

# Chaminade University of Honolulu, at Tripler

Class Meetings: Mon/Wed 1950-2155 at Bldg TBA. Concurrent registration in Biol 151 Lab is required.

Instructor: Charles Matsuda Office Hours: by appointment before or after class

phone messages: 734-9356 email: cmatsuda@hawaii.edu FAX: 734-9151

TEXT: Principles of Anatomy & Physiology, 8th ed., by Tortora et al, packaged with ancillary materials.

OPTIONAL: Kapit and Elson, Anatomy Coloring Book, 2nd ed., Harper Collins, 1993.

**INSTRUCTION:** Lecture. Regular attendance is normally required to pass.

GENERAL COURSE OBJECTIVE: To present a comprehensive first semester introduction of human anatomy & physiology (A&P) course materials for health/medical sciences programs such as nursing or physical therapy. Biology 152 provides a second semester conclusion of the course materials.

SPECIFIC COURSE COMPETENCIES: It is expected that the nursing, phygid therapy assistant, or other allied health sciences students who pass this course will acquire the knowledge of A&P necessary to pass the pertinent sections of their respective licensing exams. For other students, it is expected that the information acquired in this course will allow them to pursue more advanced studies in anatomy and/or physiology.

As the course proceeds, and at the completion of this course, students will be expected to be able to answer detailed objective questions concerning the lecture material, textbook readings, and class handout assignments relating to this PROSPECTIVE COURSE OUTLINE:

| TOPIC(S)                          | CHAPTERS                | TENTATIVE EXAM DATES Dates are NOT guaranteed |
|-----------------------------------|-------------------------|---|
| Introduction, Chemistry, Cells    | 1, 2,3                  | EXAM 1 (Apr 19 <sup>th</sup> )                |
| Tissues, Integumentary System     | 4, 5                    | EXAM 2 (Apr 26 <sup>th</sup> )                |
| Bones                             | 6, 7, S, 9              | <b>EXAM 3 (May 3'</b> d)                      |
| Midterm, on all previous TOPICS   | 1 thru 9                | Midterm (May 5 <sup>th</sup> )                |
| Muscles                           | 10, 11                  | EXAM 4 (May 19''')                            |
| Blood, Heart, Vessels, Lymphatics | 19, 20, 21              | EXAM 5 (May 31st)                             |
| Digestive System, Metabolism      | 24, 25                  | EXAM 6 (Jun 7 <sup>th</sup> )                 |
| Review Session                    |                         | June 9 <sup>th</sup>                          |
| ALL TOPICS                        | 1 - 11, 19 - 21, 24, 25 | FINAL, Jun 14 <sup>th</sup>                   |

GRADING: The grade curve is based upon six 30 point exams, a 60 point midterm, and an 60 point comprehensive final. NO extra credit assignments. Make-up exams can be scheduled, but score reduction penalties may apply. A missed final will result in an 'F' grade.

Grade curve (approximate): A'' = 300-270 B'' = 269-240 C'' = 239-210 D'' = 209-180 F'' = 179-0.

Adjustment points will be added to all student point totals if the class average falls below the 75th percentile mark normally expected on a standard curve. Individual student scores and point totals that fall below 50% are below the absolute course minimum, and will not be calculated into class averages.

STUDY SKILLS AND ADVISING: Biol 151 is a demanding course, requiring hours of study outside of class to pass. Students are advised to organize, summarize, and rewrite their lecture notes for review. The data standard for the course is the textbook, with heavy reliance on lecture notes.

Students who perform poorly on tests should seek academic advising from the instructor. Check with me at any time for your current course standing.

Withdrawal Policy: Students who stop attending the lecture and/or lab with no withdrawal form processed will receive an "F". Students who withdraw from lecture must withdraw from the lab as well. Please consult your program coordinators for assistance with forms and to determine deadlines.

## **Important Notices:**

Class is cancelled for the evening if, without prior notice, the instructor is twenty minutes late.

