

Spring 1998

Biology 22 (Human Physiology)

COURSE DESCRIPTION

INSTRUCTOR: Dr. Foletta (LS 5, Ext. 257) OFFICE HOURS: MWF 10 AM, or by appointment

This course is designed to introduce the student to a variety of topics in the area of human physiology. The text, lab manual, lab handouts, and lectures are geared to students in biological, medical, physical education and health-oriented programs. This course is especially useful for those students planning a career as a nurse, physician's assistant, nurse practitioner, lab technician, radiologist, nuclear medicine technologist, inhalation therapist, medical office assistant, medical record keeper, dental hygienist, physical therapist, surgical assistant, diagnostic medical sonographer, mortician, cytotechnologist, EEG technologist, paramedic, and students in premedical, pre dental, physical education, sports medicine, nutrition, dietetics, and prechiropractic programs.

Your active participation in all lectures and laboratory sessions is mandatory because of the many oral questions and discussions, demonstrations, exercises, and quizzes carried out during these periods. Your point totals on weekly quizzes and lab reports will be reduced by your absence from lecture and lab. Excessive unexcused absences will cause you to be dropped from the course.

Microscopes and lab supplies will be made available to each student. Each student is responsible for his/her laboratory materials and a replacement fee will be charged for lost or broken materials.

1. The final course grade will be determined as follows:
 - a) 60% of your grade (600 points) will be based on 3 lecture-lab exams given at the end of each major section.
 - b) 15% of your grade (200 points) will be based on weekly quizzes taken during the latter part of the lab period or in the lecture period. Attendance during the entire lecture or lab period is a requirement for taking the quiz. On a number of occasions you will be required to take notes during demonstrations and A/V presentations. Your point totals on weekly quizzes and lab reports will be reduced by the lack of these required notes. **There will be no makeup quizzes (no early quizzes and no late quizzes)** but your lowest quiz grade will be dropped and extra credit will be available on some quizzes.
 - c) 25% of your grade (200 points) will be based on completed laboratory reports which will be due at the end of each lab period. Completed laboratory report questions (including all color plates and assignments) turned in on time will be given 0-10 points (A: 9-10; B: 8; C: 7; D: 6; F: 0-5)

Late Lab Report	1 Day Late	2-7 Days	7 Plus Days
Points Given	0-9	0-7	0-5

- d) Percentage Required For Each Grade: A/90% or higher B/80-89% C/70-79% D/60-69% F/Less than 60%
 - e) Occasionally a student's grade will fall on the borderline, for example an 89.6%. As your instructor, I reserve the right to place that grade above the line if I think it is warranted. Some of the criteria that I use to make this judgement are: performance in lab, a steady increase in test scores, and attendance in lecture and lab.
2. Students can discuss any items related to this course by making an appointment with me immediately after the lecture, during the laboratory period, or during my office hours.
 3. It is the student's responsibility to make up missed work as soon as possible and according to a schedule worked out by the instructor.
 4. If you decide to drop this course you should:
 - a) complete the appropriate drop card and return it to the admissions office.
 - b) drop the course before the official drop date, which is Friday, March 13, 1998 .

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REQUIRED MATERIALS

- Principles of Anatomy and Physiology (Tortora - latest edition is recommended)
- Laboratory Exercises (Foletta, 1996)

REQUIRED BASIC SKILLS

- Eligibility for Math 1, Eng 25, and Eng 26.
- Because a great deal of writing on lab reports and exams will be required in this course it is strongly recommended that you complete English 25 and English 26 before you take Biology 22.

SUBJECT PRE-REQUISITES

- Principles of Biology (Biol 1), Human Anatomy (Biol 20), and Chemistry (Chem 10, 3A, 1A or H.S. Chemistry)

IMPORTANT DATES: Fill in these dates using the back of your class schedule as a guide.

Fall Semester

- Instruction Begins (_____)
- Physiology Lecture Hours (_____) Laboratory Hours (_____)
- Holidays - Fall Semester:
 - Labor Day (_____) Veteran's Day (_____) Thanksgiving (_____)
- Staff Development Day - No Classes (_____)
- Last Day To Change To Or From A CR/NC Grading Basis (_____)
- Last Day to Drop Class Without Assigned Grade (_____)
- Final Exams Week (_____)
- Physiology Final Examination (_____)

Spring Semester

- Instruction Begins (_____)
- Physiology Lecture Hours (_____) Laboratory Hours (_____)
- Holidays - Spring Semester:
 - MLK Holiday (_____), Lincoln Day (_____), Washington Day (_____)
 - Spring Recess (_____)
- Staff Development Day - No Classes (_____)
- Last Day To Change To Or From A CR/NC Grading Basis (_____)
- Last Day to Drop Class Without Assigned Grade (_____)
- Final Exams Week (_____)
- Physiology Final Examination (Wed 10:30 AM)
May 20, 1998

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LECTURE/LAB TOPICS

<u>WEEK</u>	<u>TEXT</u> <u>CHAPTER</u>	<u>LECTURE AND LABORATORY TOPICS</u>
1	2 App A	Lec: Introduction To Physiology and Biochemistry Lab: Metrics, Atoms, and Molecules
2	24/25	Lec: What Happens When You Eat A Big Mac Or A Taco? Lab: Colorimetric Tests
3	2/25	Lec: Protein And Lipid Metabolism Lab: Digestive Enzymes
4	3	Lec: How Do Chemicals Move Into And Out Of A Cell? Lab: Movement Through Cell Membranes
5	6/18 1	Lec: How Do Your Bones Grow and Develop? Lab: Medical Imaging
6		Lec: Monday - Review for Exam Lab: Lec/Lab Midterm Exam #1 (<u>Tue Feb 16</u>)
	20	Lec: Wed/Fri ==> Begin Discussion Of Cardiovascular System
7	20	Lec: What Is A Heart Beat? Lab: The Cardiac Cycle
8	21	Lec: Why Does Your Pulse Increase With Exercise? Lab: Pulse and Blood Pressure
9	19/22	Lec: Why Is Your Blood Red And How Do We Develop Immunities To Disease? Lab: Blood Cells, Lymphatic System, Cancer And AIDS
10	23	Lec: What Happens When You Breathe? Lab: Respiratory Volumes
11	5	Lec: How Do You Keep Your Cool? Lab: The Functions Of The Integumentary System
12		Lec: Monday - Review for Exam Lab: Lec/Lab Midterm Exam #2 (<u>Tue Mar 30</u>)
	10/12/13	Lec: Wed/Fri ==> Begin Discussion Of Reflexes
13	10/12/13	Lec: What Happens When You Have A Knee-Jerk Reflex? Lab: Reflexes
14	10/12/13	Lec: What Happens When You Move Your Fingers? Lab: Neuromuscular Physiology
15	16	Lec: How Do You See Colors? Lab: Vision Physiology
16	26/27	Lec: Why Do We Have To Osmoregulate? Lab: Urinalysis
17	28	Lec: How Do We Reproduce? Lab: Reproductive Endocrinology
18		Lec/Lab Final Exam (<u>Wed 10:30 AM</u>) <u>May 20, 1998</u>