

NEW YORK UNIVERSITY
Stern School of Business

PRINCIPLES OF MANAGERIAL ACCOUNTING ACCT-UB.2

Fall 2011. Sections 01, 03, and 05

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Course Overview and Objectives

This course explores the use of accounting information for *internal* planning, analysis, and decision-making. The *main objective* of the course is to equip you with the knowledge to understand, evaluate, and act upon the many financial and non-financial reports used in managing modern firms.

Managing and evaluating the modern firm requires financial and non-financial information about the firm's products, processes, assets, and customers. This information is a key input into a wide range of analytical tools to support decisions: analyzing profitability of various products, managing product-line portfolios, setting prices, measuring and managing profitability of customers, making operational and strategic decisions, evaluating investments, investigating efficiency, and so on.

The focus of this course is on information generated by internal accounting systems. Along the way, we will discover that many companies have not provided their managers with useful information. These managers have to rely on information systems designed years ago for very different business processes and with very different technologies. We will take a look at a number of pitfalls that these systems can induce and at the dangers in using these systems to make business decisions. We will also investigate some modern ideas in how an organization's information system should be designed.

To attain the right level of understanding, you will need to be familiar with the mechanics of the many techniques used to prepare management reports. But the emphasis in this course is very much on interpretation, evaluation, and decision-making.

Teaching Materials

The *required* textbook is a custom text based on *Managerial Accounting*, by Garrison, Noreen, and Brewer, 13th edition, 2009. Roughly half the course sessions will rely on pre-readings from this text. Also, for most course topics, I will suggest several problems from the text for self-study and self-evaluation.

There are two copyrighted cases we will use: *Seligram ETO* and *Infinity Bank (A)*. These are available in an electronic course pack from the bookstore.

Additional readings and cases are posted on Blackboard. I will provide extensive lecture notes.

Feedback

I encourage you to provide feedback on class topics, content, and cases. I appreciate any concerns, questions, or opinions regarding the course. I would like to continue to improve this course; participants' feedback is critical.

Class Meetings

In each class, we focus on the management aspects of the topic. To prepare for class, you should go through the readings and prepare the case questions (for classes where we discuss cases).

Case discussion will take up approximately half of the course. I have found that a mix of lectures, cases, and discussions provides an interactive learning environment allowing for greater understanding of the managerial implications of information-system design and use.

Students will be active participants in case discussions, providing summaries of issues, analyses, and recommendations. This involves the preparation of the case and reading assignments before class and the active sharing of your insights during class.

Note that many of the managerial problems I will address through cases will not have clear-cut or "correct" solutions; do not let this discourage you.

Each student should carefully prepare the assigned case and be ready to be called on to present their analysis or to comment on others' analyses. You are encouraged to prepare for cases in teams. I will randomly call on students when discussing cases.

Grading

The course grade will be based on class participation, one recap quiz, and a closed-book final examination:

- Class participation 5%;
- Recap quiz 30%;
- Final examination 65%.

Class participation. The grade for class participation will depend on the quality of your interaction and participation in class discussions. The following factors will be considered:

- Case preparation. You should prepare answers to the case questions. I encourage you to prepare for cases in small groups. ***I will randomly call on students to contribute to case discussion.***
- Contributing to the in-class case analysis by making comments to move the discussion toward an understanding of the company and its issues.

Recap quiz. There will be one short, in-class, closed-book quiz. The material covered on the recap quiz is in the course outline.

Final exam. The final exam will be cumulative and closed-book. You may use a single sheet of notes.

Grading Policy

At NYU Stern we seek to teach challenging courses that allow students to demonstrate differential mastery of the subject matter. Assigning grades that reward excellence and reflect differences in performance is important to ensuring the integrity of our curriculum.

In core courses, our faculty have adopted a standard of rigor for teaching where:

- 25-35% of students can expect to receive A's for excellent work;
- 50-70% of students can expect to receive B's for good or very good work;
- 5-15% of students can expect to receive C's or less for adequate or below work.