If you are absent, obtain lecture notes and find out about course schedule changes from classmates.

Comments and suggestions concerning the course are encouraged, but instructional, departmental, and university policies and responsibilities require that all final decisions reside with the instructor.

Mature and honorable behavior is expected of all class members. Any student observed looking at notes or another student's work during exams will be penalized minus 50 points for each incident.

Disruptive behavior will result in grade penalty and/or banishment from class. No earphones, no dictionaries, no calculators, no pagers, no cell phones, and no talking allowed during exams. Please turn off cell phones and pagers during lectures, and especially during exams.



# Chaminade University of Honolulu, Main Campus

BIOLOGY 151 Lab (1513L) Human Anatomy & Physiology I Lab, Main Campus Spring '99

Class Meetings: Saturday at Main Campus, Henry Hall, rm 8. Labs start at 12:30 PM.

Text: Integrated Human Anatomy, 4th ed., by C. Daniels, McGraw Hill Publ., 1994; and the lecture text.

**Instruction** Methods: This course combines (a) dissection labs, (b) lab exercise write-ups, (c) study of anatomy models and images, and (d) self-directed Creative Imaging.

Course competencies: To learn basic anatomy and physiology by the completion of this course, and...

- 1. As the course proceeds, it is the responsibility of the students to be able to correctly answer detailed questions derived from the following sources:
  - a. The underlined structures cited in the lab manual concerning the anatomy models.
  - b. The relevant text information and picture identifications assigned from the lecture textbook.
  - c. The relevant text information provided on lab handout materials.
  - d. The structures cited in the lab manual relevant to the assigned dissection exercises.
- 2. Students will learn and execute the study skill of Creative Imaging, explained in the lab manual, pp. 410.
- 3. Students should become "independent learners" by researching, writing, and editing lab reports, and by self-directing their lab study of models and textbook images.

Grading: The lab grade distribution is based on 200 points, with adjustments to the curve. Lab and lecture grades are separate and independent. A missed final will result in an 'F' grade.

- a. Lab practicals: A lab practical midterm and a noncomprehensive final, 60 points each. Timed stations with multiple-choice questions concerning models, lecture text images, and lab exercises.
- b. Dissection testing on structures described in the lab manual, 10 points each.
- c. Lab Write-ups: 30 points obtainable by written lab reports, which will be ranked on a percentage scale to be explained in class. There will be a one point penalty deduction for every day late; faxes, email acceptable.
- d. Creative Images: 30 points are obtainable for the completion of 10 acceptable Creative Images depicting lab **materials**. **Points** will be deducted for **unacceptable** images. Due in **class** June 14, 1999. There will be a three point penalty deduction for every day late; faxes are acceptable, but the received copy will be evaluated, and poor reproduction quality may result in point deductions.

| Lab | Date   | Prospective Schedule of Topic(s) for Biology 151 Lab  | LectureText                       |
|-----|--------|---|-----------------------------------|
| 01  | Apr 10 | Lab Guidelines, The Scientific Method, paper to be assigned. Free study: Torso model, pp. 11-16, Cell and Skin models, pp. 17-19  |                                   |
| 02  | Apr 17 | Chemistry and Microscopy, paper to be assigned.<br>Free study: Disarticulated Skeleton, pp. 21-26, Jaw, Knee, pp. 26-27<br>(Use our atlas and/or Chs. 7 & 8 of our lecture text to stud the bones.) | Exhibits 4.1, 4.2, 4.3            |
| 03  | Apr 24 | Fetal Pig Dissection, pp. 79-91, dissection test in lab. Free study: Arm Model, pp.28-34  | Figs. 5.2, 5.3, 6.1, 6.3, 6.6     |
| 04  | May 01 | Free study: all models and images.  |                                   |
| 05  | May 08 | Midterm Practical Exam, material will include all models, figures, and exhibits assigned up to this time.  Special start time to be announced   |                                   |
| 06  | May 15 | Muscle Physiology Experiment, paper to be assigned. Free study: Leg Model, 34-37  | Figs. 10.5, 10.18<br>Exhibit 10.2 |
| 07  | May 22 | Heart Dissection, pp. 92-96, dissection test in lab. Free study: Vessels 54-58 wall-mount model.  |                                   |
| 08  | May 29 | Cardiovascular experiment, paper to be assigned. Free study: Digestive System model, <b>pp.62-65</b> , Heart model, pp. 52-54   | Figs. 19.2, 19.6, 20.10, 21.9     |
| 09  | Jun 05 | Free study: all models, figures, and exhibits assigned since the midterm.   | Figs. 22.5, 22.6<br>22.19         |
| 10  | Jun 12 | Final Practical Exam, noncomprehensive, material will include all models, figures, and exhibits assigned since the midterm.   |                                   |
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# Important Notices:

