WILLIAM & MARY DEPARTMENT OF KINESIOLOGY KINE 308L, Biomechanics of Human Movement Lab Spring 2022

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Office hours: by appointment

Laboratory Description

The laboratory sessions provide the student with applications in the mechanical analysis of human movement. Fundamental mechanical principles affecting human movement during a variety of daily living and sporting activities are considered.

Laboratory Policies

Lab announcements will be posted on Blackboard or students will be notified by email when changes are made to the syllabus or course on Blackboard. *Assignments should be submitted by your lab's start time the following week.* Late assignments will only be accepted when a valid excuse has been *pre-approved*.

Accommodations

It is the policy of William & Mary to accommodate students with disabilities and qualifying diagnosed conditions in accordance with federal and state laws. Any students who feels s/he may need an accommodation based on the impact of a learning, psychiatric, physical or chronic health diagnosis should be referred to Student Accessibility Services staff at 757-221-2512 or at sas@wm.edu. SAS staff will work with you to determine if accommodations are warranted, and if so, to help you obtain an official letter of accommodation.

Honor Code

William & Mary has had an honor code since at least 1779. Academic integrity is at the heart of the university, and we all are responsible for upholding the ideals of honor and integrity. The student-led honor system is responsible for resolving any suspected violations of the Honor Code, and I will report all suspected instances of academic dishonesty to the honor system. The *Student Handbook* (www.wm.edu/studenthandbook) includes your responsibilities as a student and the full Code. Your full participation and observance of the Honor Code is expected. To read the Honor Code, see www.wm.edu/honor. *All assignments in this course are to be your own work*. Therefore, group work and use of previous assignments and exams are not permitted unless otherwise directed by the instructor. When in doubt, it is your responsibility to confirm whether collaboration is permitted.

Mental and Physical Well-Being

William & Mary recognizes that students juggle different responsibilities and can face challenges that make learning difficult. There are many resources available at W&M to help students navigate emotional/psychological, physical/medical, material/accessibility concerns. Asking for help is a sign of courage and strength. If you or someone you know is experiencing any of these challenges, we encourage you to reach out to the following offices:

- For psychological/emotional stress, please consider reaching out to the W&M Counseling Center https://www.wm.edu/offices/wellness/counselingcenter/; or (757) 221-3620, 240 Gooch Dr., 2nd floor. Services are free and confidential.
- For physical/medical concerns, please consider reaching out to the W&M Health Center at https://www.wm.edu/offices/wellness/healthcenter/; or (757) 221-4386, 240 Gooch Drive.
- For additional support or resources, please contact the Dean of Students by submitting a Care Report
 at https://www.wm.edu/offices/deanofstudents/services/caresupportservices/index.php; or by calling
 757-221-2510, or by emailing deanofstudents@wm.edu.
- For a list of many other resources available to students, see <u>Health and Wellness Resources for</u> Students

As your professor, I also ask you to reach out to me if you are facing challenges inside or outside the classroom; I will guide you to appropriate resources on campus.

Laboratory Safety

Every effort will be made for labs to be in person. However, in some instances this may be neither prudent and/or feasible given current safety guidelines. In these instances, labs may be either virtual or hybrid in format, or the lab topic adjusted. Notice will be provided via Blackboard and e-mail to notify students of such changes. *The following safety practices will be in place for our in-person meetings:*

- 1. Please wash or sanitize your hands upon entry to the lab.
- 2. There will be no eating nor drinking in lab.
- 3. Masks (not vented nor gaiters) are to be worn over the mouth and nose, unless directed by the professor.
- 4. Please socially distance yourself when possible.

Tentative Lab Schedule

Dates	Topic
1/26, 1/7	Math Review Appendix A and B (no lab meeting)
2/2, 2/3	Anthropometrics
2/9, 2/10	Lifting Mechanics
2/16, 2/17	Linear Kinematics of Walking
2/23, 2/24	Linear and Angular Kinematics of Walking
3/2, 3/3	Tissue Mechanics
3/9, 3/10	EMG
3/23, 3/24	Running Mechanics Data Collection
3/30, 3/31	Linear and Angular Kinematics of Running
4/6, 4/7	Data Processing and Writing of Paper (no lab meeting)
4/13, 4/14	Ground Reaction Forces and Center of Pressure
4/20, 4/21	Center of Mass Calculations
4/27, 4/28	Force of the Biceps and Quadriceps