EK409 ENGINEERING ECONOMY FALL 2015 COURSE SYLLABUS Prof. T. A. de Winter

Office: 15 St. Mary's Street, Room 138

Phone: (617) 353 9893(office) (603) 878 2760(home)

Fax: (617) 353 5548 email tdw@bu.edu
Office hours: Tuesday and Thursday 7AM to Noon

Monday and Wednesday by appointment

Friday: 7AM-Noon

Text: Engineering Economy, Thuesen and Fabrycky, 9th edition ISBN 0-13-028128-X

Classroom: Photonics PHO 203

Time: Tuesdays and Thursdays 12:00Noon-2:00PM

GRADING

ATTENDANCE: Attendance will be taken and will count as 10% of the semester grade. If you have 2 or fewer absences, you will get full credit for attendance.

EXAMS: There will be a takehome exam from October 1 to October 6, a takehome exam from November 5 to November 10 and a final exam, also takehome. The final exam will be optional for those students who have a better than 80% in the course at the end of the semester. While the final exam schedule is not ready yet, those students taking the final can fax it in, and do not have to be on campus to take the exam. The exam average will count as 60% of the semester grade.

HOMEWORK: There will be at least 10 homework assignments. The lowest homework grade will be dropped, the homework average will count as 20% of the semester grade. PROJECT: There will be a project, to be done by teams of 5-7 students, to modify the annual report of a company which manufactures a product. The project grade, except in rare cases, will be same for every member of a team and will count as 10% of the semester grade.

FINAL GRADES: Those students, who have an average of 90% or better on the last day of EK409 classes, have earned an A in the course and are exempt from taking the final. Students with an average of 80% (a B) or better are also exempt from taking the final exam, but may, at their option, choose to take the final exam to improve their course average. Students with an average below 80% have not shown enough comprehension of the course material and are required to take the final exam.

GRADING SUMMARY: EXAM AVERAGE 60%

HOMEWORK 20% PROJECT 10% ATTENDANCE 10%

EK409 ENGINEERING ECONOMY FALL 2015

LECTURE SCHEDULE

- 1. Thursday, September 3
- 2. Tuesday, September 8
- 3. Thursday, September 10
- 4. Tuesday, September 12
- 5. Thursday, September 17
- 6. Tuesday, September 22
- 7. Thursday, September 24
- 8. Tuesday, September 29
- 9. Thursday, October 1, takehome exam
- 10 Tuesday, October 6, exam due
- 11 Thursday, October 8
- 12. Thursday, October 15*
- 13. Tuesday, October 20
- 14. Thursday, October 22
- 15. Tuesday, October 27
- 16. Thursday, October 29
- 17. Tuesday, November 3
- 18. Thursday, November 5, takehome exam
- 19. Tuesday, November 10, exam due
- 20. Thursday, November 12
- 21. Tuesday, November 17
- 22. Thursday, November 19
- 23. Tuesday, November 26
- 24. Tuesday, December 1
- 25. Thursday, December 3
- 26. Tuesday, December8
- 27. Thursday, December 10, last EK409 class

Monday, October 12 is a holiday, on Tuesday, October 13 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. No laptops, tablets or cellphones are allowed during any of the EK409 lectures.

EK409 ENGINEERING ECONOMY FALL 2015 LECTURE TOPICS

- 1. Contracts, proposals, quotations, purchase orders
- 2. Interest relationships, examples
- 3. Financing of startup companies, entrepreneurial activities
- 4. Stock ownership, stock market, optioos
- 5. Inflation
- 6. Comparison of alternative economic choices
- 7. Decision making among alternatives
- 8. Incremental return on investment
- 9. Replacement alternatives
- 10. Break-even and minimum cost analysis
- 11. Indirect cost categories and allocation
- 12. Preparation of cost proposals
- 13. Professional ethics, protocol, conflict of interest
- 14. Benefit and cost analysis
- 15. Inventories
- 16. Accounting, bookkeeping, annual reports
- 17. Depreciation
- 18. Income taxes, corporate and individual
- 19. Patents, intellectual property
- 20. Employment contracts, offers, employee status

