

**Dr. F. Watson Phone #: 667-3483**

**Office # N-276**

**Office hours:** Tues and Thurs 2:00 to 3:30 p.m.

Email: flora@biology.csustan.edu

**Prerequisite:** Biol 1010, or Zool. 1050, or Zool. 2250

### **Brief Course Description**

The human body, its function and mechanisms, is the focus of this class- Physiology (Zool. 2230). This course provides the scientific foundation for the field of medicine and all other technologies related to human health and physical performance. The scope of topics included in this course is wide-ranging. However, each topic is covered in sufficient detail to provide a firm basis for future expansion and application.

### **Course objectives**

The students will:

1. Describe the topics studied in physiology and explain the importance of physiology in modern medicine.
2. Examine the role of the scientific method in the study of physiology as it relates to evaluating evidences and drawing logical conclusions.
3. Examine fundamental physiological principles, and the progression of structural levels of organization, and evaluate them as they apply to the homeostasis of human systems.
4. Investigate the chemical basis of life with emphasis on structure and function of macromolecules.
5. Describe the mechanisms of dehydration synthesis and hydrolysis reactions and their significance.
6. Examine the tissue level of organization and interpret the role of tissues in human systems.
7. Compare and contrast the location, organization and function of the four basic classifications of human tissues.
8. Define homeostasis and explain how this concept is used in physiology and medicine.
9. Describe the nature of negative and positive feedback loops and explain how these mechanisms act to maintain homeostasis.
10. Distinguish between intrinsic and extrinsic regulation and the roles of nervous and endocrine systems.
11. Examine and describe the major features and functions of the cardiovascular, respiratory, muscular, digestive, immune, reproductive, and renal systems and their contributions to homeostasis.

## S 2011 Tentative lecture schedule

Text: HUMAN PHYSIOLOGY by Stuart Ira Fox, eleventh edition

Website: <http://biology.csustan.edu/~watson/watson-moodle/>

**This schedule is subject to change.**

DATE	TOPIC	CHAPTER
1-27	Introduction: The Meaning of Physiology and Importance of Physiology in Modern Medicine  The primary tissues	1
2-1, 3	Control Systems-- Homeostasis  Chemical Compositions of the Body & Cell Structure	2, 3
2-8	Enzymes and Energy	4
2-8, 15	Membrane Transport	6
2-17	<b>Exam 1 Last day to add/drop—2-23-2011</b>	
2-22, 24	The Digestive System	18
3-1	Regulation of Metabolism	19
3-3, 8	The Respiratory System;	16
3-10, 15, 17	The Cardiovascular System-Heart and Circulation	13
3-29, 31	Cardiac Output, Blood Flow	14
4-5, 7	The Immune System	15
<b>4-12</b>	<b>Exam 2</b>	
4-14, 19	The Muscular System	12
4-21, 26	The Urinary System	17
4-28, 5-3	The Reproductive System	20
5-5, 10	The Nervous System: Organization	7
5-12	Central Nervous System The Autonomic Nervous System	8, 9
5-17	The Endocrine System	11
<b>5-26</b>	<b>Final Exam 11:15 a.m.- 1:15 p.m.</b>	

Physiology is the study of how cells, tissues and organs function. **Cause-and-effect sequences** are emphasized in studying how the human body works. Due to the quantity and complexity of this subject, **students need to attend class on a regular basis.** **Unannounced** quizzes will be given in class. Bonus points may be given during these quizzes. This is to encourage students to be prepared for class, e.g. reading the chapters ahead and reviewing notes. **NO make-up**

**quizzes will be given.** The missed quizzes scores will be zero and your grade may be affected if you missed more than one quiz.

You are required to purchase an iclicker remote for in-class participation. Iclicker is a response system that allows you to respond to questions I pose during class. You will be graded on the feedback and participation. In order to receive this credit, you will need to register your iclicker remote online within the **first two weeks** (by 9-2-2010) of class. You must have come to class at least once and voted on at least one question in order to complete this registration properly. Once you have voted on a question in the class, go to [www.iclicker.com/registration](http://www.iclicker.com/registration). Complete the fields with your first name, last name, student ID, and remote ID. Your email address should be your given ID for class registration. The remote ID is the series of numbers/letters found on the bottom of the back of your iclicker remote. The iclicker response system will be used quite often in class, and you are responsible for bringing your remote **daily**.

The given schedule is a tentative outline and the exam dates may change depending on the materials covered in lecture. Exams will be a combination of multiple choice questions, fill in the blanks, and essays. **You need Scantron Form No. 882-E for each exam and a number-2 pencil with a good eraser**, two scantrons for the final exam. It is the students' responsibility to transfer the correct answers from the exam to the scantron; **only the answers from the scantron will be accepted.** If you need more time to take an exam for any reason, please request permission at the Student Services Center. And, if you are going to take the exams at the Student Services Center, be sure to give the necessary form to me at least one week before the exam date. I will need to send the exam over to the test center ahead of time.

You may not leave the room during an exam without the instructor's permission. **You must turn off cell phones and remove baseball caps during exams.** Taking out a cell phone during quizzes/exams is considered cheating and you will receive an F for the quiz/exam.

Grading is based tentatively on take-home worksheets, online assignments, unannounced quizzes, two exams, and a final exam. Please let me know **ahead of time** if you cannot take the exams as scheduled. Grading will be based on percentages. If you missed an exam due to illness or family emergency, please provide official documentation and a make-up exam will be scheduled.

**Any form of academic dishonesty will result in an F in the class, and the incident will be reported to the Dean.** \*\* More information will be given in class.

Tentative grading:

6-7 quizzes @ 15 points each	105 pts
Two exams + final exam	350 pts +/- 50 pts
Worksheets	80 pts
Online assignments	40-50 pts
<i>Iclicker points</i>	40-50 pts
Total points	600 pts +/- 50 pts

**Grading scale:**

100-94% = A	93-90% = A-	89-87% = B+
86-84% = B	83-80% = B-	79-77% = C+
76-74% = C	73-70% = C-	69-67% = D+
66-64% = D	63-60% = D-	Below 60% = F

The above schedule and grading are tentative and may subject to change.

**Direction to access Online Materials-- your text book is Fox 11**

You may need to use the registration code that comes with your new textbook to log into ARIS.

**Go to:** <http://www.mharis.com>

- On the right hand side of the page, please click register as a student.
- Fill in your email address and click **Submit** button.
- Fill in the appropriate fields. Do not worry about filling in your school as you will fill in your section code later.

Accept the agreement and click **Complete my Registration.**

- Your account is now ready. Enter your appropriate section code from below and click **GO.**

**Section 1: FILL IN SECTION ENROLLMENT CODE will be given in class**

