Biology 122 – Human Anatomy and Physiology II
Course Syllabus
Spring 2004

Faculty Information: Dr. Nitya Jacob, *Office*: Room 104, Pierce Hall; *Phone*: 770-784-8346
Office Hours: TTh 9:30-10:30 AM and Th 1:30-3:00PM, or by appointment
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Lecture: MWF 11:45 AM - 12:35 PM, Room 101, Pierce Hall
Laboratory: Monday 2:00-5:00 PM, Room 123, Pierce Hall

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. Highly recommended.

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. You will learn techniques such as EKG recording and analysis and blood pressure measurement. Just as in Biology 121, you will learn anatomical terms applicable to each organ system.

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

Date	Topic	Assigned Reading
W, Jan 14	Introduction to the Endocrine system	Chapter 18
F, Jan 16	Endocrine system	Chapter 18
M, Jan 19	MLK DAY	no class
W, Jan 21	Endocrine system	Chapter 18
F, Jan 23	Endocrine system	Chapter 18
M, Jan 26	Cardiovascular system - Blood	Chapter 19
W, Jan 28	Cardiovascular system - Blood	Chapter 19
F, Jan 30	Heart – Anatomy & Conduction	Chapter 20
M, Feb 2	Heart – Physiology & EKG	Chapter 20
W, Feb 4	Heart – Problems	Chapter 20
Thurs, Feb 5	**EXAM I – 8:00-9:30AM, covers through heart physiology**	
F, Feb 6	Heart – Eliminating risk factors	Chapter 20
M, Feb 9	Review & Catch up	
W, Feb 11	Blood vessels	Chapter 21
F, Feb 13	Blood vessels	Chapter 21
M, Feb 16	Immune System - lymphatic	Chapter 22
W, Feb 18	Immune system	Chapter 22
F, Feb 20	AIDS	Chapter 22
M, Feb. 23	Respiratory System - Introduction	Chapter 23
W, Feb 25	Respiratory system	Chapter 23
F, Feb 27	Respiratory system	Chapter 23
M, Mar 1	Respiratory system	Chapter 23
W, Mar 3	Review & Catch up	
Thurs, Mar 4	**EXAM II – 8:00-9:30AM covers through respiratory system**	
F, Mar 5	Digestive System	Chapter 24
Mar 8 –12	**SPRING BREAK!**	
M, Mar 15	Digestive System	Chapter 24
W, Mar 17	Digestive System	Chapter 24
F, Mar 19	Digestive System - Disorders	Chapter 24

Biology 122 - Lecture Schedule (continued)

Date	Topic	Assigned Reading
M, Mar 22	Metabolism	Chapter 25
W, Mar 24	Urinary System	Chapter 26
F, Mar 26	Urinary System – Physiology	Chapter 26
M, Mar 29	Urinary System	Chapter 26
W, Mar 31	Urinary System	Chapter 26
F, Apr 2	Urinary System – Disorders	Chapter 26
M, Apr 5	Review & Catch up	
W, Apr 7	Reproduction	Chapter 28
Thurs, Apr 8	**EXAM III – 8:00-9:30AM covers through digestive system**	
F, Apr 9	Reproduction - Anatomy	Chapter 28
M, Apr 12	Sex and sexual response	Chapter 28
W, Apr 14	Sex and sexual response	Chapter 28
F, Apr 16	Conception	Chapter 28
M, Apr 19	Disorders of Reproductive System	Chapter 28
W, Apr 21	Pregnancy & development	Chapter 29
F, Apr 23	Pregnancy & development	Chapter 29
M, Apr 26	Wrap-up	

FINAL EXAMINATION – Thursday, April 29, 9:00AM-12:00PM, comprehensive

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Syllabus continues on next page

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

Date	Topic	Lab Exercise / Reading
Jan 19	MLK Jr Day – No Lab	
Jan 26	Endocrine system (bring Rust book)	Exercises 27, 28A: p.283-284
Feb 2	Blood	Exercise 29
Feb 9	Heart & EKG	Exercises 30, 31, 33A
Feb 16	**LAB PRACTICAL #1**	
Feb 23	Blood Vessels (dissection kit)	Exercise 32 Dissection Exercise #4
Mar 1	Blood Vessels (dissection kit)	Dissection Exercise #4
Mar 8	**SPRING BREAK**	
Mar 15	Respiratory System (dissection kit)	Exercise 36, 37A Dissection exercise #6
Mar 22	**LAB PRACTICAL #2**	
Mar 29	Digestive System (dissection kit)	Exercise 38,39 Dissection exercise #7
Apr 5	Urinary System (dissection kit)	Exercise 40, 41A
Apr 12	Trip to Emory Cadaver Lab	
Apr 19	Reproduction & Development	Exercise 42,43, 44 Dissection exercise #8
Apr 26	**LAB PRACTICAL #3**	

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 three laboratory exams, 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. 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: This semester your written assignments will be 4 case study reports. A case study is a sample practical situation, such as a medical case. You will have to answer the questions that accompany the case study. You may work on solving the case study with a partner, but case study reports must be written up individually. You will have to consult reference books such as your text, lab book or the medical books available in the lab and / or library.

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

Class Participation: Biology 122 is an interactive course. Your curiosity about the subject is demonstrated by the questions you ask in the classroom. 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. Please be sure to ask for assistance. This semester April Sharkey will be helping out as the TA in lab. 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 Monday, the lab is open T, 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 will require extra time for travel, so please be prepared to make the adjustment. All students must travel together in the college van.

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	660 points

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.