BIOL 3460/5460 Credit Hours 3-3-4

HUMAN PHYSIOLOGY Department of Biology

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

Tuesday & Thursday Lecture: 11.00am - 12.15pm BC 1025 Tuesday 2.30pm - 5.20pmBC 2070 Laboratory: Sec. A Sec. B Wednesday 10.00am - 12.50pm BC 2070 Sec. C Wednesday 2.00pm - 4.50pmBC 2070

Textbook: Vander's Human Physiology, the mechanisms of body function. 11th, 12th, 13th or 14th 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 (3460): BIOL 3200 and CHEM 1212/1212L or permission of instructor. **Prerequisites (5460):** Admission to the graduate program 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.

Title IX Statement: Valdosta State University (VSU) is committed to creating a diverse and inclusive work and learning environment free from discrimination and harassment. VSU is dedicated to creating an environment where all campus community members feel valued, respected, and included. Valdosta State University prohibits discrimination on the basis of race, color, ethnicity, national origin, sex (including pregnancy status, sexual harassment and sexual violence), sexual orientation, gender identity, religion, age, national origin, disability, genetic information, or veteran status, in the University's programs and activities as required by applicable laws and regulations such as Title IX. The individual designated with responsibility for coordination of compliance efforts and receipt of inquiries concerning nondiscrimination policies is the University's Title IX Coordinator: Maggie Viverette, Director of the Office of Social Equity, titleix@valosta.edu, 1208 N. Patterson St., Valdosta State University, Valdosta, Georgia 31608, 229-333-5463.

Access Statement: Students with disabilities who are experiencing barriers in this course may contact the Access Office for assistance in determining and implementing reasonable accommodations. The Access Office is located in Farbar Hall. The phone numbers are 229-245-2498 (V), 229-375-5871 (VP) and 229-219-1348 (TTY). For more information, please visit VSU's Access Office or email: access@valdosta.edu.

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

- -* BIOL5460 students will have extra requirements to complete for the Physiological Situations Assignment and Lab Report.
- Lab 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 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, Lab Notebook, Lab Assignments and LabReport 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 and Examination Schedule

DATE	TOPIC	Chapter
16/8	Introduction	
18/8	Homeostasis and Cells	1,3
23/8	Enzymes and Metabolism	3
25/8	Metabolism	3
30/8	Movement of Molecules and Chemical Messengers	4,5
1/9	Nerves, Action Potentials and Synapses	6
6/9	Nervous System and Sensory Physiology	6,7
8/9	EXAMINATION #1	
13/9	Sensory Physiology	7
15/9	Muscle Physiology Lab Notebook (16/9 3pm)	9
20/9	Muscle Physiology	9,10
22/9	Muscle and Movement	10
27/9	Endocrine System	11
29/9	Endocrine System	11
4/10	EXAMINATION #2	
6/10	Cardiovascular Physiology MID TERM	12
11/10	FALL BREAK	
13/10	Cardiovascular Physiology	12
18/10	Cardiovascular Physiology	12
20/10	Respiratory System Lab Notebook (21/10 3pm)	13
25/10	Respiratory System	13
27/10	Renal System Lab Report (28/10 3pm)	14
1/11	EXAMINATION #3	
3/11	Renal System	14
8/11	Renal System	14
10/11	Gastrointestinal System	15,16
15/11	Gastrointestinal System Physiological Situations Assignment (49/44 3 pm)	15,16
17/11	Reproductive Physiology Physiological Situations Assignment (18/11 3pm)	17
22/11 24/11	Reproductive Physiology THANKSGIVING	17
29/11		4.0
1/12	Immune System	18 18
7/12	Immune System Lab Notebook (2/12 3pm)	Ιδ
1112	FINAL EXAM 10.15am -12.15pm	

Tentative Laboratory Schedule

Week Beginning	TOPIC
15 August	No Lab
22 August	Introduction to PowerLab and Data Analysis
29 August	Reflexes and Reaction Times
5 September	Frog Sciatic Nerve
12 September	Sensory Physiology / EOG
19 September	EMG / Muscle
26 September	Frog Skeletal Muscle
4 October	Breathing
10 October	No Lab – Fall Break
17 October	Respiratory Airflow and Volume
24 October	ECG, Heart Sounds and Peripheral Circulation
31 October	Blood Pressure
7 November	Dive Reflex
14 November	Frog Heart
21 November	No Lab - Thanksgiving
28 November	Galvanic Skin Response and Polygraphs