

School of Kinesiology  
Faculty of Health Sciences  
Western University

**KIN 3341A - BIOMECHANICAL ANALYSIS OF PHYSICAL ACTIVITY**  
**Fall 2017**

<b>Instructor:</b>	Dr Jim Dickey	<b>Office:</b>	TH 3159A
<b>Location:</b>	FNB-1240	<b>Office Hours:</b>	by appointment
<b>Lectures:</b>	Monday, Friday, 1:30 – 2:30 pm	<b>Phone:</b>	519-661-2111 ext 87834 (email preferred)
		<b>Email:</b>	jdickey@uwo.ca

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**NOTE:** All course information including grades, assignment outlines, deadlines, etc. are available via OWL.

**Course Description:**

The course is designed as a second exposure to biomechanics for BA or BSc students in the School of Kinesiology. Emphasis is on the application of fundamental principles of biomechanics to basic motor tasks. These principles will be reinforced through laboratory experiences.

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) if applicable:**

**Prerequisite:** Kinesiology 2241a/b

**Antirequisites:** KIN 3343a/b and KIN 3353 a/b

You are responsible for ensuring that you have successfully completed all course pre-requisites, and that you have not taken an anti-requisite course. Lack of a pre-requisite or the completion of an anti-requisite cannot be used as a basis for appeal. If you are found ineligible for a course, you may be removed from it at any time and you will receive no adjustment to your fees. This decision cannot be appealed.

**Course Format:**

**Lectures (FNB-1240):** Monday, Friday, 1:30 – 2:30 pm

**Labs (Thames Hall 2125):** 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. Blazeovich, Sports Biomechanics. The Basics: Optimizing Human Performance. A&C Black Publishers Inc., London, 2007. (note that this text is available electronically through the library – for free)

**Supplementary Resources for students desiring additional examples and applications**

- Duane Knudson, SpringerLink. Fundamentals of Biomechanics. Boston, MA: Springer Science+Business Media, LLC; 2007. (note that this text is available electronically through the library – for free)

**Learning Objectives:**

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:**

1. Labs: 4 x 5%	20%
2. First Mid Term Exam (Monday October 16 <sup>th</sup> )	10%
3. Second Mid Term Exam (November 10th)	15%
4. Final Exam	55%

## Course/University Policies

1. **Lateness/Absences:** Assignments are due at the beginning of class on the assigned due date and will not be accepted late, except under medical or other compassionate circumstances. Electronic submission of assignments will not be accepted (unless otherwise specified) under any circumstances. Submitting a late assignment without appropriate documentation will result in a zero (0) grade. Appropriate documentation for assignments worth less than 10% should be submitted to the Undergraduate office. A missed mid-term examination without appropriate documentation will result in a zero (0) grade. The course policy is not to allow make-ups for scheduled midterms, presentations or final exams, nor to assign a grade of Incomplete without acceptable and verifiable medical (or equivalent compassionate) reasons. Acceptable reasons might include hospital stays, serious illness, family emergencies (like serious accidents or illness, death) or similar circumstances.

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 professors and their Academic Counselling office in a timely manner. Documentation for any request for accommodation shall be submitted directly, as soon as possible, to the appropriate *Academic Counselling Office* of the student's Faculty/School of registration not to the instructor, with a request for relief specifying the nature of the accommodation being requested. This documentation should be obtained at the time of the initial consultation with the physician or walk-in clinic. 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. See <https://studentservices.uwo.ca/secure/index.cfm> for specific policy and forms relating to accommodation.

3. **Grades:** Where possible assignment objectives and rubrics will be posted on OWL. Should you have a concern regarding the grade you received for an assignment or feel that it is unfair in any way, you must wait 24 hours from the receipt of the assignment to approach the instructor or TA. 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.

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 might 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** (*as recommended by the course instructor*): example- APA style is the approved style of writing for all assignments produced for this course. Please refer to Western University Library webpage for information on citation style and format or consult the APA publication manual: Publication manual of the American Psychological Association (6th ed.). (2009). Washington, DC: American Psychological Association.

6. According to the **Examination Conflict policy**, “A student who is scheduled to write more than two examinations in any 24-hour period may request alternative arrangements through the office of their Academic Counsellor.” *\*This policy does NOT apply to mid-term examinations.* There will be no make-up for the mid-term exam. Students who miss this exam with a valid reason will have the final re-weighted accordingly.

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. I reserve the right to lock the classroom door and deny entrance if lateness becomes a common occurrence. Excessive talking during class time is disruptive, disrespectful, and will not be tolerated. Students engaging in such behaviour may be asked to leave the room. Cellular phones, pagers, and text-messaging devices are disruptive when they ring in class. If you must bring these with you, please place them on silent mode or turn them off during class. Failure to do so may result in your being asked to leave.

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. If I receive complaints from other students regarding noise or other disruptive behaviour (e.g., watching videos on YouTube.com, updating your Facebook status, playing Solitaire), your classroom laptop privileges will be revoked.

9. Audio and/or videotaping of lectures is not permitted unless approval has been sought from the instructor in advance.

**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

<http://www.uwo.ca/univsec/board/code.pdf>

**ENGLISH PROFICIENCY FOR THE ASSIGNMENT OF GRADES**

Visit the website <http://www.uwo.ca/univsec/handbook/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. Ombuds Office -- <http://www.uwo.ca/ombuds/>