

Managerial Accounting (BUS 513P)

Syllabus – Fall 2016

Instructor Information

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Course Description

This course is about the information used to make decisions *inside* organizations. In this course, we will study the creation, interpretation, and dissemination of such information. Our study will always take place within the context of a managerial decision. We will begin each unit by discussing a decision, or set of related decisions, and then learn how management accounting has evolved to assist managers who need to make that decision.

Managerial decisions can be classified as planning or control decisions. Planning decisions relate to choices about acquiring and using resources to deliver products and services to customers. Control decisions are concerned with motivating, measuring, evaluating, and rewarding performance. Planning and control decisions form a cycle. Planning decisions occur before organizations take action (since a plan is made, by definition, before action occurs), while control decisions occur after the effects of organizations' actions are known. Interestingly, we will see how control decisions can affect planning decisions through the incentives they create. We will discuss the cyclical aspect of planning and control decisions at many times during the course. In this course, we will spend a majority of our time on planning decisions, and in particular on the use of cost information in such decisions.

Managerial decisions can also be classified as short-term or long-term. An investment in capacity is often a long-term decision, whereas the decision to temporarily drop prices to increase capacity utilization is typically viewed as a short-term decision. Over the semester, we will study planning and control decisions over multiple time horizons, and will learn how different accounting numbers are appropriate for different decisions.

Finally, note that financial and managerial accounting are largely independent. Financial accounting has a well-established set of rules, many of which are legally enforced. That is because users of financial accounting information are external stakeholders, such as investors and governments, desire comparability. However, financial accounting numbers are often misleading when used in

internal managerial decisions. The focus of this course, therefore, is to understand which information is relevant in common managerial decision contexts.

Course Topics and Flow

Following is a list of topics. For each topic, I provide an explanation of the major learning objectives, and explain why this material logically follows the previous material.

Direct and indirect costs; Cost flows; Job order costing

I will start out by explaining how inventory is valued. This is a bridge topic to financial accounting. In financial accounting, they talk about identifying units of inventory sold, and how inventory becomes COGS, but the question of valuing inventory is assumed away. By starting with cost flows and job order costing, I will dive into this process. The big conceptual distinction is between direct and indirect costs. Direct costs can be traced to specific units of inventory, while indirect costs cannot. Cost systems, which are based on allocation, have evolved to address this problem.

Variable and fixed costs; Absorption costing and variable costing; Incentive to overproduce under absorption costing; Use of practical capacity as the denominator

Another classification of costs relates to their behavior, which can be considered variable or fixed. Different methods have evolved for assigning fixed manufacturing costs to units of inventory. We can therefore explore the question of whether fixed manufacturing costs, which are sunk in the short run, should be assigned to units of inventory. The matching principle suggests that they should, and GAAP requires absorption costing. However, absorption costing introduces an incentive to overproduce inventory. This can be partially remedied by using practical capacity as the denominator.

Refining a cost system; Activity-based costing and activity-based management

What if our methods for assigning indirect costs are very inaccurate? That may distort decision making. It is possible to use additional information about resource consumption to refine a cost system. This, in turn, reduces error in cost estimates by distinguishing among different types of indirect costs and assigning categories of indirect costs to the cost objects that are responsible for them. We will distinguish between two-stage costing and activity-based costing, and show how an activity-based view of organizations allows for activity-based management.

Cost behavior and cost estimation; Identifying cost drivers

In order to increasing the sophistication of a cost system, organizations must identify additional cost drivers. In this unit, we will learn how organizations might do this. We first need to understand different cost behaviors, and then learn how to use historical data to identify which activities are driving costs. We will spend time using linear regression in this unit.

Making decisions using uncertain cost information

The previous units should convince you that costs are estimates of resource consumption, and that organizations cannot know the true costs of their outputs. There will always be some uncertainty over costs. However, organizations must use cost estimates in many managerial decisions, such as

pricing and bidding for new work. How should the uncertainty factor into such decisions? In this unit, we will discuss pricing and bidding strategies.

Cost-Volume-Profit (CVP) Analysis

We will now turn our attention to some short-run analyses. In the short-run, we can assume some costs are fixed. Given that, how can organizations maximize profits? CVP analysis shows how total costs, revenues, and operating income change as sales volumes, sales prices, variable costs, and fixed costs change. These relationships allow managers to compute breakeven volumes, and the sales volume needed to earn a target profit.

