## BIOL 3460 Credit Hours 3-3-4

## HUMAN PHYSIOLOGY Department of Biology

Instructor: Dr. Timothy J. Fort Office: BC 1100

Phone: (229) 249-2643 Email: tjfort@valdosta.edu

Office Hours: Tuesday & Thursday 4.00pm - 5.00pm or by scheduled appointment

**Lecture:** Tuesday &Thursday 11.00am – 12.15pm BC 1202 **Laboratory:** Wednesday 2.00pm – 4.50pm BC 2070

**Textbook:** Vander's Human Physiology, the mechanisms of body function. 11<sup>th</sup>,12<sup>th</sup>, or 13<sup>th</sup> Edition

Widmar, E.P., Raff, H. and Strang, K.T.

**Course Description:** Human physiological principles, from cells to systems, with emphasis on the regulation and integration of organ systems.

**Prerequisites:** BIOL 3200 and CHEM 1212/1212L or permission of instructor.

**Course Objectives:** By the end of this course, students will be expected to:

- (1) Collect and analyze physiological data, and present the results and conclusions in written format.
- (2) Demonstrate an understanding of the cellular basis of physiology.
- (3) Relate the functioning of individual organ systems to the overall functioning of the human body.
- (4) Demonstrate competency in factual content / interpretation of the major areas of human physiology.

These objectives support in part the Department of Biology Educational Outcomes #'s 1, 3 and the Valdosta State University General Educational Outcomes #'s 3, 4, 5, 7.

**Attendance:** Attendance of lectures is expected of all students, but is not required. Attendance of laboratory classes is mandatory. Any student missing 2 scheduled laboratory classes, without an acceptable documented reason (determined by the instructor) will receive a failing grade for the course. Student attendance of classes will be recorded.

**Conduct:** Students are expected to arrive on time and behave with respect in both lectures and laboratories. Students should not talk during lectures, but if you do not understand or do not hear something please ask for clarification. Use of cell phones during lectures and laboratories is not permitted. Cell phones must be turned off during lectures and laboratories. If your cell phone activates during a lecture you will be asked to leave. If your cell phone activates during lab you will be asked to leave and it will count as an unexcused absence. If your cell phone activates during an exam you will be asked to leave and receive 0% for that exam.

Cheating / Plagiarism: Please refer to the Student Code of Ethics in the Valdosta State University Student Handbook. Any student caught cheating will be penalized, ranging from receiving a zero for that assignment or test, to failure and expulsion from the course. Please refer to the Valdosta State University, Department of Biology Plagiarism Policy. By taking this course, you agree that all required course work may be subject to submission for textual similarity review to turnitin, a tool within BlazeVIEW.

**Students with Documented Disabilities:** Students requesting classroom accommodations or modifications due to a documented disability must contact the Access Office for Students with Disabilities located in the Farber Hall. The phone numbers are 245-2498 (V/VP) and 219-1348 (TTY).

**Privacy Act:** Due to the Buckley Amendment, or Privacy Act, an individual's personal information cannot be released to anyone but that individual. As such, grades will not be discussed over the phone, by email, or released to a friend or relative.

Assessment: Lecture: 3 Exams @100 points each	: 300	points
Cumulative Final	: 200	points
Physiological Situations Assignment	: 100	points
Laboratory Assignments	: 50	points
Lab Notebook	: 40	points
Lab Report	: 60	points

- Assignments will be set during lab periods and you will generally have 1 week to complete the assignment.
- Any assigned work submitted late will **NOT** be graded.
- Any assigned work submitted electronically will **NOT** be graded, unless prior permission for electronic submission is granted.
- Make up examinations will only be given if an acceptable documented reason (determined by the instructor) is provided.
- Requirements for the PSA, Notebook, Assignments and Report will be explained during the semester.
- Lecture Exams: Question styles will vary depending on the topics being examined and may include (but are not limited to), multiple choice, fill in the blank, diagrams, short answer and essays.

## **Tentative Lecture Schedule**

DATE	TOPIC	Chapter
18/8	Introduction	
20/8	Homeostasis and Cells	1,3
25/8	Enzymes and Metabolism	3
27/8	Metabolism	3
1/9	Movement of Molecules and Chemical Messengers	4,5
3/9	Nerves, Action Potentials and Synapses	6
8/9	Nervous System and Sensory Physiology	6,7
10/9	EXAMINATION #1	
15/9	Sensory Physiology	7
17/9	Muscle Physiology Lab Notebook (18/9 3pm)	9
22/9	Muscle Physiology	9,10
24/9	Muscle and Movement	10
29/9	Endocrine System	11
1/10	Endocrine System	11
6/10	EXAMINATION #2	
8/10	Cardiovascular Physiology MID TERM	12
13/10	FALL BREAK	
15/10	Cardiovascular Physiology LAST DAY TO WITHDRAW	12
20/10	Cardiovascular Physiology	12
22/10	Respiratory System Lab Notebook (23/10 3pm)	13
27/10	Respiratory System	13
29/10	Renal System Lab Report (29/10 5pm)	14
3/11	EXAMINATION #3	
5/11	Renal System	14
10/11	Renal System	14
12/11	Gastrointestinal System	15,16
17/11	Gastrointestinal System	15,16
19/11	Reproductive Physiology Physiological Situations Assignment (20/11 3pm)	17
24/11	Reproductive Physiology	17
26/11	THANKSGIVING	
1/12	Immune System	18
3/12	Immune System Lab Notebook (4/12 3pm)	18
9/12	FINAL EXAM 10.15am -12.15pm	

## **Tentative Laboratory Schedule**

DATE	TOPIC
19 August	No Lab
26 August	Introduction to PowerLab and Data Analysis
2 September	Reflexes and Reaction Times
9 September	Frog Sciatic Nerve
16 September	Sensory Physiology / EOG
23 September	EMG / Muscle
30 September	Frog Skeletal Muscle
7 October	Breathing
14 October	Respiratory Airflow and Volume
21 October	ECG, Heart Sounds and Peripheral Circulation
28 October	Blood Pressure
4 November	Dive Reflex
11 November	Frog Heart
18 November	Galvanic Skin Response and Polygraphs
25 November	No Lab - Thanksgiving
2 December	Stroop Test