

# CATALOG YEAR \_2006-2008\_\_\_\_\_ (Please use separate form for each add/change)

	COLLEGE:	Arts and S	Sciences	
Current Catalog P	age(s) Affected	p. 300		
Course: SENG 3 (check all that apply)		Delete: Change escription Prerec		itle
lecture/lab hours i		er, Title, SCH Value, I current catalog, provide stification.		-
Principles of engine analysis of single implications; certain	neering economics and multiple invest ainty; uncertainty; r	s. Three semester hour including economic equents, comparison of a risk analysis; public section 4 and ENGR 2372.	uivalence, time valternatives; capit	al recovery and tax
Justification: Ne	w elective course f	or students wanting to	learn about Engir	neering Economics.
		e: Attach new/ rrent catalog, provide c		
		Change: A and attach page with cl	_	ed minor.
Faculty: Add: catalog, provide chan	Delete: ge and attach page witl	Change: Attach no changes in red.	ew/changed faculty e	ntry. If in current
		ormation: Change inf hange and attach page with		tach new/changed
Approvals:		Signature		Date
Chair Department Curriculu	ım Committee			
Chair Department				
Chair College Curriculum C	Committee			
Dean				

# **SENG 3300 Engineering Economics**

# Description

Principles of economic equivalence, time value of money, analysis of single and multiple investments, comparison of alternatives; capital recovery and tax implications; certainty; uncertainty; risk analysis; public sector analysis and break-even concepts.

Prerequisite: MATH 2414.

#### Class schedule

TBA

#### Office hours

TBA

# Students' learning outcomes

Upon completion of the course, the student will be able to

- 1. Use spreadsheet functions to perform simple interest and compound interest analysis related to present value and future value.
- 2. Perform a sensitivity analysis using selected measures and develop a decision process to determine the most economic decision path for various investment alternatives.
- 3. Determine the level of activity necessary to break even analysis for the number of years needed to realize full investment payback.
- 4. Understand the decision process with risks for an engineering project using the basics of probability distributions, simulation analysis and multiple criteria evaluation.

#### **Textbook**

To be determined

# Grading

Your grade will be comprised of homework sets and one mid term, course project, and one in-class final examination. The grade breakdown is as follows:

• Homework assignments and quizzes: 20%

• Project: 25%

• Midterm tests: 20% each

• Final exam: 35%

# Assignment grading

• A: 90-100

• B: 80-89

• C: 70-79

• D: 60-69

• F: 0-59

# General Guidelines

#### **Classroom Behavior**

The College of Arts and Sciences encourages classroom discussion and academic debate as an essential intellectual activity. It is essential that students learn to express and defend their beliefs, but it is also essential that they learn to listen and respond respectfully to others whose beliefs they may not share. The College will always tolerate diverse, unorthodox, and unpopular points of view, but it will not tolerate condescending or insulting remarks. When students verbally abuse or ridicule and intimidate others whose views they do not agree with, they subvert the free exchange of ideas that should characterize a university classroom. If their actions are deemed by the professor to be disruptive, they will be subject to appropriate disciplinary action, which may include being involuntarily withdrawn from the class.

# **Copyright Restrictions**

The Copyright Act of 1976 grants to copyright owners the exclusive right to reproduce their works and distribute copies of their work. Works that receive copyright protection include published works such as a textbook. Copying a textbook without permission from the owner of the copyright may constitute copyright infringement. Civil and criminal penalties may be assessed for copyright infringement. Civil penalties include damages up to \$ 100,000; criminal penalties include a fine up to \$ 250,000 and imprisonment.

Copyright laws do allow students and professors to make photocopies of copyrighted materials under strict conditions. You may not copy most, much less all, of a work, but you may copy a limited portion of a work, such an article from a journal or a chapter from a book. These copies must be for your own personal academic use or, in the case of a professor, for personal, limited classroom use. In general, the extent of your copying should not suggest that the purpose or the effect of your copying is to avoid paying for the materials. And, of course, you may not sell these copies for a profit. Thus, students who copy textbooks to avoid buying them or professors who provide photocopies of textbooks to enable students to save money are both violating the law.

# Plagiarism and Cheating

Plagiarism is the presentation of someone else's work as one's own. Recently, the Internet has complicated the picture. Getting something from the Internet and presenting it as one's own is still plagiarism. Copying another student's paper or a portion of the paper - is usually called "copying". Neither plagiarism nor copying will be tolerated. Should a faculty member discover that a student has committed plagiarism, the students will receive a grade of "F" in that course and the matter may, if necessary, be referred to the Associate Vice President for Student Affairs for possible disciplinary action.

#### Students with Disabilities

Texas A& M International University seeks to provide reasonable accommodations for all qualified persons with disabilities. This University will adhere to all applicable federal, state, and local laws, regulations and guidelines with respect to providing reasonable accommodations as required to afford

equal education opportunity. It is the student's responsibility to register with the Disabilities Services Coordinator and to contact the faculty member in a timely fashion to arrange for suitable accommodations.

# **Incomplete Grade Assignments**

Incompletes are discouraged and are assigned only under extenuating circumstances. To qualify for an Incomplete, the student must be passing the course and have completed 85-90\% of the requirements at the time the Incomplete is approved. In fairness to those students who complete the course as scheduled, only under extremely exceptional conditions will an Incomplete ("I") be changed to an "A".

# **Independent Study Courses**

Independent Study (IS) courses are offered only under exceptional circumstances. The chair of the department is to determine whether the IS will be offered on the basis of the student's and the University's needs, as certified by the University Registrar. No student will take more than one IS course per semester. Moreover, IS courses are limited to seniors and graduate students. Summer IS course must continue through both summer sessions.

# Student Responsibility for Dropping a Course

It is the responsibility of the STUDENT to drop the course before the drop date. Faculty are not responsible for dropping students who suspend class attendance".

### Final Examination

Final Examinations must be comprehensive and must be given on the day specified.

#### Student E-mail Address

All students must obtain a TAMIU e-mail address.