Instructor: Dr. Sean Courtney, PhD, MS  
Office hours: Times are available by appointment  
Phone: 843-953-5558 (Dept. secretary)  
Email: courtneysm@cofc.edu  

Course meeting: Wednesday 6:00-9:00 PM Lab room 115 and PCTR 111

Prerequisite courses: BIOL 201 Human Physiology  
PEHD 201 Introduction to Physical Education or ATEP 245  

**The author of this document has the right to amend it as necessary or at will.**

Course Description: The purpose of this laboratory course is to provide hands-on experience with physiological tests, to provide practice writing in a fashion consistent with exercise science research, and provide an important link to the material being presented during lecture. Lab experiences do not match the lecture sequence precisely and do not cover all of the units covered in lecture; however, the lab is designed to provide a much-needed context to the more theoretical aspects presented in the lecture.

Course Texts:


Student Learning Outcomes:

1. Students will develop several important skills used in physiological testing and will be able to demonstrate their ability to perform these skills in a skills test.  
2. Will learn to write and reference properly as evidenced by their written lab assignments.
3. Will gain experience leading a testing group as demonstrated by providing a flow diagram and by getting the lab finished completely during the required time frame.

4. Students will gain a unique perspective on exercise physiology by focusing on practical or applied aspects of the science. The online quizzes will assess the students ability to synthesize the new material and will also make certain students arrive at the lab prepared.

Your instructor will make every effort to involve you in the learning process. You will be expected to:

1) Read the lab and take the quiz before coming to class.
2) Have an organizational flow sheet (group leaders)
3) Participate fully and practice your skills.
4) Write up the lab according to instructions provided, respond to feedback, and make improvements over the course of the semester.
5) Refer to the Adams text book for critical information about laboratory techniques.

**Evaluation:** Your lab grade is 25% of your lecture grade. I will submit the lab grade to your lecture instructor who will calculate your final grade.

**Attendance:** (required) 5 points deducted from final grade for each absence. See me prior to the start of this course if you participate in an activity that may cause a problem with attendance

**Quizzes 120:** If completed prior to lab you get full credit, if completed after lab your get one-half credit.

**Lab Reports/Assignments:** 360

**Skill Tests:** 120 (see below)

**Lab Leadership:** 50 Flow sheet for leaders (see below)

**Total 650**

**Lab Attendance and Participation:** You are required to attend every lab class, while wearing appropriate clothing (i.e. exercise clothing with athletic shoes). Showing up for lab without appropriate clothing or not participating in that day’s activities will result in your being counted as absent for the lab. If you have a planned absence (athletics, wedding, etc.) you must tell the instructor during the first two weeks of class so arrangements can be made for a make-up. If you have an un-expected absence (death in family, medical emergency) be prepared to provide documentation and to attend another lab section to make-up the work. Otherwise you will be counted as absent.
Online Quizzes prior to Lab – each student will be responsible for taking a lab quiz PRIOR TO labs 2-12. All quiz material will be based on the current and the previous week’s lab material. (Hint: READ the appropriate sections in your lab manual that cover the topic, physiological relevance, methods, protocol, etc.) The OAKS lab quizzes are open book but must be completed on your own. There will be 11 quizzes with 5-15 questions each. Failure to take the quiz PRIOR to your scheduled lab will result in a 50% reduction in your grade for that quiz.

Lab Reports/Assignments: Due at the beginning of the specified lab class. Late lab assignments will not be accepted. Examples of all assignments and grading rubrics will be posted on OAKS. Lab assignments must be typed, double spaced, stapled, and in National Library of Medicine (NLM) scientific journal format. You should provide at least two references to support your work (one can be the lab text or class text book). The other reference should come from a medical or biological journal.

Skills Tests: Students are expected to fully participate in the lab and should be able to effectively perform all laboratory skills. At minimum, students will be tested on palpating resting and exercise heart rate, taking blood pressure, proper use of the skinfold caliper, and submaximal fitness testing.

Lab Leadership- You will have the opportunity to serve as group leader for at least two labs. As leader, you will be prepared to direct your group through the lab experience. You will pass in a flow sheet of the lab (steps you will follow) prior to beginning the lab.

24 Hour Rule: After a graded assignment is returned to the student, no questions will be answered for a 24 hour grace period. I want the student to take time to read my commentary and review the assignment. Questions are welcomed after the 24 hour grace period has passed.

