

**Biology 122 – Human Anatomy and Physiology II**  
**Course Syllabus**  
**Spring 2003**

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**Faculty Information:** Dr. Nitya Jacob, *Office:* Room 104, Pierce Hall; *Phone:* 770-784-8346  
*Office Hours:* TTh 9:30-10:30 AM, M: 3:00-4:00 PM or by appointment  
*Email:* njacob@learnlink.emory.edu

**Lecture:** MWF 11:45 AM - 12:35 PM, Room 101, Pierce Hall

**Laboratory:** Tuesday 2:30-5:30 PM, Room 123, Pierce Hall

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**Required Textbooks:** **1)** *Fundamentals of Anatomy and Physiology*, by F. H. Martini. 2001. Fifth Edition. Prentice Hall Inc.

**2)** Lab Text: *Human Anatomy and Physiology Lab Manual*, Cat version, by Elaine N. Marieb. 2003. Seventh edition. Benjamin/Cummings Publishing Co., Inc.

**Required lab tools:** Dissection Kit. Available in the bookstore.

**Optional Lab Text:** *A Guide to Anatomy and Physiology Lab* by T. G. Rust. Southwest Educational Ent.

**Course objectives:** Biology 122 is a continuation of Biology 121. In this course you will continue to learn about the physical layout and the mechanisms of the human body. This time the endocrine, cardiovascular, lymphatic, respiratory, digestive, urinary and reproductive systems will be covered in detail. These six organ systems will be examined at the microscopic and macroscopic levels, as well as their place in the whole body. You will continue to apply your knowledge by studying the anatomical and physiological basis of human diseases related to each organ system. In the laboratory, you will have the opportunity to have hands-on experience by observing specimens and conducting physiological analyses. As in Biology 121, you will be expected to learn anatomical terms applicable to each organ system.

**Biology 122 - Lecture Schedule, Spring 2003****Dr. Nitya Jacob**

Date	Topic	Assigned Reading
W, Jan 15	Introduction to the Endocrine system	Chapter 18
F, Jan 17	Endocrine system	Chapter 18
M, Jan 20	MLK DAY	no class
W, Jan 22	Endocrine system	Chapter 18
F, Jan 24	Endocrine system	Chapter 18
M, Jan 27	Cardiovascular system - Blood	Chapter 19
W, Jan 29	Cardiovascular system - Blood	Chapter 19
F, Jan 31	Heart – Anatomy & Conduction (written response due)	Chapter 20
M, Feb 3	Heart – Physiology & EKG	Chapter 20
W, Feb 5	Heart – Problems	Chapter 20
<b>Thurs, Feb 6</b>	<b>EXAM I – 8:00-9:30AM, covers through heart physiology</b>	
F, Feb 7	Heart – Eliminating risk factors	Chapter 20
M, Feb 10	Catch up	
W, Feb 12	Vessels	Chapter 21
F, Feb 14	Vessels	Chapter 21
M, Feb 17	Immune System - lymphatic	Chapter 22
W, Feb 19	Immune system	Chapter 22
F, Feb 21	AIDS	Chapter 22
M, Feb. 24	Respiratory System - Introduction (written response due)	Chapter 23
W, Feb 26	Respiratory system	Chapter 23
F, Feb 28	Respiratory system	Chapter 23
M, Mar 3	Respiratory system	Chapter 23
W, Mar 5	Review & Catch up	
<b>Thurs, Mar 6</b>	<b>EXAM II – 8:00-9:30AM covers through respiratory system</b>	
F, Mar 7	Digestive System	Chapter 24
<b>Mar 10 – 14</b>	<b>SPRING BREAK!</b>	
M, Mar 17	Digestive System	Chapter 24
W, Mar 19	Digestive System	Chapter 24
F, Mar 21	Digestive System - Disorders	Chapter 24

**Biology 122 - Lecture Schedule (continued)**

<u>Date</u>	<u>Topic</u>	<u>Assigned Reading</u>
M, Mar 24	Metabolism	Chapter 25
W, Mar 26	Urinary System	Chapter 26
F, Mar 28	Urinary System – Physiology (written response due)	Chapter 26
M, Mar 30	Urinary System	Chapter 26
W, Apr 2	Urinary System	Chapter 26
F, Apr 4	Urinary System – Disorders	Chapter 26
M, Apr 7	Review & Catch up	
W, Apr 9	Reproduction	Chapter 28
<b>Thurs, Apr 10</b>	<b>EXAM III – 8:00-9:30AM covers through digestive system</b>	
F, Apr 11	Reproduction - Anatomy	Chapter 28
M, Apr 14	Sex and sexual response	Chapter 28
W, Apr 16	Sex and sexual response	Chapter 28
F, Apr 18	Conception	Chapter 28
M, Apr 21	Disorders of Reproductive System (written response due)	Chapter 28
W, Apr 23	Pregnancy & development	Chapter 29
F, Apr 25	Pregnancy & development	Chapter 29
M, Apr 28	Wrap-up	

