## EK409 ENGINEERING ECONOMY SPRING 2012 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, e-mail <u>tdw@bu.edu</u> Office Hours: Monday 7-8AM, 2-4PM

Tuesday 7-11:15AM, 1-3:30PM Wednesday 7-8AM, 2-4PM

Thursday by appointment only

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Friday 7-11:15AM

Text: Engineering Economy, Thuesen & Fabrycky, 9<sup>th</sup> edition, Prentice Hall, ISBN 0-13-028128-X

Classroom: 8 St. Mary's Street, PHO 211

Time: Monday, Wednesday 12:00-2:00PM

Season ticket location: Agganis Arena Sect. 112, Row Q, Seat 2

### 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 an open book in-class exam on Monday, February 27. The take home exam from April 4 to April 9 will also be open book. There will be a final take home exam. The average exam grade will count as 60% of the semester grade. HOMEWORK: There will be at least 10 homework assignments which are due on assigned dates. The lowest homework grade will be dropped, the homework average will count 20% of the semester grade.

PROJECT: There will be a project, to be done by teams of 3 to 5 students. The project will be the modification of the annual report of a manufacturing company or the preparation of a 2 year business plan for a manufacturing company. The project grade will be 10% of the semester grade.

FINAL GRADES: Those students, who have an average of 90% or better, have earned an A in the course and are exempt from taking the final exam. Students with an average of 80% or better are also exempt from taking the final exam, but may, at their discretion, choose to take the final to improve their course average. Students with a course average of less than 80% on the last day of class have not demonstrated evidence of having sufficient working knowledge 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 SPRING 20121 LECTURE TOPICS COVERED

1. Contracts, interest relationships

2. Economic equivalence, retirement plans

3. Inflation

4. Financing of new enterprises

5. Stock ownership, stock market, annual reports

6. Comparison of alternate economic choices

7. Decision making among alternatives

8. Replacement alternatives

9. Break-even and minimum cost analysis

10. Indirect cost analysis and allocation

11. Preparation of cost proposals

12. Professional ethics, protocol, conflict of interest

13. Benefit and cost analysis

14. Inventories

15. Accounting systems, double entry bookkeeping

16. Depreciation

17. Income taxes

18. Patents, intellectual property

19. Employment contracts, offers

20. Corporate annual reports

## **READING ASSIGNMENTS**

All reading assignments are from the required text listed above.

TOPIC	PAGES	WEEK*
1. Introduction to Engineering Economy	1-34	-
2. Interest relationships (Chapter 3)	35-65	Jan. 27
3. Economic equivalence (Chapter 4)	72-102	Feb. 3
4. Company startup and stockholders	Handout	Feb. 10
5. Inflation (Chapter 5)	115-139	Feb. 17
6. Bases for comparison (Chapter 6)	152-180	Feb. 24
7. Analysis of alternatives (Chapter 7)	190-225	Mar. 2
8. Evaluating production (Chapter 8)	244-284	Mar. 9
9. Indirect costs and proposals	Handout	Mar. 23
10. Evaluating replacement (Chapter 9)	297-331	Mar. 30
11. Evaluating public activities Chapter 10)	348-374	Apr. 6
12. Accounting and depreciation (Chapter11)	388-414	Apr. 13
13. Income Taxes (Chapter 12)	420-456	Apr. 20
14. Estimating cost elements (Chapter 13)	468-499	Apr. 27

\*Week ending

# SAMPLE EXAM COVER PAGE

## EK409 ENGINEERING ECONOMY SPRING 2012

#### March 28, 2012

This exam is due on Monday, April 2, 2012 at 12 noon sharp, at the start of the EK409 lecture.

NAME:	
ID # :	
PROBLEM	POINTS
1	
2	
. 3	
4	· · · · · ·
5	
TOTAL	

## STATEMENT

This examination is my own work. I have neither collaborated nor discussed this exam with anyone and I have neither received nor given any help in solving the problems I am submitting for grading.\* I have not had access to anyone else's solution, notes or worksheets for this exam, nor have I given anyone else access to my exam solution, notes or worksheets.\*\*

SIGNATURE

DATE

\*with the exception of the instructor

\*\*Anyone handing in someone else's exam is deemed to have had access to that exam. If you cannot hand your exam in on time yourself, contact the instructor for advice.

## EK409 ENGINEERING ECONOMY SPRING 2012

## CLASS LIST REGISTRATION

Note: This information and statement simply confirm your intention to attend this course, and your receipt and understanding of the syllabus. It is strictly for the use of the instructor.

NAME:	
ID # :	-
MAJOR:	
TERM PHONE #:	
e-mail address:	
SPECIAL INTERESTS**	
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** See general information sheet, preceding page	<u></u>

I acknowledge the receipt of the EK409 ENGINEERING ECONOMY Syllabus for the SPRING 2012 semester. I have read and I understand the grading policy and the due dates for exams. I have also read the sample exam cover and I understand the statement which I am expected to sign with each exam in the course.

SIGNATURE

DATE