

Physiology 1 Introduction to Human Physiology

Spring 2012 Class Web: www.lavc.edu/huang

SECTION 1538

OFFICE: AHS 223

OFFICE HOURS: MW 11:05 -12:50; T.TH: 2:30 – 3:15 By appointment

Email: Huangss@lavc.edu (Emails are not checked during evenings, weekends or on Holidays)

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Course Description

This is a four unit course that introduces the function of human major organ system.

Prerequisite:

- A student must complete the following classes with a grade of minimum “C”:
 - Biology 3
 - Chemistry 51
 - and Anatomy 1
- A student will be dropped from this class for not completing prerequisite classes by the end of first week.
- This class requires basic knowledge of math, physics and proficient reading and comprehension skills.

Required Texts and Supplies

Lecture Text	<i>Principles of Human Physiology</i> with Mastering A&P™, 4/E Cindy L. Stanfield, ISBN 10 0321769694 Publisher: Benjamin Cummings with Mastering A&P™ with Pearson eText Access Code Card for Principles of Human Physiology (ME component) Interactive Physiology 10-System Suite CD-ROM (Required) One copy of older text book (3 rd edition) is reserved at the library and the tutor and resource center
Notes	Lecture notes, chapter study questions and test information are posted on class web
Lab Text	<i>Physiology Lab</i> by Huang (print from class web site)
Scantron	One package of Scantron Form No. 882-E for exams One package of Scantron Form 815-E Quizzstrips for quizzes
#2 Pencil	Several
Eraser	Several
3-ringed binder	One
Colored Pens	2-3

Course Objectives

- Define terms used to describe physiological processes learned in the course, and apply them to the interpretation of concepts.
- Explain basic concepts of physiology and relate them to clinical situations.
- Write clear, concise expositions to demonstrate ability to communicate physiological concepts.

- Analyze and identify homeostatic imbalances of human organ systems
- Assemble and set up the components of a laboratory experiment and be able to use a variety of laboratory tools to collect data from measurements made during the experiment.
- Evaluate the data and arrange it into tables and graphs to be used to analyze the effects of different experimental variables.
- Relate the observation and results of lab activities to lecture topics.
- Show mastery in using common laboratory equipment (e.g., microscopes, respirometers, sphygmomanometers, etc).

Student Learning Outcomes

- Define terms used to describe the physiological processes learned in the course.
- Apply these terms in interpreting data that he/she gathered in laboratory and used to construct tables and graphs.
- Explain basic concepts of physiology and relate them to clinical situations.
- Write clear, concise expositions to demonstrate ability to communicate physiological concepts.
- Assemble and set up the components of a laboratory experiment and be able to use a variety of laboratory tools to collect data from measurements made during the experiment.
- Evaluate the data and arrange it into tables and graphs to be used to analyze the effects of different experimental variables.
- Relate the observation and results of lab activities to lecture topics.
- Show mastery in using common laboratory equipment (e.g., microscopes, respirometers, sphygmomanometers, etc).
- Students will have acquired skills necessary to analyze and identify human diseases.
- Students will have acquired skills necessary to demonstrate how physiological equipment can be used to determine organ system function.

Exams

There will be five lecture exams, 120 points each. No test will be dropped. Questions will be drawn mainly from lecture notes and chapter study questions. Lecture notes and chapter study questions are posted on the class web site. **No restroom break is allowed during the exams. Students are not allowed to use any dictionaries or any type of electronic devices during the exams. Students who come to exam late are not allowed to take the exam if someone has already completed and turned in the exam.**

Quizzes

Lecture quizzes are on selected chapters. Some quizzes may contain at least two anatomy questions. Lab quizzes are based on individual labs. The format is multiple choice. Bring in a Quizzestrips™ to take these quizzes. No quizzes will be dropped. All quizzes are close book with the exceptions of special noted ones.

Labs

Students are required to participate in the labs actively. Most lab answer sheets are due at the end of each lab period. Labs can not be made up. No lab will be dropped. Most of the physiology tests are done on yourself.

