

IME 2010

ENTREPRENEURIAL ENGINEERING I

Course Syllabus – Spring 2011

Catalog Data: This course is the first in a series of three courses in entrepreneurial engineering and will introduce students to industrial and entrepreneurial engineering. Topics covered include labor and material analysis for new and existing products, forecasting demand for products, estimation of product cost, and development of corporate financial statements.

Text: The Entrepreneurial Engineer by David Goldberg. Wiley and Sons, 2006.

Instructor: Dr. Bob White, Professor, Industrial and Manufacturing Engineering.
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Prerequisites by topic:
Mathematical level equivalent to MATH 118.

Course Objectives	Performance Criteria (department) ¹ Course	ABET/TAC Outcomes ²
1. An ability to identify, formulate, and solve engineering problems.	(E1) Learning curve assignment.	e
2. An understanding of the entrepreneurial process, including financial analyses.	(L2) Financial statements assignment.	l
3. Recognition of the need for life-long learning.	(I2) Career plan assignment.	i
4. Understand how to compute labor and material components of product cost.		

Topics:

- Week 1-3 Labor and material analysis
- Week 4-6 Forecasting and determining preliminary and detail estimates.
- Week 7-9 Basic Accounting Concepts
- Week 10-11 Operation Estimating.
- Week 12-13 Product Estimating.
- Week 14 Cost Analysis

Schedule:

Week	Text Reading
1-3	1,2,3
4-6	4,5
7-9	6
10-11	7
12-13	8,9
14	10,11

This is an approximate schedule. Actual class assignments may vary from this as the class proceeds throughout the semester. When deviations occur, they will be announced in class.

Evaluation:

Exams 2 @ 100 pts each	200	40%
Final Exam	100	20%
Wall Street Journal Quizzes	50	10%
Homework and Computer Assignments	50	10%
Team Project	100	20%
Total	500	100%

Homework Problems:

Recommended homework problems will be given in class. These problems are recommended and will be collected when announced in class. You are encouraged to work these problems to help you learn the course material.

Wall Street Journal Quizzes:

Quizzes will be given each week over the prior week's Wall Street Journal Papers.

Team Project

Everyone will be required to develop a product that can be produced and sold. The company will be started with a minimum of \$25 invested by each individual in the company. This company will be started and operated with a team of three or four.

Grading Scale:

The following are the APPROXIMATE points required for the corresponding grades. Actual points required may vary slightly.

A	400	C	320
BA	380	DC	300
B	360	D	280
CB	340		