Course Title:
BIOL 1134 – HUMAN ANATOMY AND PHYSIOLOGY I (Fall 2006)

Instructor:
Laboratory courses are taught by the Instructional Assistants (IAs). The IAs are available in Rm.124 S before or after the class period and during the ‘open lab’ for consultation. Students are also free to contact the Lab Coordinator, Dr.Tejendra Gill, by phone at (713)-743-2646 or via email tgill@uh.edu, for questions related to the laboratory.

Course Description and Objectives:
Laboratory studies of the structure and functions of the human body. This course provides the undergraduates with a "hands-on" experience in human anatomy and physiology. Students explore the human body and its functions using a variety of techniques. Graduating students will display mastery of human anatomy and physiology of organ systems.

Prerequisites
None

Course Content
The students learn about basic chemistry, anatomical terms, cells and the plasma membrane structure and function, histology, the structure and function of skin, bones, muscles, central and peripheral nervous system, and the sense organs. The following lab exercises are conducted during the semester, and corresponding lab reports turned in for grading.

#1: The Language of Anatomy
#2: Organ Systems Overview
#3: The Microscope
#4: The Cell-Anatomy and Division
#5A: The Cell-Transport Mechanisms and Cell Permeability; Diffusion through Living Membranes
#5B: The Cell-Transport Mechanisms and Cell Permeability
#6A: Classification of Tissues
#6B: Classification of Tissues
#7: The Integumentary System
#8: Classification of Body Membranes
#9: Overview of Skeleton - Classification and Structure of Bones and Cartilages
#10: The Axial Skeleton.
#11: The Appendicular Skeleton
#12: The Fetal Skeleton
#13: Articulations and Body Movements
#14: Microscopic Anatomy, Organization and Classification of Muscles
#15: Gross Anatomy of Muscular System
#16A: Skeletal Muscle Physiology
#16B: Skeletal Muscle Physiology - Frog Experimentation: Wet Lab
#17: Histology of Nervous Tissue
#18: Neurophysiology of Nerve Impulses
#19: Gross Anatomy of Brain and Cranial Nerves
#21: Spinal Cord, Spinal Nerves and Autonomic Nervous System
#22: Human Reflex Physiology
#23: General Sensation
#24: Special Senses: Vision
#25: Special Senses: Hearing and Equilibrium
#26: Special Senses: Olfaction and Taste.

**Required Texts**  
- **Lab Manual**: *Human Anatomy & Physiology Laboratory Manual (CAT Version)*  

**Books Suggested (not required)**  
- *Mammalian Anatomy - the Cat* by Sebastiani & Fishbeck  
  Available at the UH Bookstore.
  Available at the UH Bookstore.
- *Anatomy Coloring Book* Available at the Biology Research Stores Rm. #209 S

**Course Requirements**

**A. General Requirements**

In order to receive credit for this course (1 credit hr) the student must:

* Purchase the required lab manual, and a lab coat from the Biology Research Stores (Rm. 209 S) during the first week of labs.
* Complete all assigned laboratory exercises and out-of-class assignments.
* Take all online quizzes, midterm tests, and the final, and attend all lab sessions to earn a participation grade. The course (letter) grade will be awarded according to the UOH grading scale (see Exams and Grading Policy below).
* Attend the section in which they are registered from beginning to the end of the semester.
* Follow all the laboratory safety rules and regulations.

**B. Testing**

* **All quizzes, midterms and the lab final will be given online, except for the practical portion of the three tests. NO PAPER TESTS WILL BE GIVEN.**

**Quizzes:**

Quizzes will be given over lab exercises covered during the semester. *Each* quiz may have up to 10 questions (1 point each). Questions will be based on the material covered in the previous lab. At the end of the semester, the quiz grades will be normalized out of 100 points.

**Midterm Exams:**

There will be two midterms. Each test will be worth 80 points, and will have different sections, including the practical part.

**Final Exam:**
The final exam will be over the last block of the lab exercises, and will have the same exact format as the two midterms, and will be worth 80 points.

**Participation Grade:**
A student may be awarded a maximum of 5 points/lab (maximum 60 points) for actively participating in the lab and clean-up after each lab. Students missing a lab will not receive a participation grade for that lab.

