# Human Physiology – Course No. 57465 Fall 2007

Location: Reedley College – LFS 11 Dates and Times: MW; Lecture: 5:30 pm – 7:20 pm; Lab: 7:30 pm – 8:45 pm

<b>Instructor:</b> wis. Amanua Crump	
Email:	
Phone:	
Office Hours:	or by arrangement

## Course Description:

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, tissue, etc.).

Prerequisites: Biol 20 and Chem 3A or 1A

# **Objectives:**

Upon completion of this course, you will be able to:

- 1. identify the basic structure and function of each human system,
- 2. explain the cell membrane potential and how it becomes an action potential,
- 3. describe the autonomic nervous system using neurotransmitters and receptors
- 4. identify the major endocrine glands and the hormones they secrete,
- 5. discuss the types of blood cells and their function,
- 6. demonstrate use of electrocardiograph and identify normal reading,
- 7. explain the functions of the lungs and kidneys, and
- 8. demonstrate critical thinking to perform laboratory experiments and demonstrations

#### **Class Rules:**

The teacher and the class will make every attempt possible to make this course a positive and fruitful learning experience. We will treat each other with respect. We will cooperate in the learning process. We will attend to problems or miscommunication as quickly as possible.

# Attendance:

You should attend all class and lab sessions. There are no excused absences except as defined in the Reedley College Catalog. If you think you will have an excused absence, you must contact the instructor prior to the missed class.

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. If you are absent for two consecutive weeks before the drop deadline, you will be dropped from the class. Hours absent include leaving class early. Please see "Spencer's Rule" below for other attendance policies.

## Tardiness:

Tardiness is very disruptive to the learning process. Therefore, three tardies equal one class absence. In the event that you are late, please enter quietly and find a seat. If this will be disruptive, please sit near the door. Make sure you see the instructor to sign in before leaving to insure you are not marked absent.

#### Make-ups and Late Assignments:

Make-up exams and assignments will not be given except for excused absences. Make-up exams and assignments will be very, very difficult. Therefore, you are encouraged to attend all classes and turn in work ontime. Late assignments will not be accepted.

#### Books:

The textbook and laboratory manual are available in the book store. The required text and manual is Human Physiology 10<sup>th</sup> Edition by Stuart Ira Fox.

## Blackboard/WebGrade:

I will post the syllabus, learning tools, modified laboratory assignments, extra readings, notes, PowerPoint slides, and other materials on Blackboard. In Blackboard, you will be able to view your grade and attendance record by clicking on "external links" and then "WebGrade".

#### Grading:

A = 90-100%	(1044-1060 pts.)	
B = 80-89%	(928-1043 pts.)	
C = 70-79%	(812-927 pts.)	
D = 60-69%	(696-811 pts.)	
F = Below 60%	(0-695 pts.)	
Lecture Exams	7 @ 100 pts.	600 pts. (lowest score dropped)
Final Exam	1 @ 150 pts.	150 pts.
Lab. Assignments	25 @ 15 pts.	360 pts. (lowest score dropped)
Lab & Lecture Participation		<u>50 pts.</u>
	-	1160 Total Points

Lecture exams will consist of multiple choice, fill-in-the-blank, and short answer questions. <u>You must take all seven exams in order to drop one.</u> Laboratory assignments will consist of worksheets, laboratory book questions, writing questions, and written lab reports. Most laboratory assignments will be completed in class. You will be given participation points for active participation in lab and lecture including answering questions, participating in discussions, cleaning up lab area, and working well with lab partners.

# Extra Credit:

Extra credit will be offered at the discretion of the instructor! Do not ask if you can do extra credit to improve your grade, the answer will be no. If extra credit is offered, it will be for the entire class.

## Other Concerns:

**Spencer's Rule:** Ringing cell phones and pagers and text messaging during class will not be tolerated. If your phone or pager rings or you send a text message during class, you will be asked to leave and an absence will be added to your record.

Accidents/incidents should be reported to the instructor immediately.

Cheating and plagiarism will not be tolerated and will be dealt with according to the college policy.

No visitors (not even children) are allowed in class.

No smoking, eating, and drinking in the classroom. Treat the classroom with respect and return it to the normal state at the end of each class.

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 me as soon as possible.

