**MLD-411M**
**Course Syllabus**
**Draft as of March 20, 2015**

**INTRODUCTION TO BUDGETING AND FINANCIAL MANAGEMENT**
**Spring 2015, Module 4**

**March 23 – May 1, 2015**
**Mondays and Wednesdays 11:40am – 1:00pm**
**STARR**
**Review Sessions: Fridays 11:40am – 1:00pm**
**RG-20**


**Professor Linda Bilmes**
**Professor Carlos Gonzalez Barragan**

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Prof. Bilmes office hours:
Wed 2:30-4:30, Belfer-409
Wed lunches by appointment

Prof. Gonzalez Barragan office hours:
Tue. 5:00 – 7:00 Belfer-L2C

Course E-mail: MLD411M@gmail.com — All questions will be answered within 24 business hours

Course Assistants:

| | | |
|---|---|---|
| Crosby Burns | crosby_burns@hks15.harvard.edu | OH: Tue. 10:00-12:00 LG-21B |
| Jessica Huey | jessica_huey@hks15.harvard.edu | OH: Tue. 1:30-3:30 Taubman Carrel #2 |
| Jillian McLaughlin | jillian_mclaughlin@hks15.harvard.edu | OH: M 9:30-11:30 Taubman Carrel #1 |
| Amanda Zheng | amanda_zheng@hks15.harvard.edu | OH: Sun. 3:00-6:00 T-G-33 |

Teaching Fellow:

Zhuldyz Bakytzhanova zhuldyz_bakytzhanova@hks15.harvard.edu OH: Thurs. 10:30-12:00 T-275 (except April 2; T-401)

## 1. Course Overview

This is an introductory module designed for students who have little or no background in budgeting and financial management. You will learn to create, execute and analyze the basic types of budgets used in public, non-profit, and for-profit organizations. The course will teach specific tools using the case method, exercises and on-line tutorials. It is a demanding course that requires a lot of work.

We will cover budget analysis, budget formulation, budget execution, budget strategies and evaluation of operating and capital budgets. This course teaches variance analysis, cost accounting, capital budgeting and the balanced scorecard. It does NOT teach financial accounting. Most (but not all) of the material covered is taught using budgets from private sector companies, local governments, sports teams, hospitals, and other institutions that are transferable to international settings.

**2. Prerequisites**

This course is intended as an *introduction* to budgets. There are no formal prerequisites, and you do not need to be a "numbers" person in order to do well in this class. However you should be familiar with basic Excel. (There will be an (optional) training session for Excel and financial spreadsheet skills on Friday March 27th).

*Students who need more help with the mechanics and technical aspects of the course must attend the Friday review sessions, which are held on Fridays.* These sessions are carefully designed to supplement the classes and review the homework assignments. If you are not sure whether this class is the right level for you, look carefully at the previous final exams posted on the website. *If you already know this material, then you should not take this course*.

**3. Requirements**

This course requires the following:

- Class Participation
- Preparation of case materials
- Completion of homework assignments
- Completion of on-line tutorials
- Team exercises
- Midterm Quiz
- Final Exam

Approximately two-thirds of the classes will involve case discussions, primarily using Harvard Business School materials. *To prepare these cases, you must read them, struggle with them, and crunch the numbers BEFORE coming to class*. We use several on-line tutorials which will help you to master the new skills. If you have not used the skill before, you may need to run the tutorial a couple of times. Students will be assigned into teams at the beginning of term. All students are required to complete the on-line tutorials, to prepare each case thoroughly, to participate in class discussions, to submit individual and team homework assignments and problem sets.

There will be 4 individual homework assignments and 4 team assignments that must be submitted and which will form the basis for class discussion. You may be called on randomly to present portions of the cases. Students may miss one class without penalty. Beyond that, class attendance is mandatory and may only be excused for with a note from the program director or in serious emergency.

*Laptops are not permitted in class* except for team assignment dates or in exceptional circumstances.

Question Cards: This is a short module. Previous feedback suggests that it is not a good use of class time to review technical material from the homework during the class. The students who already know it can feel bored and those who don't find it hard to learn this kind of material in front of 75 onlookers. Therefore, if you have a question or comment that is not covered in class, please submit a "Question Card", which will be by the door in every session (which may be submitted anonymously). I will post the answers on the course website.

