

School of Kinesiology  
Faculty of Health Sciences  
Western University

**KIN 3341A - BIOMECHANICAL ANALYSIS OF PHYSICAL ACTIVITY  
Fall 2018**

**Instructor:** Dr Jim Dickey

**Location:** TBD

**Lectures:** Monday/Friday 1:30-2:20

**Laboratories:** TBD

**TAs:** TBD

**Office:** Thames Hall 3159A

**Office Hours:** arranged by email

**Instructor Contact:** (email preferred)

**Phone:** 519-661-2111 x87834

**Email:** jdickey@uwo.ca

**NOTE:** All course information including grades, assignment outlines, deadlines, etc. are available via OWL. Check the website regularly for course announcements.

**Calendar Course Description:**

This course is designed as a second exposure to biomechanics for students in the School of Kinesiology. Emphasis is on application of fundamental principles of Biomechanics to basic human motor tasks. These principles will be reinforced through a laboratory experience.

Students will need a calculator with trigonometric functions. Please, bring your calculator to ALL lectures and lab sessions.

**NOTE:** YOU WILL NOT BE PERMITTED TO USE YOUR PHONE AS A CALCULATOR IN ANY QUIZES OR EXAMINATIONS.

**Anti-requisite(s)|Pre-requisite(s)|Co-requisite(s)**

*You are responsible for ensuring that you have successfully completed all course pre-requisites, and that you have not taken an anti-requisite course.*

*Unless you have either the requisites for this course or written special permission from your Dean to enroll in it, you may be removed from this course and it will be deleted from your record. This decision may not be appealed. You will receive no adjustment to your fees in the event that you are dropped from a course for failing to have the necessary prerequisites.*

**Course Format:**

Lectures: Monday, Friday, 1:30 – 2:30 pm

Location TBD

Laboratories: One of Wednesday 8:30 a.m.-10:30 a.m., 12:30-2:30 p.m., 2:30 p.m.-4:30 p.m., 4:30-6:30 p.m.

**Recommended Text:** Anthony J. Blazevich, Sports Biomechanics. The Basics: Optimizing Human Performance. 3<sup>rd</sup> Edition. A&C Black Publishers Inc., London, 2017. (note that this text is available as an e-Book through the library – for free, and through Weldon Library 1st Floor Reserves - 7 Day Loan QP303.B63 2017).

### Learning Outcomes:

The students will undertake a hands-on quantitative analysis of simple physical tasks using instrumentation available in the Biomechanics Laboratory. Associated theory will be taught in lectures.

Upon completion of this course students will be able to:

1. **Identify and delineate** theoretical terms, concepts, and fundamental principles related to basic biomechanics (Knowledge)
2. **Compare and contrast** different theoretical approaches to basic biomechanics topics, such as work versus power. (Analysis)
3. **Develop** analytic problem-solving skills in basic biomechanics (Application)
4. **Further develop** abilities to *critically reflect* upon own learning and relate to the topics discussed in class. (Reflection)

### Required Course Material:

All required readings and lecture notes will be posted on OWL.

Course Evaluation Summary: (this is an example)

1.	Labs: 4*5%	20%
2.	First Midterm (Monday October 1 <sup>st</sup> )	10%
3.	Second Midterm (Friday November 1 <sup>st</sup> )	15%
4.	Final Exam	55%

### Course Evaluation Details:

1. Labs will be announced in class and on OWL. The laboratory evaluations are comprised of short-answer quizzes completed at the end of the laboratory sessions.
2. The first midterm covers material covered in classes and labs to that point in the term. It will include short answer questions and calculations.
3. The second midterm is cumulative, covering material covered in classes and labs to that point in the term. It will emphasize material since the first midterm.
4. The final exam is cumulative, covering material covered in classes and labs from the entire term. It will be comprised of short-answer questions, calculations, and interpretations.