Note that while we use these ranges as a guide, the actual distribution for this course and your own grade will depend upon how well each of you actually performs in this course.

Please see "Teaching and Grading at the NYU Stern Undergraduate College" for more information:

http://www.stern.nyu.edu/UC/CurrentStudents/Academics/PoliciesAndProcedures/CON_021884.

Re-Grading

In line with Grading Guidelines for the NYU Stern Undergraduate College, the process of assigning of grades is intended be one of unbiased evaluation. This means that students are encouraged to respect the integrity and authority of the professor's grading system and discouraged from pursuing arbitrary challenges to it.

If a student feels that an inadvertent error has been made in the grading of an individual assignment or in assessing an overall course grade, a request to have that the grade be re-evaluated may be submitted. Students should submit such requests in writing to the professor within 7 days of receiving the grade, including a brief written statement of why he or she believes that an error in grading has been made.

Academic Integrity

Integrity is critical to the learning process and to all that we do here at NYU Stern. All students are expected to abide by the **NYU Stern Student Code of Conduct**. A student's responsibilities include, but are not limited to:

- A duty to acknowledge the work and efforts of others when submitting work as one's own. Ideas, data, direct quotations, paraphrasing, creative expression, or any other incorporation of the work of others must be clearly referenced.
- A duty to exercise the utmost integrity when preparing for and completing examinations, including an obligation to report any observed violations.

For more information, please see:

<http://www.stern.nyu.edu/UC/CurrentStudents/Academics/PoliciesAndProcedures/index.htm>

Students with Disabilities

Students whose class performance may be affected due to a disability should notify the professor early in the semester so that arrangements can be made, in consultation with the Henry and Lucy Moses Center for Students with Disabilities, to accommodate their needs.

Please see www.nyu.edu/csd for more information.

Course Calendar At-A-Glance

Date	Session	Topic	Case to prepare
Sept-6	1	Introduction to the course.	
Sept-8	2	Managerial information systems: theory and practice.	
Sept-13	3	Information systems and process complexity.	<i>Seligram ETO</i>
Sept-15	4	Measuring and managing the costs of capacity (introduction).	<i>Surface Mount Technologies</i>
Sept-20	5	Measuring and managing the costs of capacity (conclusion).	
Sept-22	6	Activity-based costing (introduction).	<i>Coffee Services Company</i>
Sept-27	7	Activity-based costing (conclusion).	
Sept-29	8	Recap quiz. Customer profitability: introduction.	
Oct-4	9	Estimating and managing customer profitability.	<i>Infinity Bank</i>
Oct-6	10	Introduction to business decisions: CVP analysis.	
Oct-11		No class – university holiday	
Oct-13	11	Business decisions: relevant costs and relevant revenues.	
Oct-18	12	Wrap-up: decision analysis. Course takeaways.	<i>Ace Moped</i>
Oct-20	13	Final exam.	

Course Outline

Part I. Estimating and managing costs and revenues.

Sessions 1 and 2. Introduction to the course. Managerial information systems: theory and practice.

***Tuesday, September 6
Thursday, September 8***

Topics

- Course objectives – yours and mine.
- What is management accounting and why do we need it?
- Management accounting, strategy, and value.
- Multiple objectives of managerial-information systems.
- The flow of costs in service and manufacturing companies.
- Direct and absorption costing; normal costing.

Textbook

Chapter 1, pages 1-12 (take a quick glance through this background info);

Chapter 2, pages 31-54 (***make sure you understand the terminology – we will use it throughout the course***).

Self-study Problems

Exercises 2-2, 2-3, 2-4, 2-5; Problems 2-16, 2-18.

Session Plan

Unlike financial accounting, managerial accounting is not subject to governmental or legal requirements. Firms design their information systems to suit very specific purposes. Consequently, there are as many information systems as there are firms.

Complexity of the modern firm requires managers to rely on aggregated reports, both to make decisions and to manage costs. You must understand how these reports are prepared in order to use them. This requires you to comprehend how information is aggregated and presented. This is the main topic of the session.