Relevant Cost Analysis

This unit also pertains to short-run analyses in which some costs can be treated as fixed. We will consider common short-run decisions, such as the make-or-buy decision, the choice of a profit-maximizing product mix given capacity constraints, and customer profitability analysis. In this context, some information will be useless in the sense that future profits are not affected if we consider this information. We will show that other information that is commonly ignored does affect future profits. We will introduce the terms *relevance*, *opportunity cost*, and *sunk cost* in this unit.

Budgeting

All of the decisions we have studied so far are planning decisions. They deal with choices about acquiring and using resources to deliver products and services to customers. By contrast, control decisions are concerned with motivating, measuring, evaluating, and rewarding performance. Budgeting is a topic that spans both types of decisions. We will begin by showing how a budget is a plan for resource consumption, as well as a plan for future performance. Budgets are also used to coordinate activities across divisions within an organization, and to assign responsibility for various dimensions of performance across the organization.

A budget is a plan for future performance. However, at the end of the relevant period of time, actual performance will differ from planned performance. In other words, actual amounts will differ from budgeted (planned) amounts. How can organizations determine the cause of these deviations? Enter variance analysis, stage left. How can organizations hold individuals responsible for deviations? Variance analysis helps with this as well.

Management Control Systems, Decentralization, and Transfer Pricing

A management control system is a means of gathering and using information to aid and coordinate the planning and control decisions throughout the organization, and do guide the behavior of managers. Given the available information, and the decisions made, how should an organization be organized? What decision rights should be delegated from top management to division managers? How should the performance of those managers be measured? How should those managers be rewarded? Finally, given the answers to the previous questions, how should managers of autonomous divisions transact with each other? In other words, how should internal transfer prices be set?

Performance Pay and Incentives

If an employee is paid a fixed wage, he/she has little incentive to work harder or improve performance. On the other hand, if the employee is rewarded for performance, he/she will face risk that is not controllable. In this unit, we will study this tradeoff.

Balanced Scorecard

We will begin this unit by discussing strategy. Organizations' strategies are multifaceted, and performance measurement systems need to capture this. Rewarding employees only for financial outcomes discourages them from implementing all facets of the strategy. The Balanced Scorecard attempts to remedy this by incorporating multiple measures of performance.

Course Topics and Related Readings

The following table lists the course topics in the order in which I plan to teach them. For each topic, I list the associated readings in your textbook. Note that the abbreviation LO stands for *learning objective*. Each textbook chapter is organized into learning objectives. Thus, Ch2, LO5, refers to learning objective 5 of chapter 2 of your textbook (which is pages 38 – 40).

Note that we are covering the chapters out of order, and that we are not going to cover every learning objective of the assigned chapters.

1	Unit Title: Introduction to Cost Business Problem: None – covering prerequisites Ch2, LO1: Define cost object Ch2, LO2: Direct and indirect costs
2	Unit Title: Cost Flows Business Problems: How do companies determine the value of finished goods inventories on their balance sheets? Which costs should be part of cost of goods sold? Ch2, LO5: Inventoriable costs and period costs Ch2, LO6: Cost flows
3	Unit Title: Job Costing Business Problems: How are costs assigned to cost objects produced in small quantities? What are some different methods of assigning indirect costs when such costs are not known in advance? Ch4, LO1: Building blocks of a costing system Ch4, LO2: Job and process costing Ch4, LO3: Main challenge of implementing job-costing systems Ch4, LO4: Implementing a normal costing system Ch4, LO5: Distinguishing actual from normal costing Ch4, LO6: Recording transactions in a manufacturing job-costing system Ch4, LO7: Disposing of under- or over-allocated OH