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### Course/University Policies

1. **Lateness/Absences:** Laboratory evaluations are completed at the end of the laboratory experiences, and will not be accepted late, except under medical or other compassionate circumstances. Appropriate documentation for assignments worth less than 10% should be submitted to the instructor. A missed mid-term examination without appropriate documentation will result in a zero (0) grade.
2. **Written documentation:** Whenever possible, students who require academic accommodation should provide notification and documentation in advance of due dates, examinations, etc. stating specific reasons and dates. Students must follow up with their professor and their Academic Counselling office in a timely manner. Documentation for medical requests (which should be obtained at the time of the initial consultation with the physician or walk-in clinic) for accommodation, must be submitted directly within two (2) business days after the end date on the documentation, to the appropriate Academic Counselling office of the

student's Faculty/School of registration (e.g. KIN students will submit to the KIN Undergraduate Office), not to the instructor. An "Accommodation Consideration Request Form" found online or in the Kinesiology Undergraduate Office" for ALL accommodation requests must be submitted into the appropriate Academic Counselling office of the student's Faculty/School of registration. These documents will be retained in the student's file, and will be held in confidence in accordance with the University's Official Student Record Information Privacy Policy. [https://www.uwo.ca/fhs/kin/undergrad/files/accommodation\\_request.pdf](https://www.uwo.ca/fhs/kin/undergrad/files/accommodation_request.pdf)

3. **Grades:** Laboratory quizzes will be taken up in the subsequent laboratory. Midterm exams will be taken up in class. Should you have a concern regarding the grade you received for these assessments, or feel that it is unfair in any way, you must wait 24 hours from the receipt of the assignment to approach the instructor. In doing so, please make an appointment and prepare in writing, with evidence, why you feel your 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. 15% of course grades will be posted by the last day to drop a course.

A+	90-100	<i>One could scarcely expect better from a student at this level</i>
A	80-89	<i>Superior work that is clearly above average</i>
B	70-79	<i>Good work, meeting all requirements and eminently</i>
C	60-69	<i>Competent work, meeting requirements</i>
D	50-59	<i>Fair work, minimally acceptable.</i>
F	below 50	<i>Fail</i>

4. **Scholastic offences:** They are taken seriously and students are directed to read the appropriate policy, specifically, the definition of what constitutes a Scholastic Offence, at the following Web site:  
[http://www.uwo.ca/univsec/handbook/appeals/scholastic\\_discipline\\_undergrad.pdf](http://www.uwo.ca/univsec/handbook/appeals/scholastic_discipline_undergrad.pdf).

A) Students must write their essays and assignments in their own words. Whenever students take an idea, or a passage from another author, they must acknowledge their debt both by using quotation marks where appropriate and by proper referencing such as footnotes or citations. Plagiarism is a major academic offence (see Scholastic Offence Policy in the Western Academic Calendar). All required papers may be subject to submission for textual similarity review to the commercial plagiarism detection software under license to the University for the detection of plagiarism. All papers submitted for such checking will be included as source documents in the reference database for the purpose of detecting plagiarism of papers subsequently submitted to the system. Use of the service is subject to the licensing agreement, currently between Western University and Turnitin.com <http://www.turnitin.com>

B) Computer marked multiple-choice tests and/or exams may be subject to submission for similarity review by software that will check for unusual coincidences in answer patterns that may indicate cheating.

5. **Formatting:** Laboratory quizzes, midterms and final exams must be completed in a clear and legible manner.

6. According to the **Examination Conflict policy**, Please see the Office of the Registrar policy on Exam Conflict and Multiple Exam Situations  
[www.registrar.uwo.ca/examinations/exam\\_schedule.html](http://www.registrar.uwo.ca/examinations/exam_schedule.html)

7. **Classroom Behaviour:** Class will begin promptly at the time specified at the top of page one of this syllabus. In the event that you must arrive late, please enter the classroom with a minimal disturbance to the class. Please keep all electronic devices on silent and avoid distracting classmates. .

