

General Information

Instructor	Dr. Harry H. Cheng Office: 2018 Bainer Phone: 752-5020 Email: hhcheng@ucdavis.edu WWW: http://iel.ucdavis.edu/course/EME152/winter09/ Office hours: 11am-12pm MW, or by appointment (I might be in the computer lab during the office hour)
Teaching Assistant	David Ko Office: 1067 Bainer Phone: 752-1028 Email: dko@ucdavis.edu Lab hours: 1:20-2:30pm Tu, 3:10pm-4:00pm Th, 2121A Bainer Hall CAE Lab
Lecture Hours	10:00-10:50 am MWF, 1007 Giedt
Discussion Hour	4:10-5:00 pm W, 1006 Giedt
Computer Lab Hours 2121A Bainer	TA will be available at 1:20-2:30pm Tu, 3:10pm-4:00pm Th in 2121A in the lab TA may use discussion hour 4:10-5pm W in 2121A in the lab
Course Outline	Principles of computer-aided mechanism design, computer-aided kinematic, static, dynamic analysis and design of planar mechanisms such as multi-loop linkages and geared linkages. Introduction to kinematic synthesis of mechanisms. Cam design.
Prerequisites	EME 5, ENG 6 or equivalent; ENG 102
Textbooks and Manuscripts	(1) Erdman, A. G. and Sandor, G. N., <i>Mechanism Design, Analysis and Synthesis</i> , Vol I, 4th edition, Prentice-Hall, Inc., (4) Cheng, H. H., <i>C for Engineers and Scientists</i> , September 2008. (5) SoftIntegration, Inc., <i>Ch Mechanism Toolkit User's Guide</i> , version 2.1, March, 2006. http://www.softintegration.com/products/toolkit/mechanism/ .
Outcome	This course addresses the following Educational Outcomes for the Mechanical Engineering and Aeronautical Science and Engineering Programs (a) work comfortably and competently with mathematics, science, and basic engineering principles; (b) design and conduct experiments as well as collect, analyze and interpret data; (d) work comfortably on multi-disciplinary teams;

- Email List** For students enrolled in this class, your email addresses will be added to the email list eme152-w09@ucdavis.edu for the class automatically.
- Course Handouts** The course handouts are distributed at lecture time. They are available on the World Wide Web for the home page of this class at the following Uniform Resource Locator (URL) address:
<http://iel.ucdavis.edu/course/EME152/winter09/>
which is linked to the Department WWW homepage under **Courses**. For example, this handout is stored as a PDF file *general.pdf* on the web.
- Homework** Homework is given out periodically through the email in PDF file and is due on the date stated on the homework, typically on Wednesday. The homework will be assigned and collected at lecture time. Solutions to the homework assignment will be posted on the Web or in Navin's Copy Shop at 231 Third Street (phone: 758-2311) after the graded homework is given back to you. Solutions in computer programs might be posted on the web or sent to you through the email. The homework should be submitted in class. If you hand it in my office and before 5:00pm on due date, there will be 10% deduction for the *entire* homework. After that, late homework will not be accepted. You can submit later homework no more than twice.
- Examinations** *Midterm examination:* this is an open book/open notes examination. The specific date of examination will be announced one week before the examination date. No early or late exam will be given. If you miss the exam for medical reasons (You **must** document this; no other excuses are acceptable), the other parts of the course will be counted proportionally more or you may be allowed or required to take a make-up exam (the choice is the instructor's).
Final examination: a comprehensive open book/open notes examination. Wednesday, March 18, 10:30am-12:30pm, in 1007 Giedt
- Grading System** Written and computer homework 30%
Midterm examination 20%
Final examination 50%
The final grade will be given according to Gaussian distribution curve. Also be aware that I take other factors into account when assigning your final grade. For example, if you do very well on everything except one exam, I might boost your grade from the one I would assign using a strict numeric computation.

- Academic Integrity** (1) All work submitted for credit must be your own. You may discuss your assignment with classmates, with instructor, with teaching assistant, or with reader in the course to get ideas or a critique of your ideas, but the ideas and words you submitted must be your own. Unless **explicitly** stated otherwise in the homework assignment, collaboration is considered cheating and will be dealt with accordingly.
- (2) For written homework, you must write up your own solutions and may neither read nor copy another student's solutions.
- (3) For computer programs, you must create and type in your own code and document it yourself. **But, you are free to copy programs from toolkit CHHOME/toolkit/demos and modify them to solve the similar problems. Modifications made should be clearly documented. Also, you are free to seek help from instructor, TA, and reader while you are debugging a program once it is written.**