4	<p>Unit Title: Variable and Fixed Costs</p> <p>Business Problem: None – covering prerequisites</p> <p>Ch2, LO3: Variable and fixed costs (defines cost driver) Ch2, LO4: Interpret unit costs cautiously</p>
5	<p>Unit Title: Dealing with Fixed Manufacturing Overhead Using Fixed Costs in Managerial Decisions</p> <p>Business Problems: Should fixed manufacturing overhead costs be part of inventory costs? How does this choice affect incentives of managers? What are some methods for remedying these perverse incentives?</p> <p>Inventory costing (absorption vs. variable) and Capacity analysis Ch9, LO1: Variable and absorption costing Ch9, LO2: Differences in income in variable and absorption costing Ch9, LO3: Incentive to over-produce under absorption costing Ch9, LO5: Capacity levels that can be used as denominator in fixed MOH rate Ch9, LO6: Effects of denominator rate in LO5 (includes death spiral), but skip pp. 348 – 351.</p> <p>Cases for next class: Sedatole paper, Youngstown (in-class??), RegionFly case</p>
6	<p>Unit Title: Activity-Based costing</p> <p>Business Problem: Can we refine our cost estimates by increasing the sophistication of our cost system?</p> <p>Ch5, LO1: Under and over costing products Ch5, LO2: Refining a costing system Ch5, LO3: Simple costing vs. ABC Ch5, LO4: Cost hierarchy Ch5, LO5: Costing products using ABC Ch5, LO6: Considerations in implementing ABC Ch5, LO7: ABM</p> <p>Cases for next class: Hematest (in-class??), VMD Medical Imaging Center, Classic Pen</p>
7	<p>Unit Title: Making decisions with uncertain cost information</p> <p>Business Problem: Costs are estimates of resource consumption, but must be used in managerial decisions. If decisions are made using estimates, what might go wrong?</p> <p>Ch13, LO2: Long-run pricing decisions Ch13, LO3: Target costs Ch13, LO4: Cost incurrence vs. locked-in costs Ch13, LO5: Cost-plus Ch13, LO7: Price discrimination, peak-load pricing Mystery topic: I will tell you the name of this topic after we cover it. If I tell you in advance, it will spoil the game we will play in class.</p>

8	<p>Unit Title: Cost behavior and cost estimation</p> <p>Business Problem: How can organizations identify their cost drivers?</p> <p>Ch10, LO1: Linear cost functions Ch10, LO2: Identifying cost drivers Ch10, LO3: Cost estimation methods Ch10, LO4: Estimating a cost function using quantitative analysis (focus on regression) Ch10, LO5: Evaluating and choosing cost drivers</p>
9	<p>Unit Title: Cost-Volume-Profit (CVP) analysis</p> <p>Business Problem: How do total costs, revenues, and operating income change as sales volumes, sales prices, variable costs, and fixed costs change?</p> <p>Ch3, LO1: Define CVP Ch3, LO2: Breakeven, target income Ch3, LO3: Effect of taxes Ch3, LO4: Using CVP to make decisions Ch3, LO5: Sensitivity analysis / margin of safety Ch3, LO6: Cost planning / operating leverage Ch3, LO7: Effect of sales mix on income Ch3, LO8: Applying CVP in service and not-for-profit Ch3, LO9: Difference between CM and gross margin Ch3, Appendix: decision models and uncertainty</p>
10	<p>Unit Title: Relevant cost analysis</p> <p>Business Problem: Which information should be used in a given managerial decision? How can a manager know that information is useful, or possibly useless, when making a decision?</p> <p>Ch11, LO2: Relevant information (special orders, short-run pricing) Ch11, LO3: Insourcing/outsourcing and make vs. buy decisions, opportunity cost Ch11, LO4: Product mix decisions with capacity constraints (knapsack problem) Ch11, LO6: Customer profitability analysis Ch11, LO7: Irrelevance of past costs Ch11, LO8: Decisions and performance evaluation</p> <p>Cases for next class: Precision Worldwide</p>
11	<p>Unit Title: Budgeting, part 1</p> <p>Business Problems: How do organizations plan future resource consumption and activities, and coordinate such activities across divisions?</p> <p>Ch6, LO1: Master budget Ch6, LO2: Advantages of budgets Ch6, LO3: Operating budgets Ch6, LO4: Sensitivity analyses Ch6, LO5: Responsibility centers Ch6, LO6: Human factors in budgeting (e.g. slack, targets) Ch6, Appendix: cash budget</p>

<p>12</p>	<p>Unit Title: Budgeting, part 2</p> <p>Business Problems: Actual performance will typically differ from planned performance. How can organizations determine the causes of deviations? How do organizations hold individuals responsible for performance relative to plan?</p> <p>Ch7, LO1: Static budgets and static budget variances Ch7, LO2: Flexible budgets Ch7, LO3: Flex budget and sales volume variances Ch7, LO4: Standard costs Ch7, LO5: Price and efficiency variances Ch7, LO6: Using variances</p>
<p>13</p>	<p>Unit Title: Management Control Systems, Decentralization, and Transfer Pricing</p> <p>Business Problems: How can organizations design systems for gathering and reporting managerial accounting information? How should organizations organize themselves, given the available managerial accounting information? Finally, how should autonomous divisions with an organization transact with one another?</p> <p>Ch22, LO1: Management Control Systems Ch22, LO2: Decentralization Ch22, LO3, LO4: transfer prices Ch22, LO5: Market-based transfer prices Ch22, LO6: Transfer prices when costs are full cost plus a markup Ch22, LO7: Unused capacity and transfer pricing Ch22, LO8: Minimum transfer price</p> <p>Cases for next class: Birch paper</p>
<p>14</p>	<p>Unit Title: Performance Pay and Incentives</p> <p>Business Problems: What tradeoffs will you face when you design a compensation contract for an employee? Is there a tradeoff between risk and reward, as is taught in finance?</p> <p>Case: Performance Pay at Safelite Auto Glass (A)</p>
<p>15</p>	<p>Unit Title: Balanced scorecard</p> <p>Business Problems: How to incorporate multiple measures of performance in the performance evaluations of employees and divisions?</p> <p>Ch12, LO1: What is strategy Ch12, LO3: Strategy implementation and the balanced scorecard Ch12, LO4: Analyzing changes in operating income to evaluate the success of strategy</p> <p>Additional readings: The Balanced Scorecard: Measures That Drive Performance Cases: Ittner and Larcker paper (opt.)</p>