Cell Phones- There will be no cell phone usage during class time. Cell phones will be kept off your desk and out of your hand during class. Students will receive one warning, A second usage of cell phones during class time will result in the student being dismissed from class and a forfeiture of points accumulated during that class. This applies to the entire semester.

Center for Student Learning: I encourage you to utilize the Center for Student Learning’s (CSL) academic support services for assistance in study strategies, speaking & writing skills, and course content. They offer tutoring, supplemental instruction, study skills appointments, and workshops. Students of all abilities have become more successful using these programs throughout their academic career and the services are available to you at no additional cost. For more information regarding these services please visit the CSL website at http://csl.cofc.edu or call (843) 953-5635.
**Attendance:** Attendance is critical. Attendance is mandatory. Refer to the current Student Handbook for information on student responsibility regarding absences.

Tardiness to class is not acceptable. Habitual tardiness will be handled on an individual basis. Please refer to the current copy of the Student Handbook for proper guidelines for students regarding classroom behavior and expectations.

**Honor System:** Students must do their own work. Please see the 2014-2015 Student Handbook (Academic Honor System) for a description of the College’s Honor System, which is fully supported in this class. (http://studentaffairs.cofc.edu/honor-system/studenthandbook/index.php)

**College of Charleston Honor Code and Academic Integrity**

Lying, cheating, attempted cheating, and plagiarism are violations of our Honor Code that, when identified, are investigated. Each incident will be examined to determine the degree of deception involved.

Incidents where the instructor determines the student’s actions are related more to a misunderstanding will handled by the instructor. A written intervention designed to help prevent the student from repeating the error will be given to the student. The intervention, submitted by form and signed by both the instructor and the student, will be forwarded to the Dean of Students and placed in the student’s file.

Cases of suspected academic dishonesty will be reported directly by the instructor and/or others having knowledge of the incident to the Dean of Students. A student found responsible by the Honor Board for academic dishonesty will receive a XF in the course, indicating failure of the course due to academic dishonesty. This grade will appear on the student’s transcript for two years after which the student may petition for the X to be expunged. The student may also be placed on disciplinary probation, suspended (temporary removal) or expelled (permanent removal) from the College by the Honor Board.

Students should be aware that unauthorized collaboration--working together without permission--is a form of cheating. Unless the instructor specifies that students can work together on an assignment, quiz and/or test, no collaboration during the completion of the assignment is permitted. Other forms of cheating include possessing or using an unauthorized study aid (which could include accessing information stored on a cell phone), copying from others’ exams, fabricating data, and giving unauthorized assistance.
Research conducted and/or papers written for other classes cannot be used in whole or in part for any assignment in this class without obtaining prior permission from the instructor.

Students can find the complete Honor Code and all related processes in the Student Handbook at http://www.cofc.edu/generaldocuments/handbook.pdf

This College abides by section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act that stipulates no student shall be denied access to an education “solely by reason of a handicap.” Disabilities covered by law include, but are not limited to, learning disabilities and hearing, sight or mobility impairments. If you have a documented disability that may have some impact on your work in this class and for which you may require accommodations, please see an administrator at the Center of Disability Services, (843) 953-1431 or me so that such accommodation may be arranged.

**PEHD 340 Lab - Lab Schedule:**

**January 14** Lab 1 – Risk Assessment and Stratification, Resting Blood Pressure, PAR-Q, Health Status Questionnaire, Blood borne pathogen training, and *Exercise Blood Pressure*

**January 21** Lab 2 – Body Composition: Skinfolds, Bioelectrical Impedance Analysis, Body Mass Index

**January 28** Lab 3 – Blood Chemistry Lab

**February 4** Lab 4 – Aerobic Field Tests to predict VO2 max

**February 11** Lab 5 – Submaximal Lab Testing

**February 18** Lab 6 – VO2 and HR Max Testing

**February 25** Lab 7 – Lactate and VT Testing

**March 1-8 Spring Break**

**March 11** Lab 8 – Aerobic Practical

**March 18** Lab 9 – Anaerobic Field Testing to predict VO2 max

**March 25** Lab 10 – Anaerobic Lab (Wingate) Testing

**April 1** Lab 11 – Strength Testing (Direct and Indirect 1-RM, 3-RM, 10-RM)

**April 8** Lab 12 – Anaerobic Practical