

W, 6:00pm – 9:10pm, Room OHE100C

Professor: Virgil Adumitroaie

Office: GER 216C (W, 4:50pm - 5:50pm)

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Teaching Assistant: (TBD)

Office: GER 309 (TBD)

Phone : TBD

Fax: TBD

e-mail: TBD

Course Text: Chan S. Park, Contemporary Engineering Economics, 5th Edition, Prentice Hall, (2011)

Course References: In addition to the above texts, some course material and in-class problems may come from various other sources.

Pre-requisites: Basic computational skills with spreadsheet modeling in Excel. Upper division standing in any engineering major. Other students may be admitted on a case-by-case basis.

Course Objectives: The course focuses on the efficient allocation of scarce resources in circumstances in which alternatives can be enumerated. The course provides engineers with skills to assess the costs and benefits of engineering investments, such as product and technology development programs and capital purchases. It will also provide the framework for selecting among alternative designs, for managing technologies over their lifecycles, and for evaluating the finances of new ventures

Course Websites:

5th Edition Website

www.pearsonhighered.com

Epstein Department

www.usc.edu/dept/ise

Institute of Industrial Engineers

www.iienet.org

Business Week

www.businessweek.com

The Economist

www.economist.com

Fast Company

www.fastcompany.com

Forbes

www.forbes.com

Harvard Business Review

www.hbr.com

Wall Street Journal

online.wsj.com/home-page

Financial Times of London

www.ft.com/home/us

Course Schedule: See below.

Course Assignments: See below.

Grading: There are 10 separate homework assignments, each of which is valued at 24 points (45% of grade). The midterm exam is 120 points (23%) and the final examination is 170 points (32%). The exams will be open book. You may bring a pocket calculator, but not a laptop, PDA, or any wireless devices.

Under close guidance from the professor, all homework and exams will be graded by the assigned grader. If dissatisfied with the grading in a specific instance, the student may appeal to the professor to re-evaluate the grade. An appealed grade may be raised, lowered, or remain as originally scored. **(Caution: The final grade in this course depends in significant measure on graded homework, and thus we take very seriously the academic integrity issue inherent in this activity. Do your own work.)**

Class Participation: Attendance will be taken periodically; it is expected that students will want to attend every class meeting. Active participation in the class and on the DEN discussion board will be noted.

Office Hours: Prof. Adumitroaie is available for office hours on Wednesdays, 4:50pm - 5:50pm in SSC101. The TA, TBD is available TBD, in GER309.

Homework: All homework assignments are due at 11:59pm on the dates indicated below and will be submitted via the DEN website. It is your responsibility to make sure you have submitted the correct files and to verify after submission that the uploaded files are readable. Include your name, date, course number and assignment number in your submitted homework.

Late homework will be accepted up to two days past due date with 2 points penalty per day. Homework turned in later than past due date + 3 days will not receive any credit. No homework will be accepted after the last class meeting.

Course schedule and assignments are summarized below. This syllabus is subject to change as announced in class.

DATE	CLASS	TOPIC(S)	HOMEWORK
May 21	1	Engineering economic decisions. Financial statements.	Assigned: #1
May 28	2	Cost of money and economic equivalence.	Due(+2d): #1 Assigned: #2
Jun 4	3	Interest Formulas. Debt management.	Due(+2d): #2 Assigned: #3
Jun 11	4	Project cash flows. Cash flow analysis.	Due(+2d): #3 Assigned: #4
Jun 18	5	Mutually exclusive alternatives. Annual equivalent worth analysis. Design economics.	Due(+2d): #4 Assigned: #5
Jun 25	6	Rate of return. Internal rate of return.	Due(+2d): #5 Assigned: #6
Jul 2	7	MIDTERM EXAM Based on lectures 1 - 5	
Jul 9	8	Depreciation. Tax depreciation.	Due: #6 Assigned: #7
Jul 16	9	Corporate taxes. Developing cash flow statements.	Due(+2d): #7 Assigned: #8
Jul 23	10	Inflation. Project risk.	Due(+2d): #8 Assigned: #9
Jul 30	11	Replacement analysis. Benefit-Cost ratio.	Due(+2d): #9 Assigned: #10; Due(+3d)
Aug 6	12	FINAL EXAM Comprehensive	

Course References:

Chan S. Park, Fundamentals of Engineering Economics, 2nd Edition, Prentice Hall, (2008).

Academic Integrity. The Viterbi School of Engineering adheres to the University's policies and procedures governing academic integrity as described in SCampus (<http://www.usc.edu/dept/publications/SCAMPUS/>). Students are expected to be aware of and to observe the academic integrity standards described in SCampus, and to expect those standards to be enforced in this course.

Students with Disabilities. Any Student requesting academic accommodations based on a disability is required to register with Disability Services and Programs (DSP) each semester. A letter of verification for approved accommodations can be obtained from DSP. Please be sure the letter is delivered to me (or to TA) as early in the semester as possible. DSP is located in STU 301 and is open 8:30 a.m. - 5:00 p.m., Monday through Friday. The phone number for DSP is (213) 740-0776.