

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

Number of Credits: 4 semester credits

<u>Course Description</u>: A study of the structure and function of the human body.

Pre-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: 9:00-10:50 am TWTh

Lab Schedule: 9:00-12:50pm M

Textbook: Anatomy and Physiology, Thibodeau and Patton, 9th or 10th Edition

Lab Manual: Anatomy and Physiology Laboratory Manual, K. Patton, 9th or 10th Edition

<u>General Education Competency/Goal # 1</u>: 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 on the percent of total possible points they obtain. The lecture component of this course consists of approximately 640 points (12 drop quizzes worth 20 points each, 3-4 lecture exams worth 100 points each). Lecture points are added to laboratory points (500 points) to obtain the total points possible for the course (1140). (Note: Adjustments may be made to lecture and/or lab points so that the lecture constitutes 3/4 of the total points for the course.) Any missed exam not made up within the allotted time will be given a zero. Make-ups are not allowed on drop quizzes. Final letter grades are assigned based on the following criteria:

# Tentative Lecture Outline:

Lecture	TOPIC	READING
1.	Introduction and Blood	Chpt. 27
2.	Blood and Anatomy of the Cardiovascular	Chpt. 27, 28 -
۷.	System	30
	Anatomy of the Cardiovascular System	Chpt. 28-30
3.	Anatomy of the Cardiovascular System	Chpt. 28-30
4.	Physiology of the Cardiovascular System	Chpt. 28-30
5.	Physiology of the Cardiovascular System	Chpt. 28-30
6.	Lymphatic System	Chpt. 31
7.	Immunity	Chpt. 32-34
8.	Immunity and Stress	Chpt. 32-34
9.	TEST I	Ch 27 - 34
	Anatomy of the Respiratory System	Chpt. 35-36
10.	Anatomy of the Respiratory System	Chpt. 35-36
11.	Physiology of the Respiratory System	Chpt. 36-37
12.	Physiology of the Respiratory System	Chpt. 36-37
	Anatomy of the Digestive System	Chpt. 38-39
13.	Anatomy of the Digestive System	Chpt. 38-39
14.	Physiology of the Digestive System	Chpt. 40
15.	Physiology of the Digestive System	
16.	Nutrition and Metabolism	Chpt. 41
17.	Nutrition and Metabolism	Chpt. 41
18.	Nutrition and Metabolism	Chpt. 41
19.	Nutrition and Metabolism	Chpt. 41
20.	TEST II	Ch 35 - 41
21.	Urinary System	Chpt. 42
	Urinary System	Chpt. 42
22.	Fluid and Electrolyte Balance	Chpt. 43
23.	Acid-Base Balance	Chpt. 44
	Male Reproductive System	Chpt. 45
24.	Male Reproductive System	Chpt. 45
25.	Female Reproductive System	Chpt. 46
26.	Female Reproductive System	Chpt. 46
27.	Birth Control and Sexual Transmitted Diseases	Chpt. 46
28.	TEST III	Ch 42 - 46
29.	Growth and Development	Chpt. 47

30.	Growth and Development	Chpt. 47
	Growth and Development	Chpt. 47
	Growth and Development	Chpt. 47
31.	Genetics and Heredity	Chpt. 48
32.	Genetics and Heredity	Chpt. 48
33.	Genetics and Heredity	Chpt. 48
34.	Genetics and Heredity	Chpt. 48
35.	Final Exam (not cumulative)	Ch 47 - 48

#### Tentative Lab Outline:

WEEK	TOPIC	LAB #
1	Blood	34
	Heart and Blood Pressure	35 & 37
	Circulatory and Lymphatic Systems	38 & 39
	Circulatory and Lymphatic Systems	40
2	LAB EXAM I	
	Respiratory System	41 & 42
	Digestive System, Enzymes and Digestion	44, 45 & 46
3	LAB EXAM II	
	Nutrition	
	Urinary System	47 & 48
4	Urinalysis	49
5	Reproductive Systems	50-52
6	Development	53
7	Genetics and Heredity	54
8	LAB EXAM III	

#### **Course Objectives**

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.

#### **General Education (GE) Goal and Objectives**

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

LO # 3: Applies scientific information in everyday life

#### **Relationship to Campus 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) Cell phones and related devices are prohibited in the classroom at all times. It is recommended that you do not bring your cell phone or other electronic devices into the classroom or, at the very least, turn it off.
- 2) Food and beverages are permitted in accordance with IVN classroom policy.
- 3) Be respectful of other students, technicians, instructors, and guests.

## **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 the services office 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.