
University of Nevada, Las Vegas
Department of Kinesiology and Nutrition Sciences
KIN 346: Biomechanics, 4 credits
Spring 2016
Lectures: M/W 8:30-9:45

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Or by appointment

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Prerequisites Math 124 or above and KIN 245

Course Description

A mechanical analysis of the internal and external forces acting on the human body and the effects of these forces. Emphasis will be placed on the development of skills to analyze movement both qualitatively and quantitatively.

Course Text

Biomechanical Basis of Human Movement, 4th Edition
J. Hamill & K.M. Knutzen
Lippincott, Williams & Wilkins, 2014

Laboratory

Labs will begin the **FIRST** week of classes. All laboratory sections will meet in MPE 318. You must attend your assigned laboratory section.

Supplies you will likely need for lab include paper, pen/pencil, calculator, protractor and graph paper. Your instructors will let you know in advanced if there are additional materials you will need to bring.

An online supplement to the text, MaxTRAQ, will be used for some of the laboratory assignments. This is available with the purchase of the textbook and can also be found on computers in the BHS computer lab (BHS 200).

Additional Resources

Throughout the semester additional readings, assignments and information will be posted on WebCampus.

Learning Objectives

By the end of this course students should be able to:

1. Describe human motion using appropriate, well-defined terminology.
2. Understand Newton's Laws and know how to apply them to identify causes of human motion.
3. Demonstrate a conceptual and computational proficiency with the above objectives.
4. Demonstrate an understanding of the real world applications of the course materials.

Course Evaluation (grades are out of a total of 1000 points)

Exams	600 points
Problem sets	100 points
Literature Review	100 points
Laboratory Grade	150 points
Quizzes	20 points
Journals	30 points

Exams: There will be three mid-semester and one final exam for this class. The **final exam** will be comprehensive and will take place, according to the University schedule. Each exam will be worth 200 points, therefore, only the grades for three of the exams will count towards your final grade. This means that if you have a "bad" mid-semester exam you can drop the grade by doing better on the cumulative final exam. It also means that if you are pleased with your exam grades before the final, you can choose not to take it. (But you will have to let me know ahead of time if you intend to take the final exam.)

Problem Sets: Homework assignments are *due at the beginning* of class. Any assignment not submitted during the first 10 minutes of class will be considered late, and will not be accepted. There will be a total of six problem sets for this class.

Literature Review: The literature review will consist of a paper and an associated presentation or kinesiology related activity. Details on the project specifics and due dates will be provided separately, early in the semester.

Quizzes and Journal grades will be graded as submitted in acceptable form (full credit) or not (no credit). As long as an honest effort has been given, you will not be punished for incorrect answers. Quizzes will be given periodically and will be designed so that you and I know whether or not we are on track with the material being covered. Similarly, you will complete a journal on WebCampus when assigned so that we can communicate about material comprehension.

Extra Credit Policy: There will be no extra credit.

Grading :	≥925	A
	895-924	A-
	855-894	B+
	825-854	B
	795-824	B-
	755-794	C+
	725-754	C
	695-724	C-
	595-694	D
	<595	F

Grades will be not be rounded

For example 854 point will earn you grade of a B and 855 will earn you a grade of a B+.

Attendance Policy

Lecture: Attendance will not be taken in lecture. However, prior experience shows that students who attend class regularly tend to perform much better on the exams. With very few exceptions, people who fail the course have had poor attendance.

Students are responsible for obtaining information/notes for missed lectures. The instructor is available (after class, office hours) to clarify lecture material missed.

You must attend the lecture section that you are enrolled in. If on occasion you have a reason that you need to attend the other lecture contact Dr. Freedman Silvernail to obtain prior permission.

Lab: Attendance will be taken for labs and will factor into your grade.

Missed Exams: No make-up exams will be given and students will receive a grade of zero on the missed exam. The only exception to this is if a documented justified emergency event prevents you from attending. This will be decided by the Instructor and will be considered on an individual basis.

Classroom Conduct

Plagiarism/Cheating: Zero tolerance; No points (0) will be awarded for activity and student will be referred to the Office of the Vice President for Student Life and Student Conduct for further review/penalty/punishment. This is a very serious matter and *can* result in expulsion.

To avoid possible confusion regarding cheating, no hats may be worn during examinations or quizzes. Additionally, calculators used for quizzes and exams may not be phones or any other smart device. You must use a basic calculator that has no additional capabilities. All exam and quiz questions will be written with this in mind and will only require basic math and trigonometry functions.

It is expected that behavior in class will be conducive to a collaborative learning environment. Anyone distracting from this atmosphere may be asked to leave class.

Course Content

See class schedule for approximate dates for each topic covered.

Exam Schedule

Exam #1 Monday February 22nd

Exam #2 Wednesday March 16th

Exam #3 Wednesday April 27th

Final Exam according to the University Schedule:

Wednesday May 11th 8:00-10:00 am

University Policies and Resources

Changes to this syllabus - Due to extenuating circumstances this syllabus may be changed by the instructor, however sufficient notice will be provided to the student.

