Reedley College - Spring 2009

Class:

Biology 22 – Human Physiology - 57854 (5 Units)Lecture-Monday & Wednesday9:00am – 10:50amLaboratory-Friday9:00am – 11:50pmin 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 (tenth edition) by Stuart I. FoxMcGraw HillLab Manual:A Laboratory Guide to Human Physiology (twelfth edition)
by Stuart I. FoxMcGraw 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 <u>ALL</u> class sessions. There are NO excused absences except as defined in the Reedley College Catalog. If you are absent more than <u>FIVE</u> hours during the semester, you <u>MAY</u> be dropped from the class. If you are absent more than TEN hours, you <u>WILL</u> 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 **

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.

L	LECTURE CHAPTERS - SC		LAB ASSIGNMENT SCHEDULE	
,∟	Monday	Wednesday	Friday	
< 1	12-Jan 1 -Study of Body Function	14-Jan 2 - Chem Comp of Body 3 - Cell Struc & Gene Cont	16-Jan Ex. 1.3	
	19-Jan	21-Jan	23-Jan	EX
2	MLK Holiday	4 - Enzymes & Energy	Ex. 2.1, 2.4, & 2.5	DA1 SCC
	26-Jan	28-Jan	30-Jan	30
35	5 - Cell Resp & Metab	6 - Cells & Extracellular	Ex. 2.6 Exam #1 (1 - 5)	1
1	2-Feb 6 - Cells & Extracellular	4-Feb 7 - NS: Neurons & Synapse	6-Feb Ex. 3.1, 3.2, & video	
F	9-Feb	11-Feb	13-Feb	11
5	7 - NS: Neurons & Synapse	Exam #2 (6 & 7)	Lincoln holiday	2
	16-Feb	18-Feb	20-Feb	
5	Presidents' Day	8 - The CNS	Ex. 3.5, 3.6, & 3.8	
	23-Feb	25-Feb	27-Feb	
7	9 - The ANS	10 - Sensory Phys	Ex. 3.4	
ŀ	2-Mar	4-Mar	6-Mar	2
3	Exam #3 (8, 9, 10)	11 - Endocrine	Ex. 4.1 & 3.3	3
	9-Mar	11-Mar	13-Mar	
9		12 - Muscles	Ex. 5.1 & 5.2 *DROP DATE*	
	16-Mar	18-Mar	20-Mar	16
0	Exam #4 (11 - 12)	13 - Blood Heart & Circ.	Ex. 6.1 & 6.3	4
	23-Mar 14 - CO, BF & BP	25-Mar	27-Mar Ex. 7.2, 7.3, & 7.6	
F	30-Mar	1-Apr	3-Apr	1
I	16 - Respiratory Phys	Exam #5 (13 - 14)	Ex. 8.1 & 8.4	5
	6-Apr	8-Apr	10-Apr	
2	Spring	Break		
-	13-Apr	15-Apr	17-Apr	
3	·	17 - Phys of the Kidneys	Ex. 9.1 & 9.2	
F	20-Apr	22-Apr	24-Apr	22
1	18 - Digestive System	Exam #6 (17 & 20)	Ex. 10.2	6
	27-Apr	29-Apr	1-May	<u> </u>
5	18 - Digestive System	19 - Reg of Metabolism	Ex. 10.3	
Γ	4-May	6-May	8-May	6-
6		Exam #7 (18 - 19)	15 - The Immune System Video	7
┢	11-May	13-May	15-May	
7	20 - Reproduction		Video	
	18-May			18