College of Charleston
EXSC 340: Exercise Physiology Lab
Fall 2012

Grade: Lab accounts for 25% of your overall EXSC 340 grade:
- Lab Flow Sheet Outline (12 x 10 lab points each for a total of 120 lab points)
- Lab Leadership (3 x 10 lab points for a total of 30 lab points)
- Post Lab Discussion Questions (8 x 50 lab points each for a total of 400 lab points)

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 you losing 50% of the total points for that lab’s respective write up. Missing a lab class, without setting up prior arrangements with your lab’s instructor, will result in you receiving a zero on that lab’s respective write-up. See your instructor prior to the start of this course if you participate in an activity that may cause a problem with attendance (e.g. representing the College in varsity sports, conference presentation) or participation (documented medical condition which limits physical activity) so proper arrangements can be made. If for personal or medical reasons any classes are missed, the instructor should be informed of the reason BEFORE the lab is missed. Your full participation in all labs is expected as optimal learning occurs through participation (medical conditions will be accommodated with proper notification). Medical or any other types of appointments are not an acceptable reason to miss class since you have the ability to reschedule your appointment following this notice.

Goal of lab assignments: We work hard to put you in a position to reach understandings that you would not otherwise be able to attain.

Lab assignments must be typed, double spaced, stapled, and in National Library of Medicine (NLM) scientific journal format (for examples of this format see Medicine and Science in Sports and Exercise or Journal of Strength and Conditioning Research copies of these journals are in the student lounge and the library).

Lab Assignments: Due at the beginning of the specified lab class. Late lab assignments will not be accepted. Examples of all assignments and grading rubrics are posted on OAKS.

Lab Flow Sheet Outlines – at the beginning of each lab, every student is required to turn in a typed flow sheet of the lab (steps you will follow) that outlines the methods required to conduct the respective lab tests for each week. Students may work with others from our lab section on the outline but are not required to do so. Students that collaborate on a flow sheet outline only need to turn in one outline that lists all students’ names that contributed to the flow sheet. All outlines will be graded and points will be added to each student’s lab grade. Students can make an appointment with their lab instructor to review lab methods or various tests but DO NOT plan on walking into their office 1-2 hours before lab (i.e. at the last minute) to get this information handed to you.

Lab Leadership – three to four students will have the opportunity to serve as lab leaders each week (volunteers will be sought first; students will be selected by instructor if not enough volunteer). Lab leaders will be prepared to direct a group through the lab experience by using their flow sheet outline that was turned in that week (lab instructor will answer questions and provide additional instruction or clarification as needed before and during lab). Students will receive a score for their leadership and instruction skills performed during three different labs.
**Post Lab Discussion Questions** – following certain labs each student will be given a set of questions to answer and submit the following week. Each answer must be typed, doubled spaced, and will require the use of appropriate references to support your answer. **Where possible students should provide an example to support their answer.** It is acceptable to use your class and lab text books as your references but as with any reference, you must include a citation (number of specific reference) within the body of your answer, as well as the bibliographic information of the source (authors, title, date of publication, book or journal, volume or edition, and page numbers) at the very end of your assignment. To receive maximal points (A-level work) additional referenced are required beyond class text books. **Be sure to number all references after listing them in alphabetic order by first author’s last name and follow the National Library of Medicine (NLM) reference format style.** A grading rubric will be posted on OAKS.

**Lab Extras:**

Each member of the lab is expected to fully participate in data collection for every lab. Exceptions will require appropriate medical documentation.

It is highly recommended that you complete all assignments in a timely manner so that you can go back to proof read and edit as necessary to improve the overall quality of the assignments. Points will be deducted from all assignments for grammar and spelling mistakes.

**EXSC 340 Lab - Tentative Lab Schedule:**

Lab 1 – Thermal Physiology

*Post Lab Discussion Questions Set 1 – assigned and due Lab 2*

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

Lab 3 – Body Composition: Hydrostatic weighing

*Post Lab Discussion Questions Set 2 – assigned and due Lab 4*

Lab 4 – Anaerobic Field Tests

Lab 5 – Anaerobic Lab Tests

*Post Lab Discussion Questions Set 3 – assigned and due Lab 6*

Lab 6 – Muscular Strength and Muscular Endurance

*Post Lab Discussion Questions Set 4 – assigned and due Lab 7*

Lab 7 – Resting and Exercise Blood Pressure and Heart Rate

*Post Lab Discussion Questions Set 5 – assigned and due Lab 8*
Lab 8 – Submaximal Aerobic Field Tests to predict VO$_{2\text{max}}$

Lab 9 – Submaximal Aerobic Laboratory Tests to predict VO$_{2\text{max}}$
   Post Lab Discussion Questions Set 6 – assigned and due Lab 10

Lab 10 – Maximal Oxygen Consumption (VO$_{2\text{max}}$) & Heart Rate
   Post Lab Discussion Questions Set 7 – assigned and due Lab 11

Lab 11 – Ventilatory Threshold

Lab 12 – Lactate Threshold
   Post Lab Discussion Questions Set 8 – assigned and due 1 week later