PHYSIOLOGY 42-202 SYLLABUS
Spring 2014

Your first instructions for the semester are to carefully read this syllabus. Many of your questions will be answered therein.

Course Description: This course has been designed to introduce the student to human physiology. It targets a wide range of students with diverse backgrounds and varying biological experience. The course takes a systems approach to physiology. Due to the close interrelationship between structure and function in biological systems, each functional physiology topic will include a brief overview of anatomic structure. The physical and chemical laws that are the basis of the physiological processes will also be covered, and applications to current biomedical research and clinically relevant situations will be included.

The following is a list of units that will be addressed:

- Introduction to Physiology
- Levels of Organization: Molecular, Cellular and Tissue Physiology
- Control and Regulation: Nervous and Endocrine Systems
- Support and Movement: Muscle and Skeletal Systems
- Fluids and Transport: Circulatory, Lymphatic and Immune Systems
- Environmental Exchange: Digestive, Urinary and Respiratory Systems
- Physiological Applications: Cancer, Tissue Engineering, Biomechanics, Reproductive Physiology

In addition to the foundation material, each unit will culminate with a related case study or research topic examples.

Sadly, it is presently beyond the scope of this class to provide in depth physical, hands-on laboratory exercises. However, example simulated exercises are available through CD and web-based venues associated with the purchase of the textbook.

Text: The assigned textbook for this course is Principles of Human Physiology by Cindy L. Stanfield, 4rd Edition, Benjamin Cummings, San Francisco, 2011 or the later 2012 5th edition

Note on textbook: Is it absolutely required? First, it is an excellent reference that should do you service for years to come. Second, although I do not specifically assign reading from text, generally, it serves as further explanation of the materials covered in class lectures and for homework assignments. Third, I do not specifically draw quiz or exam questions directly from the textbook, unless I very clearly denote them prior during lectures. So, to the original question, it remains your decision to buy the textbook, share a textbook, use a prior version, etc. Lastly, if you have access to earlier versions, you can use them as well.

Additional Materials: A course notebook containing representative previous semester’s quizzes, homework, extra credit, and exams, as well as answer keys will be placed on Blackboard. During the course, handouts and relevant research articles will be distributed to supplement the text.
The textbook is designed to augment lectures and with exception, quiz and exam questions will not be directly drawn from it. Readings from the text will be assigned prior to covering a particular unit. Quiz and exam questions WILL be drawn directly from lectures, class discussions, handouts, outside readings as specifically noted including clearly defined textbook readings, and from any guest speaker presentations.

**Grading:** Course performance and grading will be determined as follows:

1. Three, **in-class** exams (20% each) 60%
2. 10, 10 pt. weekly quizzes
   (Make up quizzes will **NOT** be given but only the best approximately 60% best scoring quizzes will be used to calculate total points for a maximum score of 100 pts.) 10%
3. 10, 10 pt. homework assignments
   (Make up homework will **NOT** be given but only approximately 60% best scoring homeworks will be used to calculate total points for a maximum score of 100 pts.) 10%
4. Cumulative final exam
   (approximately 100 pts new material and 50 pts old material, all the way back to the first lecture, for a total of 100 pts) 20%
5. Attendance, class participation, performance effort and improvement during the semester will be considered if a student’s grade is borderline between letter grade* and the next higher letter grade (by example, D*, C*, and B*).

**Quizzes** will be the last 15 min of each Monday’s class (excepting as may be noted during the semester).

**Homework** assignments will be typically made over blackboard on and are due on the 7th day post-assignment day by 5 pm EST.

*Only typewritten homework will be accepted.* Strictly adhere to page limit restrictions (homework will be graded up to but not beyond indicated page limit).

**Exam** dates will be announced by the end of the first week of class. All exams are essay and short answer questions. Example questions will be provided via Blackboard and your Supplemental Instruction Leader.

**Final exam** date and time to be announced once they are released.

**Grades.** All exams including the final exam will be assigned by a preset grade assignment system (A=90-100%; B=80-90%; C=70-80%; D= 60-70%; R=<60%). The highest scoring student will set the top grade at 100 %. Should that point score be less than the maximum point score possible, all grades will be adjusted up the number of points to achieve the maximum point score. By example, if the highest grade is 85 points out of 100 points possible. Everyone in class will have 15 points added to their point score.
Questions about grading. Direct questions concerning the grading of weekly quizzes or homeworks should first be directed to the TA directly responsible for grading that particular assignment. Inquires regarding exam grades will be directed to the professor directly. As a matter of policy, exam questions or possible regrades must be initiated within seven days following the return of graded exams. In the case of exam regrades, it is understood that the entire exam is subject to regrading. Therefore, the exam grade not only can either increase, remain unchanged or in some instances decrease.

Instructor Specifics:
Phil G. Campbell, Ph.D.
Research Professor
Office: 1213 Hamburg Hall
Phone:  8-4126
Email:  pcampbel@cs.cmu.edu
Office Hours: There will be no assigned office hours at this time. Meetings will be setup as needed on mutually agreeable times.

Teacher’s Aids:
Aimon Iftikhar    aiftikha@andrew.cmu.edu
Tanuf Tembulkar   ttembulk@andrew.cmu.edu
John Miller        jvmiller@andrew.cmu.edu
Shinjini Kundu    shnjini@andrew.cmu.edu

Office Hours: TAs will hold office hours at specific locations of 1 hr/week to be designated by the TA on Blackboard. TAs will be assigned specific grading tasks for quizzes and homework. If you have specific questions concerning your grade for a specific quiz or homework, first address it to the TAs. Only if you cannot resolve the issue will I intervene. For questions regarding exam grading please see me directly.

Supplemental Instruction:
The Supplemental Instruction Leaders for this semester will be Angela Lo. Angela will provide updates to meetings both in class and via Blackboard.

Angela’s email contact is avlo@andrew.cmu.edu