**Physiology of Exercise Laboratory**

**(KINE3680) Course Syllabus**

**Fall 2017**

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**Instructor:** Petey Mumford

**Office:** 260 D, Kinesiology Building, 301 Wire Rd

**E-mail:** [pwm0009@auburn.edu](mailto:pwm0009@auburn.edu)

**Office Hours:** Due to teaching and research schedule, please attempt to make an appointment. Drop-ins are always welcome, but there are no set hours

**Class Schedule:** Monday 1:00 - 2:50 pm

**Meeting Location:** Meet in *Kinesiology Building 136* for lab lecture then move to the appropriate room for lab. Please check your e-mails for updates prior to class should meeting places change based on the needs of the different labs.

**Course Description:** This course will focus on applying your knowledge of basic energy, musculoskeletal, nervous, and cardiovascular systems using various testing procedures. The course content will emphasize understanding the science of exercise, how to interpret common physiological fitness tests, and how to write about your findings using the basics of scientific writing techniques.

**Attendance Policy:** No lab absences will be allowed. Lab write-ups will not be accepted if one was not present for data collection. The only exception to this is data will be provided to students that miss lab for an excused absence

**Late Policy:** Assigned lab work will not be accepted late. All assigned work is due on the stated date during the class period. The only exception is if you talk to me BEFORE the assignment is late and negotiate a new due date with me. Failure to do so will result in a **ZERO** on the assignment.

**Dress:** Labs will require your participation; therefore you should dress ready for physical activity. If you are not dressed properly and cannot participate you WILL BE COUNTED ABSENT and not receive credit for that lab.

**Personal Items:** Please refrain from bringing personal items to the lab. The School of Kinesiology and I will not be responsible for lost or damaged items. You should also try to minimize the amount of stuff brought with you to each lab due to limited storage space in the lab.

**NO CELL PHONES ARE TO BE USED DURING LAB ACTIVITIES.** Should you be expecting an important call, please notify me beforehand.

**Lab Grading:**

Pre-lab Quizzes (7) 21 pts

Lab Reports (3) 24 pts

Worksheets (6) 30 pts

Online Lab (1) 5 pts

Lab Final 20 pts

Total 100 pts

**Grading Scale:**

A = 100 – 90%

B = 89 – 80%

C = 79 – 70%

D = 69 – 60%

F = Below 60%

**Pre-lab Quizzes:**

Students are responsible for being familiar with the material of that day’s lab prior to coming into class. To ensure that all students are prepared, quizzes will be given at the beginning of every lab lecture. They will consist of 3 questions. The questions will come from the handouts on Canvas and will be “surface” questions (So don’t stress the small details. Know the broad terms/formulas/etc). Notes will not be allowed during the quiz.

Quizzes will be given at the beginning of lecture and must be turned in 5 minutes after the start of class. If you are not present during this time, you will not be allowed to make up the quiz and will receive a zero. Please make sure you are on time to lab to prevent this from happening.

**Lab Reports:**

Cover pages include the title of the lab, the lab number, the date, and your name.

Lab reports must contain a *Rationale*, *Methods*, *Results* and *Discussion* section. Everything should be in paragraph format (no bullet points or numbered sections). All writing should be in the **PAST TENSE and THIRD PERSON**.

Rationale section should be around ½ of a page explaining the background and value of what we are measuring. The rationale should cover the VALUE of what we are measuring, not the physical measurements that we took in the lab (that is *Methods*). Also, you need to answer the question "How are these measurements used/changed in health, sport and disease/injury?" This last part is critical for full credit and must be explained using some research that you did.

\* In scientific writing, we do not use quotes. Please refrain from using quoted phrases. Excessive use of quotes will result in points off. Correct paraphrasing includes changing BOTH the verb and the structure of the sentence and then citing it appropriately.

\* Please use appropriate citations. I don’t require any particular format, but please be consistent (I would recommend using APA format). Remember that you need to cite a sentence even if you paraphrase the information. You have to cite information from all sources including text books, the internet, magazines, journals, etc. Therefore, a References page should be included at the end of your lab report.

\*If the lab has multiple parts…please have just ONE rationale section, ONE methods section, and ONE results section. Each section should include information for both parts of the lab. Please use headings and clearly indicate where one stops and the next one begins.

The Methods section includes the details of the test you performed, such as the equipment used, places you took the measurements, and formulas you used. The level of detail required in this section is such that another person would be able to read your methods section and be able to reproduce the test. No data should be included in this section. Also, remember to reference appropriately (tell me where you got the information, like the formulas).

The Results section includes all of the data that you collected in an easily readable format. For some data a graph/figure will be required for full points. The figure must have a correctly labeled x- and y-axis and be consistent with the raw data presented. You should also include any formulas that you used and call calculations must be attached (this can be on a separate handwritten page). Do not include calculation in your report. If there is more than one figure or table, please number them and refer to them using the number in the text. \*\*Please have the results in an easily readable format. Use headings to denote different experiments. It is not necessary to walk me through your calculations in sentence format.\*\* Do not include any explanations of your results here. This is simply stating what you found.