READING ASSIGNMENTS

TOPIC	PAGES	WEEK*
1, Introduction to Engineering Economy	1-34	-
2. Interest relationships (Chapter 3)	35-65	Sept. 11
3. Economic equivalence	72-102	Sept. 18
4. Company startup and stockholders	Handout	Sept. 25
5. Inflation (Chapter 5)	115-139	Oct. 2
6. Bases for comparison (Chapter 6)	152-180	Oct. 9
7. Analysis of alternatives (Chapter 7)	190-225	Oct. 16
8. Evaluating production (Chapter 8)	244-284	Oct. 23
9. Indirect costs and proposals	Handout	Oct. 30
10. Evaluating replacement (Chapter 9)	297-331	Nov. 6
11. Annual Reports	Handout	Nov. 6
11. Evaluating public activities (Chapter 10)	344-374	Nov. 13
12. Accounting, depreciation (Chapter 11)	388-414	Nov. 20
13. Income taxes (Chapter 12)	420-456	Dec. 4

^{*} week ending

EK409 ENGINEERING ECONOMY FALL 2015 HOMEWORK ASSIGNMENTS

ASSIGNMENT	DUE DATE
1	Friday, September 11
2	Friday, September 18
3	Friday, September 25
4	Friday, October 9
5	Friday, October 16
6	Friday, October 16
7	Friday, October 23
8	Friday, October 30
9	Friday, November 13
10	Friday, November 20
11	Friday, December 4

Graded homeworks can be picked up from the slots outside the office door. Homeworks can be handed in at the office. If the door is open, there is a homework stack on the chair next to the door. If the door is closed, please slide your homework under the door.

DO NOT LEAVE YOR HOMEOWRK IN THE MAIL SLOTS NEXT TO THE OFFICE DOOR, THEY ARE FOR GRADED HOMEWORKS ONLY.

From time to time, additional material will be handed out in class. When there is a handout, including homework assignments, it will be circulated through the classroom, and copies will be available on the desktops nearest the doors. If, when entering class, you notice a handout on the corner desk, pick one up on the way to your seat. In the event you miss a handout in class, extra copies will be available in the office or in the slots outside the door.

The work you submit for grading and credit is expected to be your own work. On your exams you will be required to affirm that by signing a short statement to that effect, a copy of which is shown on the attached sample exam cover page. While homework assignments don't require an individual signed statement like the exam, they are expected to be your own work and your submission of the homework in your name will be taken as confirmation of this. In the first case of plagiarism on homework, the homework grade will be evenly divided among the students in question. In subsequent cases involving the same students, a zero grade will be given. Obvious and flagrant recurrence may be brought before the Committee on Students.

EK409 ENGINEERING ECONOMY TAKE HOME EXAMINATION OCTOBER 1, 2015

THIS EXAM IS DUE AT THE START OF THE EK409 CLASS ON OCTOBER 6, 2015

NAME	
ID NUMBER	
PROBLEM	POINTS
1	
2	
3	
4	
5	
	+
TOTAL	
This examination is my own work. I have not had or working papers, nor has anyone else had access I have not collaborated or discussed this exam with have neither given nor received any help in solvin grading with the exception of the EK409 professor	to my exam solution, notes or working papers, h anyone (excluding the EK409 professor). I g the exam problems I am submitting for
SIGNATURE	

General Information

In order to bring current relevance to the teaching of engineering courses, to remain upto-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
Aviation Week*

Popular Science*

Monthly:

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

Sporadically:

The Times(London)

Der Spiegel

International Herald Tribune

Banger Deily Nevye

Marine Technology*

Fortune

Outdoor Life*
Field and Stream*
American Rifleman *
Guns and Ammo *

Trout and Salmon

La Nacion

International Herald Tribune De Telegraaf
Bangor Daily News
*Publications marked with an asterisk are routinely available in my office

1/14/2014

EK409 ENGINEERING ECONOMY FALL 2015 CLASS LIST REGISTRATION

NAME	
ID NUMBER	
MAJOR	
TERM PHONE	
SPECIAL INTERESTS	Managara.
I acknowledge the receipt of the EK409 Syllabus for the Fall 2015	5 Semester.
I have read and understood the grading policy and the requirement homework to be the original work of the student named on the wo	t for the exams and ork.
SIGNATURE	DATE