

Instructor: Dr. Jay T Worobets	Room: KNB 131
Phone: 403-220-2704	Days: Tuesday and Thursday
Email: worobets@kin.ucalgary.ca	Time: 09:30 – 10:45
Office: KNB 416	Course Website: https://blackboard.ucalgary.ca
Office Hours: by appointment	

Course Description: Functional characteristics of muscle, bone, cartilage, tendon, ligament, and joints as they relate to movement and loading of the locomotor system.

Course Objectives: Biomechanics of the human locomotor system with special consideration of
 (a) force system analysis with the help of the free body diagram, and
 (b) bio-mechanical aspects of biological materials as they relate to movement

Required Reading Materials: Biomechanics of the Musculo-Skeletal System. Nigg and Herzog (eds.), John Wiley & Sons. ISBN-13978-0-470-01767-8 (HB)
 (recommended but not required)

Contacting the Instructor: Students requiring assistance are encouraged to speak with their instructor during class or office hours. Should you wish to meet with the instructor outside of office hours, please phone or email the instructor to make an appointment.

Email, while commonly used, does limit the effectiveness of communications and may not be the best way for instructors to answer student questions. Therefore, the instructor may request a telephone call or personal meeting. Your instructor will inform you as to his/her expectations about emails.

Teaching Assistants:

Dr. John Whitting	KNB 225	jwhitting@kin.ucalgary.ca	220-3449	Wed 09-10
Hendrik Enders	KNB 222	henders@kin.ucalgary.ca	220-5450	Wed 09-10
Stefan Hoerzer	KNB 218	shoerzer@kin.ucalgary.ca	220-3853	Mon 15-16
Jennifer Baltich	KNB 218	jbaltich@kin.ucalgary.ca	220-5142	Wed 09-10
Nicole Schrier	KNB 2220	nschrier@kin.ucalgary.ca	220-7119	Wed 11-12

Grading Scale:

Grade	Percent	Grade Point Value	Description
A+	95.0 - 100	4.00	Outstanding
A	90.0 - 94.9	4.00	Excellent - superior performance, showing comprehensive understanding of subject matter.
A-	86.0 - 89.9	3.70	
B+	82.0 - 85.9	3.30	
B	78.0 - 81.9	3.00	Good-clearly above average performance with knowledge of subject matter generally complete.
B-	74.0 - 77.9	2.70	
C+	70.0 - 73.9	2.30	
C	66.0 - 69.9	2.00	Satisfactory – basic understanding of the subject matter. Grade point average below 2.00 is not sufficient for promotion.
C-	62.0 - 65.9	1.70	Minimum grade required if needed as a prerequisite course.
D+	58.0 - 61.9	1.30	
D	55.0 - 57.9	1.00	Minimal pass – marginal performance; generally insufficient preparation for subsequent courses in the same subject.
F	< 55.0	0	Fail – unsatisfactory performance or failure to meet course requirements.

Evaluation of Course Content:

Requirements:	Quizzes:	Six quizzes (5 to 10 minutes) at the beginning of lecture on the material covered in the previous 2 lectures.
	Presentation:	Groups of four students about a defined topic (power-point).
	Midterm Exams:	Two midterm exams.
	Oral Exam:	A final oral exam of one hour on force system analysis, biological materials, applied topics and own presentation

Grading:	Quizzes	20 %	best 5 out of 6
	Midterm I	20 %	
	Midterm II	20 %	
	Presentation	20 %	
	Oral Exam	20 %	

Final Examination:

Final oral examinations will be held in Room KNB 214 on Dec 4 and Dec 6 based on a pre-arranged schedule.

Course Content:

The presentations are summaries of material resulting from research of the literature and of ongoing work in the HPL. Each group consists of four members. Equal marks will be given for each member of the group.

The assessment of the presentation is based on: (a) The initial literature search and summary, (b) The quality and comprehensiveness of content and (c) The quality of the presentation.

The time table for the presentations is

Oct 30 (12:00)	Summary of review of the literature consisting of (a) One page structured summary (b) List of references (APA-format)
Nov 20, 22, 27, 29	Presentations in class. (16 minute presentation, 5 minute discussion).