## 4. Readings

**There is a case you must read for the first day of class!! The "Seven Letters" case is available on the course website**.
Any reading that is marked "critical" in the syllabus means that you will not be able to do the assignment without it. The other readings are strongly recommended.
Most of the skills-teaching cases are from Harvard Business School (HBS). The tutorials are learning tools that enable you to learn the skill at your own pace. You will receive a special code so that you can enter the site to use these tutorials. *Do not share this code with anyone outside the course because we have only purchased copies for the students in the class*.

**NOTE:** The cost of classroom handouts as well as materials purchased from outside vendors (including the HBS online tutorials) and distributed in class will be recovered through a term bill charge at the end of the semester. All students are term billed for these materials.

Budget websites: In addition, there are numerous web sites that may be helpful as you prepare for class discussions. Useful websites include:
www.aabpa.org = American Assn for Budget and Program Analysis
www.gao.gov = Government Accounting Office
www.whitehouse.gov/omb/budget/fy2010 = Office of Management and Budget
www.oecd.org = OECD member budgets
www.fedstats.gov = selected statistics for US, all levels of government
www.cbo.gov = congressional budget office
http://www.imf.org/external/pubs/ft/expend/guide4.htm= Guidelines for Public Expenditure Management
www.internationalbudget.org = International Budget Partnership
www.openbudgetindex.org = issues related to budget transparency
www.nasbo.org = National Assn of State Budget Officers

## 5. Office Hours

We have office hours every day of the week from Sunday through Thursday as well as review sessions on Friday. Please take advantage of this opportunity. In addition, Professor Bilmes is also willing to advise you on your career search. For Professor Bilmes Office Hours we will be using signup genius. Please contact Patricia Timmons for information on how to access this system.

Link to signup for Prof Bilmes' OH: www.SignUpGenius.com/go/10C044AAEAF2EA3F49-office2

**6. Review Sessions**

Review sessions will be conducted by Professor Gonzalez Barragan and Teaching Fellow Zhuldyz Bakytzhanova. Students who feel uncertain on the numbers, or who wish to review the answers to problem sets and assignments in great detail, it is *highly advisable* to attend the reviews. *Attendance at review sessions is factored into class participation*. Review sessions will be taped and posted as soon as we receive them from IT (usually 48 hours).

**7. Team Assignments**

Students will be assigned into teams of 3 or 4 students on the second day of class. There will be four team assignments in which you will need to work with your team. The main purpose of this system is so that we can simulate the real world, in which different groups with differing perspectives and assumptions develop budgets in their own ways. The teams will be used in class to create this environment.

**8. Grading**

Individual homework assignments are graded pass/fail. All that is required for a passing grade is a genuine effort to master the material. However, these assignments are critical for you to learn the material, and the feedback from previous years is that students find them very useful. They also enable me and the course assistants to get a sense of how the students are doing, and what to emphasize during class.

You should print out your homework assignments and bring them to class. Students must print out the assignment so that the spreadsheet columns fit on a single page. They must be submitted to your designated course assistant or placed in the Homework Box outside Starr unless otherwise indicated. Individual assignments must be submitted individually. Team assignments should include all team members' names and you should submit one copy only in the Homework Box. Late homework will receive half-credit except in case of medical excuse. *Students may choose to skip ONE individual homework assignment without penalty (not the team exercises).*
Answers to the homeworks will be posted after class. Homeworks with homework feedback may be collected from the 3 boxes (alphabetical) outside Patricia Timmon's office R-110B within one week.

Grades are assigned on the basis of:

- 15% Class Participation
- 10% Homework Assignments
- 15% Team Assignments
- 20% Midterm Quiz
- 40% Final exam

The course will use the standard HKS-required grade distribution.

**9. Exams**

There will be a short midterm quiz (35 minutes in class period) and a final exam on the last day of class. You may bring one page of your own notes (two-sides) and a calculator. (*No mobile phones* permitted as calculators). No make-up quiz will be given. *If you have a conflict and cannot take the quiz on this date, then you will receive a 0 for the quiz.*
*The final exam will be given in class on April 29, 2015. If you have a conflict and cannot take the final exam then you can not enroll in the course. The only exception is for MPP1s, who may choose to take a different exam on May 11th.*

The exams are straightforward and there are no surprises. The TF will hold a review prior to the midterm quiz and the final. Answers to the quiz will be posted on-line and explained in the review session. Final exams and quizzes will be graded and returned to you with the answers posted on-line. If you have queries about your exam or quiz, you must submit your exam and the query in writing to Patricia Timmons within ONE week of receiving it. The entire exam will be re-graded, so the grade can go up or down.

