**KINS 4690/6690 Lab Syllabus**

**Lab Instructor**: Cory Cribb, M.S.,

**Location:** 109 Ramsey (Exs Phys Lab)

**Class time(s):** Tuesdays 5:20pm – 7:15pm

**Office**: Ramsey – Rm 334

**Office Hours**: By appointment only (via email)

**Email**: [cfc78737@uga.edu](mailto:cfc78737@uga.edu)

**Course Description**: This course consists of hands-on experiences related to applied exercise physiology and specifically, skeletal muscle physiology.

**Course Objectives:**

* To learn various methods of assessing muscle strength and endurance
* To become familiar with various techniques, procedures, and equipment used in clinical research and physical therapy settings
* To develop skills related to data collection and analysis
* To practice interpreting and communicating experimental findings
* To understand muscle physiology and how our learning objectives may serve you in your future career path.

**ELC**: All lab information will be posted on ELC unless otherwise stated by your instructor. All prelab quizzes, reading material, and lab protocols will be available on ELC.

**Grading**: Your lab grade will contribute 20% of the total course grade (KINS 4690). Your lab grade will be made up from the prelab procedural quizzes (20%) and lab report write-ups (30%), while (50%) will come from in-lab participation, which is an integral part of the learning experience in KINS 4690L.

* Make-up quizzes are very rare unless documentation is provided.
* Every day that an assignment is late, 10 points will be deducted from the grade you receive.

**Assignments**: Pre-Lab: Reading material (i.e. lab protocol and relevant literature) will be provided to you prior to each lab (on eLC). You will be expected to have read the literature and at the very least be familiar with the lab/experimental protocol. You will be expected to complete a pre-lab quiz on ELC prior to the lab that will cover the general information from the Lab Manual pertaining to laboratory procedures. This lab requires critical thinking, so reading literature before our lab meets is highly encouraged.

**Course Policies**

**Attendance**: Attendance is mandatory. You may attend the other lab section and make-up

assignments only with a university excused absence and approval from the instructor. For all other excuses, you will receive no credit for that week’s assignments (i.e. lab quiz, lab write-up). Attendance serves as a major portion of your laboratory credit, thus, absences can quickly negatively impact your grade.

**Pre-Lab Quizzes will open the day of the previous lab (at the end of the class period).**

**\*Please note, Pre-Lab Quizzes close the evening prior to lab (11:59pm)**

**Lab Reports are due on the following Wednesday evenings at 11:59pm. This allows you to ask in-person questions during lab before submitting your lab report.**

**Dress**: All students will be expected to participate in the lab testing/data collection and will

be required to dress accordingly. Therefore, athletic clothing and shoes are required. Proper clothing includes athletic pants/shorts, T-shirts/sweatshirts, etc – clothing you feel comfortable exercising in. Jeans, dress shoes and pants, dresses, skirts, etc are not permitted.

**Academic Honesty:**

University Honor Code and Academic Honesty Policy.

All academic work must meet the standards contained in “A Culture of Honesty.”

Each student is responsible to inform themselves about those standards before performing any academic work. Copies of the honor code can be obtained from the Office of the Vice President for Instruction or may be viewed at the following web site: <http://www.uga.edu/ovpi/>

**Course Outline**: Laboratory topics will be covered as listed below. Lab reports will be turned in the following week. The course syllabus is a general plan for the course; deviations

announced to the class by the instructor may be necessary.

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| **Date:** | **Lab Topic!** | **Due Before Lab** | **Due After Lab** |
| 8/23 | No Lab  (Muscle-Bone Conference: Emory)-Albi | N/A |  |
| 8/30 | No Lab | N/A | Lab #1 Pre-Lab Quiz (Tuesday 11:59 pm) \* |
| 9/6 | Lab #1 Muscle Structure: Ultrasound Muscle Pennation Angle | Lab #1 Pre-Lab Quiz | Lab Report #1  Lab #2 Pre-Lab Quiz  (Tuesday 11:59 pm) \* |
| 9/13 | Lab #2 MVC Force-Length | Lab #2 Pre-Lab Quiz | Lab Report #2\*  Lab #3 Pre-Lab Quiz\* |
| 9/20 | Lab #3 MVC Force-Velocity | Lab #3 Pre-Lab Quiz | Lab Report #3\*  Lab #4 Pre-Lab Quiz\* |
| 9/27 | No Lab  (AACPDM Conference: Las Vegas) |  |  |
| 10/4 | Lab #4 Electromyography | Lab #4 Pre-Lab Quiz | Lab Report #4\*  Lab #5 Pre-Lab Quiz\* |
| 10/11 | Lab #5 Force-Frequency Relationship | Lab #5 Pre-Lab Quiz | Lab Report #5\*  Lab #6 Pre-Lab Quiz\* |
| 10/18 | Lab #6 Prolonged Low-Frequency Force Depression (PLFFD) | Lab #6 Pre-Lab Quiz | Lab Report #6\*  Allocate Presentation Groups |
| 10/25 | No Lab | N/A | Enjoy Fall Break (10/28)  Lab #7 Pre-Lab Quiz\*  Journal Article: Approval |
| 11/1 | Lab #7 Interpolated Twitch Technique | Lab #7 Pre-Lab Quiz | Lab Report #7\*  Lab #8 Pre-Lab Quiz\* |
| 11/8 | Lab #8 Contraction-Induced Injury | Lab #8 Pre-Lab Quiz | Lab Report #8\* |
| 11/15 | Group Presentations | Read Articles: Prepare for Discussion |  |
| 11/22 | Thanksgiving No Lab |  |  |
| 11/29 | Make-Up Day (only If necessary) |  |  |
| 12/6 | No Lab: Semester Ends |  |  |

**Laboratory schedules are tentative and may be subject to change at the accord of the instructor or lead laboratory instructor.**