MSE 608C - SEMINAR IN ENGINEERING FINANCIAL AND COST ANALYSIS

Thursdays, 7:00 - 9:50 pm, Class Number 17213, Spring 2004

Instructor Dr. Bonita Campbell, Professor of Engineering

Department of Manufacturing Systems Engineering and Management

Faculty Office: EA 1317; email bjc20362@csun.edu (aka bonita.campbell@csun.edu)

Department Office: EA 1308; (818) 677-2167

Office Hour for MSE 608C: Thursdays, 6:00 - 7:00 pm

Text Henry E. Riggs, Financial and Cost Analysis for Engineering and Technology

Management, John Wiley & Sons, Inc., 1994 (ISBN 0-471-57415-5)

Supplements Posted at <www.csun.edu/~bjc20362/Campbell-608C.htm>

Purpose The learning experiences in this course are intended to enhance your knowledge of basic

accounting, managerial accounting, cost accounting, budgeting and financial analysis, and to facilitate the development of your managerial decision-making abilities in situations in

which funding is one of the criteria.

COURSE PLAN

Week	Date	Chp	Topic(s)	Session Format	Due
01	02/05	1-2	Accounting Concepts	Lecture; Study Questions	
02	02/12	3-4	Balance Sheet; Income Statement	Lecture; Study Questions and Problems	
03	02/19	5-6	Accounting Rules; Mechanics	Lecture; Study Questions and Problems	
04	02/26		[Howell Company mini case pp 113-115, #5.2]	Discussion	Howell Mixer Sales Company
05	03/04	7-8	Valuation; Fixed Assets	Lecture; Study Questions and Problems	
06	03/11	9-10	Other Procedures; Statement Analysis	Lecture; Study Questions and Problems	
07	03/18		[Marvin Machinery mini case pp 244-245, #10.12]	Discussion	Marvin Machinery
08	03/25		Chps 1-10 Quiz; Case studies	Quiz; Discussion of case studies questions	Quiz
09	04/01		[Pirelli Corp case study pp 439-445]	Presentations/Discussions	Pirelli Corp

	04/08		Spring Break							
10	04/15	11-12	Cash Flow; Budgeting	Lecture; Study Questions and Problems						
11	04/22	13	Fixed/Variable Expenses; Case studies	Lecture; Study Questions and Problems; Discussion of case studies questions						
12	04/29		[Software Associates case study, pp 450-454]	Presentations/Discussions	Software Assoc					
13	05/06	14-15	Cost Accounting; Product Costs	Lecture; Study Questions and Problems						
14	05/13	16-17	Indirect and Standard Costs	Lecture; Study Questions and Problems						
15	05/20		Chps 11-17 Quiz; Case studies	Quiz; Discussion of case studies questions	Quiz					
16	05/27		[Tritex Corp case study pp 455-459]	Presentations/Discussions	Tritex Corp					
	Note that class meeting time on 05/27 is 8-10 pm									

STANDARD OPERATING PROCEDURES

1. Class members are encouraged to maintain personal and professional standards consistent with The Fundamental Principles of the Code of Ethics of the Accreditation Board for Engineering and Technology; i.e.,

Engineers uphold and advance the integrity, honor and dignity of the engineering profession by:

- using their knowledge and skill for the enhancement of human welfare;
- being honest and impartial, and serving with fidelity the public, their employers and clients:
- striving to increase the competence and prestige of the engineering profession; and
- supporting the professional technical societies of their disciplines.
- 2. Withdrawing from (dropping) this course should be accomplished during the first two weeks of instruction. Please note that failure to *officially* drop any course results in a grade of U, which is the equivalent of an F for your transcript and grade point average. For additional information regarding withdrawals, see FAQs at www.csun.edu/~msem.
- 3. It is a University requirement that all undergraduate and graduate students *must pass* the Writing Proficiency Examination (WPE) as part of earning their degree. Graduate students *must pass* the WPE before completing more than 12 units in their graduate program. Students who earned an undergraduate degree at CSUN in Spring 1982 or thereafter have already met the requirement. Delaying the completion of the WPE requirement can delay your graduation. For additional information, see FAQs at www.csun.edu/~msem