All practical exams will be retained by the instructor.

See me at any time during the semester to check your progress in lab.

Concurrent registration in Biology 151 is required.

No smoking, no drinking, no eating allowed in lab.

### \* LABORATORY WARNING AND DISCLOSURE \*\*\*\*\*

Specimens used in this lab are stored in relatively "safe" solutions, but it should be assumed that they have been fixed in formalin, an aqueous solution of formaldehyde. Formalin has been used as a fixing agent and preservative of biological specimens for years. Formalin is an irritant of the eyes, upper respiratory tract, and skin - - especially in sensitive individuals. Also, lab experiments have shown that formaldehyde is fully been considered in rats, and the EPA classifies formaldehyde as a Group B 1 carcinogen. Formalin is toxic. Drinking formaldehyde is fatal.

For these reasons, during any dissection lab:

- 1. Gloves should be worn to protect the skin.
- 2. Glasses should be worn to protect the eyes.
- 3. Spills and splashes should be immediately and thoroughly rinsed off with water.
- 4. The specimen should be frequently rinsed with water.
- 5. Available fans should be set on full speed, and all windows and doors kept open.
- 6. Anyone with chronic, defined respiratory problems should report to the instructor for possible initiation of alternative labs.

#### GENERIC LABORATORY RULES

- 1) Each student is expected to act in a mature and responsible manner in the laboratory.
- 2) Lab equipment is to be treated with care; please report any malfunction or breakage.
- 3) Keep your work area clean. All spills mid debris are to be removed before leaving lab.
- 4) Preservative fluids can stain your clothes. A lab coat, or an apron or an old shirt is recommended.

#### SAFETY RULES

- 1) Know the location of the first aid kit and report any injury or toxic reaction to the instructor.
- 2) Dissection instruments are to be used with careful control; do not endanger yourself or your lab partner with inattention or horseplay.
- 3) All incisions and cuts are to be made away from you and your lab partner. Whenever feasible, cut downward into the bottom of the dissecting pan.
- 4) Do not eat or drink anything in the lab; after leaving the lab, be aware of the possibility of contact-contamination.
- 5) Wear gloves when handling any specimen. Skin contact is to be avoided. Wash off immediately and thoroughly if you touch preservative fluids.

Please tear along this line and present the completed form below to your instructor.

#### ASSUMPTION OF RISK AND RELEASE FOR BIOLOGY 151 LABORATORY

Spring 1999, April 05 - June 14, Saturday, 12:30-4:20, taught by Charles Matsuda

I have read and fully understand the written safety and other rules and precautions that are a part of the requirements for my participation in lab, as well as those explained to me by my instructor, and I agree to strictly observe them; and

(Please print your name here) do for myself, my heirs, executors, and administrators hereby accept full responsibility for and indemnify, release, and discharge Chaminade University of Honolulu, its officers, agents, and employees from any and all claims of actions for property damage, and/or personal injury which may result from my failure to abide by these safety rules and precautions, or from any inherent risks in said lab.