

# Biology 122 – Anatomy and Physiology II

## Spring 2007

**Instructor:** Dr. Brooke Bourdélat-Parks  
Office: Pierce 114  
Phone: 770-784-4667  
E-mail: bbourde@emory.edu

**Office hours:** Monday and Wednesday, 12:30 – 1:30  
Thursday, 1:00 – 3:00  
*Other times are available by appointment. Also, feel free to stop by my office anytime to ask questions, clarify information, or just introduce yourself.*

**Lecture hours:** MWF, 10:40 AM – 11:30 AM      Room: Pierce 101  
**Lab hours:** M, 2:00 PM – 5:00 PM      Room: Pierce 119

**Required texts:** *Anatomy and Physiology*, by F.H. Martini. 2005. 1<sup>st</sup> Edition. Benjamin / Cummings Publishing Co., Inc.  
*Human Anatomy and Physiology Lab Manual*, Cat version, by Elaine N. Marieb. 2005. 8<sup>th</sup> Edition. Benjamin / Cummings Publishing Co., Inc.

**Required material:** Dissection kit, available in the bookstore.  
1 pack of 3" x 5" index cards (at least 50 cards).

**Blackboard site:** The Blackboard site is available at <http://classes.emory.edu>. Please check it frequently as there will sometimes be materials posted for you to print out and bring to class. Also, I strongly encourage you to use the Discussion Board section of the course site.

**Objectives:** This course is a continuation of last semester. We will continue to use active learning techniques. You are responsible for your own learning. You will be expected to do significant work outside the classroom as our in-class activities depend on an understanding of the topic in advance, and often your learning group will depend on you.

My other goals for you this semester are:

- Learn about the physical characteristics of the body systems (anatomy) and about the mechanisms that allow these parts to function (physiology).
- Learn anatomical terminology and be able to identify structures on laboratory specimens.
- Gain understanding of how body systems are inter-related.
- Explore how textbook anatomy and physiology topics are related to real-world scenarios.
- Practice scientific communication skills through presentations and writing.

**Academic honesty:** Students are expected to abide by the Oxford College Honor Code. To that end, all assignments should include a signed pledge that no unauthorized aid has been given or received. To read the complete statement of the Honor Code, please see <http://www.emory.edu/OXFORD/CampusLife/Policies/honor.html>.

**Attendance:** Attendance at lectures is expected. This is very important for you to gain an understanding of the material, but also because many of our activities involve work in learning groups and members of your group will count on you to be present. Attendance will be assessed through “The Murkiest Point” cards. Students are allowed 4 absences from lecture *for any reason*. Attendance at laboratory sections is mandatory. Please see the attached Absence Policy for more information.

**Case studies:** We utilized case studies last semester in a fairly informal manner. Now that you are familiar with them, we will have several cases for which work is submitted. These products will be worth 20 points each.

**Cell phones:** Cell phones should be turned off before class and lab and should remain out of sight for the duration of the time in class. If cell phones become a problem, they will be taken and kept until the end of class.

**Grading:** The course grade will be based on the total number of points you accumulate on the class assignments, quizzes, and exams.

Exams	100 points each
Lab Exams	50 points each
Final Exam	150 points
Case studies	20 points each
Participation	Grade may be docked up to 10% if inadequate

The grade will be calculated as a percentage of total possible points and the following scale used:

A	93% and above	C	73 – 76%
A-	90 – 92%	C-	70 – 72%
B+	87 – 89%	D+	67 – 69%
B	83 – 86%	D	60 – 66%
B-	80 – 82%	F	59% and below
C+	77 – 79%		

*A minimum grade of C- in this course is required for pre-nursing students.*

**Late work:** Assignments turned in after the due date will have 10% taken off per day late.

**Learning groups:** You will be assigned a learning group and will work with this group throughout the semester. When you arrive in class, you should sit with your group. Additional guidelines will be handed out about the learning groups.

**Make-up exams:** The policy for missed tests is outlined on an additional page.

**Murkiest Point:** During the last two minutes of each class, describe “The Murkiest Point” from the class on an index card. This is an idea from the class that you still do not fully understand. If you understand everything, describe “The Most Interesting Point.” These cards should have your name and the date listed, but they do not count against your grade. (They are, however, used for attendance assessment.) The next class will begin with an explanation of the two or three “Murkiest Points.”

Additionally, if there are specific questions or topics that you would like clarified during class, particularly from the reading for that day, e-mail me before 7:30 AM on the day of each class. If I do not receive any questions, I will assume everyone understands the topic for the day and will not spend class time explaining.

**Participation:** Class participation is expected. This includes your work on case studies and presentations during the semester.

**Topic schedule:** This schedule is tentative and may change if we find we need more time to investigate interesting topics or choose to study other topics. Readings should be completed **before class** on the assigned day. For example, when arriving at class on January 19, you should have *already* read pp. 449 - 463. There will also sometimes be other items to read, such as articles from magazines or information for case studies.

