



Western University  
Faculty of Health Sciences  
School of Kinesiology



KIN 3353B – Biomechanical Analysis of Human Locomotion  
Winter 2023  
Elon:

toward biomechanical analyses, and in addition will be able to initiate research in the area of biomechanics.

Required Course Material/Text :

All materials will be posted on OWL. Students are expected to have moderate proficiency with Microsoft Excel and obtaining/reviewing scientific literature.

NOTE the following important dates:

Winter 2022

Mon Jan 8:

Sat Feb 19 – Sun Feb 25

Mon April 8:

Second term begins

Reading Week NO CLASS

Last Day of Class

Proposed Course Schedule (\*see detailed calendar on OWL)

Week 1 (Jan 8) – Introduction to Motion Capture, Linear Kinematics Review

Week 2 (Jan 15) – Linear Kinematics, Reading Discussion

Week 3 (Jan 22) – Angular Kinematics Review, Joint Angle Calculations

Week 4 (Jan 29) – Applications of Kinematics, Reading Discussion

\*Laboratory 2 Data Collection (Wed Jan 31 – attendance required)

Week 5 (Feb 5) – Review and Midterm (Feb 9)

Week 6 (Feb 12) – Linear Kinetics Review, Force Plates

Week 7 (Feb 19) – Reading Week

Week 8 (Feb 26) – Take-up Midterm, Reading Discussion

\*Laboratory 3 Data Collection (Wed Feb 28 – attendance required)

Week 9 (March 4) – Angular Kinetics Review, Inverse Dynamics

Week 10 (March 11) –

3. Midterm Exam (Feb 9) 25%  
Administered virtually using Proctortrack
4. Final Exam (TBD) 35%  
Administered virtually using Proctortrack

Course Evaluation :

Assignments are due as stated in the course syllabus and will not be accepted late. Submitting a late assignment without appropriate documentation will result in a zero (0) grade. A missed quiz or mid-term examination, without appropriate documentation will result in a zero (0) grade. Acceptable reasons might include hospital stays, serious illness, family emergencies (like serious accidents, illness or death) or similar circumstances. In the case of a missed assignment, a 1-day extension will be provided beyond the reported absence. In the case of a missed quiz, weighting is re-distributed evenly to the other quizzes. In the case of a missed midterm, the weighting is shifted to the final exam.

Course/University Policies

1. Statement on Use of Personal Response Systems (“Clickers”)

If Personal Response Systems (“Clickers”) are used in the course, a reference to the Guidelines for their use (Guidelines are shown below). Instructors are to communicate clearly to students information on how clickers are used including: how the student’s privacy will be protected, how clickers may be used by the instructor for data gathering and for evaluating the students, and why they cannot be used by anyone but the student (since the students involved in misuse of a clicker may be charged with a scholastic offence).

2.

regarding noise or other disruptive behavior (e.g. watching videos on YouTube.com, updating your Facebook status, playing Solitaire), your classroom privileges will be revoked. From time to time, your professor may ask the class to turn off all computers, to facilitate learning or discussion of the material presented in a particular class. Unless explicitly noted otherwise, you may not make audio or video recordings of lectures – nor may you edit, re-use, distribute, or re-broadcast any of the material posted to the course website.

#### 4. Health and Wellness:

Information regarding health and wellness-related services available to students may be found at <http://www.health.uwo.ca/>.

Students who are in emotional/mental distress should refer to Mental Health@Western (<http://www.health.uwo.ca/>) for a complete list of options about how to obtain help.

#### 5. Support Services

There are various support services around campus and these include, but are not limited to:

1. Student Development Centre -- <http://www.sdc.uwo.ca/ssd/>
2. Student Health & Wellness -- <http://www.health.uwo.ca/>
3. Registrar's Office -- <http://www.registrar.uwo.ca/>
4. Ombudsperson Office -- <http://www.uwo.ca/ombuds/>

#### 6. Accommodation, Illness Reporting and Academic Considerations:

[http://www.westerncalendar.uwo.ca/PolicyPages.cfm?Command=showCategory&PolicyCategoryID=1&SelectedCalendar=Live&ArchiveID=#Page\\_12](http://www.westerncalendar.uwo.ca/PolicyPages.cfm?Command=showCategory&PolicyCategoryID=1&SelectedCalendar=Live&ArchiveID=#Page_12)

#### 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: [Academic Accommodation for Students with Disabilities](#).

#### Religious Accommodation

Students should consult the University's list of recognized religious observances: [http://www.westerncalendar.uwo.ca/PolicyPages.cfm?Command=showCategory&PolicyCategoryID=1&SelectedCalendar=Live&ArchiveID=#Page\\_12](#)

grade is inappropriate. Please be aware that in requesting a grade reassessment, your grade could go up/down/or stay the same. Note that calculations errors (which do occur!) should be brought to my attention immediately.

Generally, students can expect some form of feedback on their performance in a course before the drop date.

November 12th, 2020

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.

Note that disruptive behaviour of any type during online classes, including inappropriate use of the chat function, is unacceptable. Students found guilty of Zoom-bombing 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](#) for students

#### 12. Student Code of Conduct

The purpose of the Code of Student Conduct is to define the general standard of conduct expected of students registered at Western University, provide examples of behaviour that constitutes a breach of this standard of conduct, provide examples of sanctions that may be imposed and set out the disciplinary procedures that the University will follow. For more information, visit