

UB - Department of Industrial and Systems Engineering
IE 320 Engineering Economy
Summer 2013

1 COURSE CONTACT

- Class Meetings: Tue Thu, 5:00 PM - 8:10 PM 260 Capen Hall
- Course Website: <http://ublearns.buffalo.edu>
- Instructor: Iakovos Toumazis
 - E-mail: iakovost@buffalo.edu
 - Office: 339A Bell Hall
 - Office hours: Wed 3:00 PM - 5:00 PM, or by appointment

2 COURSE DESCRIPTION

Applied concepts of economic decision making, including present worth analysis, cash-flow equivalence, replacement analysis, equipment selection. Open to students in any discipline.

3 TOPICS COVERED

- Engineering Economic Decisions
- Interest Rate and Economic Equivalence
- Present-Worth Analysis
- Annual Equivalent-Worth Analysis
- Rate-of-Return Analysis
- Analysis of Project Cash Flows
- Capital-Budgeting Decisions

4 REQUIRED TEXTBOOK

- Chan S. Park, *Contemporary Engineering Economics (5th Edition)*, Prentice Hall, 2010.

5 REFERENCES

- G.J. Thuesen, and Wolter J. Fabrycky, *Engineering Economy*, Prentice Hall, 2001.
- William G. Sullivan, Elin M. Wicks, and C. Patrick Koelling, *Engineering Economy*, Pearson Education, 2011.
- Ted Eschenbach, *Engineering Economy: Applying Theory to Practice*, Oxford University Press, 2010
- Any other edition of the textbook and reference books.
- Any book whose title contains 'Engineering Economy' or 'Engineering Economics'.

6 GRADING

There will be 5 assignments, 3 quizzes, 2 midterm exams and 1 final exam. While students are welcome to discuss homework problems with colleague students, you are **not allowed to copy the solutions** from another student. The grading will be determined as follows:

- Assignments: 15% for all assignments (will be announced via email)
- Quiz: 15% for all quizzes (will be taken approximately every two weeks)
- Midterm I: 20% (Tentatively scheduled on June 4, in class)
- Midterm II: 20% (Tentatively scheduled on June 18 , in class)
- Final: 30% (Tentatively scheduled on June 27, in class)

7 QUIZ

Quizzes are intended to assess your conceptual understanding of the material covered in the course. Quizzes will typically be short answered and approximately 20 minutes in length. **No makeup quizzes will be given.** Quizzes are tentatively scheduled as follows:

- May 28, Tuesday
- June 11, Thursday
- June 25, Tuesday

8 COURSE POLICY

- Students are expected to check his or her email and the course website frequently, at least once a day, especially before the class day. Important announcements including homework assignments will be made via emails and the course website.
- Note that attendance is not included in the grading. However, attendance will be very important to learn the course material. Please try not to be late to the class. It is your responsibility for being a college student.
- Exams must be taken on the dates scheduled. Unless there is a medical emergency, make-up exams will not be given. Proof will be required.
- **No kind of cheating is allowed.** If you do, you will not receive a grade higher than 'F'.
- Homework will be assigned at least a week prior to the due dates.
- Please turn in your assignments before or on the due date. **No late turn-in will be accepted.**
- Quizzes will be based on homework problems. Quizzes are not designed to give students more burden. Quiz problems will be made easy enough for students who solved homework problems by themselves.

9 ACADEMIC HONESTY AND INTEGRITY

The University at Buffalo has a responsibility to promote academic honesty and integrity and to develop procedures to deal effectively with instances of academic dishonesty. Students are responsible for the honest completion and representation of their work, for appropriate citation of sources, and for respect for others academic endeavors. By placing their name on academic work,

students certify the originality of all work not otherwise identified by appropriate acknowledgments. Please take your time to visit <http://academicintegrity.buffalo.edu/>

One simple rule: If you fail to meet the UB policy and the instructor's policy for academic honesty and integrity, you will at least receive 'F', and it is possible that you are suspended or expelled from the university.

10 EXAMPLES OF ACADEMIC DISHONESTY

Academic dishonesty includes, but is not limited to, the following:

- *Previously submitted work.* Submitting academically required material that has been previously submitted in whole or in substantial part in another course, without prior and expressed consent of the instructor.
- *Plagiarism.* Copying or receiving material from any source and submitting that material as one's own, without acknowledging and citing the particular debts to the source (quotations, paraphrases, basic ideas), or in any other manner representing the work of another as one's own.
- *Cheating.* Soliciting and/or receiving information from, or providing information to, another student or any other unauthorized source (including electronic sources such as cellular phones and PDAs), with the intent to deceive while completing an examination or individual assignment.
- *Falsification of academic materials.* Fabricating laboratory materials, notes, reports, or any forms of computer data; forging an instructor's name or initials; resubmitting an examination or assignment for reevaluation which has been altered without the instructor's authorization; or submitting a report, paper, materials, computer data, or examination (or any considerable part thereof) prepared by any person other than the student responsible for the assignment.
- *Misrepresentation of documents.* Forgery, alteration, or misuse of any University or Official document, record, or instrument of identification.
- *Confidential academic materials.* Procurement, distribution or acceptance of examinations or laboratory results without prior and expressed consent of the instructor.
- *Selling academic assignments.* No person shall sell or offer for sale to any person enrolled at the University at Buffalo any academic assignment, or any inappropriate assistance in the preparation, research, or writing of any assignment, which the seller knows, or has reason to believe, is intended for submission in fulfillment of any course or academic program requirement.
- *Purchasing academic assignments.* No person shall purchase an academic assignment intended for submission in fulfillment of any course or academic program requirement.

11 DISABILITY SERVICES

If you have a disability and may require some type of instructional and/or examination accommodation, please inform me early in the semester so that we can coordinate the accommodations you may need. If you have not already done so, please contact the Disability Services office. The office is located at 25 Capen Hall and the telephone number is (716) 645-2608. The website is at: <http://www.ub-disability.buffalo.edu/>

12 COURSE OUTLINE

Date	Course Material	Notes	Lecture Slide Set
05/21	Introduction; Chapters 1 and 3	Homework 1 Assigned	1 - 2 - 3
05/23	Chapter 3		4 - 5 - 6 - 7
05/28	Chapter 4	Homework 1 Due; Homework 2 Assigned; Quiz 1	8 - 9
05/30	Chapter 4	Midterm Exam I Review	10 - 11
06/04	Chapter 5	Homework 2 Due; Homework 3 Assigned; Midterm Exam I	12
06/06	Chapter 5		13 - 14 - 15
06/11	Chapter 6	Homework 3 Due; Homework 4 Assigned; Quiz 2	16 - 17
06/13	Chapter 6	Midterm Exam II Review	18 - 19
06/18	Chapter 7	Homework 4 Due; Midterm Exam II	20 - 21
06/20	Chapter 7	Homework 5 Assigned	21 - 22 - 23
06/25	Chapter 11	Quiz 3	24 - 25
06/27	Chapter 16	Homework 5 Due; Final Exam	26 - 27