**10. Team Exercises**

There are four team budgeting exercises.
1. Somerville Traffic Unit: Teams will prepare the case from one of the 4 perspectives handed out prior to class.
2. A-Rod: Teams will prepare the valuation from the perspective of the player or the baseball franchise using financial and statistical tools.
3. DUMBO: Teams will prepare the case from one of the four perspectives handed out: A, B, C, and D. Teams will receive the supplementary information for their perspective, which should not be shared with teams who are not the same letter.
4. Balanced Scorecard: Teams will work to design balanced scorecards.

**11. Course Pages**

Check course Pages for announcements and posting of materials. Assignments, instructions and templates will be posted before class. Handouts and copies materials used in class will be posted on the website *after* class. (There may be minor changes/additions/subtractions to the materials used in class, as I update them depending on what we covered during the session

**12. Extra classes**

Professor Bilmes will hold 1 or 2 optional extra classes in the evening. Possible topics include the US Budget, the European Budget and Greece, and/or participatory budgeting.

| Session | Day | Date | **What's Happening in Class** | **Homework and Prep BEFORE Class** |
|---|---|---|---|---|
| 1 | Mon | Mar 23 | Topic: Program Operations vs. Budget Requirements, Class case discussion | Prepare Seven Letters case for class discussion<br>Readings |
| 2 | Wed | Mar 25 | Topic: Budget Formulation<br>Discuss Bartlett School case<br>Introduce Variance Analysis | INDIVIDUAL ASSIGNMENT #1:<br>Prepare a budget for Bartlett School (A)<br>Review Harvard Manage Mentor (budget) quick topic overview |
| | Fri | Mar 27 | Review session | Review session: 7 letters, Bartlett |
| 3 | Mon | Mar 30 | Topic: Variance Analysis and Flexible Budgets<br>Review Case: Software Associates<br>In-class exercise on Variance | INDIVIDUAL ASSIGNMENT #2:<br>Complete Variance tutorial<br>Read Variance readings<br>Prepare "Software Associates Case" using template |
| 4 | Wed | Apr 1 | Introduction to ABC | Complete Cost Accounting Tutorial<br>Do Cost Accounting readings<br>Read and familiarize with the ABC Pen Case |
| | Fri | Apr 3 | Review session | Review session:<br>Variance, flexible budgeting and ABC |
| 5 | Mon | Apr 6 | ABC Budgeting in the Non Profit Sector<br>Case: Boston Children's Hospital<br>In-class exercise: Bartlett Revisited | INDIVIDUAL ASSIGNMENT #3:<br>Complete Cost Accounting Tutorial<br>Do BCH Case<br>Cost Accounting readings |
| 6 | Wed | Apr 8 | Topic: Application of ABC in Public Sector<br>Case: Somerville Traffic Unit (JOE CURTATONE)<br>In-class simulation | TEAM ASSIGNMENT #1<br>Complete additional ABC Readings<br>Complete Somerville Traffic Unit case on template<br>Read Indianapolis case |
| | Fri | Apr 10 | Review session | Review Session: variance, ABC, Excel |
| 7 | Mon | Apr 13 | Short Quiz<br>Introduction to Financial Analysis | Optional: Complete "Buying Time" tutorial<br>Review financial analysis exercises |
| 8 | Wed | Apr 15 | Topic: Using DCF for Valuation<br>Case: Alexander Rodriguez (A-Rod)<br>Revenue forecasting | TEAM ASSIGNMENT #2<br>Complete "A-ROD" valuation case questions<br>Optional: Financial Analysis exercises |
| | Fri | Apr 17 | Review session | Review session: capital budgeting techniques, NPV, IRR, Payback, Timing of Cash flows |
| 9 | Mon | Apr 20 | Budget Execution in the US Navy, Department of Veterans Affairs, and IBM<br>Guest: The Hon. W. Scott Gould | INDIVIDUAL ASSIGNMENT# 4<br>Problem set<br>Readings |
| 10 | Wed | Apr 22 | Topic: Capital Budgeting Flows<br>Case: DUMBO<br>In-class exercise: Bartlett revisited Yet Again | TEAM ASSIGNMENT #3<br>Complete 5 year budget for DUMBO<br>Readings |
| | Fri | Apr 24 | Review Session | Review Session: All materials post-quiz |
| 11 | Mon | Apr 27 | Topic: Performance Budgeting/ Innovations in Budgeting:<br>*Case: New Profit Inc* | TEAM ASSIGNMENT #4<br>BSC Problem Set<br>Readings on Performance Budgeting and BSC |
| 12 | Wed | Apr 29 | Final Exam in class<br>(MPP1s ONLY *may choose to take a different exam on* May 11th) | Last day for homeworks to be submitted |