**Evaluation and Grading**

**Grading Scale:**
The course grade will be awarded at the end of the semester based on the total points earned by the student (see the details below)

<table>
<thead>
<tr>
<th>Component</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quizzes</td>
<td>100</td>
</tr>
<tr>
<td>Midterm and Final</td>
<td>240</td>
</tr>
<tr>
<td>Participation Grade</td>
<td>60</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>400</strong></td>
</tr>
</tbody>
</table>

- 92 to 100% = A
- 90 to 91.9% = A-
- 88 to 89.9% = B+
- 82 to 87.9% = B
- 80 to 81.9% = B-
- 78 to 79.9% = C+
- 72 to 77.9% = C
- 70 to 71.9% = C-
- 68 to 69.9% = D+
- 62 to 67.9% = D
- < 62% = F

Note: To achieve a fair and reasonable distribution of grades, the grading scale may be adjusted anytime during the semester at the discretion of the Instructor. The cut off for different grades will not be more severe than the limits indicated above.

**Policy on Incomplete Grade (I)**

Students' attention is drawn to the University of Houston - Student Handbook 2005-2006 (pages 17 - 18) on the official academic policies on incompletes and withdrawals. "The temporary grade of “I” (incomplete) is a conditional and temporary grade given when students (a) are currently passing a course or (b) still have a reasonable chance of passing in the judgment of the Instructor, but for non-academic reasons beyond their control have not completed a relatively small part of all requirements.”

"Students are responsible for informing the Instructor immediately of the reason for not submitting an assignment on time or not taking an examination. Students should understand that the only way to have an “I” changed to a passing grade is to fulfill course requirements in accordance with the conditions specified by the Instructors. Students must contact the Instructor of the course in which they receive an “I” grade to make arrangements to complete the course requirements. Student must not re-register for the courses in which their grade is currently
recorded as an “I”………….After the course work is completed, the Instructor will submit a change of grade form to change the “I” grade to the grade earned. Both grades, the original “I” and the earned grade, will appear on the transcript. The grade of “I” may not be changed to a grade of “W” but may be changed only to another letter grade………………Should the student not complete the course in time allotted, a grade of “F” will be assigned and used for purposes of calculating a student’s cumulative grade point average for graduation………………” (please see the handbook for complete details)

Extra Credit

**CPR extra credit:** A maximum of 10 points may be added to the overall grade by earning certification in adult or child CPR during the spring 2006 semester **BEFORE the May 4, 2006 deadline.** The course can be taken at any of the facilities which offer CPR training. Students can also check with their local hospital, YMCA and Red Cross as well. CPR certification is recommended even if not for the purpose of extra credit. Students **MUST submit a copy of the CPR certificate** to receive the extra credit.

Assignments/Lab Reports

* All lab work must be turned in personally to the Instructor.
* DO NOT drop off the assignments in TAs mailbox or slide under the lab/office door.
* All assignments must be turned in by the deadline set by the Instructor.
* There is penalty for lateness.

Attendance, Academic status, Make-ups etc.

Missed labs

* All sections do the same lab in any given week.
* A student may make up the lab in any other section in the same week.
* To be allowed to make up, the student must have valid reasons for missing the lab.
* **Make-up test will NOT be given by the guest TA. Only regular TA for that section will administer the make-up test with the consent of the coordinator.**
* In the absence of a make up, credit for the missed lab will be disallowed and the student will receive a ‘zero’ for the missed quiz/test.
* The students cannot be allowed to just leave if a TA is absent.
* In an emergency, coordinator/fellow TA will fill in for your regular TA.

Posting of Grades

Students have the right to the privacy of their personal information and academic performance (Privacy Right Law), and the Instructors have access to such information strictly for professional reasons. Grades will be posted on the official UH WebCT Vista website. Students will need their WebCT Vista user ID and the password to access the information. Contact your TA for information on how to access the WebCT Vista website (www.uh.edu/webct). Grades can not be given over the phone or e-mailed.

