NEW YORK UNIVERSITY
Stern School of Business

## ADVANCED MANAGERIAL ACCOUNTING (ACCT-GB.3305.20)

Spring 2018

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Office hours: Mondays $1 \mathrm{pm}-1: 50 \mathrm{pm}$ and by appointment

## 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 any modern firm requires information about the firm's products, processes, assets, and customers. This information is a key input into a wide range of 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, guiding improvement efforts, and so on.

The focus of this course is on modern internal-reporting systems. We will discover that many firms do not provide their managers with useful information; we will see numerous examples of value destruction and bankruptcies caused by this. We will also investigate some modern ideas in how an organization's internal information system should be designed to enhance value creation; and we will see how world-class firms take advantage of their competitors' internal-reporting mistakes.

To attain the right level of understanding, we will briefly explore the mechanics of the many techniques used to prepare internal reports. But the emphasis in this course is very much on interpretation, evaluation, and decision-making.

## Teaching Materials

The recommended textbook is Managerial Accounting, by Garrison, Noreen, and Brewer, $16^{\text {th }}$ edition.

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). You will need to purchase these cases.

I will post reading materials not requiring copyrights and lecture slides on NYU Classes.
I will also post any important announcements on NYU Classes.

## 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 ideal interactive learning environment.

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 closed-book midterm, a case write-up, and a closed-book final examination:

- Class participation $10 \%$;
- Write-up of Falco Scooters (A) case 5\%;
- Midterm exam 40\%;
- Final exam $45 \%$.

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.

Write-up of Falco Scooters (A) case. This write-up will be graded based on effort only. Submit the assignment using NYU Classes.

Midterm. We will have one in-class, closed-book midterm.
Final exam. The final exam will be in-class and closed-book. You may use a single page of notes (front and back). The final exam is not cumulative, but the material in the second half of the course builds on the knowledge acquired in the first half, before the midterm.

Please note the following grading-related policies:

- There will be no make-up midterm examinations under any circumstances. If you miss the midterm because of a medical or family emergency, you will need to provide me with documentation; in this case, the weight of the midterm will be added to the weight of the final.
- The weights, in "Grading" above, are identical for everyone. It is not possible to make up for poor performance by doing extra work.
- After the midterm, you have one week from the time your exam paper is returned to you to review the exam for any errors in grading. After that period, I will not re-grade any part of your exam. All requests for re-grading must be submitted in writing.


## Course Calendar At-A-Glance

|  | Date | Topic | Case to prepare |
| :---: | :---: | :---: | :---: |
| 1 | Monday 1/29/2018 | Introduction to the course <br> Managerial information systems: theory and practice |  |
| 2 | Monday 2/5/2018 | Normal absorption costing <br> Cost estimation and process complexity | Seligram ETO |
| 3 | Monday 2/12/2018 | Measuring and managing the costs of capacity | Adapconn |
| 4 | Monday 2/26/2018 | Activity-based costing | Coffee Services |
| 5 | Monday 3/5/2018 | Estimating and managing customer profitability | Infinity Bank |
| 6 | Monday 3/19/2018 | Budgeting <br> Review for midterm |  |
| 7 | Monday 3/26/2018 | Midterm |  |
| 8 | Monday 4/2/2018 | Wrap-up of course Part I <br> Guest speaker |  |
| 9 | Monday 4/9/2018 | Decentralization and performance evaluation Incentive effects of absorption costing | Western Chipsets |
| 10 | Monday 4/16/2018 | Introduction to decision analysis: Cost-Volume-Profit |  |
| 11 | Monday 4/23/2018 | Decision analysis: Relevant costs and relevant revenues | Falco Scooters (A) |
| 12 | Monday 4/30/2018 | Decision analysis: Asset-related costs and strategic issues <br> Transfer pricing: Part 1 | Falco Scooters (B) |
| 13 | Monday 5/7/2018 | Transfer pricing: Part 2 <br> Course takeaways. Review for final |  |

## Course Outline

## Part l. Estimating and managing costs and revenues.

## Session 1. Introduction to the course. Managerial information systems: theory and practice. <br> January 29

## 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.
- Direct and absorption costing.


## Textbook

Chapter 1, pages 24-40. Make sure you understand the terminology introduced in this chapter. You have seen many of these terms before; we will use many of them throughout the course.

Chapter 2, pages 67-82. You can skip low-level details such as: "Measuring Direct Materials Cost", "Job Cost Sheet", and "Measuring Direct Labor Cost" on pages 70-71.

Self-study Review problem on page 83. Exercises 2-1; 2-2; 2-3; 2-4; 2-6; 2-13. Problems

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\begin{array}{ll}
\text { Session } \\
\text { Plan } & \begin{array}{l}
\text { Unlike financial accounting, managerial accounting is not subject to } \\
\text { governmental or legal requirements. Firms design their information systems to } \\
\text { suit very specific purposes. Consequently, there are as many information systems } \\
\text { as there are firms. }
\end{array} \\
\text { Complexity of the modern firm requires managers to rely on aggregated reports, } \\
\text { both to make decisions and to manage costs. You must understand how these } \\
\text { reports are prepared in order to use them. This requires you to comprehend how } \\
\text { information is aggregated and presented. This is the main topic of the session. } \\
\text { We will also discuss the "big picture" of the course, course objectives (both yours } \\
\text { and mine), and key dates in the course. }
\end{array}
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Session 2. Normal absorption costing. Cost estimation and process complexity. Seligram case.

February 5

Topics - Overhead cost allocations.

- Cost estimation and cost management.
- Two-stage structure of costing systems.
- Selection of allocation bases.