Final Grades

(1). Total Possible Points (Subject to Change)

Lab Answer Sheets and Exercises	180 pts
Quizzes	225 pts
Lecture Tests	600 pts
Total	1005 pts

(2). Final Grade = Total Pts Earned/ Total Possible Points

Symbol	Definition	Percentile	Grade Point
A	Excellent	90.00 – 100.00%	4
B	Good	80.00 – 89.99 %	3
C	Satisfactory	70.00 - 79.99 %	2
D	Less than satisfactory	60.00 – 69.99 %	1
F	Failing	<50.00%	0
I	Incomplete	For emergencies and medical reasons	

➤ **Please remember:** The instructor of this class will not negotiate with you regarding your final grades at the end of the semester. Please remember instructors do not GIVE grades. Students EARN grades. Marginal grades are NOT going to be bumped up automatically.

(3) Extra Credits

- To bump up marginal grades, take ALL or NONE marginal grade insurance quizzes (1% of class total points) at the end of the semester.
- Each lecture test contains two or three extra questions (total about 18 points).

Class Policies

- Attendance
 - Students are advised to read the scheduled chapter before coming to class.
 - A major key to success in this class is good attendance. Students with excess absences usually do not do well in the class. **If you do not wish to attend the class anymore, please drop yourself, other wise you may get an “F”.**
- Make up and late assignment policies
 - Make up
 - Students miss lecture exams due to illness and emergency are required to present a written excuse. All approved make up exams are going to be given on the last of class. **The makeup exam will contain 60 multiple choice or true/ false questions only. Should you miss the makeup exams again, you have to wait till fall 2012 to finish your makeup.** Test 5 can not only be made up in fall 2012 during the final week.

- For people who missed labs and quizzes, make a human disease **PowerPoint** presentation at the end of semester (15 points max).
 - Late assignments (15 minutes pass the beginning of the class) and reports would carry a 15% deduction per day and 30% deduction per weekend. Late homework will not be accepted at all, if it is being returned to the class.
- All students are expected to follow the Standards of Students Conduct as described in the Schedule of Classes and Catalog.
- Academic dishonesty
 - **Academic dishonesty** is a violation of Standards of Student Conduct and Disciplinary Action (code 9803.28).
 - Group work is commonly conducted in this class. You are not permitted to put down your group member's name if she or he did not make a contribution to your projects.
 - **Each individual need to write lab answers in his or her words. Do not copy word be word from the lab manual, book or each other. Do not turn in identical answers.**
 - Anyone found to be in violation of code 9803.28 such as plagiarizing or cheating will
 - receive a zero on the assignment,
 - be suspended for the remainder of the day, and
 - be reported to the Dean of Student Services for further disciplinary action,
 - Any disciplinary action filed against you may be placed in your student record permanently.
- Exam review policy
 - Exams are not returned. However you are encouraged to go over each test within two weeks after the test is taken.
- Use of electronic gadgets
 - **Cell phone use is not allowed in classroom.** Please turn off your cell phone during the class.
- Checking grades
 - To protect your privacy, you are given a signal molecule code name.
 - Your grades will be posted periodically (at least twice a week) on the class web page. Please check your grades posted on the class web site periodically; save all returns in case of discrepancies.
 - **Any request of grade discrepancy correction shall be made within one week period after the grades are posted.**
- Reference letter
 - Reference letters will be given at the end of the semester **only** after the letter grade is issued. A request form shall be completed and submitted to the professor electronically. The form is located at www.lavc.edu/huang.
- Personal hygiene
 - Please do not come to class if you are sick and may be contagious to other people.
 - Cover your mouth with your elbow when you sneeze.

- Wash your hands thoroughly with soap and warm water after the completion of each lab.

Available Helps

- Professor's office hours
- Biology Tutoring and Resource Center (AHS 232): **You must have a Monarch card** to enter this room. Answers to quizzes and exercise are reserved with the tutors. Schedules are posted on the door of AHS 232.
- For more study tips, go to www.physiology.wisc.edu/phys335/studytips.htm
- Writing Center: Humanities 100 Tel: (818) 947-2810 (computers with PowerPoint)
- Mastering A&P: Text Book Online Exercises
- Student With Disability Services: Student Services Annex, Room 175 or call SSD at (818) 947-2681 or TTD (818) 947-2680 for individualized diagnostic assessment.
- Free Psychological Counseling at the Student Health Center: Dr. Carl King (818)778-5504.

