DAKOTA COLLEGE AT BOTTINEAU

COURSE SYLLABUS

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, MS MEd

Office: N/A Office Hours: N/A

Phone: (701)-228-5472

Email: Janelle.a.green@dakotacollege.edu

Lecture Schedule: Online

Lab Schedule: Online

Textbook: Anatomy and Physiology, Patton and Thibodeau, 9th/10th 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 ~911 points: 14 quizzes worth 10-40 points each for 300pts, 1 vessel image exam (34pts) 1 mid-term, and 1 final

exam worth 100 points each and laboratory and assignment points are worth approximately 377 points.

No assignments are accepted late.

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:

Week 1:
- Labs: Getting Started & Laboratory Safety
- Quiz: Attest to reading Syllabus
- Reading: Blood (Ch.27) and the Heart (Ch.28)
- Assignment: Blood Typing and Antigen Recognition
- Begin Lab: Cardiovascular Lab
- Quiz: Ch. 27 & Ch. 28

Week 2:
- Reading: Blood Vessels (Ch.29) and the Circulation of Blood (Ch.30)
- Lab Due: Cardiovascular Lab
- Assignment: Pulse Point/Pressure
- Quiz: Ch. 29 & Ch. 30
- Exam: Vessel Diagrams
- Reading: Lymphatic System (Ch.31) and Innate Immunity (Ch.32)
- Begin Lab: Lymphatic System Assignment
- Quiz: Ch. 31 & Ch. 32

Week 3:
- Reading: Adaptive Immunity (Ch.33) and Stress (Ch.34)
- Lab Due: Lymphatic System Assignment
- Quiz: Ch. 33 & Ch. 34
- Reading: Respiratory Tract (Ch.35)
- Lab: Anatomy of Respiratory Lab
- Quiz: Ch. 35

Week 4:
- Reading: Ventilation (Ch. 36) and Gas Exchange (Ch. 37)
- Begin Lab: Respiratory Physiology Lab
- Quiz: Ch. 36 & Ch. 37
- Lab Due: Respiratory Physiology Lab
- Midterm

Week 5:
- Reading: Upper Digestive Tract (Ch. 38)
- Lab: Digestive System Lab

- Quiz: Ch. 38
- Reading: Lower Digestive Tract (Ch. 39) and Digestion and Absorption (Ch. 40)
- Lab Due: Digestive System
- Quiz: Ch. 39 & 40

Week 6:

- Reading: Nutrition and Metabolism (Ch. 41) and Urinary Tract (Ch. 42)
- Begin Lab: Urinary Tract System
- Quiz: Ch. 41 & Ch. 42
- Reading: Fluid and Electrolyte Balance (Ch. 43) and Acid-Base Balance (Ch. 44)
- Lab Due: Urinary Tract System
- Quiz: Ch. 43 & Ch. 44

Week 7:

- Reading: Male Reproductive System (Ch. 45) and Female Reproductive System (Ch. 46)
- Begin Lab: Reproductive System
- Quiz: Ch. 45 & Ch. 46
- Reading: Growth and Development (Ch. 47)
- Lab Due: Reproductive System
- Quiz: Ch. 47

Week 8:

- Reading: Genetics and Heredity (Ch. 48)
- Assignment: Genetics and Genomics
- Quiz: Ch. 48
- Final

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) Notify the instructor of any coursework that may be late prior to the due date

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 as soon as possible for accomodations.

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.