Syllabus Biology 22 – Human Physiology

Fall 2013 Section: 50160

Class Meetings: Lecture Tuesday, Thursday 05:30PM - 07:20PM, Life Science, Rm 11 Lab

Tuesday, Thursday 07:30PM – 08:45PM, Life Science, Rm 11

<u>Instructor:</u> Mrs. Whitney Menefee, M.S. <u>E-mail:</u> whitney.menefee@reedleycollege.edu

Course Description

Biology 22 is a 5-unit course on human physiology. This course provides a basic understanding and working knowledge of the human body with the 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).

I. Course Objectives:

- Assess the basic structure and function of each system in the human body
- Assess the results of laboratory experiments and demonstrations
- Illustrate the cell membrane, its electrical activity, and the conduction of action potentials
- Compare the autonomic system and the endocrine system
- Analyze the cardiovascular system by performing an EKG and monitoring blood pressure
- Evaluate lung and kidney function using computer simulations
- II. **Prerequisites**: Biology 20 and Chemistry 1A or 3A

III. Required Materials:

Text Book: Human Physiology by Stuart Ira Fox, 13th Edition. (Loose Leaf)

ISBN: 978-0-07-755445-3

Lab: PhysioEx 9.0 Laboratory Simulations in Physiology. Zao

ISBN: 978-0-321-92964-8

• Scantrons: (6) 889-E (quizzes); (7) 882-E (exams)

IV. Technology/Blackboard:

- Check your Reedley college email accounts and blackboard regularly for announcements.
- All lecture and lab PowerPoints, handouts, notes, schedules, grades, ect. will be posted on blackboard.

V. Evaluation of Student Progress

6 Exams @ 100 points each	600 points
1 Cumulative Final Exam	150 points
6 Quizzes @ 20 points each	100 points*
25 Lab Assignments (points vary/lab; see below)	250 points
	1100 points

Grades will be assigned on a percentage basis:

100 - 90	89-80	79-70	69-60	less than 60
\mathbf{A}	В	\mathbf{C}	D	${f F}$

VI. Class Policy's

• Attendance Policy:

- Students are expected to attend all class sessions. Sign-in sheets will be used and each student must sign in for himself ONLY.
- Students will be dropped from this course if they do not attend the first lecture and/or lab without prior notification to the instructor.
- Excessive absences of 8 hours of lab and/or lecture (prior to the drop date), lack of participation, etc., may be causes for a student to be dropped from this course.
 Excessive tardies (10 min late) will NOT be tolerated (three tardies equals an absence).
 If you miss 10 hours or more of this class after the ninth week, it will result in the lowering of your grade by one letter grade.
- Make-up Policy: Lecture Exams may only be made up due to extreme circumstances, at the discretion of the instructor, if arranged with the instructor before the scheduled exam period (at least 3 hrs prior). Quizzes may not be made up. No late assignments will be accepted.
- Lab Reports from the previous week are due every Tuesday AT THE BEGINNING OF THE CLASS (during the first 10 minutes). All work is due on the assigned due date. No late work is accepted. PhysioEx lab reports are worth 15 points each. All other labs are worth 10 points each.
- NO cell phones, beepers, ect. are allowed to go off or be used during this class. If they ring or are used during a test or quiz, the student will receive a 0 for that exam or quiz. You cannot make up these assignments.

COLLEGE POLICY ON CHEATING AND PLAGIARISM

- "Students at the Reedley College are entitled to the best education that the college can make available to them, and they, their instructors, and their fellow students share responsibility for seeing that their education is honestly attained. Because cheating, plagiarism, and collusion in dishonest activities erode the integrity of the college, each student is expected to exert an entirely honest effort in all academic endeavors. Academic dishonesty in any form is a very serious offense and will incur serious consequences. Please see Disciplinary Procedures in the Student Conduct Standards and Grievance Procedures Handbook available in the Vice-President of Student Services office." Student Handbook pg. 46
- If you have a verified need for an academic accommodation or materials in alternate media (i.e. Braille, large print, electronic text, etc.) per the Americans with Disabilities Act (ADA) or section 504 of the Rehabilitation Act, please contact the instructor as soon as possible.

TENTATIVE SCHEDULE

DATES				Text	
		Lecture	Lab	Reading	Other
Week 1	8/13	The Study of Body Function		Ch.1	
Week 1	8/15	Chemical Composition of the Body	Microscopes	Ch.2	
Week 2 8/20 8/22	-	Cell Structure and Genetic Control	Feedback	Ch.3	* Quiz #1
	8/22	No Class			
Week 3	8/27	Enzymes and Energy		Ch.4	
	8/29	Exam #1 (Ch. 1-4)			
Week 4	9/3	Cell Respiration and Metabolism		Ch.5	
	9/5	Cells and Extracellular Environment	PhysioEx 1	Ch.6	
Wook 5	9/10	Neurons and Synapses	PhysioEx 3	Ch.7	* Quiz #2
Week 5	9/12	Neurons and Synapses		Ch.7	
Week 6 9/17 9/19	9/17	Exam #2 (Ch. 5-7)			
	9/19	The Central Nervous System		Ch.8	
Week 7	9/24	The Autonomic Nervous System	Sensory	Ch.9	
week /	9/26	Sensory Physiology	Physiology	Ch.10	* Quiz #3
Wash 0	10/1	Endocrine	PhysioEx 4	Ch.11	
Week 8	10/3	Exam #3 (Ch. 8-11)			
10/	10/8	Muscle	PhysioEx 2	Ch.12	
Week 9	10/10	Blood, Heart, and Circulation	PhysioEx 11	Ch.13	
1 WAAR III	10/15	Blood, Heart, and Circulation	Blood & ECG	Ch.13	* Quiz #4
	10/17	CO, BF, & BP	PhysioEx 5	Ch.14	
WARK 	10/22	CO, BF, & BP	PhysioEx 6	Ch.14	
	10/24	Exam #4 (Ch. 12-14)			
Week / 	10/29	The Immune System	PhysioEx 12	Ch.15	
	10/31	Respiratory Physiology	PhysioEx7	Ch.16	
I WEEK IS	11/5	Respiratory Physiology		Ch.16	*Quiz #5
	11/7	Physiology of the Kidney's	PhysioEx 9	Ch.17	
Week 14 11/12 11/14	11/12	Physiology of the Kidney's	PhysioEx 10	Ch.17	
	11/14	Exam #5 (Ch. 15-17)			
1 WEEK 15 -	11/19	The Digestive System	PhysioEx 8	Ch.18	
	11/21	Metabolism		Ch.19	
Week 16	11/26	Reproduction		Ch. 20	*Quiz #6
	11/28	Thanksgiving - No Class			
Week 17	12/3	Final Exam Review			
	12/5	Exam #6 (Ch. 18-20)			
Week 18	12/10	Final Exam - Cumulative			

^{***}This schedule is subject to change with notification.
• Final Drop Date: October 11