Required Materials

Cases

We will use some Harvard Business School Cases and *Harvard Business Review* articles this semester. You can procure them from **Study.net** under the course name *BUS 513P: Managerial Accounting (Anand, Fall 2016)*. Here's a direct link:

http://www.study.net/r_mat.asp?crs_id=30093753

- Register for access at <http://www.study.net>.
- Study.Net is quoting a price of \$25.56 for this material.

Textbook

Hornngren, C.T., Datar, S.M., and M.V. Rajan 2015. *Cost Accounting: A Managerial Emphasis*. 15th edition. Pearson. ISBN: 9780133781106.

The textbook is required. *Additionally, you must purchase access to a Pearson product called **My Accounting Lab***. I will use this product, which accompanies the textbook, to assign and grade your weekly homework assignments.

Which format / edition should you obtain?

- You may use an electronic copy of the textbook.
- The publisher's representative suggests that you purchase a "student value edition" which is printed on 3-hole punch paper, and includes access to MyAccountingLab. The Emory bookstore had a few copies of this on hand on Monday Aug 22, 2016.
- Amazon also sells the "Student Value Edition Plus MyAccountingLab". Click [here](#).

Additional Readings and Cases

There are some additional readings and cases that are available at no charge. I will post these on Canvas throughout the semester.

Expectations for Classes

During class, I will alternate between lecturing and problem solving. Sometimes, I will solve problems in front of the class, with student input. At other times, I will present a problem to the class and give 5-15 minutes to work on it. We will then reconvene and discuss the solution. I will also pose questions to the class, and poll the class, using a website called Kahoot.

Occasionally, we will discuss cases during class. Most of the cases are short and should be treated as a long, in-class exercise. There are, however, a few cases that will occupy a significant portion of the class. *Prepare the cases before class, and expect to participate heavily during case discussions*. I will cold call frequently during case discussions.

Lecture Notes

I will distribute paper copies of my lecture slides before each class. I will leave blank areas on my slides so you can take notes during class. I plan to write on my slides with an electronic pen during

class. After each class, I will upload an electronic copy of my slides, including my e-ink, to course's *Canvas* site.

At the End of Each Class

At the end of each class, I will provide you with a list of homework problems that will be due in 4 days (on Sunday night). I will also let you know which cases or articles, if any, you need to read and prepare for the following week's class.

Communication

From me to the class

I will use *Canvas* as the primary means of communicating with the class. You are responsible for ensuring that you have access to the *Canvas* site for this course (FA16_BUS_513_C32). I will post electronic copies of course materials, such as my lecture notes, and other handouts on *Canvas*.

Emory is in the process of migrating from Blackboard to *Canvas*. In Fall 2016, core courses must use *Canvas*. Other courses will migrate to *Canvas* in the spring of 2017. **Since this is the first time Emory (and I!) is using *Canvas*, expect a learning curve, and technical difficulties.**

From me to an individual

If I need to communicate with you individually, I will send an email to your official Emory email address. Therefore, you should check your Emory email regularly, or have it forwarded to your preferred email address.

Getting Help

If you have questions, don't hesitate to ask me. You may ask me after class, or you may email me. I will hold office hours before each class. We can also set up a meeting or a phone call if you want.

Teaching Assistants

Two of my PhD students, Lisa LaViers and Jake Zureich, have agreed to be teaching assistants for this course. You may email either with questions, or meet with them to go over the material. Their email addresses are lisa.laviers@emory.edu and jacob.theodore.zureich@emory.edu.

Grading and Assignments

Your final grade will be determined at the end of the semester based on the percentages in the table at right. Goizueta Business School policy mandates a grade distribution,¹ which implies that you will be graded "on a curve". Thus, your performance *relative* to other students will determine your grade. Because we will use relative performance evaluation, it is *not* possible to estimate your overall grade during the semester.