- 4. It is a University requirement that all graduate students whose overall undergraduate degree grade point average was less than 3.0, and who have not taken the General Aptitude Test of the Graduate Record Examination (GRE), *must* take the test before completing more than 12 units in their graduate program. A delay in meeting the GRE requirement will delay your classification and can delay your graduation. Information on the test is available at www.gre.org or at FAQs at www.csun.edu/~msem.
- 5. The major of each student in this class will be verified using the University course roster. Students whose majors are not correct must submit a change of major within the first three weeks of the semester. Graduate students should submit a *Change of Objective for Graduate Students* to the MSEM Department Office. The form can be obtained from FAQs at www.csun.edu/~msem.
- 6. The classification status of each graduate student in this class will be verified using the University course roster. Conditionally classified graduate students who are eligible for classification must submit a *Request for Classification* during the first three weeks of the semester. Eligible students are in the correct major and in GRAD status, have met their WPE and GRE requirements, and have a GPA of 3.0 or better. For additional information, see FAQs at www.csun.edu/~msem.
- 7. Class members are expected to attend class sessions and to be prompt.
- 8. Class members are expected to be considerate and respectful of one another.
- 9. In addition to written assignments, class members are responsible for materials in reading assignments, class presentations and discussions, study questions and problems, and case study discussions.
- 10. Budgeting 4-5 hours per week for this course, in addition to class attendance, is not unreasonable.
- 11. All assignments submitted for evaluation must be typed. Please do NOT use report covers; simply staple the pages together in the upper-left-hand corner.
- 12. Professionalism dictates timely submission of assignments. Tardy assignments are unacceptable to the instructor and unfair to other class members.
- 13. Class members should be prepared to make very brief and informal summary presentations to the class regarding their Pirelli, Software Associates, and Tritex case study results (if time permits).
- 14. Class members may work in small groups (three people maximum) on the Pirelli, Software Associates, and Tritex case studies. All members of a group are expected to contribute similar amounts of work to a case study assignment, and each written case study report must include a summary of what was contributed by each group member.
- 15. All graduate students majoring in MSEM Department programs (i.e., Automation Engineering, Engineering Management, Materials Engineering) are encouraged to add their email addresses to the Department listing. This listing is used for special notifications (e.g., course scheduling changes, academic advisement notices, social events, and emergencies). The list may be accessed at
- www.csun.edu/~msem/faqs.htm, or by emailing a request to msem@csun.edu to be added to the list.

EVALUATION COMPONENTS

- 5% Attendance and Participation
- 10% Howell Mixer Sales Company Company mini case
- 10% Marvin Machinery Corporation mini case
- 20% Pirelli Corporation case study
- 20% Software Associates case study (Questions 1, 4, 6, 7, 10)
- 15% Tritex Corporation case study
- 20% Two Quizzes, 10% each

Letter Grade Scale:

 $A = 90\text{-}100\%; \;\; B = 80\text{-}89\%; \;\; C = 70\text{-}79\%; \;\; D = 60\text{-}69\%; \;\; F = 0\text{-}59\%$

Plus/Minus Grading will not be used

TEXT ERRATA - Please report any additional errata to the Instructor

- page 142, third line under Accrued Assets and Revenues, "eared" should be earned
- page 140, bottom, Figure 7.1, "Prepaid Asset" more frequently referred to as Prepaid Expense
- page 148, top, Figure 7.3, Inventory T-Account, "\$19,800" should be \$19,600
- page 157, #7.17, Merchandise Inventory of "\$12,000" should be \$12,100
- page 158, part (g), "\$1650" should be \$1500
- page 220, top, "total shareholder's equity" in denominator should be total assets
- page 220, lower set of equations, "Logn" should be Long; "425 + 13,700" should be 425 + 7,499; "667 + 16,736" should be 667 + 8,511
- page 379, fourth line of last paragraph, "shear" should be sheer
- page 452, heading for Figure S.2, "Assocatiates" should be Associates

