

BIOL 3460/5460

Credit Hours 3-3-4

HUMAN PHYSIOLOGY

Department of Biology

Instructor: Dr. Timothy J. Fort
Phone: (229) 249-2643
Office Hours: Thursday 3.00pm – 5.00pm

Office: BC 1100
Email: tjfort@valdosta.edu

Lecture:	Tuesday & Thursday	11.00am – 12.15pm	BC 1024
Laboratory:	Sec. A Tuesday	2.30pm – 5.20pm	BC 2070
	Sec. B Wednesday	11.00am – 1.50pm	BC 2070
	Sec. C Wednesday	2.30pm – 5.20pm	BC 2070

Textbook: Vander's Human Physiology, the mechanisms of body function. (11th - 15th 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.

COVID Fall 2022: The first line of protection against COVID 19 is to be fully vaccinated, including a booster.

Vaccinations are strongly encouraged and are available free of charge through VSU Health Services and many local pharmacies. If you are experiencing COVID symptoms, use the free testing available at the Student Health Center; you may also obtain a test at many other locations around town. If you test positive, please **report your case using the COVID Self Reporting tool at the top of your MyVSU page**. If you must self-isolate or quarantine, follow the directions provided by Student Health after you have reported your COVID status.

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 or lab you will be asked to leave. **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.

Non-Discrimination and Title IX Statement

Valdosta State University (VSU) upholds all applicable laws and policies regarding discrimination on the basis of race, color, sex (including sexual harassment and pregnancy), sexual orientation, gender identity or expression, national origin, religion, age, veteran status, political affiliation, or disability. The University prohibits specific forms of behavior that violate Title IX of the Education Amendments of 1972. Title IX of the Education Amendments of 1972 prohibits

discrimination on the basis of sex in education programs and activities that receive federal funding. VSU considers sex discrimination in any form to be a serious offense. Title IX refers to all forms of sex discrimination committed against others, including but not limited to: sexual harassment, sexual assault, sexual misconduct, and sexual violence by other employees, students or third parties and gender inequity or unfair treatment based on an individual's sex/gender. The designated Title IX Coordinator for VSU is Mr. Darius Thomas. To view the full policy or to report an incident visit: <https://www.valdosta.edu/administration/student-affairs/title-ix/>

Accommodations Statement:

Students with disabilities who are experiencing barriers in this course may contact the Access Office (<https://www.valdosta.edu/student/disability/>) for assistance in determining and implementing reasonable accommodations. The Access Office is located in University Center Room 4136 Entrance 5. The phone numbers are 229-245-2498 (V), 229-375-5871. For more information, please visit VSU's Access Office or email: access@valdosta.edu. To request reasonable accommodations for pregnancy and childbirth, contact Christina Kidd, Student Conduct Coordinator at chkidd@valdosta.edu. Please note, you will be required to provide documentation from an appropriately licensed medical professional indicating the requested accommodations are medically necessary.

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

- *BIOL5460 students will have extra requirements for completing the Physiological Situations Assignment.
- 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 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 and Lab Assignments 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 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
3 October	Breathing
10 October	NO LAB - FALL BREAK
17 October	Respiratory Airflow and Volume
24 October	EKG, 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 OR Stroop test

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	9
20/9	Muscle Physiology	9,10
22/9	Muscle and Movement	Lab Notebook (23/9 by 3.00pm)
27/9	Endocrine System	11
29/9	Endocrine System	11
4/10	Endocrine System	11
6/10	EXAMINATION #2	<i>Midterm</i>
11/10	NO CLASS – FALL BREAK	
13/10	Cardiovascular Physiology	<i>Withdrawal Deadline</i>
18/10	Cardiovascular Physiology	12
20/10	Cardiovascular Physiology	Lab Notebook (21/10 by 3.00pm)
25/10	Respiratory System	13
27/10	Respiratory System	13
1/11	Renal System	14
3/11	Renal System	14
8/11	EXAMINATION #3	
10/11	Renal System	14
15/11	Renal System	14
17/11	Gastrointestinal System	15,16
22/11	Gastrointestinal System	15,16
25/11	NO CLASS - THANKSGIVING	P.S.A (22/11 by 5.00pm)
29/11	Reproductive Physiology	17
1/12	Reproductive Physiology	Lab Notebook (2/12 by 3.00pm)
7/12	FINAL EXAM 10.15am – 12.15pm	