

ISE 599 (566)  
FINANCIAL ACCOUNTING ANALYSIS FOR ENGINEERING  
COURSE SYLLABUS  
SPRING 2007

Instructor: Dana Sherman, Esq. (BA, JD, MBA, MBT, MPA)  
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Time: Tuesday, 6:30 to 9:10 p.m.

Location: TBD

Office hours: After class, by appointment, email or telephone; contact me **any time**

Prerequisites: Graduate standing or permission of the instructor

Text: Primary Text: Managerial Accounting by Garrison, Noreen and Brewer, 2006 Edition

In addition, there will be extensive professor prepared handout materials to augment the textbook

Course Assistant:

Course Objectives:

The course is intended to provide students in engineering and related disciplines with the information and skills necessary to engage in financial decision making at both an operational level and a business enterprise level. Topics which will be covered include concepts from cost accounting, managerial accounting, law and finance. The specific course objectives include enabling the student to:

- Identify, formulate and solve financial issues in engineering
- Understand financial reports and reporting systems
- Understand the legal context in which financial decisions are made
- Understand process cost determination and allocations
- Have knowledge of contemporary business issues
- Recognize the need for continuing life-long learning
- Participate effectively on multi-disciplinary teams, and
- Understand professional ethical issues and responsibilities

### Method of Instruction:

Lecture, class discussion and review of assignments conducted by the instructor will occupy the class period. Students are expected to attend class and participate in the class discussion. DEN students are expected to participate live whenever possible.

The class is intended to be practical in its approach. Students who are employed are STRONGLY encouraged to bring to the attention of the instructor procedures, problems or issues which the students deal with on a daily basis

### Teaching Assistant:

The teaching assistant is responsible for conducting a problem review/question and answer session which will be held....

### Grading:

Midterms	30% (15% each)
Assignments.	40
Final	30 (cumulative)
	<hr/>
	100%

Grading is based upon 1000 possible points to be earned during the course. There is no "forced curve" and final grades will be based upon both your personal comprehension of the material as well as your performance on the exams and assignments relative to the other students. Cooperative learning is encouraged on homework assignments. Thus, it is to your benefit to help each other as much as possible. Weekly and cumulative class scores will be sent to each student on a frequent basis by the course assistant. You are also encouraged to contact the instructor at any time if you are having problems completing the assignments or understanding the material.

While cooperative learning is encouraged, plagiarism or the copying of the work of another student is not allowed. If this is determined to occur, the grade for a particular assignment will be negative the number of possible points for that assignment.

### Assignments:

Homework assignments are due at the beginning of each class. Late assignments are accepted with a penalty of fifty percent of the actual score only if the answers are not previously discussed in class. To insure fairness, grading is done anonymously on all work. Do NOT put your name on your homework assignment papers, only your STUDENT NUMBER. You should turn in the original assignment but retain a copy for yourself to have in class for discussion.

The instructor will attempt to return homework assignments within two weeks. If you have a question regarding the grading of homework, you should bring it to the attention

of the instructor as soon as possible. Unclaimed papers will be discarded after four weeks.

All homework assignments count equally and the lowest score will be dropped. DEN students are expected to have sent their homework via the Blackboard Assignment Manager prior to commencement of class.

#### Quizzes and Examinations:

Examinations are not cooperative. Calculators may be used if appropriate. Laptop computers may not be used. The final exam will be cumulative. The date of the of the final examination is set by the University and cannot be changed. DEN students in geographic proximity to the campus are expected to be personally present for each exam. Those who cannot be present will have their exams proctored.

#### DEN:

DEN students and on-campus students have access to course webcasts at the DEN website. DEN students may watch webcasts of the lectures as they occur or subsequently, or both. On campus students will automatically have access to DEN. On campus students may review lectures only after they occur. For general technical problems with the course website, contact DEN Web Support at 213-821-1321 or email at [webclass@den.usc.edu](mailto:webclass@den.usc.edu). For general administrative questions relating to DEN call 213-740-4488 or email [denadmin@usc.edu](mailto:denadmin@usc.edu).

#### Miscellaneous:

Taping of lectures and class presentations or discussions is not allowed.

There is no term project or paper due either as a requirement or as "extra credit."

#### Additional Important Information: (The "legal" stuff...what else would you expect)

The Viterbi School of Engineering adheres to the University's policies and procedures governing academic integrity as described in *Scampus*. Students are expected to be aware of and to observe the academic integrity standards applicable to all students and will be enforced in this course.

Any student requesting academic accommodations based upon a disability is required to register with the Disability Services and Programs Office (DSPO) each semester. A letter of verification for approved accommodations can be obtained from DSPO and should be delivered to the instructor as soon as possible. DSPO is located in STU 301 and the telephone number is 213-740-0776.

Occasionally, a student will have a personal, family, medical or other emergency, will have the necessity to travel for work related business, or will be compelled to miss a class due to a significant university sponsored event in which the student will participate including intercollegiate athletics (note: this does not include primarily social

events....even if you are a business student). Contact the instructor as soon as the possible conflict is known and arrangements will be made to the extent possible to allow the student to timely turn in homework assignments.

## COURSE CALENDAR

**Week            Topic**

### **I. THE ORGANIZATION OF THE ENGINEERING ENTERPRISE**

- 1                    Course Introduction; Forms of Doing Business**
- 2                    Business Forms Continued: corporations, partnerships, LLC's, joint ventures; equity investments; reorganizations**
- Handout Materials*
- 3.                    Debt Transactions: secured and unsecured lending in real and personal property; bonds and debentures; recourse and non-recourse financing; personal guarantees**

*Handout Materials*

### **II. ACCOUNTING TOOLS FOR FINANCIAL MANAGEMENT OF THE ENGINEERING ENTERPRISE**

- 4.                    Midterm 1  
The Balance Sheet; short term and long term assets and liabilities, retained earnings, tangible and intangible assets, goodwill**
- 5.                    The Income Statement: cash and accrual income, depreciation effects, amortization concepts**
- 6                    Cash flow Statement: time value of money, discount factors and equivalence, compounding**

*Chapter 16*

- 7.                    Financial Statement Analysis: present worth analysis, rate of return, financial ratios**

*Chapter 17*

- 8.                    Income Tax Consequences of Business Transactions**

*Handout Materials*

**III. ACCOUNTING TOOLS FOR OPERATIONS MANAGEMENT OF THE  
ENGINEERING ENTERPRISE**

9. **Midterm 2**  
**Operational Costs: material and labor costs, fixed and variable, direct and indirect costs, opportunity costs, make or buy decisions**

*Chapters 2 and 13*

10. **Operational Design: Job Order Costing; cost measurement, costs of goods sold and manufactured, overhead rates**

*Chapter 3*

11. **Operation Design: Process Costing; flow of materials, labor and overhead costing**

*Chapter 4*

12. **Cost-Volume Profit Relationships: fixed and variable costs, equation and contribution models**

*Chapter 6*

13. **Activity Based Costing and Profit Planning: overhead allocation, activity rates, budgeting and cash flow**

*Chapters 8 and 9*

14. **Standard Costs; direct and indirect labor and material costs, variances, balance sheet effects**

*Chapter 10*

15. **Budgets and Overhead Analysis; fixed and variable budgets, overhead rates and variances, volume effects, internal rate of return, cost of capital discount rates**

*Chapter s 11 and 14*

16. **Review and Final Exam**