## Textbook Chapter 3, pages 110-128.

Self-study Exercises 3-3, 3-4, 3-7; Problem 3-12 (parts 1 and 2 only).

## Problems

Prepare Case study Seligram, Inc.: ETO. 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.

> Session The most common modern approach to estimate unit costs is normal absorption Plan costing. We will investigate the key components of this approach.
> We will then begin 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.

Session 3. Adapconn case. Measuring and managing the costs of capacity. February 12

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.

Prepare Case study Adapconn. Address the questions in the case.

Session
Plan will spend the majority of the session discussing the Adapconn case and some
modern enhancements to Adapconn'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.

Textbook

Prepare Coffee Services Company case. This is pretty light reading. Get to know the facts and think through the two questions in the case.

Self-study Exercises 7-4, 7-5, 7-9, 7-13; Problem 7-16 (parts 1 and 2 only); and the review Problems

Session Plan

Chapter 7, pages 310-335. Do not get overwhelmed by the details; we will clarify the main ideas in the class session.
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$\qquad$ problem on pages 336-337.

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 activity-based.

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.

We will do most of this in the context of the Coffee Services Company case.

Session 5. Infinity Bank (A) case. Estimating and managing customer profitability.

Topics Customer profitability analysis.

Read I will post several readings on NYU Classes. A good background is in "Retail Renaissance", a special report in The Economist, May 19, 2012. The library has full text from The Economist in numerous e-journal sources.

Currently, it is available for free at: http://www.economist.com/node/21554742 (note the numerous links to the articles in this special report under the heading "Special report" in the middle of the web page).

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 We will devote these sessions to the discussion of the Infinity Bank case and Plan customer-profitability analysis.

Session 6. Budgeting.
March 19
Review for midterm.

Topics - Profit planning.

- Sales budgets.
- Cash budgets.

Textbook Chapter 8, pages 362-387.

Self-study Exercises 8-1, 8-2, 8-3, 8-4, 8-5, 8-6, 8-7, 8-8.
Problems

Session
Plan
We will discuss budgeting: a key reporting, planning, performance-evaluation, and decision-analysis tool.

We will then review for the midterm exam. The midterm covers materials from sessions 1-6. I will post sample questions (and, later, answers) to help you prepare.

To prepare for the review session (and for the midterm), it is crucial that you attempt to solve the sample-midterm problems.
Session 7. Midterm. March 26

Session 8. Wrap-up of course part I. April 2

## Part II. Performance Evaluation. Tactical and Strategic Decisions.

Session 9. Decentralization and performance evaluation.
Incentive effects of absorption costing. Western Chipsets case.

Topics

Textbook Chapter 11, pages 506-515.
Chapter 6, pages 257-266.

Prepare Case study Western Chipsets. Provide the analysis requested in the case.

Self-study Exercises 11-2, 11-5, 11-9.
Problems
Exercises 6-1, 6-2, 6-3; Problems 6-19, 6-20.

Session We will begin our discussion of decentralization and performance evaluation. Plan

- Decentralization.
- Evaluating investment centers: ROI and Residual Income.
- Incentive effects of absorption costing.
- Variable costing and contribution format income statements.
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Topics - Variable and fixed costs.

- The profit equation.
- The break-even point.
- The relevant range of analysis.
- General cost-volume-profit analysis.
- Contribution margin ratio analysis.
- Degree of operating leverage analysis.

Textbook Chapter 5, pages 196-217.

Self-study Exercises 5-4, 5-5, 5-8, 5-9, 5-11, 5-18; Problem 5-23.
Problems

Session We will discuss a decision-analysis tool frequently used (and misused) in practice Plan - cost-volume-profit analysis.

Session 11. Decision analysis: Relevant costs and relevant revenues. Falco Scooters (A) case.

## Topics

Prepare and turn
in by 12pm

- Relevant costs and relevant revenues.
- Constraints and opportunity costs.
- Asset-related costs.
- Strategic considerations.


## Textbook Chapter 12, pages 560-585.

- Routine and non-routine business decisions.

Self-study
Problems

Session
Plan
We will begin our exploration of general decision 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?

We will analyze the Falco Scooters (A) case.

## Session 12. Decision analysis: Asset-related costs and strategic issues. Falco Scooters (B) case. <br> Transfer pricing: Part 1.

Topics - Implications of changes in inventories, receivables, and payables.

- Erosion and cannibalization issues.
- Strategic issues.
- Transfer pricing - key method in evaluating the performance of managers in integrated organizations.
- Aligning incentives of divisional managers.

Textbook Chapter 13, pages 632-634, 638-643.

Prepare Case study Falco Scooters (B). Address the questions in the case. Note: The discussion of residual income and $E V A^{\circledR}$ from Chapter 11 is useful for doing the Falco Scooters (B) case.

Self-study Exercise 13-14; Problems 13-16.
Problems

Session Plan

We will continue our exploration of decision analysis. We will analyze the Falco Scooters (B) case.

We will then begin our discussion of a critical decentralization and performanceevaluation tool - transfer pricing.

Sessions 13. Transfer pricing: Part 2.
Course takeaways. Review for final.
May 7

Topics - Cost-based and negotiated transfer pricing.

- International considerations.
- Strategic considerations.

Textbook Appendix 11A, pages 540-546.

Self-study Exercises 11A-1, 11A-3; Problem 11A-5; Case 11A-7 (parts 1-3 only). Problems

Prepare Sample final exam.

Session We will consider the two most popular transfer pricing methods: cost-based and Plan negotiated. We will discuss how these techniques contribute to an overall goal of decentralization and performance evaluation.

We will then review the key takeaways from the course.

We will then take a look at the sample final and discuss final-exam preparation.

