

Reedley College - Spring 2010

Class: Biology 22 – Human Physiology - 57854 (5 Units)
Lecture - Monday & Wednesday 9:00am – 10:50am in LFS11
Laboratory - Friday 9:00am – 11:50pm in LFS11

This course provides a basic understanding and working knowledge of the human body with emphasis on the functions of each major system. The interrelationship between human systems and the relationship between structure and function of each system will be studied at several levels (biochemical, cellular, organ levels)

Subject Prerequisites: Biology 20 and Chemistry 1A or 3A. (A, CSU-GE, UC, I)

Text: Human Physiology (eleventh edition) by Stuart I. Fox McGraw Hill
Lab Manual: A Laboratory Guide to Human Physiology (thirteenth edition)
by Stuart I. Fox McGraw Hill

Instructor: Dr. B.J. Marquez
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Office: Life Science Room 13 **Phone:** 559-638-3641 ext. 3257
Office Hours: Tuesday 11:00am, Wednesday 3:00 pm, & Thursday 1:00 pm or to arrange

Attendance:

You are required to attend **ALL** class sessions. There are NO excused absences except as defined in the Reedley College Catalog. If you are absent more than **FIVE** hours during the semester, you **MAY** be dropped from the class. If you are absent more than **TEN** hours, you **WILL** be dropped from class. If your **ELEVENTH** hour of absence occurs after the last day to drop, your final point total will be lowered by 25 points for each absence.

Tardiness: Three tardies equal one class absence.

***** I reserve the right to make changes in this syllabus with notification *****

Final Grade: ***Determined on a basis of points accrued throughout the course.***

A = 90 - 100%	60%	- Seven (7) lecture exams: 100 points each
B = 80 - 89%	15%	- One (1) final exam: 150 points
C = 70 - 79%	20%	- Laboratory assignments: 200 points
D = 60 - 69%	5%	- Lecture & Laboratory participation : 50 points
F = 59% & lower		

NO FOOD OR DRINK ALLOWED IN ANY CLASSROOMS **NO EXTRA CREDIT**
No children allowed in class at any time **No disruptive behavior**
Tardy assignments count for only one-half credit or no credit.

"If you have special needs as addressed by the Americans with Disabilities (ADA) act including alternate media requests, please notify your course instructor immediately. Reasonable efforts will be made to accommodate your special needs."

COURSE OUTCOMES: Upon completion of this course, students will be able to:

- A. identify the basic structure and function of each human system.
- B. explain the cell membrane potential and how it becomes an action potential.
- C. describe the autonomic nervous system using neurotransmitters and receptors.
- D. identify the major endocrine glands and the hormones they secrete.
- E. discuss the types of blood cells and their function.
- F. demonstrate use of electrocardiograph and identify normal reading.
- G. explain the functions of the lungs and kidneys.
- H. demonstrate critical thinking to perform laboratory experiments and demonstrations.

COURSE OBJECTIVES: In the process of completing this course, students will:

- A. assess the basic structure and function of each system in the human body.
- B. assess the results of laboratory experiments and demonstrations.
- C. illustrate the cell membrane, its electrical activity and the conduction of action potentials.
- D. compare the autonomic system and the endocrine system.
- E. analyze the cardiovascular system by performing an EKG and monitoring blood pressure.
- F. evaluate lung and kidney function using computer simulations.

Canceled Class Notification:

If circumstances do not allow me to hold class, the Deans' office will place a notice on the class room door.

Cheating on exams, will not be tolerated:

Anyone caught cheating will receive 0% on that exam.

****Tentative Schedule - subject to Change with Notification****

LECTURE CHAPTERS - SCHEDULE

LAB ASSIGNMENT SCHEDULE

	Monday	Wednesday	Friday	
WEEK 1	11-Jan 1 -Study of Body Function	13-Jan 2 - Chem Comp of Body 3 - Cell Struc & Gene Cont	15-Jan Ex. 1.3	
2	18-Jan MLK Holiday	20-Jan 4 - Enzymes & Energy	22-Jan Ex. 2.1, 2.4, & 2.5	EXAM DATES & SCORES 29-Jan
3	25-Jan 5 - Cell Resp & Metab	27-Jan 6 - Cells & Extracellular	29-Jan Ex. 2.6 Exam #1 (1 - 5)	1
4	1-Feb 6 - Cells & Extracellular	3-Feb 7 - NS: Neurons & Synapse	5-Feb Ex. 3.1, 3.2, & video	
5	8-Feb 7 - NS: Neurons & Synapse	10-Feb Exam #2 (6 & 7)	12-Feb Lincoln holiday	10-Feb
6	15-Feb Presidents' Day	17-Feb 8 - The CNS	19-Feb Ex. 3.5, 3.6, & 3.8	2
7	22-Feb 9 - The ANS	24-Feb 10 - Sensory Phys	26-Feb Ex. 3.4	
8	1-Mar Exam #3 (8, 9, 10)	3-Mar 11 - Endocrine	5-Mar Ex. 4.1 & 3.3	1-Mar
9	8-Mar	10-Mar 12 - Muscles	12-Mar Ex. 5.1 & 5.2 *DROP DATE*	3
10	15-Mar Exam #4 (11 - 12)	17-Mar 13 - Blood Heart & Circ.	19-Mar Ex. 6.1 & 6.3	15-Mar
11	22-Mar 14 - CO, BF & BP	24-Mar	26-Mar Ex. 7.2, 7.3, & 7.6	4
12	29-Mar Spring	31-Mar Break	2-Apr	
13	5-Apr 16 - Respiratory Phys	7-Apr Exam #5 (13 - 14)	9-Apr Ex. 8.1 & 8.4	7-Apr
14	12-Apr	14-Apr 17 - Phys of the Kidneys	16-Apr Ex. 9.1 & 9.2	5
15	19-Apr 18 - Digestive System	21-Apr Exam #6 (17 & 20)	23-Apr Ex. 10.2	21-Apr
16	26-Apr 18 - Digestive System	28-Apr 19 - Reg of Metabolism	30-Apr Ex. 10.3	6
17	3-May	5-May Exam #7 (18 - 19)	7-May 15 - The Immune System Video	5-May
18	10-May 20 - Reproduction	12-May	14-May Video	7
		19-May Final Exam 9 - 10:50 am		19-May
				Final