# Northwestern University IEMS 403: Accounting for Engineers DRAFT Syllabus for Spring 2016

Class Meetings: Tuesday 6:30-9:30

Classroom Location: Krebs Classroom, 2311 Campus Drive, Suite 1400

Course Web Site: Canvas

Note: This is a draft syllabus. The syllabus should be finalized after the first day of class. The textbook will not be changed, but the topics covered near the end of the class may be adjusted based on input from the students.

## **Course Description:**

This is an introductory survey course in accounting. The course covers the financial reporting process and uses of accounting data, linkages between accounting information and management planning, decision making and control. Managerial topics include product costing, cost terminology, budgeting, cost-volume-profit analysis, standard costs and activity based costing.

Students will learn to understand the financial statements of an organization, with emphasis on the Income Statement and Balance Sheet. Students will learn to understand, analyze and explain the financial performance of a company and to make managerial decisions using this information. Students will work in teams to prepare an in-depth financial analysis of a company.

## **Evaluation of Student Work:**

Exam 1	32%
Exam 2	33%
Homework including cases	10%
Financial Analysis Project	25%

After completing the course, students should be able to:

- 1. Understand and analyze a company's income statement, balance sheet and statement of cash flows
- 2. Understand the impact various decisions or transactions will have on the company's statements and financial health.
- 3. Prepare an analysis of the financial health of a public company using ratio analysis.
- 4. Prepare a detailed financial budget.
- 5. Make decisions using managerial accounting information.
- 6. Be able to comfortably communicate with senior financial and non-financial leaders about financial statement issues and the financial impact of business decisions.

## **Course Materials**

**Weekly Lecture Notes**: Lecture notes will be made available each week on CANVAS at least two days in advance of the class. Each student should print a hardcopy of these notes.

**Required Textbook**: Financial and Managerial Accounting for Decision Makers by Dyckman, Magee, Pfeiffer, Hartgraves and Morse, 2nd edition. One note about this book – it is very heavy! While you don't need to carry it to class, some students do prefer the electronic version.

**Homework Software**: Each student must register for mybusinesscourse.com, the homework software. The homework software comes with a NEW copy of the text book or with the ebook. Here is the link:

# https://mybusinesscourse.com/?code=2819-33432

If you are purchasing a used book, you can buy the homework software separately. Please note that depending on the price of the used book, it might be less expensive to purchase the ebook, which comes with the homework software, than to buy a used book plus the homework software.

**Cases**: We will be using some cases from Harvard Business School Publishing. The link for purchasing these cases will be posted two weeks before class begins. We will also use cases I have developed and these will be posted on Canvas.

## **Course community**

Each student has an important role in our classroom community. Each of you has unique experiences which can be shared with the class. Often, just asking a question can help other students learn. To maximize the learning opportunity for everyone, I ask you to participate actively in class discussions, work enthusiastically and positively on class activities and help each other on in-class problems and mini-cases. If you have ideas for the class, please let me know.

Because each of you is an important part of the learning community, your attendance is crucial to success for you and your classmates in this course. Students bring a wealth of information and knowledge to the classroom experience. Class discussion will play an important role in learning. You and your classmates will learn as you work together on cases and share your ideas, experiences and opinions.

Class attendance is required. If you have to miss class for any reason, please notify the instructor by email at least 24 hours before the scheduled start of the class. If you think you will need to miss more than one class, please contact the instructor. If you do have to miss more than one class, it might be best to take this course another term.

Exam dates and the date of the final presentation are shown below. All students must be present for these exams and for the presentation.

#### **Classroom Rules of Conduct**

- 1. Cell phones must be turned off during class.
- 2. Laptop computers are strongly discouraged. If you must use your laptop for note taking you must sit in the *first* row of the classroom.
- 3. Class start times and break times should be respectfully observed. Please be in your seat and ready to participate at the prescribed times.

## **Academic Integrity**

Each student is obligated to not seek an unfair advantage over other students, including but not limited to giving or receiving unauthorized aid during completion of academic requirements, copying, or using the work of other students or committing plagiarism. You are expected to follow the program's standards of Academic Integrity. Please make sure you are familiar with these standards. Here is the link:

<a href="http://www.mccormick.northwestern.edu/engineering-management/curriculum/academic-standards-and-integrity.html">http://www.mccormick.northwestern.edu/engineering-management/curriculum/academic-standards-and-integrity.html</a>.

