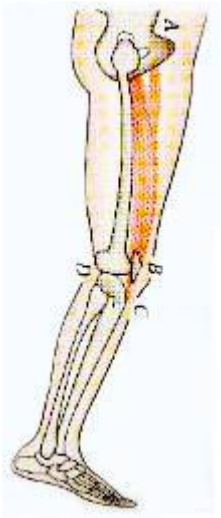


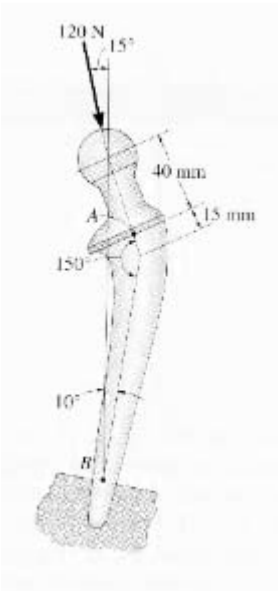
EGM 3503

APPLIED MECHANICS (4)

SYLLABUS

SPRING 2012

Modified Jan 06, 2012



Professor: Cesar Levy
Office EAS 3474
Office hours: TBD. Other times by appointment
Tel: (305) 348-3643
e-mail: levyez@fiu.edu

Textbook: Engineering Mechanics: Statics and Dynamics by RC Hibbeler 12th Ed 2011

Course Objectives

1. Identify appropriate models (particle, rigid body or deformable body for systems, especially biomechanical systems.
2. Analyze systems in static equilibrium
3. Understand and mathematically describe relationship between motion and forces
4. Use different methods to solve problems, including energy and momentum methods

Main Topics	Chapters
0. Statics	1-5, 6, 8-10
1. Kinematics of Rigid Bodies	12,16
2. Kinetics of Rigid Bodies	13, 14, 17
3. Work-Energy and Impulse-Momentum Methods for Rigid Bodies	15, 18, 19

Attendance Policy

We will meet MW 11-1150 and F 11-1250 in EC1113. Attendance is expected at all lectures, although it will not be checked. Proper learning of the course material can only be achieved through regular course attendance and an abundance of time spent completing all of the assigned homework and practicing the skills introduced in this course. You should try to make every effort in a timely manner.

Homework and Class Participation

Selected problems and readings are assigned in class. It is recommended that student complete these problems by the next lecture period for which they are assigned. The instructor will not collect any of these problems for grading. Answers to selected homework problems are provided in the text, and detailed solutions for some problems related to the topic will be available on the website http://web.eng.fiu.edu/~levy . Also, Mastering Engineering, the site related to the book, will allow you to solve the problems and give you methods of solution and the solution

As a means of encouraging interactive learning in the course, the instructor will base part of your grade on your participation in class discussions and assignments.

Exams

Three in-class exams and a comprehensive final exam will be given during the semester. All exams will be cumulative and will primarily test problem solving skills. All exams are closed books, with non-programmable calculators only. Make-up exams will generally NOT be given. However, exceptions will be made in the case of medical emergencies only. Please notify the professor in case of an emergency prior to any exam or as soon as it is possible.

Grades

Your grade for this course will be determined on the following basis:

In-class exams (22% each)	66%
Final exam will be comprehensive	34%
Total	100%

The grading scheme proposed for the Final grade is presented below

Final Percentage for the Course	Final Letter Grade		
94-100	A	73-76.9	C+
90.-93.9	A-	70-72.9	C
85-89.9	B+	67-69.9	C-
80-84.9	B	63-66.9	D+
77-79.9	B-	60-62.9	D

Grades below a 60 are considered as an F

Dishonesty

Any form of dishonesty during the semester will result in a final grade of "F" for the course and a recommendation for expulsions to the Provost. No exceptions. Please avoid dishonesty or any other form of misconduct. If you are having personal problems, come and talk to me.

Disclaimer

The course content and assignments are subject to modification when circumstances dictate and as the course progresses. If changes are made, you will be given due notice.