***(01) – Monday, March 23***

**<u>Topic: Program Operations vs. Budget Requirements and use of supporting data</u>**

<u>READ THE CASE</u>**:**

- Stene, Edwin O. "Seven Letters: A Case in Public Management," *Public Administration Review*. Vol. 17, No. 2, pp. 83-90. Revised 1996. *(Posted on course page)*

<u>ANSWER THESE DISCUSSION QUESTIONS</u>: This collection of correspondence highlights the conflict and tension between program managers and budget staff. Please come to class prepared to discuss the following questions:

1. Have you ever experienced this type of conflict, either from a budget perspective or a program perspective?
2. Why is Mason dissatisfied with the way that the budget office has handled his request for additional personnel?
3. Why is Harper unhappy with how the Water Department has responded to budget office inquiries about the personnel request?
4. Is the conflict inevitable? What data could be used to resolve the conflict? Is that data provided in the case? What reasonable assumptions could help you?
5. What kind of framework or template would you recommend to avoid such problems?

<u>REQUIRED READING:</u>

Richard Steele and Craig Albright, "Games Managers Play at Budget Time", MIT Sloan Management Review, Spring 2004. Vol 45, no.3, SMR-140. reprint # 45314 (posted on course page)

***(02) – Wednesday, March 25***

**<u>Topic: Budget Formulation: Line-Item Operating Budget</u>**

<u>READ CASE</u>:

"Bartlett Graduate School of Business Administration" John F. Kennedy School of Government, 1999. This case, which bears passing similarity to a well-known School of Government, demonstrates how an ordinary line-item budget is pulled together from a long and somewhat confusing list of information about how the school operates. The case also shows the difficulty of allocating overhead costs.

<u>INSTRUCTIONS FOR INDIVIDUAL ASSIGNMENT #1</u>**:**

Create a budget for the upcoming year. <u>Use the TEMPLATE posted on the course website for guidance.</u> Start with revenues (a fairly straightforward calculation) before tackling the more complex expense calculations. It may be helpful to group expenses by academic program –1st year Masters, 2nd year Masters, Doctoral students, Executive Programs and Research. Ultimately we want to compare the projected revenues and expenses for the upcoming year.

Answer the following questions:

1) What are the total revenues for the BSM? What are total expenditures? Is the BSM in the red or the black?
2) What are the revenues of the three activities:
    - Degree Programs
    - Executive Education
    - Research

3) How would you allocate the faculty cost across the different programs?
4) How much information does the line-item budget provide you if you don't allocate the overhead expense?
5) How would you allocate the overhead expenses across the different programs?
6) Which program(s) are earning or losing money, net of revenues?
7) What recommendations would you offer to the Dean?

REQUIRED READINGS:

- Wildavsky, Aaron and Naomi Caiden, The New Politics of the Budgetary Process, Fourth Edition (New York: Addison-Wesley Educational Publishers) 2001, pp. 1-6 ("Budgeting as Conflicting Promises") (posted on course page).

- Chapter 7, Harvard Business Essentials: Guide to Finance for Managers, Harvard Business School, Product number: 8768-PBK-ENG

OPTIONAL READINGS:

- Garner, C. William, "The Origins and Purposes of Accounting and Budgeting", in Accounting and Budgeting in Public and Nonprofit Organizations (San Francisco, CA: Jossey-Bass Publishers) 1991, pp. 1-19. (posted on course page).