At Northwestern, all cases of suspected cheating or plagiarism are **required** to be reported directly to the Dean, who directs the review process for all suspected violations of academic integrity. Please be careful that your work represents your own thinking, writing, and effort. If you are uncertain about committing a possible violation, speak to your professor.

## **Homework Problems**

Homework will be assigned and completed via myBusinessCourse, the online system associated with our textbook. The homework is set up so that you can see if you got the correct answer. You can do the homework as many times as you like until you get the correct answer. I will only count the final submission. Your new textbook or electronic book will come with a registration code for the homework software. More information about registering and using myBusinessCourse will be posted on Canvas. I have provided additional nongraded practice problems on myBusinessCourse. Use the homework and practice to reinforce the material of the course. Accounting is a class which requires practice.

#### **Cases**

More information about cases will be provided during the first class and will be posted on Canvas. Some cases will be turned in on paper in class. Other cases will be submitted through Turnitin on Canvas.

## Financial Analysis Project

The financial analysis project will be completed as a team. Teams will be assigned by the instructor. This project is an opportunity to apply what you have learned in this class to a real public company. The project will include a written paper and an in-class presentation. All team members will participate in both the paper writing and the presentation. More information about the project will be posted on Canvas and the project will be discussed in class.

#### **Due dates**

Due dates for the class are non-negotiable. If you have a question about a deadline, you should resolve your question prior to the deadline. Under special circumstances you may arrange to turn in assignments early. Assignments will not be accepted after the due date.

## **Intellectual Property**

The class notes, assignments, class activities and the mini-cases are the intellectual property of the instructor. You may not distribute any of this material electronically or any other way to anyone outside the class. You may not duplicate course materials for use by your employers or anyone else.

Session	Date	Topic	Reading due at beginning of class	Assignments Due at beginning of class
1	Tuesday, March 29	Course Introduction Introduction to Financial Reporting Journal entries Financial reporting environment	Chapters 1-2	Bring a couple of ideas of companies for project. See information about project on Canvas
2	Tuesday, April 5	How financial statements are prepared Cash Flow Statement and how to analyze it Ratio analysis Hints on your Final project Pro Forma statements for new products	Chapter 4, read only pages 153-158 Chapter 5, including appendix 5B, but not 5A or 5C Chapter 3 is strictly optional. Read only if interested in going beyond course material.	Homework 1A (Chapter 1) and 1B(Chapter 2)
3	Tuesday, April 12	Reporting and analyzing revenues Reporting and analyzing inventory	Chapter 6, including appendix Chapter 7	Mini-Case 1 due
4	Tuesday, April 19	Reporting and Analyzing Long-Term Operating Assets	Chapter 8	Homework 2A(Chapter 4) and 2B(Chapter 5)
5	Tuesday, April 26	Reporting and Analyzing Liabilities Introduction to leases and pensions	Chapter 9	Homework 3A (Chapter 6), 3B (Chapter 7) and 3C (Chapter 8)
6	Tuesday, May 3	Exam 1  Introduction to Managerial Accounting  Cost Behavior, Activity Analysis and Cost Estimation	Chapter 13 Chapter 14	Homework 3D(Chapter 9)
7	Tuesday, May 10	Continue Cost work  Cost/Volume/Profit Analysis and Planning	Chapter 15	Homework 4A (Chapter 14)

8	Tuesday,	Relevant Costs and Benefits	Chapter 16	Homework 5A
	May 17	for Decision Making	Chapter 17 pages 759-765 and	(Chapter 15)
		Product Costing	Appendix 17A	
		Activity Based Costing	Chapter 18, pages 811-822	
		Introduction to Bridgeton Case		
9	Tuesday, May 24	Bridgeton Case Discussion	Chapter 21 Chapter 22	Bridgeton Case
		Operational budgeting and Profit Planning		In class budgeting case
		Standard Costs		
		Introduction to ABC Case		
10	Tuesday, May 31	ABC Case discussion		ABC Case
	_	Exam 2		
Final	Tuesday,	Presentation of Financial		Financial Analysis
	June 7	Analysis Projects		project