TIMETABLE

Day	Date	Content	Lecturer	Quiz	
Tue	Sept 11	Lecture	Introduction & Force System Analysis	Worobets	
Thur	Sept 13	Lecture	Force System Analysis	Worobets	
Tue	Sept 18	Lecture	Force System Analysis	Worobets	
Thur	Sept 20	Lecture	Bone	Worobets	Quiz 1
Tue	Sept 25	Lecture	Bone	Worobets	
Thur	Sept 27	Lecture	Bone	Worobets	Quiz 2
Tue	Oct 02	Midterm	Force System Analysis & Bone		
Thur	Oct 04	Lecture	Muscle	Worobets	
Tue	Oct 09	Lecture	Muscle	Worobets	
Thur	Oct 11	Lecture	EMG	Worobets	Quiz 3
Tue	Oct 16	Lecture	Tendon & Ligament	Worobets	
Thur	Oct 18	Lecture	Tendon & Ligament	Worobets	Quiz 4
Tue	Oct 23	Lecture	Cartilage	Worobets	
Thur	Oct 25	Lecture	Cartilage	Clark	Quiz 5
Tue	Oct 30	Midterm	Muscle/EMG/Tendon/Ligament/Cartilage		
Thur	Nov 01	Lecture	Injury	Worobets	
Tue	Nov 06	Lecture	Joint Energetics	Worobets	
Thur	Nov 08	Lecture	Sport Biomechanics	Worobets	Quiz 6
Tue	Nov 13	Reading Days			
Thur	Nov 15	Lecture	Presentation Preparation	Worobets	
Tue	Nov 20	Presentations			
Thur	Nov 22	Presentations			
Tue	Nov 27	Presentations			
Thur	Nov 29	Presentations			
Tue	Dec 04	Oral Exam	(in KNB 214)		
Thur	Dec 06	Oral Exam	(in KNB 214)		

Supplementary Course Information

In accordance with the University of Calgary Calendar

Instructor Responsibilities

Each instructor responsible for a course is required to make a course outline available to each student no later than first meeting date for the course. It is expected that the outline will be available as a Web based document or through the learning management system (i.e. Blackboard). If it is not, a paper version of the outline will be handed out to every student at the first meeting of the class, and made available for those unable to attend the first class. Printing of course outlines can be obtained through Laura Styler, Assistant Administrator lstyler@ucalgary.ca.

Academic Accommodation Awareness Information:

It is the student's responsibility to request academic accommodation. If you are a student with a documented disability who may require academic accommodation and have not registered with the Disability Resource Centre, please contact their office at 220-8237. You are also required to discuss your needs with your instructor no later than fourteen (14) days after the commencement of this course. Students who have not registered with the Disability Resource Centre are not eligible for formal academic accommodation.

Plagiarism/Cheating/Other Academic Misconduct: (see Calendar)

A single offence of cheating, plagiarism, or other academic misconduct is a serious act that will not be tolerated in the Faculty of Kinesiology. Penalties for such acts will be determined by the Dean and may result in a failing grade, probation, suspension, or expulsion. Any student who is uncertain if an action falls into this category should consult the instructor and/or the Calendar.

Midterm Exam Policy:

The Faculty of Kinesiology policy is that all students are expected to write midterm exams on the dates listed on the course outline. Special accommodation may be granted by the instructor in exceptional circumstances only which include illness, participation in athletic events (varsity, national or international), domestic affliction, and religious conviction. It is the student's responsibility to supply proper documentation and/or notification prior to the originally scheduled midterm to support their circumstance. Personal travel plans and arrangements are not valid reasons for requesting a special accommodation for a midterm exam. Failure to comply with this policy will result in a grade of zero for the midterm and possible failure in the course.

FOIP Policy:

Please note that the University is under the jurisdiction of the provincial Freedom of Information and Protection of Privacy (FOIP) Act. Please refer to the website for details: <http://www.ucalgary.ca/secretariat/privacy>

Internet and Electronic Communication Device Information:

Any surfing of the Internet during lectures that is not directly related to the class discussion is distracting and strictly forbidden. Additionally, the use of any electronic devices (e.g., cellular phones, Blackberrys) for e-mailing, texting, etc. is strictly prohibited. Please turn OFF your phone before the beginning of each lecture.

Instructors have the authority, at the discretion of the dean of their faculty, to require that specific course assignments, term papers and academic exercises be submitted in an electronic format. Instructors cannot require that multiple copies of an assignment be submitted.

Emergency

For classes in the Kinesiology buildings Primary assembly point is the MacEwan

**Evacuation/Assembly
Points:**

Student Centre - North Courtyard and the Alternate assembly point is University Theatres Lobby

Safewalk Information:

Safewalk volunteers walk people safely to their destination on campus (including Health Sciences, Children's Hospital, McMahon Stadium, and University LRT station). This service is free and available to students, staff and campus visitors. Call 403-220-5333 (24 hours a day/7 days a week/365 days a year).

Student's Union:

The Kinesiology Representative is Calindy Ramsden

E-mail: kinesrep@su.ucalgary.ca.