



FNCE612
ACCELERATED CORPORATE FINANCE
COURSE SYLLABUS

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Office Hours: Tuesday, 3:00pm-4:30pm

Also, by appointment

Course Description

This course is intended for students with prior knowledge of finance or with strong analytical backgrounds. Together with the pre-term preparation course (FNCE604), it forms the foundation for subsequent courses in corporate finance, corporate valuation, investment, venture capital financing, and financial derivatives. Its purpose is to develop a framework for analyzing a firm's investment and financing decisions. The course will start where FNCE604 ended. Specifically, it will provide an introduction to the relationship between risk and return, the operation and efficiency of capital markets, the optimal capital structure and payout policy of the firm, and options. In short, it will cover all the topics of a typical semester-long finance introduction class (FNCE611) in six weeks.¹

While the course does not concentrate exclusively on theory, the basic theoretical underpinnings of the various topics will be formally discussed as they are necessary for competent financial analysis. The course emphasizes the development of problem-solving skills based on a good understanding of general principles that can accommodate the constantly evolving nature of the business environment. Because of the practical importance of the material and as an illustration of the relevant theory, several examples and applications will be discussed throughout the course.

Prerequisites

The course assumes that students are familiar with the material covered in FNCE604, and will often make use of this material. No time will be spent reviewing it. As a result, FNCE612 is available only to those students who placed into it based on past credentials or by successfully passing the Finance Placement Exam.²

The course makes use of mathematical and statistical manipulations at the level taught in the pre-term "Math for Business" course (STAT611). Although the first section of the notes in FNCE612 will include a review of the statistics material that will be used throughout the course, very little class time will be spent on it. Finally, as in FNCE604, some basic familiarity with Excel will be assumed for FNCE612.

¹ Of course, since FNCE604 has already covered some of the material studied in a typical finance introduction class, the pace of FNCE612 will be effectively about 35-40% faster than that of FNCE611.

² Students who placed into the course by credentials should make sure that they are still comfortable with all the topics covered in FNCE604. All FNCE604 files are in the folder FNCE604 on the FNCE612 canvas site.

Course Material

The textbook for the course is:

Berk, Jonathan, and Peter DeMarzo, Corporate Finance, 3rd edition, Pearson: Boston. (Referred to as BD below)

The textbook should be purchased with the option to access the web platform offered by Pearson, called MyFinanceLab.³ This web platform will be used for homework assignments and course grading. Note that, if you prefer a soft copy of this textbook, Pearson also makes it available in digital format at http://www.pearsonhighered.com/berk_demarzo/.

To show you how the concepts developed in class can be applied to the real world, we will cover a number of case studies throughout the course. These case studies will be available through Study.Net (www.study.net), which is itself accessible through Canvas.

The rest of the course material will be made available only electronically. In particular, the notes for every lecture will be available on Canvas at least one day in advance of each class. It is your responsibility to bring a printed or electronic copy with you in class. Additional materials will also be made available on Canvas. They will include additional problem sets (and their solutions), practice exams (and their solutions), spreadsheets, and other useful handouts.

Appendix C of this document contains a list of relevant reference books for interested students.

Grading

The course grade will be based on two exams, and three case studies. Students will also have the option to work on periodic individual homework assignments that will be factored into their grade.⁴

Exams - The final and midterm exams will account for 60% and 40%, respectively, of the exams grade, denoted by **E**. However, the exam grade will be your final exam grade, denoted by **F**, if your performance in it exceeds that on your midterm exam, denoted by **M**. Thus your exams grade **E** is given by

$$E = \text{Max}\{F, 0.6 \times F + 0.4 \times M\}$$

The exam schedule will be as follows.

- Midterm exam: Thursday, September 17, 6:00-8:00pm.
- Final exam: Tuesday, October 13, 6:00-8:00pm.

The midterm exam will test the material already covered up to that point. The final exam is comprehensive; that is, it will test the material for the entire course. The material covered in FNCE604 will not be directly examined again in FNCE612. Of course, we will still need to use many of the tools developed in that course (e.g., annuity formulas, NPV rule, free cash flows, etc.). The exact material covered in each of the two exams will be announced in class.

³ It is also possible to subscribe to MyFinanceLab separately, if the book does not come with access to it.

⁴ More information about the case studies and individual homework assignments is provided below.