We will also discuss the “big picture” of the course, course objectives (both yours and mine), and key dates in the course.

Topics

- Cost estimation and cost management.
 - Two-stage structure of costing systems.
 - Selection of allocation bases.
 - Failure of “traditional” costing systems.
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Prepare

Case study *Seligram, Inc.: Electronic Testing Operations*. Address the following questions:

1. How has ETO’s competitive environment changed?
 2. What caused the existing system at ETO to fail?
 3. Calculate the reported costs of the five components described as computed by
 - a. the existing system;
 - b. the system proposed by the accounting manager;
 - c. the system proposed by the consultant.
 4. Which system is preferable? Why?
 5. Would you treat the new machine as a separate cost center or as part of the main test room? Why? Compute the first-year overhead rate for the new machine if it were treated as a separate cost center.
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**Session
Plan**

We will start examining the issues of information-system design affecting an organization’s strategy and performance. The information system at *Seligram* is an extremely common one in practice. As many as 60% of publicly-traded firms rely on similar systems in the majority of their operations. Smaller firms are far more likely to use these “traditional” systems.

We will take a look at what is wrong with the information system, what dysfunctional behavior it can induce, and some proposed solutions.

Topics

- Costs of capacity resources.
 - Allocating capacity costs using practical and budgeted capacity utilization.
 - The “death spiral” – dangerous reporting-system-induced phenomenon in cyclical industries.
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Prepare

Case study *Surface Mount Technology*. Address the following questions:

1. OH rates for Sunnyvale Line 6 were \$360 in 1998 and \$375 in 1999. How are these OH rates computed by SMT?
2. Compute the OH rates for Sunnyvale Line 6 for 1997, 2000, and 2001. Why are the rates fluctuating so much? What are the fundamental economic changes causing these fluctuations?
3. Using SMT’s bidding algorithm, prepare a bid analysis for the Motorola request if the bid is analyzed (i) in 2000; (ii) in 2001.

Do you expect these bids to succeed?

4. What is likely to happen to OH rates (and, thus, our bids) in 2002?
5. Take a look at Project HP-HDC-32 (**this is new information, not in the case**). This long-term contract with a major customer involves the assembly of 10,000 control boards per year on one of the state-of-the-art surface-mount assembly lines (like Sunnyvale Line 6).

The contract requires the customer to pay us \$107 per board. The direct-material content is \$1.32; the direct-labor content is \$0.31. The processing requirements are 0.2 hours per board.

Compute the unit and total profitability of this relationship in 1999 and in 2001 (labor, materials, and processing requirements remain the same).
Comment.

**Session
Plan**

We will spend the majority of the sessions discussing the *SMT* case and some modern enhancements to *SMT*’s reporting system.

Topics	▪ Activity-based costing. ▪ Differences from and advantages over “traditional” costing systems. ▪ Hierarchy of activities. ▪ Translating activity-based costing into improved profitability. ▪ Implementation of modern cost-management systems.
Textbook	Chapter 8, pages 307-331, 333-334.
Read	<i>Coffee Services Company</i> case. This is pretty light reading. Don’t spend too much time on it. Just get to know the facts and think through the two questions in the case.
Self-study Problems	Exercises 8-1, 8-7, 8-15; and the review problem on pages 334-336.
Session Plan	We will begin our discussion of activity-based costing (ABC) and activity-based management (ABM). These information-system tools have become generally accepted as the solutions to many of the problems of “traditional” costing systems. However, there is no general agreement about how ABC and ABM should be implemented for a given firm. Even more problematically, there is no general agreement about what an economic model of the firm must include to qualify for the title <i>activity-based</i>. We will investigate exactly how ABC and ABM differ from the “traditional” systems. We will also look at what the activity-based models have to offer firms. Along the way, we’ll focus on several disadvantages of the “modern” systems.

Topics ▪ Analyzing and managing customer profitability.