Date	Topic	Reading
W, 1/17	Endocrine – hormones	Ch. 16: 442 - 448
F, 1/19	Endocrine – glands	Ch. 16: 449 – 463
M, 1/22	Endocrine – pancreas and other tissues	Ch. 16: 463 – 470
W, 1/24	Endocrine – interactions	Ch. 16: 470 - 474
F, 1/26	Cardiovascular – blood	Ch. 17: 477 – 487
M, 1/29	Cardiovascular – blood	Ch. 17: 487 – 498
W, 1/31	Cardiovascular – heart anatomy	Ch. 18: 501 – 513
F, 2/2	Cardiovascular – cardiac physiology	Ch. 18: 513 – 528
M, 2/5	Cardiovascular – disorders	<b>Chapters 16 – 18</b>
W, 2/7	Cardiovascular – risk factors	
<b>THURS, 2/8</b>	<b>8:00 – 9:30 AM – Exam I (1/17/07 to 2/2/07)</b>	
F, 2/9	Cardiovascular – vessels	Ch. 19: 532 - 547
M, 2/12	Cardiovascular – vessels	Ch. 19: 547 – 556, 572 – 573
W, 2/14	Immune – lymphatic	Ch. 20: 578 – 588
F, 2/16	Immune – defenses	Ch 20: 588 – 605
M, 2/19	AIDS	Ch. 21: 616 – 629 Ch. 21: 629 – 637
W, 2/21	Respiratory – anatomy	
F, 2/23	Respiratory – physiology	

<b>Date</b>	<b>Topic</b>	<b>Reading</b>
M, 2/26	Respiratory – gases	Ch. 21: 637 – 643
W, 2/28	Respiratory – control	Ch. 21: 644 – 650
F, 3/2	Review and catch up	
M, 3/5	Digestive	Ch. 22: 654 – 666
<b>TUES, 3/6</b>	<b>8:00 – 9:30 AM – Exam II</b> <b>(2/5/07 – 2/28/07)</b>	<b>Chapters 19 - 21</b>
W, 3/7	Digestive	Ch. 22: 666 – 682
F, 3/9	Digestive	Ch. 22: 682 – 691
M, 3/12	<i>Spring break!</i>	
W, 3/14	<i>Spring break!</i>	
F, 3/16	<i>Spring break!</i>	
M, 3/19	Digestive – disorders	
<b>*M, 3/19 2:00</b>	Metabolism	Ch. 23: 695-696, 712-716 Ch. 23: 696 – 712 (skim)
W, 3/21	Urinary – anatomy	Ch. 24: 719 – 727
F, 3/23	<b>Lab Exam (see lab schedule)</b>	
M, 3/26	Urinary – physiology	Ch. 24: 727 – 735
W, 3/28	Urinary – reabsorption, secretion	Ch. 24: 735 – 744
F, 3/30	Urinary – urine transport	Ch. 24: 744 – 749
M, 4/2	Urinary – disorders	
W, 4/4	Review and catch up	
F, 4/6	Reproductive – male	Ch. 26: 779 – 793
M, 4/9	Reproductive – female	Ch. 26: 793 – 809
<b>TUES, 4/10</b>	<b>8:00 – 9:30 AM – Exam III</b> <b>(3/5/07 – 4/2/07)</b>	<b>Chapters 22 – 24</b>
W, 4/11	Reproductive - sex and sexual response	Ch. 26: 809, 812 - 813
F, 4/13	Reproductive - birth control and STD's	Ch. 26: 810 – 812
M, 4/16	Reproductive - conception	
W, 4/18	Reproductive – disorders	
F, 4/20	Development – fertilization	Ch 27: 817 – 819
M, 4/23	Development – first trimester	Ch. 27: 819 – 829
W, 4/25	Development – second and third trimester	Ch. 27: 829 – 832
F, 4/27	Development – labor and delivery, postnatal	Ch 27: 832 – 837
M, 4/30	Wrap up	
<b>TUES, 5/8</b>	<b>2:00 – 5:00 – Final Exam</b>	

## Laboratory syllabus

Please bring all texts to the laboratory. We will use them for photographs and illustrations while observing specimens.

Camera phones and digital cameras are not permitted in the laboratory.

I strongly advise you to return to the lab each week outside of lab time to review the materials. The lab will be accessible to you Monday through Friday from 8:00 AM to 5:00 PM, except Wednesday afternoons and the day before a lab exam.

<b>Date</b>	<b>Topic</b>	<b>Exercise / Reading</b>
1/22	Lab 1 - Endocrine system	27
1/29	Lab 2 – Blood (DK)	29A
2/5	Lab 3 - Heart and EKG (DK)	30 – 31
<b>2/12</b>	<b>Lab Exam I</b>	<b>Labs 1 – 3</b>
2/19	Lab 4 - Blood vessels (DK)	32 – 33A, Dissection #4
2/26	Lab 4 - Blood vessels, continued (DK)	
3/5	Lab 5 - Respiratory system (DK)	36 – 37A, Dissection #5
3/12	<i>Spring Break – no lab</i>	
3/19	<b>Lecture during lab time (see lecture schedule)</b>	
<b>Friday 3/23</b>	<b>Lab Exam II during lecture time</b>	<b>Labs 4 - 5</b>
3/26	Lab 6 – Digestive system (DK)	38 – 39A, Dissection #7
4/2	Lab 7 – Urinary system (DK)	40 – 41A, Dissection #8
4/9	Lab 8 – Reproduction and Development (DK)	42 – 44, Dissection #9
4/16	TBA	
<b>4/23</b>	<b>Lab Exam III</b>	<b>Labs 6 - 8</b>

(DK) indicates labs for which you need to bring your dissection kit.

## **Keys to Success in Lab**

1. **Bring your lab manual AND textbook to every lab.**
2. Do **everything** and answer **every** question on the lab sheets.
3. Do a good job working in lab. Make sure you can answer questions on demo cards.
4. Lab is scheduled from 2:00 – 5:00. This is your time to work with access to the instructor and TA. Your goal should not be to get out as fast as you can.
5. Come back and work in the lab to finish or **review**. The lab is open M – F from 8:00 – 5:00, except Wednesday afternoons, so you should be able to find time to work. If the lab is not open, ask one of the other professors or Ms. Budensiek.
6. Your lab manual is an excellent review of lecture material.