In case the median of the final exam is below that of the midterm exam, the medians of the midterm and final exams will be standardized so that they are equal. For example, if the midterm and final have medians of 85 and 75 respectively, 5 points will be subtracted from all midterm scores and 5 points will be added to all final scores so that both exams have a median of 80. This is to ensure that a sufficient number of students end up with a better score in the final than the midterm and therefore benefit from this weighting system, even if the final turns out to be difficult.⁵

Assignments – There are two types of assignments in the course: Three **mandatory case studies** to be done in teams, and five **optional individual homework assignments**. Each case study will be graded on a 0-5 scale, so total case studies grade, denoted by **C**, will be between 0 and 15. Each of the optional individual homework assignments will be graded on a 0-3 scale, so total individual homework assignments grade will be between 0 and 15 points. Thus, your overall assignments grade, denoted by **A**, will be between 0 and 30 points.

Course Final Grade – Your course final grade, denoted by **FG**, will be calculated according to the following formula

$$FG = A + (1 - A) \times E.$$

Note, however, that I will subtract 3 points from your **FG** for each case study that is not submitted.

Under this grading scheme you don't lose points from getting less than perfect grades on individual homework assignments, submitted case studies, and the midterm exam. Regardless of your scores on these, scoring 100 on the final exam guarantees a course grade of 100, provided that you submit all three case studies. In case you get less than 100 points on the final exam, any point that you earn on the individual assignments will increase your course grade and points you earn on your midterm exam may increase or not affect your course grade.

Your letter grade for the course will be based on your ranking in the course (curve), and on performances/scores that I consider reasonable for this course.

Make-Up Exams - There will be **absolutely no make-up exam** for the midterm exam. If a student cannot take or even chooses not to take the midterm exam, the final exam will count for the entirety of the exam weight in his/her final grade. There is no need to notify the instructor in that event. That said, it is strongly recommended that you prepare for and take the midterm exam if you can.

Students who, for some reason, cannot attend the final exam will either be allowed to take the same exam early (upon signing an honor agreement that they will not disclose its content), or a different exam later, depending on the circumstances. To be clear, this will only be considered for extraordinary circumstances, as judged by the instructor.

If extraordinary circumstances prevent a student from attending the final exam, it is his/her responsibility to notify the instructor before the exam or, if impossible, as quickly as possible after the exam. Please note that, as per Wharton policy, traveling, interviews and job-related absences are not considered to be **extraordinary circumstances**. In the case of illness, a signed doctor's note must be provided.

⁵ The grades on the case reports and homework assignments will not be adjusted.

Regrading Policy – Regrade requests for the midterm and final exams must be made within one week after the graded exams are distributed back to students. All such requests must be made in writing. Hard copies of the exams and the request will then be forwarded to the TA who graded the question(s) to be regraded. **The TA's decision is final and may not be appealed.** In making your requests, keep in mind that the whole exam is potentially subject to regrading.

Case Studies

Preparation for the case studies is done in groups of four to five students, all from the same section of the course. Students were randomly assigned to teams by the instructor. Your team and team leader is published on Canvas.

A total of three case studies will be discussed in class. The exact dates of the various case discussions will be announced as the course progresses. For each of the case studies, teams are expected to prepare a case write-up consisting of a maximum of 2-page double-spaced text plus a maximum of 4 pages of exhibits to support the recommendation. Case studies will be submitted in a pdf file, accompanied by easy to read Excel spreadsheet that contains their analysis by 11:55pm on the day before the class discussion. I will present the main points of the case in class, so no need for students to prepare a presentation. All students should come to class ready to discuss issues relevant to the case.

In analyzing cases, take the perspective of an external consultant to the case decision-makers, i.e., CEO, CFO, Board of Directors, etc. Write-ups should roughly conform to the following format:

1. Statement of the problem: State the main problem of the case as precisely as possible.
2. Statement of facts and assumptions: State the relevant facts of the case. Those facts that are not obvious from the case itself should be supported either by a calculation in the body of the write-up or in an exhibit. Clearly state any assumptions. Provide any necessary justification for your assumptions.
3. Analysis: This contains your analysis of the various courses of available actions.
4. Recommendation.

Please note that I view you as my consultants on the case study. Consequently, other than clarifying questions, you can not discuss any aspect of case studies with me or the course TAs before submitting them. I will not distribute case solutions. All action takes place in class discussions.

