

**CALIFORNIA STATE UNIVERSITY, NORTHRIDGE**  
**Department of Kinesiology**  
**KIN 345L – Biomechanics Lab**

**Course Information:**

Course Code: 13175, 93 & 94  
Units: 1  
(Intramurals)  
Semester/Year: SPR 2008  
Location: RE 174  
Meeting Time: T 14:00-16:50  
R 14:00-16:50  
F 10:00-12:50

**Instructor Information:**

Instructor: Chris McClain, CSCS  
Office: RE100A  
Phone: (818) 677-3225  
E-mail: [chris.mcclain@csun.edu](mailto:chris.mcclain@csun.edu)  
Office Hours: By appointment

**Prerequisite:** Biology 211/212 or Kin 275; passing score on ELM.

**Required Text:** *Biomechanics Laboratory Manual* (QuickCopies in Matador Bookstore).

**Course Description:** Biomechanical analysis of human movement based on anatomical concepts and mechanical laws of motion.

**Course Objectives:** At the conclusion of this course, the student will be able to:

1. Describe and understand fundamental biomechanical concepts as applied to human movement.
2. Solve basic biomechanical problems using physics and mathematics (e.g. force, torque, kinematics, friction).
3. Understand human movement using biomechanical instrumentation.

**Student Grades/Evaluations:**

Quizzes	350 points
Problem Sets	100 points
Midterm	125 points
Final	125 points
Oral Presentations	100 points
Lab Report	100 points
<u>Literature Review</u>	<u>100 points</u>
Total	1000

**Grading Scale: (%)**

A	93-100	C	72-77
A-	90-92	C-	70-71
B+	88-89	D+	68-69
B	82-87	D	62-67
B-	80-81	D-	60-61
C+	78-79	F	<60

**Class Guidelines:**

1. 10% will be deducted for every day an assignment/problem set is turned in late.
2. Quizzes will start promptly at the beginning of class and will end 30 min later.
3. Students arriving late may still take the quiz but will not receive additional time.
4. Students arriving after quizzes are collected will receive a zero grade for that quiz.
5. No make up quizzes are given.

**Attendance:**

Attendance is mandatory for every lab. It is not possible to provide make-up opportunities given the time to set up and arrange the use of the equipment and locations we will use for our labs. If you miss a lab,

you simply lose the points assigned for the lab. Excessive absences will lower your grade according to the following scale: 4 absences=1 letter, 5=2, 6=3 and 7=automatic fail!

**Statement on Cheating and Plagiarism:**

Any student caught cheating on an exam or written assignment will automatically fail the course, and may be subject to more severe University discipline. Please refer to the California Code of Regulations, Section 41301, Title 5 as found in the university catalog.

**Students with Disabilities:**

This instructor, in conjunction with California State University Northridge, is committed to upholding and maintaining all aspects of the federal Americans with Disabilities Act of 1990 (ADA) and Section 504 of the Rehabilitation Act of 1973. If you are a student with a disability and wish to request accommodations, please contact the office of Students With Disabilities Resources located in 110 Student Services Building, or call (818) 677-2684 for an appointment. Any information regarding your disability will remain confidential. Because many accommodations require early planning, requests for accommodations should be made as early as possible. Any requests for accommodations will be reviewed in a timely manner to determine their appropriateness to this setting.

**Statement on Personal Communication Devices:**

All students are reminded to turn off all personal communication devices (cell phones, PDAs, pocket computers, etc.) at the start of each class period, and to leave these devices turned off for the duration of the class period. If you need to leave your personal communication device on for **emergency purposes only**, you must notify the instructor before the class period begins. Due to the disruptive nature of these personal communication devices on the educational process, failure to comply with these rules will result in a loss of points toward the student’s overall class grade. Specifically, five percent (5%) will be deducted from the student’s overall class grade for each disruptive occurrence.

**Students are expected to read the relevant chapter in the lab manual prior to class.**

<b>Week</b>	<b>Laboratory</b>	<b>Assignment Due/Quiz</b>
1	No Lab	
2	Functional Anatomy	
3	Mathematical Foundations	
4	Mathematical Foundations	<b>Quiz:</b> Functional Anatomy
5	EMG	<b>Quiz:</b> Mathematical Foundations Problem Set 1 Due
6	EMG in class project	
7	GRF and Gait Analysis	<b>Quiz:</b> EMG
8	Literature Review & <b>Midterm</b>	EMG Lab Report Due
9	NO CLASS...SPRING BREAK...HAVE FUN!	
10	NO CLASS...RECOVER FROM SPRING BREAK!	
11	Oral Presentation of EMG project (Group)	<b>Quiz:</b> GRF/Gait Analysis
12	Torque	Problem Set 2 Due
13	Friction	<b>Quiz:</b> Torque
14	Momentum	<b>Quiz:</b> Friction Articles Due (Lit. Review)
15	Oral Presentation of Lit. Review (individual)	<b>Quiz:</b> Momentum Literature Review Due
16	Final Exam	
17	Last week to turn-in make-up assignments	Good Luck On Your Finals!

**Please note: Schedule is subject to change as circumstances may dictate.**