# Auburn University

# College of Education

# School of Kinesiology

# Course Syllabus

## Syllabus for KINE 3621 (Spring 2025)

### Course Information:

Course Number: KINE 3621

Course Title: Biomechanics of Human Movement Laboratory

Course Hours: 1 semester hour

Prerequisites: none

### Instructor Information:

Primary Instructor: John Grace, MS

Office Location: 003 Kinesiology Building or KINE 020 Sport Biomechanics Lab (1st floor)

Office Hours: Wednesday 12-2 PM (Please contact in advance to schedule a meeting)

Email**:** [**jlg0068@auburn.edu**](mailto:jlg0068@auburn.edu)

Secondary Instructor: Christopher Wilburn, PhD

Office Location: Room 103, Kinesiology Building

Office Hours: Tuesday and Thursday 2– 3:30 PM

Email**:** [**czw0043@auburn.edu**](mailto:czw0043@auburn.edu)

### Course Descriptions :

This course is designed to enhance a fundamental understanding of the anatomical, neuromuscular, and biomechanical principles of human movement through applicable laboratory activities.

### Course Materials:

\*Several laboratory assignments utilize this course’s **e-text**.

### Student Learning Outcomes:

The students will be able to:

1. learn a systematic approach to the analysis of human motion;

2. understand the anatomical, neuromuscular, and biomechanical fundamentals of human motion;

3. apply anatomical and biomechanical analyses to the study and improvement of a broad spectrum of movement activities  
4. utilize various biomechanical research equipment to supplement class lectures

### Course Overview

Weeks 1-2. (Weeks of 1/12 & 1/19) **Biomechanics laboratory will not meet.**

**Read syllabus and take the syllabus quiz (Due 1/25).**

* Become acquainted with the Canvas page and ensure you can access links to the Box folder containing laboratory materials.

During these initial weeks, you can utilize this time to potentially meet members in the same laboratory section if working in a group for laboratory assignments (optional) is of interest to you. See below details.

* **As this is an online course you can work independently**. Although you do have the **option** to form a group of up to 4 members **from the same section.** Again, all members in a laboratory group must be in the **same** laboratory section (this may be different than groups formed in the lecture portion of class).
* **If elected to work with peers**, you can assign yourselves to a laboratory group by going to the “People” tab on Canvas and dragging your name under a group number (again all members in a lab group need to be in the same laboratory section). **If you are working independently, you will still need to assign yourself to your own group** (this is for submission purposes). The decision to work independently or with others should be based on your learning preference, willingness & dependability to work with others, and any other pertinent considerations, etc. See the discussion tab to reach out to others in the section if you are looking for another peer to work with. Each member in a group needs to agree beforehand to participate in the group with the other members.

*By assigning myself to a group to work with others, you agree that your contributions to each lab assignment will be appropriate and your responsiveness and accessibility to your peers will be a priority. This syllabus serves as my agreement to these conditions.*

**Steps for assigning yourself to a Laboratory Group:** Step 1) find the “People” tab on Canvas; Step 2) Toggle over to “Laboratory Groups”; Step 3) Place your name in a Laboratory Group by right clicking your name and dragging it over to a laboratory group number.

A screenshot of a test

Description automatically generated

Week 3. (Week of 1/26)

**Laboratory 1: Writing Laboratory Reports**

Week 4. (Week of 2/2)

**Laboratory 2: Overview of a Movement Analysis**

Week 5. (Week of 2/9)

**Laboratory 3: Roles Associated with a Movement Analysis**

Weeks 6. (Week of 2/16)

**Laboratory 4: Analysis of Mechanical Quantities**

Weeks 7-8. (Weeks of 2/23 & 3/2)

**Laboratory 5: Obtaining Mechanical Quantities with Equipment**

**Week 9. (Week of 3/9)**

**Spring Break**

Week 10. (Weeks of 3/16)

**Laboratory 6: Identification of Differences in Mechanical Quantities**

Week 11-12. (Weeks of 3/23 & 3/30)

**Laboratory 7: Anatomical Contributions to Mechanical Quantities & Task Instructions**

Week 13-14. (Weeks of 4/6 & 4/13)

**Laboratory 8: Sport Skill Video Assessment and Exercise Prescription** *(Part of this lab is connected to Laboratory Final Project)*

Week 15-16. (Week of 4/20 & 4/27)

**Laboratory Final Project: Mechanical Effects of an Exercise Prescription on a Sport Skill** *(connected to Laboratory 8)*

### EVALUATION METHODS:

#### Course Requirements:

Students will complete a syllabus quiz, 8 laboratory assignments (85 %) and a laboratory final (15 %). Each laboratory assignment will be worth 100 points. All assignments must be completed and submitted as a group.

90 – 100 --- A

80 – 89 --- B

70 – 79 --- C

60 – 69 --- D

Under 60 --- F

**Class Policy Statements:**

***Participation:*** Students are expected to participate in all virtual laboratory activities. It is the student’s responsibility to contact the instructor **PRIOR** to class if an illness or emergency requires the student to miss class. Any missed work due to a University approved excuse MUST be made-up within 5 days.

***Online Student Expectations:*** All students in this course are expected to have all the equipment and software needed to be successful in the course. All students are expected to contribute to their own learning as active and well-prepared participants. You should plan on spending the same amount of preparation and “in class” time on this course as you would if you were taking the course face-to-face. Access to the course e-book is needed for several laboratories.