Appendix A of this syllabus provides you with questions for consideration for each of the case studies. These questions are provided to help guide and focus your analysis and are not intended to be a complete list of the relevant issues. Don't submit your case study analysis in a question-answer format.

Appendix B of this syllabus discusses the case study approach.

Individual Homework Assignments

Individual homework assignments will be assigned periodically from MyFinanceLab, Pearson's website for the textbook by Berk and DeMarzo. The site can be accessed from the following address: www.pearsonmylabandmastering.com. Instructions to register for "Wharton – FNCE604/612 – Fall 2015" on MyFinanceLab are included towards the end of this syllabus. I will announce the homework assignments and submission deadlines on Canvas as the course progresses.



Supplementary Problem Sets

In addition to the team case studies and individual homework assignments, supplementary problem sets (and their solutions) will be distributed via Canvas throughout the term. These problem sets are structured to reinforce the major themes in the course material and to provide students with extra practice for the two exams. Write-ups for these problem sets will not be collected or graded.

Class Etiquette and Code of Conduct

I do not grade attendance nor participation as I trust students to attend and contribute where appropriate. Particularly for an accelerated course, it is essential to (a) attend class in order to absorb the material, and (b) ask questions if anything in the lecture is unclear.

Students should attend the section of the course for which they are registered, especially on days that include a case discussion. When a conflict is unavoidable, students can attend another of my sections without notifying me. If it is impossible to make any section on a given day, you may miss class without notifying me, and are trusted to catch up on the material in your own time.

While I am flexible regarding the above, I expect classroom conduct to be on a high level. Students should arrive on time for class and remain until the class is completed. **During class it is not acceptable to use cell phones or send text messages, leave temporarily to get coffee or make a call, do other work, or use laptop computers for any reason other than to take notes.**

Although it should go without saying, I fully expect you to adhere to the school's Code of Academic Integrity (http://www.upenn.edu/academicintegrity/ai_codeofacademicintegrity.html). In particular, the use of past problem set solutions or past exams (except when distributed by the instructor) is expressly forbidden. Any violation of this code, such as cheating in any form, will be treated with severity.

Preparing for Classes

The material for this course needs to be absorbed consistently. As the course progresses, students should work on the problems that I will assign from MyFinanceLab and, optionally, on the supplementary problem sets that I will make available. These problems are an integral part of the course and it is generally insufficient to just attend lectures for a full understanding of the material. The two exams will include questions that are very similar to these problems.

Since I will move at a fast pace, it is recommended that you read up on the lecture notes ahead of time. Students are also encouraged to read from the BD textbook the chapters/sections relevant to the material covered (and to be covered) in class.

Canvas

The course website on Canvas contains the material for FNCE612 as well as the most updated information and announcements for the course. This website is the information center for the course. Please check the course website regularly.

Teaching Assistants

Several Ph.D. students and 2nd-year MBA students will be assisting me in this course. Their names, functions and schedules will be posted on Canvas and announced in class.



Calculators and Computers

You will definitely need a calculator for the course (and the two exams). Any calculator that has a y^x button will do. In fact, when constructing the exams, I will make sure that the people who do not have a fancy calculator are not at a disadvantage.

Financial calculators are not necessary for this course. However, if you would like to acquire one, consider buying an HP-17BII, HP-19BII, or their subsequent models. Finally, please note that email-capable devices (like laptops, tablets, cell phones, and so on) will not be allowed for the two exams.

Semester Deadlines

Students are allowed to drop the course (and join FNCE611) during Wharton's official add/drop period. Students who choose to join the FNCE611 course are encouraged to promptly contact the instructors in the course to make sure that they have not missed any deadlines.

Course Outline

The material for this course essentially corresponds to chapters 10-18 and 20-21 of the BD textbook. Below is the sequence of topics that will be covered in class, along with the relevant chapters/sections in BD. Note that the first five modules of the FNCE604/612 sequence were covered during the pre-term.

- **Module 5 (cont.) – Investment Evaluation and Capital Budgeting⁶**

TOPICS: Capital rationing; investment criteria and capital rationing.

READINGS FROM BD: Section 7.5.

CASE STUDY: Energy Gel - A New Product Introduction (A).

- **Module 6 – Risk and Return: Measurement**

TOPICS: Returns as random variables; mean, variance, and covariance of returns; using historical returns; diversification.

