

Syllabus (FIN 411) Financial Problems

SUNY POLYTECHNIC INSTITUTE

SCHOOL OF BUSINESS ADMINISTRATION

Instructor: Matthew Brigida, Ph.D.

Office: Online Fall 2020 | On Campus Office is Donovan 1277

Office Hours: Tuesday 4:00–6:00, I will be in a BB Collaborate session. Feel free to log in and ask questions.

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Class Location: Online (Synchronous)

Class Day/Time: Synchronous Online Tuesday 6:00pm–9:30pm. We will meet via Blackboard Collaborate. All lectures will also be recorded.

Text: Case Studies in Finance 6th Edition, by Robert Bruner, Kenneth Eades, Michael Schill. ISBN-13: 978-0073382456 ISBN-10: 0073382450

Supplementary Material: - readthefinance | 5MinuteFinance.org - Corporate Finance Data Sets These data sets contain very useful information for case analyses.

Course Structure and Interaction

The goal of the course is to provide good solutions to the text cases. Completing the cases requires a good knowledge of concepts/terms/measures learned in earlier courses. To help you remember this material, I may reference materials I provide via the following media:

- Via BlackBoard Collaborate. You can view them live (I'll let you know when I am recording), or under the **Recordings** section of Collaborate.
- Short videos many of which are/will be posted on my YouTube channel: <https://www.youtube.com/channel/UCwekb0vAK-FKaqPF5gfd0eQ/featured>

Description

This is a cases course for upper-level finance students. The learning outcomes for this course are summarized below:

1. Students will use various skills to evaluate complex financial problems, and ultimately provide a recommendation on a course of action. Among these skills are the ability to analyze financial statements, perform time-value-of-money calculations, perform capital budgeting tasks, compute costs of capital, and manipulate corporate capital structure, among others.
2. Students will learn to communicate complex topics in a clear and concise manner.
3. Students will learn to calculate and present various measures of financial performance appropriate to specific types of firms.
4. In short, in this course you will start to complete analyses like you are an analyst. Specifically, we are transitioning away from simple calculations, and toward holistic analyses which incorporate many calculations, and your knowledge of financial topics and the interdependence between variables.

Academic Honesty Policy

Academic dishonesty will not be tolerated in this class. Cheating on quizzes, examinations, and other forms of dishonesty (e.g., plagiarism, collusion, and falsification of data) will be dealt with in a serious and formal manner. The penalty for academic dishonesty in this class will be course failure. That is, any student who is found to be cheating or engaged in other academically dishonest behavior will be failed for this course for

this semester. Course withdrawals to avoid such a failure will not be permitted. As a student, you have a responsibility to become familiar with the Academic Honesty Policy found in the Student Rights, Regulations, and Procedures Handbook.

Office Hours

I will be available on BB Collaborate for an hour prior to each class. I will also be logged on the course throughout the week to answer questions and review the discussions. I will try to be available on request, however I will not help if you wait until the last minute to complete your work. If you post questions on a case on the day it is due I will likely not answer.

Cases

Throughout the semester we'll work on a series of projects that will help us understand both financial theories, and also, *importantly*, practical considerations we are faced with when applying these theories in the real-world. Some notes on the projects:

- Most case will require computations either in a spreadsheet, or programming language. In this course you should probably use a spreadsheet (Excel or similar). If you write it in a programming language (such as R or Python) you'll have to share the code so I can reproduce your results.
- If you have questions on a project you are encouraged to post your spreadsheet/code to the relevant discussion board so I and other students can help. You learn a great deal by helping others, and by seeing how others approach the problem. Also don't worry too much about others copying you. It is fairly easy to tell when one spreadsheet has been copied from another. Moreover, since you posted yours, it would be clear that you were the one copied off of.

Case Report Structure

For each case you will hand in a report with the following general headings:

I. Executive Summary

This section should provide background and context to the case. For example, in the Ben and Jerry's case it is important to know the company is incorporated in Vermont, and the effect on goal of the firm. Whatever context you provide, however, should be relevant to the problem and recommendation. Just random facts wastes time.

II. Problem Statement

This is a concise clear statement of the problem. It should be a sentence or two.

III. Recommendation and Analysis

This section should **first** answer the question posed in the problem statement. The answer should be the first line of this section. Don't hide your recommendations within the analysis.

Following your recommendations should be supporting analyses. These are often calculations, for example you may say Ben and Jerry's should accept a given offer because it provides the highest price per share. Note, if you simply do random calculations that don't support your recommendation, this is worse than providing no analysis—it wastes time.

IV. Alternate Solutions

Here you can offer other solutions, along with accompanying benefits or drawbacks. This section is optional and should not be long.

V. Supplementary Material (Excel spreadsheets, etc)

Many of the cases will require supplementary spreadsheet calculations. Do not simply hand in a spreadsheet with your calculations with no explanation. Think about how you would submit an analysis to your boss while working as an analyst. You must explain why you did what you did.

Your spreadsheet should be easily readable and usable by anyone. Spreadsheets don't just calculate answers, they present them. Lastly, you must complete and submit your computation questions in a spreadsheet. If you submit your computation answers in Word, I will reduce your score.

Other General Notes Many of the cases will require supplementary spreadsheet calculations. Do not simply hand in a spreadsheet with your calculations with no explanation. Think about how you would submit an analysis to your boss while working as an analyst. You must explain why you did what you did.

Also, often students will ask for the correct answer or way of doing something. This is a cases (real-world problem) course, and as such there is not one unique right answer. The important thing is not your answer, but rather that you clearly state your reasoning for taking a particular approach.

