BIO- 13301, Anatomy & Physiology II Lab  
Summer 2013, 1.0 Credits

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Schedule (class times and day(s)): Monday-Wednesday 11:00-1:30 PM  
July 15, 2013 to July 31, 2013  
Room: Higgins 380

Boston College Mission Statement

Strengthened by more than a century and a half of dedication to academic excellence, Boston College commits itself to the highest standards of teaching and research in undergraduate, graduate and professional programs and to the pursuit of a just society through its own accomplishments, the work of its faculty and staff, and the achievements of its graduates. It seeks both to advance its place among the nation's finest universities and to bring to the company of its distinguished peers and to contemporary society the richness of the Catholic intellectual ideal of a mutually illuminating relationship between religious faith and free intellectual inquiry.

Boston College draws inspiration for its academic societal mission from its distinctive religious tradition. As a Catholic and Jesuit university, it is rooted in a world view that encounters God in all creation and through all human activity, especially in the search for truth in every discipline, in the desire to learn, and in the call to live justly together. In this spirit, the University regards the contribution of different religious traditions and value systems as essential to the fullness of its intellectual life and to the continuous development of its distinctive intellectual heritage.

Course Description

The continuation of Anatomy and Physiology includes the endocrine, circulatory, respiratory, excretory, digestive and reproductive systems.

Summer Grading System

The undergraduate grading system consists of twelve categories: A (4.00), A- (3.67), excellent; B+ (3.33), B (3.00), B- (2.67), good; C+ (2.33), C (2.00), C- (1.67), satisfactory; D+ (1.33), D (1.00), D- (.67), passing but unsatisfactory; F (.00), failure; I (.00), incomplete; F (.00), course dropped without notifying office; W (.00), official withdrawal from course. The graduate grading system is A (4.00), A- (3.67), Excellent; B+ (3.33), B (3.00), good; B- (2.67), C (2.00), passing but not for degree credit; F (.00), failure.

Grade Reports. All students are required to log into the web through Agora to access their summer grades. Students must utilize their BC username and password to log on. If your username or password is not known, the HELP Desk located in the Campus Technology Resource Center (CTRC) in O’Neill Library will issue a new one. The CTRC requires a valid picture ID (a BC ID, driver’s license or passport) to obtain your password.

Laboratory Syllabus for ANATOMY & PHYSIOLOGY II Summer Session 2013

You will need the Cat Version in the 9th ed or 10th ed of the Marieb Laboratory Manual for Human Anatomy and Physiology by Pearson/Benjamin Cummings Publisher. ISBN 9780321765581. Please see Professor Guilmette for any exceptions. All laboratory exercises that need to be handed into you TA are listed below. Your TA will be going through the activities listed below with you, but you will also be working in groups and with a lab partner at times. Please be respectful to everyone in the lab!

Your grade is composed of: 20% participation
40% lab “reports” (from lab manual)

40% lab quizzes

Lab 1: July 15  

**Exercise 29A: Blood (Please Use WARD’s Simulated Blood Kits and handouts provided).**

- Complete the following activities for Exercise 29A:
  
  Part I: Simulated ABO and Rh Blood Typing Activity (Handout Provided)

- Complete the following exercises in the back of your lab book: Page 437 #1,2,3; Page 438 #4,6,8; Complete the activities that go along with the handouts provided for Part I.

Lab 2: July 16  

**Exercise 30: Anatomy of the Heart**

- Complete the following activities for Exercise 30:
  
  Sheep Heart Dissection Page 449

- Complete the following exercises in the back of your lab book: Page 453 #1; Page 454 #2,3,4,5,6; Page 455 #7, 8, 9,10,11; Page 456 #13,14;

Lab 3: July 17

**LAB QUIZ ON Blood Typing and Heart Anatomy**

**Exercise 31: Conduction System of the Heart and EKG**

- Complete the following activities for Exercise 31:
  
  Please go over EKG handouts provided in prep room.