Academic honesty

Students' attention is drawn to the University of Houston - Student Handbook 2005-2006 (pages 9 - 14) on the official academic honesty policy. **Instructors are within their right to drop a student from the class or disallow a student from taking the test if the student is (i) actually found cheating in the class during a test or (ii) suspected of cheating during the test or (iii) fails to show a valid student I.D. or (iv) not registered in the class.**

Open Lab

Instructors are free to offer the **open lab. Contact your TA for schedule and sign up.** No extra credit will be allowed for attending the open lab. Open lab, if offered, may be canceled
for lack of sufficient number of students signing up for the lab. Check the WebCT website for any announcements about the open labs.

**Guesting policy**

*Before* a student can guest in a lab, the TA will verify from the class rolls whether or not the student is registered for the course in another section of the lab. Student not properly enrolled can not guest in any section.

* A student may guest in any other section **NOT MORE THAN TWO TIMES** in the entire semester.
* The guesting form **must** be filled, signed by the student/TA and kept on file.
* Reason for guesting should be asked verbally (need not be recorded).
* Student is responsible for the credit transfer from the guested section.

**Switching the lab sections:**

Students wanting to change the lab section should **go to the Office of Undergraduate Advising in Rm.116 Science Bldg.** Lab sections can be switched provided there are seats available in the desired section or someone from the desired section wants to move to another section. **All such mutual transfers must be officially processed by the Advising Office.**

**Academic status**

Instructor reserves the right to disallow any student of uncertain academic status to attend labs and take quizzes/tests. Any student who is NOT on the class rolls will NOT be allowed to attend the lab and take quizzes/tests. All such students should go to Rm.116 Science Building or to Rm.104 E. Cullen to resolve the enrollment issues. Students NOT on the class rolls will be deleted from the WebCT class roster as well as from the online testing center.

**Administrative Drop**

Student may be dropped from the class on administrative grounds. Some of the **common grounds for an administrative drop are listed below but are not limited to:**

1. Student is not properly enrolled in BIOL 1134 for the fall 2004 semester.
2. Student’s does not possess the required lab manual and the Interactive Physiology software.
3. Student misses **more than 2** class periods regardless of reasons.
4. Student misses **more than 2** quizzes or more than one midterm test.
5. Violation of Academic Honesty Policy.

**Students with Disabilities**

Whenever possible, and in accordance with 504/ADA guidelines, the University of Houston will attempt to provide reasonable academic accommodations to students who request and require them. Please call (713) 743-5400/voice or (713) 749-1527/TTY for more assistance. Students requesting such accommodation for this course should contact the Instructor as soon as possible. Please refer to the University of Houston - Student Handbook 2005-2006 (page 14-5) for detailed information on this topic.
1. Always wear the white lab coat throughout the duration of the lab.

2. Wear safety goggles/mask whenever necessary.

3. Use gloves when handling animal/human material/tissues/fluids.

4. Wear closed toe shoes. Appropriately manage long hair or any loose clothing/head dress.

5. Never eat or drink in the lab. Wash your hands with soap before you exit the lab.

6. SMOKING is not allowed inside the building.

7. Do not use mouth suction for pipeting/siphoning.

8. Know toxicity, inflammability, and reactivity of hazardous chemicals. A chemical spill kit is available in the lab.

9. Use fume hood for specific chemicals.

10. Use electrical outlets carefully.


12. Do not remain in the lab in the absence of the Instructor nor leave the lab w/out Instructor's permission.

13. Dispose off glass, sharps, syringes, and plastic pipettes in designated containers. MUST clean up when finished.

14. **Report any slightest injury to the TA immediately.** A First Aid kit is available in the lab.

15. **In case of medical emergency, immediately call 3.3333 (campus police).**

16. **Call 3.5674 for cleanup of ordinary chemical spills or 3.5858 for hazardous chemical spills.**

17. Know the exit routes from the building in case of a fire or other emergency.

18. Know location of and how to use the fire extinguishers, first-aid kits, showers and eye wash stations.

19. Consult the Instructor before using any unfamiliar chemical or equipment.

20. **Do not panic** in an emergency situation! The emergency on-campus police phone number is extension 3.3333.
21. General Emergency Evacuation: Know ALL the EXITs from the Science Building. In case of general emergency evacuation, all TAs and STUDENTS must assemble for a head count near the water fountain (south side of Science Building).