All cases should be handed in by uploading them to the BB Dropbox. Do not send them via email

Course Communication

All communication will be through Blackboard and email. If you have question you are strongly encouraged to post it to a discussion forum instead of emailing me. This way, other students can get the benefit of the question and answer. It also saves me from answering the same question many times via email, and frees me up to answer more questions and generally provide more effective instruction for you.

Grading

Your final grade is an average of your grades for each case. All cases are worth an equal amount.

Final grades will be assigned according to the following scale:

- 90 - 100 A
- 80 - 89.9 B
- 70 - 79.9 C
- 60 - 69.9 D
- < 60 F

+/- grades may be assigned at the instructors discretion.

General Notes

- All times referred to in this course are Eastern Standard—unless otherwise indicated.
- There will be no make up exams or extra points assignments.
- Cheating will result in prosecution to the fullest extent possible under university rules.
- You are responsible for material covered in the online discussion, as well as text material.
- **Internet Access:** This course requires that you have regular access to the internet to submit work. You should not take this course if you plan on being in an area with insufficient internet access. "My internet was down for a week" is not an acceptable reason to hand in late work.
- **Adding or Dropping the Course:** To add or drop the course the student should consult the university guidelines and withdrawal dates. The course instructor is not involved in a student's adding or withdrawing from the course.
- **Software:** You will need word processing and spreadsheet software to take this course. Common examples of such software are Microsoft Word and Excel. However, there is no need to buy this software if you don't already have it. There are many free (open-source) alternatives which are just as good (and which allow you to save/read files as .doc(x), .pdf, and .xls(x)). Some widely used free office suites are LibreOffice (<http://www.libreoffice.org>) and OpenOffice (<http://www.openoffice.org>). Feel free

to download and use these. *In this course all word processed submissions should be in .pdf, and all spreadsheets should be submitted as .xlsx.*

Tentative Outline

Cases are due on the second

Week	Case
Weeks 1 and 2: 8/24–9/4	Setting themes–Cases in module: Ben & Jerry
Weeks 3 and 4: 9/7–9/18	FedEx vs. UPS
Weeks 5 and 6: 9/21–10/2	Krispy Kreme
Weeks 7 and 8: 10/5–10/16	Securitization
Weeks 9 and 10: 10/19–10/30	Financial Analysis and Forecasting–Case: Value-Line Publishing (HD vs LOW)
Weeks 11 and 12: 11/2–11/13	Estimating the cost of capital–Case: Nike, Inc.
Weeks 13 and 14: 11/16–12/4	Capital Budgeting and Resource Allocation–Case: Aurora Textile Corp.

Some notes on the cases are here.

We may substitute one of the above cases for the following:

- Teletech
- Deposit Insurance
- Machine Learning/Artificial Intelligence in Finance

Some Notes on Spreadsheet Design

You should construct your spreadsheet as if you were an analyst at a company, and you were going to submit the spreadsheet to upper management. Therefore, getting the correct answer can be considered the minimal amount of work. The spreadsheet should be easily readable and organized. There are a couple of reasons why this is important: (1) management often will check some numbers (or maybe change a few inputs if they have more up to date information) and it will reflect very poorly on you if they have to search around through a muddled and ill-conceived spreadsheet; and (2) anyone should be able to pick up your spreadsheet and complete it if you are not there (vacation, sick, or hopefully promoted). Following are a couple tips on spreadsheet design, though it is far from exhaustive.

- Hard-code as little as possible. You want a few cells for your inputs, or a place where you put your data, and then every other cell is linked and feeds off of these input cells. This way, to update your spreadsheet you simply change the inputs or drop in new data.
- Take the time to label cells, and put in appropriate comments if necessary - though comments should not be used excessively. Also, it is common to change the cell color depending on whether it is hard-coded (an input) or a formula. This way you (or anyone else) can immediately look at a cell and tell whether it is one in which you can type (an input). Don't forget to include a key.
- It is often better to add tabs to a spreadsheet than continue calculations on one tab. You can easily page through spreadsheet tabs with **Ctrl+Shift' and**Page-up' or 'Page-down'.
- Pivot tables. While we probably won't need them in this course, you should nonetheless get to know them. Pivot tables are incredibly useful for summarizing data, and it is very possible you will be asked in an interview whether you are familiar with them. Similarly, get to know **VLOOKUP**.
- If you are inputting a long formula, then break the calculation into multiple cells. This makes it much easier to tell where a mistake was made - and everyone always spends a fair amount of time looking for errors.
- Excel has many built in formulas which can be useful, however it is important that you understand what the formula is doing to use them. Blindly applying a formula can lead to trouble. For example, if

you use the IRR() function on cash flows with multiple roots, the formula will return the first root it finds without signaling to you that there are other roots. Also, there are Excel formulas that are flat out incorrect - in particular the NPV() function. So, use a function if it saves time, but first be sure you know what the function is doing and verify it works. That said, in my experience it is better (and faster) to input your own formula instead of using Excel's. You often have to break the calculation into a couple of steps, but this can be done quickly, and the result is a spreadsheet that you know works and is easily auditable.

Some Discussion Papers on AI

You are not required to read these.

- McKinsey AI
- AI: The Next Digital Frontier?
- Notes from the AI Frontier: Insights from Hundreds of Use Cases
- Notes from the AI Frontier: Modeling the Impact on the World Economy
- Notes from the AI Frontier: Applying AI for Social Good