

Human Structure and Function Syllabus  
Fall 2012

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

Number of Credits: 4 semester hours

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.

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 advancements 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 the 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: Angie Bartholomay

Office: NSC 111

Office hours:

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Lecture Schedule: 2:20-3:10pm MWF in Th 2211 or Main 364

Lab Schedule: Bottineau \_\_\_\_\_ NSC 128  
Minot 4:00-5:50pm Wednesday

Textbooks: Understanding Human Anatomy and Physiology, S. Longenbaker, 7<sup>th</sup> Edition  
Human Biology Laboratory Manual, 12<sup>th</sup> Edition by Sylvia Mader

Course Requirements: The lecture component of this course will consist of approximately 700 pts. The 700 points will come from 10-12 quizzes worth 10 points each; 5 exams worth 100 points each and a

final exam for 100 points. The laboratory component of this course consists of 200 points ( 14 lab reports for 10 points each and four lab exams for 15 points each. Lecture points will comprise 75% of the final grade while labs comprise 25% of the final grade. There will not be make-up for missed exams unless prior arrangements have been made with the instructor.

Grading scale is as follows:

A= 90-100%

B= 80-89.5%

C= 70-79.5%

D=60-69.5%

F= <59.5%

Exams: There will be five regular exams. Exams may contain short answer, multiple choice, Completion and problems. Periodic tables and calculators may be used on the test.

Homework: Throughout the semester problems will be assigned in order for you to better Comprehend the concepts and math involved. This homework will not be graded, however you Will be able to use these assignments on quizzes. The problems assigned will be similar to those Which will be on the exams. Whenever possible we will discuss the problems in class or you can See one of the chemistry tutors or myself for help.

Quizzes: will be used in lieu of graded homework to check for understanding. Quizzes cannot be Taken if you are absent the day of the quiz.

Laboratory: The laboratory portion of the course provides an opportunity to integrate lecture Concepts with observable activities and is critical to understanding chemical concepts. Safety Goggles are available for purchase in the bookstore. Attendance in lab is mandatory and the Instructor must validate that you actually assisted in the collection of data. Borrowed results Are not acceptable and all parties involved will receive a grade deduction. Lab reports are due at The beginning of the next lab class. Late lab reports will not be accepted. Failure to wear safety Goggles, not following instructions or using unsafe procedures is unacceptable and may result in Your dismissal from further labs.

Tentative Course Outline:

		Reading
Week 1	Introduction & Organization of the Body	Chapter #1 & 2
Week 2	Chemistry	Chapter #2
Week 3	Cell Structure & Function	Chapter #3
9/12/12	Exam #1- Chapters #1-3	
Week 4	Tissues & Integumentary system	Chapter #4 & 5
Week 5	Skeletal system	Chapter #6
Week 6	Muscular system	Chapter #7
10/3/12	Exam #2- Chapters #4-6	
Week 7	Nervous & sensory systems	Chapter #8 & 9
Week 8	Endocrine system	Chapter #10

Week 9	Blood	Chapter #11
10/24/12	Exam #3 Chapters #7-11	
Week 10	Circulatory System	Chapter #12
Week 11	Lymphatic System	Chapter #13
Week 12	Respiratory & digestive system	Chapter #14 &15
Week 13	Nutrition	
11/14/12	Exam #4 -Chapter #12-15	
Week 14	Urinary System	Chapter #16
Week 15	Reproductive System	Chapter #17
Week 16	Development & Birth	Chapter #18 &19
12/7/11	Final Review	
12/10/12	Final Exam	

Lab Schedule	Topic	Lab #
Week 1	Use of Light Microscope + Scientific Method	1 & 2
Week 2	Chemical Composition	3
Week 3	Cell Structure & Function	4
Week 4	Human Body Tissues	5
Week 5	Basic Mammal + Lab Exam I	6
Week 6	Skeletal & Muscular system	11
Week 7	Nervous System & Senses	12
Week 8	Lab Exam II	
Week 9	Cardiovascular system	7
Week 10	Circulatory & Respiratory System	8
Week 11	Lab Exam III	
Week 12	Digestive system & nutrition	9
Week 14	Urinary & reproductive systems	10.3 & 10.4
Week 15	Development, Inheritance & Genetics	13 & 15
Week 15	Final Lab Exam	

#### General Education Goals & 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 them 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 electronic devices using headphones are prohibited in the classroom at all times. It is recommended that you do not bring these devices into the classroom or have them turned off and stowed away.
- 2) Food and beverages are permitted in accordance with IVN classroom policy.
- 3) Be respectful of other students, technicians, instructors and guests

#### Academic Integrity

All students are expected to adhere to the highest standards of academic integrity. Dishonesty in the classroom or laboratory with assignments, quizzes and exams will not be tolerated. Refer to the student handbook for further information.

#### Disabilities and Special Needs:

If you have a disability for which you require 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.