The Discussion section is where you explain your results (What did you see vs. what you thought you would see, was there something that explains any weird results, etc). You should refer back to your figures in this section. A “take-home message” that gives the overall conclusion about the lab should be included at the end to receive full credit for this section.

You are welcome to bring a draft of your lab report to me to review no later than the day before it is due to get pointers to improve your grade. I will only review lab reports in person, so please do not send it to me via e-mail or Canvas.

I expect these lab reports to be professional and carefully researched. I will not grade anything handwritten except calculations, so please type what you would like me to grade. Neatness, organization, and grammar count towards your grade, so please proof read. Always use complete sentences and write in the past tense. Do not use undefined abbreviations.

**Worksheets:**

Worksheets with calculations may be handwritten; however, handwriting must be legible, and it is at the discretion of the instructor whether or not it is acceptable. All calculations MUST be shown. Answers that do not have calculations will be marked as incorrect.

If there are questions to be answered, **RESPONSES MUST** be typed and attached to the worksheet. Like the lab reports, responses that are handwritten will not be graded.

**Lab Final:**

The lab final will test the student’s knowledge of basic lab concepts learned throughout the semester. It will consist of 30 questions and will be administered December 4th.

**Professionalism:** As faculty, staff, and students interact in professional settings, they are expected to demonstrate professional behaviors as defined in the College’s conceptual framework. These professional commitments or dispositions are listed below: Engage in responsible and ethical professional practices.

* Contribute to collaborative learning communities
* Demonstrate a commitment to diversity
* Model and nurture intellectual vitality

**Academic Integrity Policy:** The Auburn University student academic honesty code Title XII found on the University Policies webpage (<https://sites.auburn.edu/admin/universitypolicies/default.aspx>) applies to this class. All academic honesty violations or alleged violations of the SGA Code of Laws will be reported to the Office of the Provost, which will then refer the case to the Academic Honesty Committee.

In this class, data will often be collected in pairs or groups. Exchanging raw data from the lab is acceptable if you were present to assist in data collection. However, all data processing, analysis and write up must be individual. Therefore, you may not collaborate on lab reports, data processing, or data analysis. Any evidence that this has occurred will be considered academic dishonesty and reported to the Office of the Provost. The minimum penalty will be a zero on the assignment. You also may not use the data of other students to complete your lab report. All data for lab reports must be data that you participated in collecting. If you have a documented, university-approved absence on a data collection day, you must talk to me to receive a make-up (within one week of the day missed). You **MAY NOT** get the data from the other people in your group without my permission. Failure to get an approved make-up from me will result in a **zero** on that section of the lab report.

**Disability Accommodations:** Students who need accommodations are asked to arrange a meeting during office hours the first week of classes, or as soon as possible if accommodations are needed immediately. If you have a conflict with my office hours, an alternate time can be arranged. To set up this meeting, please contact me by e-mail. If you have not established accommodations through the PSD office, but need accommodations, make an appointment with The Program for Students with Disabilities, 1228 Haley Center, 844-2096 (V/TT).

**Laboratory Schedule**

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| **Date** | **Lab** | **Assignments Due** |
| **8/21** | **No Lab** |  |
| 8/28 | Syllabus/General Info/ Graphing | In class assignment |
| **9/4** | **No Lab- Labor Day** |  |
| 9/11 | Lab 1: Work and Power (Worksheet) |  |
| 9/18 | Lab 2: Wingate (Lab Report) | Lab 1: Worksheet Due |
| 9/25 | Lab 3: Blood Pressure (Worksheet) | Lab 2: Lab Report Due |
| **10/2** | Lab 4: Pulmonary **(No Lab Meeting)** | **Lab 4 will be completed on Canvas** |
| **10/9** | **No Lab** |  |
| 10/16 | Lab 5: VO2 (Lab Report) | Lab 3: Worksheet Due |
| 10/23 | Lab 6: EPOC/ O2 Debt (Lab Report) | Lab 5: Lab Report Due |
| 10/30 | Lab 7: DOMS (Worksheets) | Lab 6: Lab Report Due |
| **11/6** | Lab 8: Repeated Bout Effect **(No Lab Meeting)** | **Lab 8: will be completed on own** |
| 11/13 | Lab 9: F-V Curve/ Muscle Fatigue (Worksheet) | Lab 7 & 8: Worksheets Due |
| **11/20** | **No Lab- Thanksgiving Break** |  |
| 11/27 | Lab Final Review | Lab 9: Worksheet Due |
| **12/4** | Lab Final **(No Lab Meeting)** | **Lab Final will be on Canvas** |

***\*The above content, schedule and procedures in this course are subject to change at the discretion of the instructor\****