READINGS FROM BD: Sections 10.1-10.2 and 10.4-10.6; sections 11.1-11.3.

- **Module 7 – Risk and Return: Capital Assets Pricing Model**

TOPICS: Portfolio risk and return; portfolio choice and Sharpe ratios; equilibrium and the market portfolio; dealing with superior information; the Capital Asset Pricing Model (CAPM); estimating beta.

READINGS FROM BD: Sections 11.4-11.8; sections 12.1-12.3.

- **Module 8 – Cost of Capital**

TOPICS: Debt, equity, and the cost of capital; comparable firms, leverage, and asset betas; cost of capital for a division or project.

READINGS FROM BD: Sections 11.7-11.8; Chapter 12..

CASE STUDY: Midland Energy Resources, Inc.: The Cost of Capital.

- **Module 9 – Market Efficiency and Asset Management**

TOPICS: Index investing; average abnormal return and performance evaluation; market efficiency and active portfolio management; multifactor models and hedge funds; behavioral finance.

READINGS FROM BD: Chapter 13.

⁶ Note that Module 5 is the basis for the entire course. As such, it will be in its entirety on the course exams. Please make sure to review Module 5 and problem set 3.

- **Module 10 – Capital Structure**

TOPICS: Capital structure in a perfect capital market; the role of corporate taxes; the role of personal taxes; the trade-off theory.

READINGS FROM BD: Chapter 14; chapter 15; sections 16.1-16.4.

CASE STUDY: Bed Bath & Beyond: The Capital Structure Decision.

- **Module 11 – Payout Policy**

TOPICS: Dividends and share repurchases; the role of taxes; tax clienteles; the signaling role of payout policy; the effects of agency costs.

READINGS FROM BD: Sections 17.1 - 17.6.

- **Module 12 – Valuation**

TOPICS: Weighted average cost of capital; adjusted present value.

READINGS FROM BD: Sections 18.1-18.3 and 18.5.

- **Module 13 – Options**

TOPICS: Financial options; payoffs at maturity; binomial option pricing; the Black-Scholes formula.

READINGS FROM BD: Sections 20.1-20.4; Sections 21.1-21.4.

Disclaimer

This document represents my current plans for the course at the time of writing, but is subject to change. Any changes will be communicated promptly and clearly to the students.

MyLab & Mastering Student Registration Instructions

MyFinanceLab™

PEARSON

ALWAYS LEARNING

To register for Wharton – FNCE604/612 - Fall 2015:

1. Go to pearsonmylabandmastering.com.
2. Under *Register*, click **Student**.
3. Enter your instructor's course ID: **israel07045**, and click **Continue**.
4. Sign in with an existing Pearson account or create an account:
 - If you have used a Pearson website (for example, MyITLab, Mastering, MyMathLab, or MyPsychLab), enter your Pearson username and password. Click **Sign in**.
 - If you do not have a Pearson account, click **Create**. Write down your new Pearson username and password to help you remember them.
5. Select an option to access your instructor's online course:
 - Use the access code that came with your textbook or that you purchased separately from the bookstore.
 - Buy access using a credit card or PayPal.
 - If available, get 14 days of temporary access. (Look for a link near the bottom of the page.)
6. Click **Go To Your Course** on the Confirmation page. Under MyLab & Mastering New Design on the left, click **Wharton – FNCE604/612 – Fall 2015** to start your work.

Retaking or continuing a course?

If you are retaking this course or enrolling in another course with the same book, be sure to use your existing Pearson username and password. You will not need to pay again.

To sign in later:

1. Go to pearsonmylabandmastering.com.
2. Click **Sign in**.
3. Enter your Pearson account username and password. Click **Sign in**.
4. Under MyLab & Mastering New Design on the left, click **Wharton – FNCE604/612 – Fall 2015** to start your work.

Additional Information

See **Students > Get Started** on the website for detailed instructions on registering with an access code, credit card, PayPal, or temporary access.

APPENDIX A - CASE QUESTIONS FOR CONSIDERATION

The questions below will help you focus on the critical issues that need to be addressed in the analysis of the case studies.