***Attendance/Absences***: The format of this course will be presented primarily in an online fashion. Students can work independently to complete assignments but do have the option to meet in groups (face-to-face and/or virtual) with up to a maximum of 4 other students in the same laboratory section to complete a laboratory assignment. If an assignment is completed in a group manner, place all names on the assignment cover page. A doctor’s statement for verification of sickness is required and should clear the absence with the instructor the day they return to class. Other unavoidable absences from campus must be documented and cleared with the instructor in advance. No late assignments will be accepted outside of extreme circumstances noted by the instructor. Please carefully adhere to established assignment deadlines. In such a case the instructor will have the discretion of deducting points on the assignment for each day that it is late.

***Posting/Appealing Exam and Assignment Grades***

All laboratory assessments (laboratory activity and laboratory final) will be posted to Canvas. Students will have five business days from the date that the exam/assignment scores are posted on Canvas to send an email to the instructor requesting grade adjustments on their work. To appeal a grade that you have received, please compose and send an email to your instructor writing out the assignment in question, indicating the answer you submitted, and providing a written justification from the reading/class notes/etc. on why you think your answer is correct.

Once received, the instructor may or may not communicate with you regarding your appeal. Ultimately, the instructor will render a decision. If no appeal is sent to the instructor after five business days, the assignment score is final. Failure to monitor your progress as the semester progresses does not warrant a re-grade on assignments evaluated earlier in the semester. Once the 5-day appeal period has passed, students forfeit their right to have the graded material reassessed at a later date.

***Late Assignment Policy***: It is very important that students submit work on time, or they will find it very difficult to catch up. Any assignment that is submitted after the due date will have a 10-point reduction in points per day its late. Students should reach out to their instructor immediately to discuss any concerns. In situations where you are experiencing technical difficulties submitting your assignment near the deadline, please consult the Canvas help desk resources available in left navigation. Please work to avoid encountering technical difficulties near the assignment due dates by completing your work ahead of deadlines.

***Questions/Help:*** If you are struggling academically with this class, do NOT wait until the end of the semester to ask for help. Your instructor is here to help you but cannot provide help unless you communicate the problem. In announcements to the class, your instructor may specify a preferred method of communication. You are strongly encouraged to reach out to your instructor early in the course and follow-up whenever you encounter challenges with the material. For assistance with components on assignments reach out to your instructor early in the week and/or the time frame to which the assignment is due.

***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 alternative time can be arranged. To set up this meeting, please contact me by e-mail. Bring a copy of your Accommodation Memo and an Instructor Verification Form to the meeting. If you do not have an Accommodation Memo but need accommodations, make an appointment with the Program for Students with Disabilities at 1244 Haley Center, 844-2096 (V/TT).

***Honesty Code:*** The University Academic Honesty Code and the student e-book Rules and Regulations pertaining to Cheating will apply to this class.

***Professionalism:*** As faculty, staff, and students interact in professional settings, we 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

***Email:*** Tigermail is the official means of communication for Auburn University. The instructor will communicate with the class regularly through Tigermail. You are responsible for this information, so please check your account regularly.

**\*COVID-19 Policy Statements\***

**Attendance Policy**

Your health and safety, and the health and safety of your peers, are my top priorities. If you are experiencing any symptoms of COVID-19, or if you discover that you have been in close contact with others who have symptoms or who have tested positive, you should not attend in-person classes. My hope is that if you are feeling ill or if you have been exposed to someone with the virus, you will stay home to protect others.

Please do the following in the event of an illness or COVID-related absence:

* Notify me in advance of your absence if possible (or within 48 hours of missed class)
* Keep up with coursework as much as possible
* Participate in class activities and submit assignments electronically as much as possible
* Notify me if you require a modification to the deadline of an assignment or exam

Finally, if remaining in a class and fulfilling the necessary requirements becomes impossible due to illness or other COVID-related issues, please let me know as soon as possible so we can discuss your options.

**Face Covering Policy**

\*Subject to change: In response to COVID-19, and in alignment with Auburn University's Presidential directives, and local, state, and national health official guidelines, face coverings may be required while on campus, except when alone in a private office. This includes the classroom, laboratory, studio, creative space, or any type of in-person instructional activity, and public spaces. "A “face covering” is defined as a “covering that fully covers a person’s nose and mouth, including without limitation, cloth face mask, surgical mask, towels, scarves, and bandanas.

If a student has a medical exception to the face covering requirement, please contact the Office of Accessibility to obtain appropriate documentation.

**Instructional Contingency Plan**

If normal class and/or lab activities are disrupted due to illness, emergency, or crisis situation (such as a COVID-19 outbreak), the syllabus and other course plans and assignments may be modified to allow completion of the course. If this occurs, an addendum to your syllabus and/or course assignments will replace the original materials. If the method of delivery should need to be changed throughout the course of the semester, please look to your Canvas page for announcements. If I, the instructor John Grace, test positive and am unable to teach the course for any reason, then a backup instructor (who you will be notified of in the case that I cannot teach) and class will continue to be delivered as usual.

***\*\*\*NOTE: The syllabus is subject to change at the discretion of the class instructor. Students will be notified in a timely manner of any syllabus changes.\*\*\****