- Mikesell, John. Fiscal Administration: Analysis and Applications for the Public Sector, Sixth Edition. (Belmont CA: Wadsworth Group/Thomson Learning) 2003, pp. 613-626 ("GLOSSARY"). [Note: this is a glossary. You do not need to memorize it – just look at the terms, and keep this on hand as we go through the course.] (posted on course page).

***(03) – Monday, March 30***
**Topic: Applying Variance Analysis and Flexible Budgeting**

This class will introduce the most common way of monitoring budgets, which is by using variance analysis. Variance is used to isolate price and quantity factors in the actual vs. expected revenues and expenditures. Variance analysis allows us to disaggregate the actual budget so we can understand the situation better. In class we will cover the highlights of the case.

INSTRUCTIONS FOR INDIVIDUAL ASSIGNMENT #2:
**Do online tutorial before class**: Variance Analysis (Harvard Business School Publishing). You must do this tutorial, which you can access at http://www.elearning.hbsp.org/. Directions on how to access the tutorials will be sent via email from Patricia Timmons.

**Prepare case:** Software Associates, Harvard Business School C 2004 (9-101-038)
Using the Excel Template posted on the course website, prepare questions 1 to 4 of the case, covering price and volume variance and flexible budgets. (Do not prepare Question 5 on mixed variance). Print out your calculations and hand them in.

CRITICAL READING:

- "Variance Analysis and Flexible Budgeting", Harvard Business School Publishing Note. 9-101-039, c 2000

READING:

- Robert N., Anthony and Young, David W.; Management Control in Nonprofit Organizations, Sixth Edition (Boston, MA: Irwin/McGraw Hill) 1999, Chapter 13, "Reporting on Performance: Technical Aspects", pp. 616-635, and Budgeting, pp. 444-461.

OPTIONAL READINGS**:**

- Bucci, Ronald V. "Budgeting and Variance Analysis." *Medicine and Business*. Springer International Publishing, 2014. 79-86.

- Herzlinger, Regina E. and Denise Nitterhouse, Financial Accounting and Managerial Control for Nonprofit Organizations, pp. 279-298 (top).

IN CLASS EXERCISE:
Kalamazoo Zoo Case

***(04) – Wednesday, April 1***
**Topic: Introduction to Activity-Based Budgets and Activity Based Costing (ABC)**

Activity-Based Costing (ABC) is a fundamental skill in budgeting. Budgets are essentially meaningless until you learn how to unravel them using this cost accounting technique. We will first learn the basic skill in the tutorial and then examine how ABC works.

ASSIGNMENT FOR CLASS:

DO ABC TUTORIAL: Introductions to Cost Accounting Systems Tutorial (HBS)
You must do this tutorial before class #4 which you can access at http://www.elearning.hbsp.org/.
Go through slides 1-33. Pay particular attention to the Greenwich Greenstuffs example.

READ THE ABC PEN CASE:
You must read the case before class.

- Classic Pen Company: Developing an ABC Model, HBS Case 9-198-117.

FAMILIARIZE YOURSELF WITH THE TEMPLATE THAT WE WILL DO AS AN IN CLASS EXERCISE.

CRITICAL READINGS:

- "Brief Introduction to Cost Accounting", Harvard Business School C 1993 (9-192-068)
- "Introduction to Activity-Based Costing", Harvard Business School C 2001 (9-197-076)

***(05) – Monday, April 6***
Topic: ABC Budgeting in the Non Profit Sector

CASE:
- "Boston Children's Hospital, Measuring Patient Costs", Harvard Business School C2013 (N9-914-407)

INSTRUCTIONS FOR INDIVIDUAL ASSIGNMENT #3:
You will prepare the Boston Children's Hospital (BCH) case using the template on the course website.

Core Case Questions:
1. In the healthcare industry, why should clinical department heads, such as Drs. Meara and Waters, be interested in developing more accurate costs for their procedures?
2. Use the accompanying Excel worksheet to calculate the costs and margins of the three different office visits using:
   a. RCC method
   b. TDABC method
3. What explains the difference in costs using the two methods?
4. Suppose DPOS dedicates the following resources to handle all office visits: 2.5 surgeons, 2 Ambulatory Service Representatives, 2 Registered Nurses, and 1 Clinical Assistant. During the year the office performs 4,400 Plagiocephaly visits, 2,200 Neoplasm visits, and 1,800 Craniosynostosis visits. Calculate the quantities and cost of used and unused capacity for the four types of personnel, and the total cost of unused capacity for the year. How can Dr. Meara reduce the costs of unused capacity?
5. Use the accompanying Excel worksheet to calculate the costs and margins of the three different orthopedic casts using the TDABC method.
6. Compare the TDABC costs and margins with those calculated using the hospital's existing RVU system. What differences occur and why?