- Complete the following exercises in the back of your lab book: Page 467 #1,2,4,5; Page 468 #7,8,9

**Exercise 32: Anatomy of Blood Vessels**
Complete the following activities for Exercise 32:

Activity 1: Examine the Microscopic Structure of Arteries and Veins

Activity 2: Locating Arteries on a Model

Activity 3: Locating Veins on a Model

Complete the following exercises in the back of your lab book: Page 485 #1, 2, 4; Page 486 #5

Lab 4: July 22

Complete Exercise 32 if you did not get to it last week

Complete Exercise 33A: Blood Pressure and Pulse Detection

Complete the following activities for Exercise 33A:

Activity 1: Auscultating Heart Sounds

Activity 2: Identifying Radial and Carotid Pulse

Activity 5: Using a Sphygmomanometer to Measure Arterial Blood Pressure

Activity 6: Observing the Effect of Various Factors on Blood Pressure (DO THIS ONLY IF TIME ALLOWS)

Complete the following exercises in the back of your lab book: Page 506 #2, 3, 6; Page 507 #10, 11, 12, 13; Page 508 #15, 16, 18, 19, 20, 22, 23; Page 509 #25, 27, 28, 29; Page 510 #30

Lab 5: July 23

Cat Dissection

Complete the following dissections for the Cat:

Exercise 3: Endocrine Organs

Exercise 4: Blood Vessels

Exercise 6: Respiratory System
Exercise 7: Digestive System
Exercise 8: Urinary System
Exercise 9: Reproductive System

• Complete the exercises that follow the dissection located at the end of each exercise.

Lab 6: July 24

LAB QUIZ ON...to be determined!

Exercise 36: The Respiratory System

• Complete the following activities for Exercise 36:

Activity 1: Identifying Respiratory Organs
Activity 3: Examine Slides of Trachea and Lung Tissue

• Complete the following exercises in the back of your lab book: Page 546 #4,5,6; Page 547 #9,10,11,12

Lab 7: July 29

Exercise 38: The Digestive System

• Complete the following activities for Exercise 38:

Activity 1: Identifying Alimentary Canal Organs
Activity 2: Stomach
Activity 3: Small Intestine Slides
Activity 4: Large Intestine Slides
Activity 8: Liver Slide
Activity 9: Pancreas Slide

- Complete the following exercises in the back of your lab book: Page 591 #3, 4, 5; Page 592 #6; Page 593 #7; Page 595 #14, 15; 596 #16, 19, 20

Lab 8: July 30

Exercise 40: The Urinary System

- Complete the following activities for Exercise 40:

Activity 1: Identifying Urinary System Organs
Dissection of a Sheep Kidney Page 445

Activity 2: Studying Nephron Structure

- Complete the following exercises in the back of your lab book: Page 617 #1, 2, 4; Page 618 #5, 6; Page 619 #7, 8; Page 620 #11, 12, 13, 16

Lab 9: July 31

LAB QUIZ ON Kidney …study figure 40.3 in lab manual!

Anatomy & Physiology Laboratory Rules

1. The following rules apply to all Anatomy & Physiology students while using the lab. Please read the following rules carefully.

2. Note the locations of the following safety devices: exits, shower, fire extinguisher, fire blanket, eye wash, gas switch, first aid kit, and burn station.

3. Be sure to place all books, coats, and articles other than your lab book and textbook under your lab bench. Please make sure that all the isles are free from any obstructions.

4. There is to be NO FOOD OR DRINK IN THE ROOM during lab time, this includes GUM!!!!!!

5. Long hair, loose/baggy/belled sleeves or baggy shirts that may catch on fire must be pulled back, or not be worn. In addition no open-toed shoes or sandals are allowed in lab.

6. Young children and pets of any sort are not allowed in the laboratory. If you plan to bring an older child to class, you must have permission of the lab instructor.
7. Lab aprons, glove, and goggles will be provided. These items must be worn when your instructor tells you to do so.

8. Always wash work areas with disinfectant at the beginning and end of the lab.

9. Always wash hands with soap at the beginning and end of lab.

10. DO NOT THROW any regular trash into the biohazard waste bags. Trash bins are located at the front of the lab for any trash that is not contaminated; such as paper towels from hand washing, scrap paper, tissues, candy and gum wrappers. PLEASE DO NOT THROW trash into sinks or drawers.

11. NEVER throw broken glass into the biohazard bag or the trash bins. Report any broken glass to the instructor who will take care of it. This includes glass slides and cover slips.

12. Please be sure that all glass wear and materials used during lab are put back where you got them and IN THE CONDITION IN WHICH YOU RECEIVED THEM!