8. **Laptops** for the purpose of typing lecture **notes are permitted in class**, but please be respectful to your fellow students and turn the sound off. You are expected to use the computer for scholastic purposes only, and refrain from engaging in any activities that may distract other students from learning. 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.** If I receive complaints from other students regarding noise or other disruptive behavior laptop privileges will be revoked.

9. Regarding **Illness:** please refer to the following document:  
[https://www.uwo.ca/univsec/pdf/academic\\_policies/appeals/accommodation\\_illness.pdf](https://www.uwo.ca/univsec/pdf/academic_policies/appeals/accommodation_illness.pdf)

The University recognizes that a student's ability to meet his/her academic responsibilities may, on occasion, be impaired by medical illness. Illness may be acute (short term), or it may be chronic (long term), or chronic with acute episodes. The University further recognizes that medical situations are deeply personal and respects the need for privacy and confidentiality in these matters. However, in order to ensure fairness and consistency for all students, academic accommodation for work representing 10% or more of the student's overall grade in the course shall be granted only in those cases where there is documentation indicating that the student was seriously affected by illness and could not reasonably be expected to meet his/her academic responsibilities.

A UWO Student Medical Certificate (SMC) is required where a student is seeking academic accommodation. This documentation should be obtained at the time of the initial consultation with the physician or walk-in clinic. An SMC can be downloaded under the Medical Documentation heading of the following website:  
[http://www.uwo.ca/univsec/pdf/academic\\_policies/appeals/medicalform.pdf](http://www.uwo.ca/univsec/pdf/academic_policies/appeals/medicalform.pdf)

Documentation is required for non-medical absences where the course work missed is more than 10% of the overall grade. Students may contact their Faculty Academic Counselling Office for what documentation is needed.

Whenever possible, students who require academic accommodation should provide notification and documentation in advance of due dates, examinations, etc. Students must follow up with their professors and their Academic Counselling office in a timely manner. Documentation for medical requests for accommodation must be submitted within two (2) business days after the end date on the documentation, to the appropriate Academic Counselling Office of the student's Faculty of registration. For KIN students, you may go to the School of Kinesiology in 3M Centre room 2225 NOT to the instructor. It will be the Academic Counselling office that will determine if accommodation is warranted.

#### 10. **Health and Wellness:**

As part of a successful undergraduate experience at Western, we encourage you to make your health and wellness a priority. Western provides several on-campus health-related services to help you achieve optimum health and engage in healthy living while pursuing your degree. For example, to support physical activity, all students receive membership in Western's Campus Recreation Centre as part of their registration fees. Numerous cultural events are offered throughout the year. Please check out the Faculty of Music web page

(<http://www.music.uwo.ca/>), or the McIntosh Gallery <http://www.mcintoshgallery.ca/>  
Further information regarding health and wellness-related services available to students may be found at <http://www.health.uwo.ca/>.

Students who are in emotional or mental distress should refer to Mental Health@Western (<http://www.uwo.ca/uwocom/mentalhealth/>) for a complete list of options about how to obtain help. To help you learn more about mental health, Western has developed an interactive mental health learning module, found here:

[https://uwo.ca/health/mental\\_wellbeing/education/module.html](https://uwo.ca/health/mental_wellbeing/education/module.html).

### **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 <https://www.uwo.ca/univsec/pdf/board/code.pdf>

### **ENGLISH PROFICIENCY FOR THE ASSIGNMENT OF GRADES**

Visit the website [http://www.uwo.ca/univsec/pdf/academic\\_policies/exam/english.pdf](http://www.uwo.ca/univsec/pdf/academic_policies/exam/english.pdf)

### **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* -- <http://www.shs.uwo.ca/student/studenthealthservices.html>
3. *Registrar's Office* -- <http://www.registrar.uwo.ca/>
4. *Ombudsperson Office* -- <http://www.uwo.ca/ombuds/>

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.