READINGS:
- "Activity Accounting – Another Way to Measure Costs", Harvard Business School C 1992 (9-193-044)

- Kaplan, Robert S and Porter, Michael E. "How to Solve the Cost Crisis in Health Care" HBR (September 2011) Reprint: R0801D

IN CLASS EXERCISE:
Bartlett School of Management Revisited

***(06) – Wednesday, April 8***
**Topic: Using Activity-Based Budgeting in Government**

Guest: Mayor Joe Curtatone, Mayor of Somerville

INSTRUCTIONS FOR TEAM ASSIGNMENT #1:
Instructions and templates will be posted on the course website.

CRITICAL READINGS**:**
- **CASE:** Somerville Traffic Unit: Using Activity-Based Budgeting to Improve Performance.

- **CASE**: Indianapolis: Activity-Based Costing of City Services (A) HBS**:** Read and prepare for discussion.

REQUIRED READINGS:

- "Using Activity-Based Costing to Manage More Effectively", Michael Granof, David Platt and Igor Vaysman, Department of Accounting, University of Texas, PricewaterhouseCoopers Endowment for the Business of Government. (posted on course page).

- Blanton, Kimberly, "Best Places to Live 2012", Boston Magazine. Available online http://www.bostonmagazine.com/articles/2012/02/boston-best-places-to-live-2012/4/

- City of Somerville, Fiscal Year 2015 Somerville Budget Overview, City of Somerville. Available online http://www.somervillema.gov/sites/default/files/documents/fy15-mayors-budget-presentation.pdf

- Keane Jr. Thomas M, "The Model City", The Boston Globe, May 14, 2006. Available online http://www.somervillema.gov/sites/default/files/Best%20Run%20city%208-12.pdf

***(07) – Monday, April 13***

| **SHORT QUIZ** Covering Classes 1-6 (variance, activity-budgeting, basic revenue forecasting) |
|---|

**Topic: Introduction to Financial Analysis**

After the quiz we will do an introduction to financial analysis.

READINGS:

- Basic Capital investment Analysis 9-198-004

- Richard Brealey and Stewart Myers, Principles of Corporate Finance, 7th edition. McGraw-Hill Irwin, c2003. Chapter 2, 2.1 pp. 14-21 and Chapter 3, 3.1 – 3.3 pp. 33-45.

- Richard Brealey and Stewart Myers, Principles of Corporate Finance, 7th edition, pp. 105 (bottom) to 107 (top)

OPTIONAL TUTORIAL:

**"Buying Time"** tutorial, **HBS e-learning**

If you are not familiar with this kind of material, you should do this tutorial, which you can access: at http://www.elearning.hbsp.org/

***(08) – Wednesday, April 15***

**Topic: Valuation using DCF and Probability Model**

This case will enable us to look at using DCF analysis for projecting long-term revenue and expenditure streams, and to introduce the importance of timing of cash flows and probability adjusted cash flows.

In 2000, the Texas Rangers, (a professional baseball team previously owned by George Bush), had an opportunity to sign a long-term contract with arguably the best player of all time, Alex Rodriguez (A-

Rod). The total cost of contract would be $252 million, which would have made A-Rod the highest paid player of all time. In this case, you will examine A-Rod's contract using probability analysis to determine the winning/cost ratio and a discounted cash flow estimation to determine true value of A-Rod.

- **CASE:** A-Rod: Signing the Best Player in Baseball, Harvard Business School C 2003 (5-203-091)

INSTRUCTIONS FOR TEAM ASSIGNMENT #2:
You will prepare the A-Rod case using the answer key template on the course website in Excel spreadsheet format.