Other Important Dates

- February 15 :
 - Students, who observe religious holidays, need to ask your religious leader provide the instructor a written list of observed holidays by 4 pm.
 - Students with disability shall inform DSS office and the instructor by 4 pm.
- February 20: Last day to add
- February 21: Last day to drop without incurring fee.
- March 4: Last day to drop classes without receiving a "W" in- person.
- May 4: Last day to drop classes with a "W" in- person.

Schedule (Subject to changes)

Date	Lecture	Ch.	Lab
2/06	Introduction	1 & 2	Cell and Biological Molecules Exercise
2/08	Metabolism	3 & 4	Cell Membrane Transport Exercise
2/13	Chapter 3 Quiz Neurophysiology	7	Animated Neuroscience DVD Exercise Lab 1 Membrane Transport
2/15	Synaptic Transmission and Neural Integration, Sensory	8 & 10	Sensory Physiology Exercise
2/22	Chapter 8 Quiz (3 questions on anatomy and function of eye) Vision	10	Lab 2 Vision
2/27	Lab 1 Quiz Hearing, Equilibrium and Taste	10	Lab 3 Hearing and Equilibrium
2/29	Labs 2- 3 Quiz Endocrine		Lab 4 Sensation
3/05	Test 1	7, 8, 10	Lab 5 Reflex Physiology (Wear loose pants and shirts)
3/07	Regulation of Energy Metabolism and Growth	21	Lab 6 Endocrine System (Part I)
3/12	Chapter 21 Quiz General and Male Reproductive System	22	Lab 6 Endocrine System (Part II)

Date	Lecture	Ch.	Lab
3/14	Labs 4-5 Quiz	22	Life's Greatest Miracle Video Exercise
	Female Reproductive System		
3/19	Muscle Physiology	12	Lab 7 Metabolism
3/21	Test 2	6, 21, 22	Lab 8 Muscle Simulation (Physio EX)
3/26	Labs 6-7 Quiz	12 & 13	Heart Attack Video
	Muscle and Cardiac Function		
3/28	Lecture Quiz Chapter 12	13	Lab 9 Electrocardiography (BioPac) Shave legs & bring a flash drive to class
	Cardiac Function (Lab starts early on this day)		
Spring Break			
4/11	Blood vessels (Lab starts early)	14	Lab 10 Pulse and Blood Pressure
4/16	Labs 8-9 Quiz	14	Lab 11 Cholesterol Determination (Bring gloves)
	Blood Vessels		
4/18	Chapter 14 Quiz	15	Lab 12 Blood Type and Hematocrit (Bring gloves)
	Blood		
4/23	Labs 10- 11 Quiz	16	Cardiovascular Case Study
	Pulmonary Ventilation		
4/25	Test 3	12-15	Lab 13 Spirometer (BioPac) Bring a flash drive to school
4/30	CD Ex: Bring Interactive Physiology CD to class	17	Ventilation Case Study
5/02	Chapter 17 Quiz (3 questions pages 509-514) Renal Function	18	14 Urinalysis
5/07	Labs 12- 13 Quiz	19	Digestive Table
	Fluid and Electrolyte Balance		
5/09	Lab 15 Digestion starts at the beginning of the class three hours 10 pt. lab		
5/14	Test 4	16-19	Interactive CD Ex: Immunity (Bring Interactive CD to class)
5/16	Digestive Open Book Quiz (24 questions 30 minutes. Bring a 882-ES Scantron to class)	24	Human Disease PowerPoint Presentations & All or None Marginal Grade Insurance Quiz (Part 1)
5/21	Labs 14-15 Quiz	23	Human Disease PowerPoint Presentations & All or None Marginal Grade Insurance Quiz (Part 2)
	Immunity		
5/23	Diabetes Mellitus DVD: The Ghost in your Gene	20	Human Disease PowerPoint Presentations & All or None Marginal Grade Insurance Quiz (Part 3) Makeup Exam (3:00-4:00)
5/30	Test 5 (1:00 – 2:25)	20, 23, 24	