EK131 INTRODUCTION TO ENGINEERING
FALL 2012
MODULE M1 MECHANICAL DESIGN FOR MANUFACTURING
COURSE SYLLABUS

Prof. T. A. de Winter
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Office hours: Monday 7:00-11:15AM 1:30-4:00PM
Tuesday 7:00AM - 12:00 noon
Wednesday by appointment only
Thursday 7:00AM-12:00 noon
Friday 7.00-11:15AM

Text: Spotts, Shoup and Hornberger, Design of Machine Elements, Prentice-Hall, 8th edition
Classroom: Photonics PHO 201
Time: Tuesday, Thursday 2:00AM-4:00PM
Season BU Hockey seat location:
Agganis Arena: Section 112, Row Q, Seat 2

FALL 2012 CLASS SCHEDULE

1. Tuesday, September 4
2. Thursday, September 6
3. Tuesday, September 11
4. Thursday, September 13
5. Tuesday, September 18
6. Thursday, September 20
7. Tuesday, September 25
8. Thursday, September 27
9. Tuesday, October 2
10. Thursday, October 4
11. Thursday, October 11*
12. Tuesday, October 16
13. Thursday, October 18, last EK131 class

*Monday, October 9 is a holiday, and on Tuesday, October 10 a Monday schedule of classes will be observed

An attendance sheet will be circulated in class each day. It is your responsibility to sign the sheet before the start of the next class in the classroom. If you arrived in class after the attendance sheet has passed your seat, be sure to sign the sheet at the desk before leaving the classroom. Excessively and chronically late students may not get full credit for signing the attendance sheet after the end of the class. Each student will have to demonstrate proficiency in the use of Solidworks, a sophisticated Computer Aided Design(CAD) software. There will be two comprehensive tutorials in the ECL laboratory in 15 ST. Mary's Street and exercises consisting of three dimensional engineering objects.

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GRADING

The grading in Module M1 will be based in equal parts on class attendance, class work, homework and project. There will be regular homework assignments, which will be due at 3:00PM on Fridays. This will allow questions in class to deal with the homework problems before the homework is due. You should bring a bound, square ruled notebook to every class, this will be handed in at the end of the module with your project and any other class work. You should bring a calculator to every lecture. Your notebook and project can be picked up after they have been graded. They will be available for pickup until the end of the Spring 2013 Semester.

PROJECT

There will be a simple project assigned to demonstrate the use of the course material and to provide an exercise in good technical report writing.

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 textbook.

Week 1: Introduction, Pages 1-14
Week 2: Chapter 1, pages 15-48
Week 4: Chapter 2, pages 119-150
Week 6: Chapter 3, pages 185-220

Boston University has an honor system, and all the work you submit for grading is expected to be your own. You are allowed and encouraged to increase your understanding of the material by discussing the reading material and the homework with your classmates, however, the homework problems and the project which 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 at the end of the first class.

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
- Newsweek
- Business Week
- Aviation Week*
- Fortune
- Forbes

Monthly:

- Popular Science*
- Popular Mechanics*
- Technology News(MIT)*
- The Atlantic
- Car and Driver*
- Automotive Industries*
- Manufacturing Engineering*
- Mechanical Engineering*
- Marine News*
- Maritime Reporter*
- Road and Track*
- Marine Technology*
- Yachting*
- 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

9/1/2012

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CLASS LIST REGISTRATION

Note: This information and statement simply confirm your intention to attend this course and your understanding of the syllabus, the grading policy and the honor system. This information is necessary to list you on the homework grade sheet for the course and to give you a wake-up call if you appear to have overslept.

NAME_____

ID # _____

MAJOR _____

TERM PHONE* _____

E-MAIL ADDRESS _____

SPECIAL INTERESTS**_____

*Listing your phone number and email will help us get in touch with you in the case of missing homework and occasionally for wake-up calls

**Special interests refer to the publications listed on the previous page.

I acknowledge the receipt of the EK131 M1 Syllabus for the Fall 2012 Semester. I have read and understand the grading policy and the due dates for the homework. I understand that all homework I submit for grading is expected to be my own, individual work.

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Signature Date