Core Case Questions: All teams must work out the answers to the following questions:

(1) What is the pre-tax present value of the incremental costs of signing Alex Rodriguez?
(2) How many extra tickets do you expect the Rangers to sell each year if they sign Rodriguez? What is the PV of those additional sales? (Use the regression charts provided in the key template.)
(3) What is the increase in the probability of the Rangers of participating in the American League Championship Series and the World Series? What are the expected pre-tax cash flows and the associated pre-tax PV? (Please see the information on the playoff probabilities provided in the answer key template.)
(4) If you find the PV of incremental costs exceeds the PV of incremental benefits, how much would ticket prices have to increase for the Rangers to break even?
(5) Should the Texas Rangers sign Alex Rodriguez?

OPTIONAL FINANCIAL ANALYSIS EXERCISES (THEY WILL BE COVERED IN THE REVIEW SESSION):
Posted on course website. Do Tri-Star Exercises 1-3. (Do not do 4).
Lockheed Tri-Star exercises 1, 2, and 3.

***(09) – Monday, April 20***
***Guest Speaker: W. Scott Gould***

READINGS:
Readings for this session will be posted prior the lecture.

***(10) – Wednesday, April 22***
**Topic: Capital Budgeting Flows**

Integrating operating and capital budgets, further practice on capital budgeting and project financing. Why do decisions look different from the perspective of different stakeholders?

INSTRUCTIONS FOR TEAM ASSIGNMENT #3:
Instructions and templates will be posted on the course website.

CRITICAL READINGS:

- **CASE**: The Greening of DUMBO, Harvard Business School C 2010 (9-410-079)

- Robinson, Susan G., "Capital Planning and Budgeting", in Petersen, John E. and Dennis R. Strachota, Eds. Local Government Finance: Concepts and Practices (Chicago: Govt Finance Officers Assn). 1991, Chapter 5, pp. 65-84.

***(11) – Monday, April 27***

**Topics: Innovations in Budgeting: The Balanced Scorecard**

The structure of budgeting, including transparency and performance targets, can influence the development and structure of economic development. We will look at the theory of this, and also learn one specific technique for enhancing participation and setting performance targets: The Balanced Scorecard. This tool integrates quantitative and qualitative measures and is widely used in many non-profit and government organizations.

Do the readings and read the cases to understand how an organization uses this tool. Focus on: lead/lag indicators, integration of financial and qualitative measures, cascading objectives.

CRITICAL READINGS:

- **CASE:** New Profit Inc., Harvard Business School c 2001 (9-100-052)

- **Chapters: 12 and 16** "The Balanced Scorecard: Measures That Drive Performance", by Robert S. Kaplan and David P. Norton, (Harvard Business Review Classic, July 2005) (posted on course website)

- **Chapter 4:** "A Mutually Reinforcing Loop: Budget Transparency and Participation in South Korea". pp.105-128, by Jong-Sung You and Wonhee Lee in *Open Budgets: The Political Economy of Transparency, Participation and Accountability* (Sanjeev Khagram, Archon Fung, Paolo de Renzio, Brookings 2013).

INSTRUCTION FOR TEAM ASSIGNMENT #4:

Instructions will be posted on the course website.

OPTIONAL READINGS:

- Kaplan, Robert and David Norton, "Strategy Scorecards in Nonprofit, Government, and Health Care Organizations" HBSP, ISBN-13:978-1-4221-1615-9 1615BC

- Kaplan, Robert S., "Strategic Performance Measurement and Management in Nonprofit Organizations", Nonprofit Management and Leadership, 11(3), (New York: Jossey-Bass Inc., Publishers, © 2001), pp. 353-370. (Posted on course page)

- Marc Robinson, "Performance Budgeting Models and Mechanism", in Marc Robinson (ed). *Performance Budgeting: Linking Funding and Results*, IMF 2007, pp. 1-20. (On course website)

- Jones, David. "Performance Measurement and Budgetary Reform in the Singapore Civil Service", in the Journal of Public Budgeting, Accounting and Financial Management, vol. 13, No. 5, pp. 485-511, Winter 2001. (Posted on course page)

***(12) – Wednesday, April 29***

**FINAL EXAM: MPP 1s may take a different exam on May 11th**

Final exam during Class. You may bring 1 page of notes (2-sides) and a calculator. Cell phones may NOT be used as calculators. The exam will cover revenue forecasting, valuation, cash flows, capital budgets, and balanced scorecard.