**FINAL EXAMINATION – Tuesday, May 6, 2:00-5:00PM, comprehensive**

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***Syllabus continues on next page***

**Biology 122 - Laboratory Schedule, Spring 2003****Dr. Nitya Jacob**

<u>Date</u>	<u>Topic</u>	<u>Lab Exercise/Reading</u>
Jan 21	Endocrine system (bring Rust book)	Exercises 27, 28
Jan 28	Blood	Exercise 29
Feb 4	Heart & EKG	Exercises 30, 31, 33A
<b>Feb 11</b>	<b>PRACTICAL #1</b>	
Feb 18	Blood Vessels	Dissection Exercise #4
Feb 25	Blood Vessels	Dissection Exercise #4
Mar 4	Respiratory System	Exercise 37, 38 Dissection exercise #6
<b>Mar 11</b>	<b>SPRING BREAK</b>	
<b>Mar 18</b>	<b>PRACTICAL #2</b>	
Mar 25	Digestive System	Exercise 38,39 Dissection exercise #7
Apr 2	Urinary System	Exercise 40,41A
Apr 8	Reproduction Development	Dissection exercise #8
Apr 15	Trip to Emory	
Apr 22	Review	
<b>Apr 29</b>	<b>LAB PRACTICAL FINAL EXAM</b>	

**Please bring all texts (Martini, Marieb and Rust) to the laboratory. We will use them for photographs and illustrations while observing specimens.**

## GUIDE TO BIOLOGY 122

Please read this syllabus carefully and please be sure to clarify any doubts. This handout is your map to Biology 122! Please pay full attention to the information contained in this syllabus. Information in this syllabus is also subject to change according to my discretion, so please pay attention to any changes made during the semester.

**Honor Code:** All examinations and work for credit in this course come under the regulations of the Honor Code. Please uphold the Honor Code and include your signature on your work as your pledge.

**Attendance:** Attached to this syllabus is the Biology Department Absence Policy. Please read through this handout carefully for conditions on absences. Unexcused absences, tardiness or a failure to follow the procedures outlined in the handout will result in a reduction in your grade. Any questions about absences should be raised immediately.

**Examinations:** There will be three lecture exams, held on the dates specified in the syllabus. Lecture exams cover the topics indicated, which include textbook readings, lecture notes and concepts learned in lab. The final exam is cumulative. There are also two laboratory exams and a laboratory final exam, which will involve recognition of structures and functions of materials encountered in the lab.

**Dissection:** Since this is an anatomy course, lab exercises will involve dissection of various materials. You will get to reunite with your friend, the cat, once again. We will be using the cats to study cardiovascular, respiratory, digestive and reproductive systems. Please come prepared to lab with your dissection kit.

**Written assignments:** I will hand out 4 articles from the American Journal of Nursing. These articles may cover social issues or clinical updates geared towards nurses. You will be expected to read the article, and respond to it in one page. Guidelines for the response will be provided in class. The article will be distributed one week prior to the due date for the response.

**LearnLink Class Conference:** You are already familiar with the class conference for Biology 121/122 on LearnLink. Please continue to use it as well as you did last semester. Handouts for lab will be posted on the conference as well.

**Class Participation:** I will be giving credit for class participation. Please make notes of questions you have and feel free to ask during the class.

**Laboratory.** The laboratory exercises require learning and recognizing anatomical structures. To be successful on the lab exams, I strongly recommend that you make a

habit of returning to the lab a second time during each week. Review the specimens and slides on a regular basis so that you are well acquainted with them at the time of the lab practical. Aside from the scheduled lab period on Tuesday, the lab is open M, Th, and F from 8:30AM –5:00 PM. Open labs will be offered before the lab exams.

**Trip to Emory.** Towards the end of the semester we will take a field trip to visit the cadaver lab at Emory. This will give you a chance to review what you have learned between the two courses, this time observing an actual human body. Please mark the date on your schedule. The lab may require extra time for travel, so please be prepared to make the adjustment.

**Evaluation:** The point distribution given below will be used to evaluate your performance in Biology 122.

Lecture Exams	300 points
Lab Practical Exams	150 points
Written assignments	40 points
Class Participation	20 points
Final Exam	150 points
Total	<hr/> 660 points

Occasionally, lab quizzes may be given to evaluate your performance in lab. Total points allotted for the course will be adjusted to include these quizzes.

Your letter grade will be determined on the standard scale of:

90-100 %	A
80-89 %	B
70-79 %	C
60-69 %	D
<60	F

Plus and minus grades will be given.

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