Academic Misconduct – Academic integrity is a legitimate concern for every member of the campus community; all share in upholding the fundamental values of honesty, trust, respect, fairness, responsibility and professionalism. By choosing to join the UNLV community, students accept the expectations of the Student Academic Misconduct Policy and are encouraged when faced with choices to always take the ethical path. Students enrolling in UNLV assume the

obligation to conduct themselves in a manner compatible with UNLV's function as an educational institution.

An example of academic misconduct is plagiarism. Plagiarism is using the words or ideas of another, from the Internet or any source, without proper citation of the sources. See the *Student Academic Misconduct Policy* (approved December 9, 2005) located at: <http://studentconduct.unlv.edu/misconduct/policy.html>.

Copyright – The University requires all members of the University Community to familiarize themselves **with** and to follow copyright and fair use requirements. **You are individually and solely responsible for violations of copyright and fair use laws. The university will neither protect nor defend you nor assume any responsibility for employee or student violations of fair use laws.** Violations of copyright laws could subject you

to federal and state civil penalties and criminal liability, as well as disciplinary action under University policies. Additional information can be found at: <http://www.unlv.edu/provost/copyright>.

Disability Resource Center (DRC) – The UNLV Disability Resource Center (SSC-A 143, <http://drc.unlv.edu/>, 702-895-0866) provides resources for students with disabilities. If you feel that you have a disability, please make an appointment with a Disabilities Specialist at the DRC to discuss what options may be available to you.

If you are registered with the UNLV Disability Resource Center, bring your Academic Accommodation Plan from the DRC to the instructor during office hours so that you may work together to develop strategies for implementing the accommodations to meet both your needs and the requirements of the course. Any information you provide is private and will be treated as such. To maintain the confidentiality of your request, please do not approach the instructor in front of others to discuss your accommodation needs.

Religious Holidays Policy – Any student missing class quizzes, examinations, or any other class or lab work because of observance of religious holidays shall be given an opportunity during that semester to make up missed work. The make-up will apply to the religious holiday absence only. It shall be the responsibility of the student to notify the instructor no later than the end of the first two weeks of classes, **January 29, 2016**, of his or her intention to participate in religious holidays which do not fall on state holidays or periods of class recess. For additional information, please visit: <http://catalog.unlv.edu/content.php?catoid=6&navoid=531>.

Incomplete Grades - The grade of I – Incomplete – can be granted when a student has satisfactorily completed three-fourths of course work for that semester/session but for reason(s) beyond the student's control, and acceptable to the instructor, cannot complete the last part of the course, and the instructor believes that the student can finish the course without repeating it. The incomplete work must be made up before the end of the following regular semester for undergraduate courses. Graduate students receiving "I" grades in 500-, 600-, or 700-level

courses have up to one calendar year to complete the work, at the discretion of the instructor. If course requirements are not completed within the time indicated, a grade of F will be recorded and the GPA will be adjusted accordingly. Students who are fulfilling an Incomplete do not register for the course but make individual arrangements with the instructor who assigned the I grade.

Tutoring – The Academic Success Center (ASC) provides tutoring and academic assistance for all UNLV students taking UNLV courses. Students are encouraged to stop by the ASC to learn more about subjects offered, tutoring times and other academic resources. The ASC is located across from the Student Services Complex (SSC). Students may learn more about tutoring services by calling 702-895-3177 or visiting the tutoring web site at: <http://academicsuccess.unlv.edu/tutoring/>.

UNLV Writing Center – One-on-one or small group assistance with writing is available free of charge to UNLV students at the Writing Center, located in CDC-3-301. Although walk-in consultations are sometimes available, students with appointments will receive priority assistance. Appointments may be made in person or by calling 702-895-3908. The student's Rebel ID Card, a copy of the assignment (if possible), and two copies of any writing to be reviewed are requested for the consultation. More information can be found at: <http://writingcenter.unlv.edu/>

Rebelmail – By policy, faculty and staff should e-mail students' Rebelmail accounts only. Rebelmail is UNLV's official e-mail system for students. It is one of the primary ways students receive official university communication such as information about deadlines, major campus events, and announcements. All UNLV students receive a Rebelmail account after they have been admitted to the university. Students' e-mail prefixes are listed on class rosters. The suffix is always @unlv.nevada.edu. **Emailing within WebCampus is acceptable.**

Library Resources – Students may consult with a librarian (www.library.unlv.edu/consultation) about research needs. For this class, the subject librarian is Xan Goodman. UNLV Libraries provides resources to support students' access to information. Discovery, access, and use of information are vital skills for academic work and for successful post-college life. Access library resources and ask questions at www.library.unlv.edu/

Final Examinations – The University requires that final exams given at the end of a course occur at the time and on the day specified in the final exam schedule. See the schedule at: <http://www.unlv.edu/registrar/calendars>.