Read 1. Calmetta Coleman, “Banks Cozy Up to Customers,” *The Wall Street Journal* 26 April 2001.
2. Matthew Swibel, “Where Money Doesn’t Talk,” *Forbes* 24 May 2004.

Session Plan We will hold our recap quiz at the beginning of session 8. The quiz will cover materials from class sessions 1-7.

For the rest of the class, we will begin our discussion of customer-profitability analysis.

Topics

- Actions to manage profitability of products and customers.
 - Translating reporting innovations into shareholder value.
 - Using management reports to make business decisions.
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Read

1. Randall Payant, “Challenges and Opportunities of Customer Profitability Analysis,” *Journal of Bank Cost & Management Accounting*, Nov. 2003.
 2. Gary McWilliams, “Minding the Store...” *WSJ*, 8 November 2004.
 3. Tom Richebacher, “The Art of Customer Profitability Analysis”
<http://www.destinationcrm.com/Articles/ReadArticle.aspx?ArticleID=45096>
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Prepare

Case study *Infinity Bank (A)*. Address the following questions:

1. Summarize Infinity Bank’s competitive environment. What are the major issues facing the bank? How has the bank performed in 1998-2003?
2. What were the conclusions of the product-profitability project? What were the surprises?
3. What are the potential advantages of the “supermarket” strategy? What are the potential disadvantages of the strategy?
4. What are the objectives of customer-profitability analysis (at Infinity and in general)? What does it add to the product-profitability system? Is it important? How should Philippa Smith’s customer-profitability pilot study be improved / extended?
5. What were the conclusions of Philippa Smith’s customer-profitability pilot study? What were the major sources of variation in customer profitability?
6. Examine the customer-profitability database. Construct a graph to communicate the profitability of the 2,205 customers in the *Weighted Sample* sheet, ranked from best to worst.
7. Given the customer-profitability analysis, does the “supermarket” strategy make sense?
8. How should the customer-profitability information be used? What should we do about the large number of unprofitable customers?
9. Overall, what are your recommendations for Infinity Bank’s managers?

NOTE: See the course web page for Excel spreadsheet with case data.

**Session
Plan**

We will devote this class to the discussion of the *Infinity Bank* case.

Part II. Tactical and Strategic Decisions.

Session 10. Introduction to business decisions: cost-volume-profit analysis.

Thursday, October 6

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| Topics | <ul style="list-style-type: none">▪ Variable and fixed costs.▪ The profit equation.▪ The break-even point.▪ The relevant range of analysis.▪ General cost-volume-profit analysis. |
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Textbook	For background, look over Chapter 5 (pages 188-200, 210-211). Carefully read Chapter 6 (pages 233-251, <i>Assumptions of CVP Analysis on page 258</i>).
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Self-study Problems	Exercise 6-11; Problems 6-26, 6-31.
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Session Plan	We will then discuss the managerial-accounting tool frequently used (and misused) in practice – cost-volume-profit analysis.
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Topics

- Relevant costs and relevant revenues.
- Opportunity costs.
- Asset-related costs.
- Routine and non-routine business decisions.

Textbook

Chapter 13 (pages 578-598, 602-603).

Self-study Problems

Exercises 13-4, 13-14; Problems 13-18, 13-25; Case 13-28.

Session Plan

I will begin this meeting with a concise lecture on relevant-cost and relevant-revenue analysis. We will do a number of examples, focusing on the following question: how do we use various management reports to extract data and analyze implications of decisions?

Session 12.	<i>Decision analysis: strategic considerations. Ace Moped Company case. Course takeaways.</i>	<i>Tuesday, October 18</i>
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Topics	▪ Illustration of relevant-cost and relevant-revenue analysis in a rich setting. ▪ Constraints and opportunity costs. ▪ Dealing with more than two alternatives.
Prepare	Case study <i>Ace Moped Company</i> (the questions are in the case study).
Session Plan	We will spend the majority of class time on the <i>Ace</i> case. We will take a careful look at the key takeaways from the course. At the end of session 12, we will discuss final-exam preparation (sample final will be posted on Blackboard).