## Western University Faculty of Health Sciences School of Kinesiology

## KIN 2241A – Biomechanics Fall 2021

Instructor: Derek Pamukoff Office: Arts & Humanities Bldg Rm 3G02 Email: dpamukof@uwo.ca Phone: 519/661-2111 x88385 Office Hrs: Tues 9:00-10:00am, Wed 11:30am-12:30pm

**TAs:** Harry Battersby, <u>hbatters@uwo.ca</u> Ryan Evans, <u>revans44@uwo.ca</u> Jillian Neufeld, <u>jneufe22@uwo.ca</u> Richard Magony, <u>rmagony@uwo.ca</u> Proposed Course Schedule

- Week 1 (Sept 8) Course Overview, Introduction to Biomechanics
- Week 2 (Sept 13) Vectors and Forces, Friction
- Week 3 (Sept 20) Friction, Linear Kinematics
- Week 4 (Sept 27) Linear Kinematics, Projectile Motion, Take-up lab 1 (due Sept 20)
- Week 5 (Oct 4) Linear Kinetics, Work Power, Energy
- Week 6 (Oct 11) Thanksgiving Holiday; Work, Power, Energy, Take-up lab 2 (due Oct 4)
- Week 7 (Oct 18) Take-up lab 3 (due Oct 18), Review and Midterm (Oct 22)
- Week 8 (Oct 25) Torques and Moments
- Week 9 (Nov 1) Reading Week
- Week 10 (Nov 8) Angular Kinematics
- Week 11 (Nov 15) Angular Kinetics, Take up lab 4 (due Nov 19)
- Week 12 (Nov 22) Mechanics of Biological Tissues
- Week 13 (Nov 29) Mechanics of Biological Tissues
- Week 14 (Dec 6) Career Pathways in Biomechanics, Review

Notes -

• The order and dates of topics may change at the discretion of the instructor

## **Required Course Material/Text:**

All materials will be posted on OWL, and you will need a scientific calculator.

## Course Evaluation Summary (Due Dates listed below):

- 1. Laboratory Assignments (4 @ 7.5%) 30%
  - Lab 1 Vectors and Forces (Due Sept 20)
  - Lab 2 Linear Kinematics (Due Oct 4)
  - Lab 3 Linear Kinetics (Due Oct 18)
  - Lab 4 Torques and Angular Kinetics (Due Nov 19)
- 2. Midterm Exam (Oct 22) 35%
- 3. Final Exam (TBD) 35%

## **Course Evaluation:**

Assignments are due as stated in the course syllabus and will not be accepted late, except under medical or other compassionate circumstances. Submitting a late assignment without appropriate documentation will result in a zero (0) grade. A missed mid-term examination, without appropriate documentation will result in a zero (0) grade. Acceptable reasons might include hospital stays, sce dmpe rdoce)

# **Accommodation Policies**

Students with disabilities work with Accessible Education (formerly SSD) which provides recommendations for accommodation based on medical documentation or psychological and cognitive testing. The accommodation policy can be found here: <u>Academic Accommodation for</u> <u>Students with Disabilities</u>.

#### Academic Consideration for Student Absence

https://www.uwo.ca/fhs/kin/undergrad/academic/consideration/index.html

Students will have up to two (2) opportunities during the regular academic year to use an on-line portal to self-report an absence during the term, provided the following conditions are met: the absence is no more than 48 hours in duration, and the assessment for which consideration is being sought is worth 30% or less of the student's final grade. Students are expected to contact their instructors within 24 hours of the end of the period of the self-reported absence, unless noted on the syllabus. Students are not able to use the self-reporting option in the following circumstances:

- for exams scheduled by the Office of the Registrar (e.g., December and April exams)
- absence of a duration greater than 48 hours,
- assessments worth more than 30% of the student's final grade,
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In the case of online examinations, an "Examination Conflict Room," which may be assigned when a

- if you wish to speak, use the "raise hand" function and wait for the instructor to acknowledge you before beginning your comment or question
- remember to unmute your microphone and turn on your video camera before speaking
- self-identify when speaking.
- remember to mute your mic and turn off your video camera after speaking (unless directed otherwise)

General considerations of "netiquette":

- Keep in mind the different cultural and linguistic backgrounds of the students in the course.
- Be courteous toward the instructor, your colleagues, and authors whose work you are discussing.
- Be respectful of the diversity of viewpoints that you will encounter in the class and in your readings. The exchange of diverse ideas and opinions is part of the scholarly environment. "Flaming" is never appropriate.
- Be professional and scholarly in all online postings. Cite the ideas of others appropriately.

Notesthat disturbing behaviour of any type during anine classes, including bape optioner up optioner a class or of other serious online offenses may be subject to disciplinary measures under the Code of Student Conduct.

## 11. Online Learning Support

If you require support with online learning tools and resources, please refer to the Faculty of Health Sciences Online Teaching and Learning Support Jira request links