Schedule\*:

Date	Topics Covered	Assignment	
13 August – Lecture	1 The Study of Body Function	Skim chapter 1.	
Lab	1.2	Written lab assignment.	
15 August - Lecture	2 Chemical Composition of the Body	Skim chapter 2.	
Lab	1.3	Written lab assignment.	
20 August - Lecture	3 Cell Structure and Genetic Control	Skim chapter 3.	
Lab	2.1	Written lab assignment.	
22 August - Lecture	4 Enzymes and Energy	Read chapter 4.	
Lab	2.4, 2.5	Written lab assignment.	
24 August	Last day to drop and qualif	<u> </u>	
27 August - Lecture	5 Cell Respiration and Metabolism	Read chapter 5.	
Lab	2.6	Written lab assignment.	
29 August – Lecture	6 Interactions Between Cells and the		
27 August – Lecture	Extracellular Environment	Read chapter 6.	
Lab	Exam #1 (Ch. 1	-5)	
31 August	Last day to drop and avoid a "W"		
03 September	Labor Day – No C		
05 September – Lecture	6 Interactions Between Cells and the		
·	Extracellular Environment		
Lab	3.1, 3.2	Written lab assignment.	
10 September – Lecture	7 The Nervous System: Neurons and	Deed aborton 7	
	Synapses	Read chapter 7.	
Lab	Video	Written lab assignment.	
12 September – Lecture	7 The Nervous System: Neurons and		
	Synapses		
Lab	3.4	Written lab assignment.	
17 September - Lecture	8 The Central Nervous System	Read chapter 8.	
Lab	Exam #2 (Ch. 6-7)		
19 September - Lecture	8 The Central Nervous System		
Lab	3.5, 3.6	Written lab assignment.	
24 September - Lecture	9 The Autonomic Nervous System	Read chapter 9.	
Lab	Video	Written lab assignment.	
26 September - Lecture	10 Sensory Physiology	Read chapter 10.	
Lab	Additional Nervous System Lab	Written lab assignment.	
01 October – Lecture	11 Endocrine Glands: Secretion and	Read chapter 11.	
	Action of Hormones	•	
Lab	Exam #3 (Ch. 8	-10)	
03 October – Lecture	11 Endocrine Glands: Secretion and		
I - b	Action of Hormones		
Lab	4.1	Written lab assignment.	
08 October – Lecture	12 Muscle: Mechanisms of Contraction	Read chapter 12.	
Lab	and Neural Control 5.1, 5.2	Written lab assignment.	
10 October – Lecture	12 Muscle: Mechanisms of Contraction		
	and Neural Control		
Lab	Video	Written lab assignment.	
12 October			
	Last day to drop (you will receive a "W")		
13 October	Mid-term report period		

Date	Topics Covered	Assignment	
15 October - Lecture	13 Blood, Heart and Circulation	Read chapter 13.	
Lab	Exam #4 (Ch. 11-12)		
17 October - Lecture	13 Blood, Heart and Circulation		
Lab	6.1, 6.3	Written lab assignment.	
22 October – Lecture	14 Cardio Output, Blood Flow, and Blood Pressure	Read chapter 14.	
Lab	7.2, 7.3	Written lab assignment.	
24 October – Lecture	14 Cardio Output, Blood Flow, and Blood Pressure		
Lab	7.6	Written lab assignment.	
29 October - Lecture	16 Respiratory Physiology	Read chapter 16.	
Lab	Exam #5 (Ch. 13-14)		
31 October - Lecture	16 Respiratory Physiology		
Lab	8.1	Written lab assignment.	
05 November – Lecture	17 Physiology of the Kidneys	Read chapter 17.	
Lab	8.4	Written lab assignment.	
07 November – Lecture	18 The Digestive System	Read chapter 18.	
Lab	Exam #6 (Ch. 16-17)		
12 November	Veterans' Day – No Class		
14 November – Lecture	18 The Digestive System		
Lab	9.1, 9.2	Written lab assignment.	
19 November – Lecture	19 Regulation of Metabolism	Read chapter 19.	
Lab	10.1	Written lab assignment.	
21 November – Lecture	19 Regulation of Metabolism		
Lab	10.1	Written lab assignment.	
26 November – Lecture	15 The Immune System	Read chapter 15.	
Lab	Exam #7 (Ch. 18-19)		
28 November – Lecture	15 The Immune System		
Lab	Video	Written lab assignment.	
03 December – Lecture	20 Reproduction	Read chapter 20.	
Lab	6.2	Written lab assignment.	
05 December – Lecture	20 Reproduction		
Lab	Video	Written lab assignment.	
10 December	FINAL EXAM (50% Cumulative, 5	0% Chapters 15 & 20)	

\*The schedule is tentative and can be changed by the instructor without notification.