MSE 608C - Spring 2004 - Campbell

Assignment for 12 February 2004

- Read Chapters 1-4 in Riggs (Accounting Concepts; Balance Sheet; Income Statement)
- Survey Appendix to Chapter 2 if unfamiliar with Present Worth
- © Study Questions and Problems:

page 68, D #3.10, parts a,c,e,i page 69, P #3.1, parts b,d

page 71, P #3.7

page 72, P #3.9, a,d,f

page 73, P #3.15

page 93, P #4.1, parts b,i

page 94, P #4.4, parts b,c,d

page 95, P #4.6, parts a-j

page 97, P #4.10

© Read case studies and mini case studies

Assignment for 19 February 2004

- Read Chapters 5-6 in Riggs (Accounting Rules; Mechanics)
- © Study Questions and Problems:

page 110, D #5.3, 5.6

page 111, D #5.10

page 112, D #5.14

page 113, D #5.22, parts a,d,e

page 115, P #5.3 (long)

page 135, D #6.16, parts a,c,e,f

page 135, P #6.5, parts a,c,e,g

Assignment for 26 February 2004

Howell Company mini case (pp 113-115, #5.2)Discussion and submission

Assignment for 04 March 2004

- Read Chapters 7-8 in Riggs (Valuation; Fixed Assets)
- Study Questions and Problems:

page 150, D #7.4

page 151, D #7.16, part a

page 154, P #7.3, parts a,b,c

page 156, P #7.13

page 177, D #8.4

page 178, D #8.13

page 179, P #8.4, 8.8

page 180, P #8.14, parts b,e,g,i

Assignment for 11 March 2004

- Read Chapters 9-10 in Riggs (Other Procedures; Statement Analysis)
- Study Questions and Problems:

page 201, D #9.13, 9.16

page 203, P #9.7, part b

page 205, P #9.14

page 239, D #10.2

page 241, D #10.21, 10.22

page 241, D #10.24, parts b,c

page 241, P #10.4

Assignment for 18 March 2004

Marvin Machinery mini case
 (pp 244-245, #10.12)
 Discussion and submission

Assignment for 25 March 2004

Quiz (Chps 1-10); Questions about
 Pirelli Corp case study

Assignment for 01 April 2004

Pirelli Corp case study (pp 439-445)
 Presentation, discussion and submission

MSE 608C - Spring 2004 - Campbell

Assignment for 15 April 2004

- Read Chapters 11-12 in Riggs (Cash Flow; Budgeting)
- © Study Questions and Problems:
 page 259, D #11.3, 11.4, 11.5,
 11.6, 11.7
 page 283, D #12.1, 12.4
 page 284, D #12.8
 page 285, D #12.9, 12.12
 page 285, P #12.1

Assignment for 22 April 2004

- © Read Chapter 13 in Riggs (Fixed and Variable Expenses)
- Study Questions and Problems:

 page 311, D #13.8, 13.10

 page 311, P #13.1, 13.3

 page 312, P #13.4

 page 313, P #13.7
- © Questions about Software Associates case study

Assignment for 29 April 2004

Software Associates case study (pp 450-454), Questions #1, 4, 6, 7, 10;
 Presentation, discussion and submission

Assignment for 06 May 2004

- Read Chapters 14-15 in Riggs (Cost Accounting; Product Costs)
- Study Questions and Problems:

 page 340, D #14.6, 14.10

 page 341, D #14.13

 page 354, D #15.4, 15.5

 page 355, D #15.7, 15.8

 page 357, P #15.1

Assignment for 13 May 2004

- Read Chapters 16-17 in Riggs
 [excluding Chapter 16 Appendix]
 (Indirect and Standard Costs)
- © Study Questions and Problems:

 page 395, P #16.2

 page 397, P #16.6, parts a,b

 page 412, D #17.2, 17.6

 page 414, P #17.2

 page 418, P #17.11

Assignment for 20 May 2004

 Quiz (Chps 11-17); Questions about Tritex Corp case study

Assignment for 27 May 2004

Tritex Corp case study (pp 455-459)
 Presentation, discussion and submission