Energy Gel - A New Product Introduction (A) (A Kellogg Case)

1. What is your assessment of HPC's capital budgeting process currently in place? Would you recommend any improvements? What is the correct method to value the project?
2. Does Wickler have to consider costs for overhead and mixing machine usage? Why or why not?
3. Should Wickler include potential cannibalization in his estimates?
4. Assuming 15% nominal cost of capital for the project, should HPC invest in the Energy Gel Project?

Midland Energy Resources, Inc.: The Cost of Capital (HBS 4129 19/6/2009)

1. Calculate Midland's corporate WACC under the existing capital structure and under the proposed capital structure. Be prepared to explain your specific assumptions about the various inputs to the calculations. What risk-free rate and Expected Market Risk Premium did you choose?
2. Should Midland use a single corporate hurdle rate for evaluating investment opportunities in all of its divisions? Why or why not?
3. Compute a separate cost of capital for the E&P and Marketing & Refining divisions. What causes them to differ from one another?
4. How would you compute a cost of capital for the Petrochemical division?

Bed Bath & Beyond: The Capital Structure Decision

1. How would you characterize the business risk of Bed Bath & Beyond? Review their financial performance.
2. Do you think Bed Bath & Beyond has too much cash? Should Bed Bath & Beyond lever up? Consider both the 40% and 80% debt-to-total capital proposals.
3. What capital structure would you recommend as appropriate for Bed Bath & Beyond? How much financial risk would Bed Bath & Beyond face at each of the proposed levels of debt?
4. How much potential value, if any, can Bed Bath & Beyond create for its shareholders at each of the proposed levels of debt?
5. How would the capital markets react to a decision by the company to increase the use of debt in the capital structure?
6. How might Bed Bath & Beyond implement a more aggressive capital structure policy? What are the alternative methods for leveraging up?
7. Given Bed Bath & Beyond conservative approach, what arguments would you advance to persuade management to adopt your recommendation?

APPENDIX B - HOW TO STUDY A CASE

Introduction

Remember that learning by the case-study method depends much more on interchange among students than it does upon solitary study. It is a participatory method of learning, and both students and instructor bear a responsibility to the entire class to share their insights and points of view. Careful presentation is not to insure a good grade, but rather to prepare to learn and to help others learn as well. The following notes are merely some elementary hints on how to study cases; you will soon develop your own style of getting at the materials.

- Immerse yourself in the case; get to know *all* the details
- Analyse the case after reading it
- Write out the cast of characters
- Develop a chronology of events in the case
- Identify the basic issues (especially those things--acts, values, and attitudes--about which decisions need to be made)
- Try to see all the positions reasonable persons might take
- Then try to see how to raise issues with these various positions
- Mull it over--i.e., just ruminate about it casually, let things flow through your mind, free-associate
- Think of any theoretical material which would be helpful in clarifying or resolving the issues in the case
- Remember that there is usually no *one* right answer

Participation

- Push your ideas, and be willing to give reasons for them
- Listen to others, and evaluate their positions
- Keep an open mind; be willing to change it upon new insights or evidence
- Enjoy yourself

Aftermath

- Jot down any new ideas that occur to you in the course of discussion
- Make note of any information or theoretical knowledge for which you feel a need as a result of the discussion; find out where to get it
- Evaluate your own participation; what could you do to improve it next time?

APPENDIX C – OPTIONAL READINGS

- Shiller, Robert J, Irrational Exuberance. Princeton University Press. 3rd edition, 2015
- Luigi Zingales, A Capitalism for the People: Recapturing the Lost Genius of American Prosperity, 2014
- Malkiel, Burton Gordon: Random walk down Wall Street: the time-tested strategy for successful investing, 10th edition, New York: W W Norton, 2012
- Taleb, Nassim Nicholas , The Black Swan: The Impact of the Highly Improbable, Random House, 2007
- Raghuram G. Rajan and Luigi Zingales, Saving Capitalism from the Capitalists: Unleashing the Power of Financial Markets to Create Wealth and Spread Opportunity, 2004
- Morris, Kenneth M: Wall Street Journal Guide to Understanding Money & Markets, 3rd ed., New York: Lightbulb Press, 2004
- Burrough, Bryan: Barbarians at the gate: the fall of RJR Nabisco, Arrow, 1990.
- Hayes, Samuel L: Investment banking: a tale of three cities, Boston, Mass: Harvard Business School Press, 1990
- Lewis, Michael: Liar's poker, Coronet, 1990