Course Prefix/Number/Title: BIOL 115 – Human Structure and Function (online)

Number of Credits: 4 semester credits

Course Description:
An introduction to the study of the structure (anatomy) and function (physiology) of the human body. This course consists of three one-hour lectures and one two-hour lab each week.

Pre-/Co-requisites: None

Course Objectives:
The goal of this course is to facilitate student learning about human anatomy and physiology so that students better understand and appreciate the complexities of and interactions between organ systems in order to promote the advancement of life sciences in society.

Objectives:
1) To learn and retain information essential to a broad knowledge of human anatomy and physiology.
2) To understand and utilize scientific methods of inquiry.
3) To practice sound, safe, and sensible laboratory techniques.
4) To appreciate the historic development of science.
5) To apply scientific information and principles to everyday life.
6) To recognize the interrelationship among the sciences, technology, and society.

Instructor: Larry Brooks

Office: NSC 111

Office Hours: 9-10 AM on M, Tu, W, Th, & F and by appointment

Phone: (701) 228-5457

Email: larry.brooks@dakotacollege.edu

Lecture Schedule: Online

Lab Schedule: Online

Textbooks: Understanding Human Anatomy and Physiology, S. Longenbaker, 6th Edition
Instructor generated lab manual

Course Requirements:

Although subject to slight modification based on the discretion of the instructor, the lecture component of this course will consists of approximately 600 points (14 lab reports worth 5 points each, 4 lab quizzes worth 20 points each). The laboratory component of this course consists of 200 points (14 lab reports @ 10 points each and four lab exams @ 15 points each. There is a one week grace period to make-up any missed quiz, exam or assignment. Any missed exam/work not made up within the allotted time will be given a zero. Makeup exams may be of an essay nature and are usually considered more difficult. Grading is based on a standard college curve, where students earn a grade based upon the percent of total possible points they obtain. 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

Course Outline:

TOPIC	READING
Organization of the Body	Chpt. 1
Chemistry	Chpt. 2
Cell Structure	Chpt. 3
Cell Function	Chpt. 3
Tissues	Chpt. 4
Integumentary System	Chpt. 5
Skeletal System	Chpt. 6
Muscular System	Chpt. 7
Nervous System	Chpt. 8
Senses	Chpt. 9
Endocrine System	Chpt. 10
Blood	Chpt. 11
Cardiovascular System	Chpt. 12
Lymphatic System	Chpt. 13
Respiratory System	Chpt. 14
Digestive System	Chpt. 15
Nutrition	Chpt. 15
Urinary System	Chpt. 16
Reproductive System	Chpt. 17
Development and Birth	Chpt. 18
Genetics	Chpt. 19

LAB

LAB #	TOPIC
1	Organization of the Body
2	Introduction to Human Physiology
3	Histology
4	The Skeletal System
5	Fetal Pig Anatomy
6	The Muscular System
7	The Nervous System
8	The Senses
9	Cardiovascular System
10	Arteries and Veins
11	The Respiratory System
12	Digestive System
13	Urinary and Reproductive Systems
14	Genetics

General Education Goals and Objectives

This course meets General Education Goal 1: Explains the interrelationships between humans and their environment and the role of science in their lives. Specific objectives include:

1) Demonstrates the application of the scientific method of inquiry (Objective #1).
2) Demonstrates an awareness of the role of science in everyday life (Objective #3)

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.

Class Policies

1) Be respectful of other students and the instructor.

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

If you have a disability for which you need accommodations, you are encouraged to contact your instructor and the Learning Center (228-5479 or 1-888-918-5623) to request disability support services as early as possible during the beginning of the semester.