fluid and Electrolyte Balance (Ch. 43) and Acid-Base Balance (Ch. 44)
  - Chapter 43 and 44 notes (5 pts)
  - Lab Due: Urinary Tract System
  - Discussion (5 pts)
  - Quiz (20 pts): Ch. 43 & Ch. 44
- Week 13:
- Reading: Male Reproductive System (Ch. 45) and Female Reproductive System (Ch. 46)
  - Chapter 45 and 46 notes (5 pts)
  - Begin Lab (60 pts): Reproductive System
  - Discussion (5 pts)
  - Quiz (20 pts): Ch. 45 & Ch. 46
- Week 14:
- Reading: Growth and Development (Ch. 47)
  - Chapter 47 notes (5 pts)

- Lab Due: Reproductive System
- Discussion (5 pts)
- Quiz (10 pts): Ch. 47

Week 15:

- Reading: Genetics and Heredity (Ch. 48)
- Chapter 48 notes (5 pts)
- Assignment (60 pts): Genetics and Genomics
- Discussion (5 pts)
- Quiz (10 pts): Ch. 48

Week 16:

- Review

Week 17:

- Final (200 pts):

### 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.

### Classroom Policies

- 1) Be respectful of other students and the instructor
- 2) No late work is accepted.
- 3) Use of outside materials or plagiarized content will be scored as a zero.

### 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

All students are expected to adhere to the highest standards of academic integrity. Dishonesty in the classroom or laboratory and with assignments, quizzes, and exams is a serious offense and is subject to disciplinary action by the instructor and college administration. For more information, refer to the Student Handbook.

### Disabilities and Special Needs

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

If you have a disability for which you need accommodations, you are encouraged to contact your instructor and Jackie Migler at 701-228-5672 to request disability support services as early as possible during the beginning of the semester.

## 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.