EK131 INTRODUCTION TO ENGINEERING
FALL 2014
MODULE M1 MECHANICAL DESIGN FOR MANUFACTURING
COURSE SYLLABUS

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Office hours: Tuesday and Thursday 7AM to Noon
Wednesday 7AM-Noon, 1-3PM
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Text: Design of Machine Elements, Spotts, Shoup and Hornberger, Prentice Hall, 8th edition ISBN 0-13-048989-1

Classroom: Photonics PHO 201

Time: Tuesdays and Thursdays 2:00-4:00PM

FALL 2014 CLASS SCHEDULE

1 Tuesday, September 2
2 Thursday, September 4
3 Tuesday, September 9
4 Thursday, September 11
5 Tuesday, September 16
6 Thursday, September 18
7 Tuesday, September 23
8 Thursday, Septmber 25
9 Tuesday, September 30
10 Thursday, October 2
11 Tuesday, October 7
12 Thursday, October 9
13. Thursday, October 16*

Monday, October 13 is a holiday, on Tuesday, October 14 a Monday schedule of courses will be held

An attendance sheet will be circulated in class each day. It is your responsibility to sign the sheet before the class is adjourned. If you arrived in class after the sheet has passed your seat, be sure to sign the sheet at the desk before leaving the classroom. Excessively and regularly late students may not get full credit for attendance for signing the attendance sheet after the end of class. Each student will have to demonstrate proficiency in the use of a user friendly computer aided design software. There will be two comprehensive tutorials in the ECL Laboratory in 15 St. Mary's Street (Room 125) and exercises consisting of 3-D engineering objects.

EK131 MODULE M1, FALL 2014

GRADING

The grading in Module M1 will be based in equal parts on class attendance, class notes, homework and a project. There will be regular homework assignments. For class notes, the preferred format will be the use of a square ruled bound notebook. This is available at the BU Barnes and Noble in Kenmore Square at a cost of about $3 (the notebook trademark is Roaring Spring). Since the notebook will have to be handed in for grading at the end of the module, you should not keep your notes for other courses in the same notebook. The square ruled format is useful in developing good sketching and graphing skills which are essential in all engineering records and communication. You should bring a calculator to every lecture. The use of laptops in class is not permitted. After the notebooks and the projects have been graded, they can be picked up any time before the end of the Spring 2015 semester.

PROJECT

There will be a simple project at the end of the module to familiarize students in this module with good technical communication and technical report format.

READING ASSIGNMENTS

There will be several handouts with reading material and data necessary to solve some of the design problems covered in class and homework. In addition the following reading assignments are from the course textbook.

Week 1: Introduction. Pages 1-14
Week 2 Chapter 1, pages 15-48
Week 3 Chapter 2, pages 119-150
Week 4 Chapter 3, pages 185-220

All the work you submit for grading is expected to be your own. You are allowed and encouraged to increase your understanding of the course material and the homework by discussions with your classmates. The homework problems and the project you hand in should be your own work. Attached is a course registration form which will log your name on the homework grade sheet and acknowledge your receipt and understanding of the course syllabus. Please fill this sheet out and hand it in before the end of the second lecture.

GRADING SUMMARY

Attendance 25%
Homework 25%
Class notes 25%
Project 25%

General Information

In order to bring current relevance to the teaching of engineering courses, to remain up-to-date on the state of the art of various technologies and to satisfy my own curiosity, I subscribe to and read(or scan) a number of publications. Some of these are available in my office for your use. If I am aware of the particular interests of some of my students, I look for and save copies of relevant, current articles about those interests. If you would like to indicate such interests to me on the appropriate line of your registration form for this course, I'll try to spot relevant articles and call your attention to them or provide you with copies for your use and information. Feel free to indicate your interest in a company, industry, technology, product line or one of the publications listed below. A partial list of publications follows.

Daily:

- The New York Times
- The Wall Street Journal
- The Boston Globe
- The Nashua Telegraph

Weekly:

- Time
- Fortune
- Aviation Week*

Monthly:

- Popular Science*
- Popular Mechanics*
- Technology News(MIT)*
- Yachting*
- Car and Driver*
- Automotive Industries*
- Manufacturing Engineering*
- Mechanical Engineering*
- Marine News*
- Maritime Reporter*
- Road and Track*
- Marine Technology*
- Outdoor Life*
- Field and Stream*
- American Rifleman *
- Guns and Ammo *

Sporadically:

- The Times(London)
- Der Spiegel
- International Herald Tribune
- Bangor Daily News
- Trout and Salmon
- La Nacion
- De Telegraaf

*Publications marked with an asterisk are routinely available in my office

1/14/2014

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CLASS LIST REGISTRATION

NAME_____

ID NUMBER_____

MAJOR_____

TERM PHONE*_____

E-MAIL ADDRESS_____

SPECIAL INTERESTS**_____

_____

*Listing your phone and email will help us get in touch with you in case of missing homework and occasionally for wakeup calls.

**Special interests refer to the publication list which will be handed out in hard copy in class.

I acknowledge the receipt of the EK131 M1 Syllabus for the Fall 2014 Semester. I have read and understand the grading policy, and the requirement for homework and the project to be the original work of the student named on the work.

_____
SIGNATURE DATE