



Chaminade University of Honolulu, at Pearl Harbor

SE '00

BIOLOGY 151 (15160)

Human Anatomy and Physiology I

Spring 2000

PM

Class Meetings: Mon/Wed 1905-2055 at Bldg 679, 2nd floor.

13

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.

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

GENERAL COURSE OBJECTIVE: To present a comprehensive 1st semester introduction to human anatomy & physiology (A&P) for health/medical sciences programs, eg. nursing or physical therapy.

Concurrent registration in Biol 151 L required. Biol 152 provides a 2nd semester conclusion of the course.

SPECIFIC COURSE COMPETENCIES: It is expected that the nursing, physical 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 <u>Dates are NOT guaranteed</u> |
|--|--|---|
| Introduction, Chemistry, Cells | 1, 2, 3 | EXAM 1 (April 19 th) |
| Tissues, Integumentary System | 4, 5 | EXAM 2 (April 26 th) |
| Bones | 6, 7, 8, 9 | EXAM 3 (May 3 rd) |
| Lab Practical Midterm, special start time to be announced. | All models, figures, an exhibits assigned in lab, up to this point. | Lab Practical Midterm (May 8 th) |
| Muscles | 10, 11 | EXAM 4 (May 17 th) |
| Blood, Heart, Vessels, Lymphatics | 19, 20, 21 *pp 635,649 | EXAM 5 (May 31 st) |
| Digestive System, Metabolism | 24, 25 | EXAM 6 (June 7 th) |
| LECTURE FINAL, June 7 th | 1 - 11, 19 - 21, 24, 25 | LECTURE FINAL, June 7 th |
| Lab Practical Final, special start time to be announced. | All models, figures, an exhibits assigned in lab after the midterm. | Lab Practical Midterm (June 12 th) |

GRADING: The grade curve is based upon six 30 point exams, and an 60 point comprehensive final. NO extra credit assignments. A missed final will result in an 'F' grade.

Grade curve (approximate): "A" = 240-216 "B" = 215-192 "C" = 191-168 "D" = 167-144 "F" = 143-0.

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. 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.

The lecture final and all lab practicals will be retained by the instructor for a holding period that expires on August 1" of this year. Should any grade be disputed as incorrect during the holding period, contact me and scores and records will be checked for accuracy. On Aug 1 % course materials will be destroyed and recorded grades will stand as valid and irrevocable.

Chaminade University of Honolulu, Main Campus

BIOLOGY 151 L (151L60) Human Anatomy & Physiology I Lab, Spring '00

Class Meetings: Saturday at Main Campus, Henry Hall, room 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: (a) dissection labs, (b) lab exercise write-ups, and (c) study of anatomy models and text images.

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 questions from:

- 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 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**, **50 points each**. **Timed stations** with multiple-choice questions concerning models, and lecture text images.

b. Dissection testing on structures described in the lab manual, 10 points each.

c. Lab Write-ups: 20 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.

| Lab | Date | Prospective Schedule of Topic(s) for Biology 151 Lab | LectureText |
|-----|--------|---|-----------------------------------|
| 01 | Apr 8 | The Scientific Method , paper to be assigned. Free study: Torso model, pp. 11-16, Cell and Skin models, pp. 17-19 | |
| 02 | Apr 15 | Chemistry and Microscopy, paper to be assigned. Free study: Disarticulated Skeleton, pp. 21-26, Jaw, Knee, pp. 26-27 (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 22 | Free study: Arm Model, pp.28-34 | Figs. 5.2, 5.3, 6.1, 6.3, 6.6 |
| 04 | Apr 29 | Fetal Pig Dissection, pp. 79-91, dissection test in lab. Free study: all models and images. | |
| 05 | May 06 | Free study: all models and images. | |
| | May 08 | Midterm Practical Exam, in the Pearl Harbor classroom in the evening. Material will include all models, figures, and exhibits assigned thus far. Special start time to be announced | Pearl Harbor |
| 06 | May 13 | Muscle Physiology Experiment, paper to be assigned. Free study: Leg Model, pp. 34-37 | Figs. 10.5, 10.18 Exhibit 10.2 |
| 07 | May 20 | Heart Dissection, pp. 92-96, dissection test in lab. Free study: Vessels pp. 54-58 wall-mount model. | |
| 08 | May 27 | Cardiovascular experiment, paper to be assigned. Free study: Digestive System model, pp.62-65, Heart model, pp. 52-54 | Figs. 19.2, 19.6, 20.10, 21.9 |
| 09 | Jun 03 | Free study: all models, figures, and exhibits assigned since the midterm. | Figs. 22.5, 22.6 22.19 |
| 10 | Jun 10 | Free study: all models, figures, and exhibits assigned since the midterm. Final Practical Exam, noncomprehensive, in the Pearl Harbor classroom in the evening. Material will include all models, figures, and exhibits assigned since the midterm. Special start time to be announced. | Pearl Harbor |

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 is an irritant of the eyes, upper respiratory tract, and skin - - especially in sensitive individuals. Lab experiments have shown that formaldehyde is **tumorigenic** 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.

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 and 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 carefully; do not endanger people 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 specimens. 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 2000, April 03 - June 12, 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

I, _____ (Please print your name on the line) 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.

Student Signature

Date