

DYNAMICS Syllabus – Summer 2006

Course Number: Engr 80, Engr CEE 80, or Engr MAE 80

Course Website: http://eee.uci.edu/06m/13015

Objective: This course is designed to develop skills in

treating the dynamic analysis of objects.

(Credit units: 4; Design units: 0)

<u>Description</u>: Kinematics of particles/ rigid bodies,

Kinetics of particles/rigid bodies,





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<u>Prerequisite</u>: Classical Physics (Physics 7B)

<u>Co-requisite</u>: Multivariable Calculus (Math 2D)

<u>Textbook</u>: *Vector Mechanics for Engineers – Dynamics, 7th*

(Required) F.P. Beer, E.R. Johnston, and E.R. Eisenberg,

McGraw-Hill, 2004 (8th edition is okay)





DYNAMICS Syllabus – Summer 2006

<u>Instructor</u>: Gangyi Zhou (Post-doctorate scholar)

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<u>Lectures</u>: Mon., and Wed. 1:00 PM - 2:50 PM

SH 128





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TA: Mr. Nasser Abbasi

Email: nabbasi@uci.edu

<u>Discussions</u>: Mon. 12:00 PM – 12:50 PM, SH 128













DYNAMICS Syllabus – Summer 2006

Office Hours:

Mon. 09:00 AM – 10:30 AM

Tue. 09:00 AM - 10:30 AM

Wed. 09:00 AM – 10:30 AM

Thu. 09:00 AM - 10:30 AM

(Dr. G. Zhou, Engr. Lab. Fac., ELF/237)





DYNAMICS Syllabus – Summer 2006

Grading: Homework 10%

Midterm Exams 20% x 2

Design project 15%

Final Exam 35%



Seventh dition

Vector Mechanics for Engineers: Dynamics

STATICS Syllabus – Fall 2005

Assignments: Homework and readings are assigned on a weekly basis.

Homework must be turned in by <u>5:00 PM on Wednesday</u> one week after it is assigned. Homework should be deposited in the CEE 80 box located at the entrance of the CEE Dept. suite at the east wing of the fourth floor of Engineering Gateway prior to the due date and time.

There will be a 50% penalty for the late homework but submitted before 12:00 PM noon on the following day (Thursday); Homework turned in after then will not be graded and will receive no credit.

Students can pick up their graded homework at the front table of SH128 when the next Wednesday's class is over.





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Examinations:

Midterm Exams will cover all materials through previous week's reading and homework assignments and will be closed-book examinations.

Final Exam will cover all materials assigned during the quarter and will be a closed-book examination.





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Class and Exam Schedule

Week 1 (06/26-06/30)	Class missed
Week 2 (07/03-07/07)	Chap. 11: Kinematics of particles, Chap. 12: Kinetics of particles:
Week 3 (07/10-07/14)	Chap. 12 (Cont'd); Chap. 13: Kinetics of particles: energy and momentum methods
Week 4 (07/17-07/21)	Chap. 13 (Cont'd); Chap 14: Systems of particles; 1st Midterm (Wed. 2:00PM-2:50PM)
Week 5 (07/24-07/28)	Chap 14 (Cont'd); Chap. 15: kinematics of rigid bodies
Week 6 (07/31-08/04)	Chap. 15 (Cont'd)
Week 7 (08/07-08/11)	Chap. 15(Cont'd); 2nd Midterm(Wed. 2:00PM-2:50PM)
Week 8 (08/14-08/18)	Chap. 16, Plane motion of rigid body
Week 9 (08/21-08/25)	Chap. 17, Energy and momentum method
Week 10 (08/28-09/01)	Chap. 17 (Cont'd); Course review; Final Exam: (Wed. 1:00PM-3:00PM)