¹ See <https://community.bus.emory.edu/program/FullTimeMBA/Grading%20Policy/Grading%20Policy.aspx>

Class Participation

Participation will count for 15% of your grade. Your participation score has two components: attendance and a subjective rating. Attendance will count for 5% of your overall grade, and your subjective rating will count for 10% of your overall grade.

Class participation	15%
Homework	15%
Accounting in the Wild	10%
Midterm exam	20%
Final exam	40%

Attendance

One third of your participation score (5% of your overall grade) will be determined by your attendance. This is a purely objective performance measure.

If you need to miss a class...

If you have to miss class, I will give you the opportunity to make up the attendance points. I will email you approximately 3 questions. Expect these to be qualitative. If you answer those questions satisfactorily, you will earn the attendance points. The purpose of these questions will be to show me that you learned the material you missed.

Subjective Rating

The other two thirds of your participation score (10% of your overall grade) will be *completely subjective*. I will assign the subjective participation scores at the end of the semester. The higher the quality of your in-class contributions, the higher will be your subjective score. The quality of your comments are more important than their quantity. Vacuous comments that waste class time will decrease your subjective score. *I reserve the right to lower your subjective score if your behavior detracts from, or inhibits, other students' learning.*

Cold calling

I will cold call students during class. Some questions will pertain to material that I expected you to prepare in advance (like a case), and other questions will pertain to material that I am presenting for the first time.

- If you are unable to answer a question pertaining to new material, just say “pass.” However, it would be better if you attempt to answer the question or explain your confusion.
- *If I ask you about material that I asked you to prepare in advance, try to show me that you prepared.* I do not expect you to always have the right answer, but I expect you to have thought about the material before class. I will reward thoughtful answers even if they are incorrect. However, if you are unprepared and provide flippant answers, expect a lower subjective rating.
- You have one “Get out of jail free” card this semester. If there is a day when you are unable to prepare for class, let me know beforehand and I will not cold call you for material that I expected you to prepare ahead of time. If you are unprepared more than once, I will reduce your subjective rating.

Professional behaviors

I expect you to be attentive and engaged during class. I will not tolerate disruptions and distractions that inhibit other students' ability to learn during class. I cannot list every possible distracting or disruptive behavior. Instead, I will follow the "I know it when I see it" doctrine established by U.S. Supreme Court Justice Potter Stewart:

I shall not today attempt further to define the kinds of [behaviors] I understand to be [distracting or disruptive], and perhaps I could never succeed in intelligibly doing so. But I know it when I see it...

If you behave in a distracting or disruptive manner, I will reduce your subjective participation rating.

Finally, be discreet if you arrive late.

Laptop and Phone Use During Class

You may **not** use laptops and phones during class unless I approve their use. If you would like to use your laptop to take notes, come see me immediately so we can discuss it. I will likely approve your request, but if I find you are using your laptop for other purposes, I will revoke your right to use it in class and reduce your subjective rating. That said, we will perform many in-class exercises that require technology, so please bring a laptop or phone to class.

If a phone rings during class, I reserve the right to answer it. ☺

Homework

I will assign homework each week on *MyAccountingLab*. Each homework assignment will be due on the Sunday (at midnight) following the class on which it was assigned. That means you will have 4 days to complete each homework assignment after we cover the relevant material in class. There are two reasons why I decided to make your homework due on Sundays. First, I want you to interact with the material soon after class. Second, I want to give you time to prepare for the following class. That said, if the Sunday due date is problematic in a given week, email me and we can discuss an extension.

Submit your answers to homework questions at the MyAccountingLab website.

Accounting in the Wild

Managerial accounting is extremely useful in practice. To convince you of this, I am tasking you with writing a short document (roughly 3-5 pages) that describes a real-world setting and explains how something you learned in my class applies in that setting. Ideally, this document should be based on your current job, or a previous job. However, you may also use articles in the business press as your inspiration.

You may turn in this write-up at any time during the semester. I can give you sample write-ups if you wish.



Midterm Exam

You will take the midterm exam during the first half of class on Wednesday, October 12. The midterm exam will consist of problems, similar to those assigned in the weekly homework. The midterm exam may also include some qualitative, conceptual questions.

Final Exam

The exam is scheduled for Wednesday, December 7 during our regular class time (6:30 – 9:15 PM). However, I may make the final exam a “take home” exam. We will discuss the details of the final exam in the second half of the semester.