

UNIVERSITY OF PENNSYLVANIA
The Wharton School

FNCE612
ACCELERATED CORPORATE FINANCE
COURSE SYLLABUS

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Fall 2014

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Office Hours:

- Tuesday, 3:30pm to 5:00pm.
- 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, 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 ends. More precisely, it will provide an introduction to the relationship between risk and return, capital budgeting techniques under uncertainty, 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 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

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

²Students who placed into the course by credentials should make sure that they are still comfortable with all the topics covered in FNCE604.

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.

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 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 cases throughout the course. These cases 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.

Grading

By default, the course grade will be based on two exams (75%), three mini-case reports (15%), and one final case report (10%). Students will also have the option to work on periodic individual homework assignments that will be factored into their grade.⁴ By default, the midterm and final exams will account for 1/3 and 2/3, respectively, of the exam weight of 75%. However, the entire exam weight will be put on your final exam if your performance in it exceeds that on your midterm exam. The exam schedule will be as follows.

- Midterm exam: Tuesday, September 23, in class.
- Final exam: Tuesday, October 14, 6:00-8:00pm (to be confirmed).

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. Both exams will be open-book exams, i.e., you can consult the course materials while taking them. The material covered in FNCE604 will not be directly examined again in FNCE612. Of course, we will still need to use

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

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

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.

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 the weighting system, even if the final turns out to be difficult. The grades on the case reports and homework assignments will not be adjusted.

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 2014" on MyFinanceLab are included on the last page of this syllabus. Each of six assignments is to be completed before 11:55pm every Sunday, starting on August 31 and ending on October 12, with the exception of September 28.

Each assignment is optional and will potentially count for 3% of your total (midterm and final) exam score. More specifically, the total weight given to your two exams will be reduced by your total score on these six assignments. For example, if you get 2/3, 3/3, 3/3 and 2/3 on the first four and choose not to work on the last two, then your two exams will count for $75\% - 2\% - 3\% - 3\% - 2\% = 65\%$ of your final grade, and I will add 10% to it to get to 75%.

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.

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 exam 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.

Cases

Preparation for the cases is done in groups of five or six students, all from the same section of the course. Students will be randomly assigned to teams by the instructor.

A total of five mini-cases will be discussed in class.⁵ The exact dates of the various case discussions will be announced as the course progresses. For each mini-case, teams are expected to prepare a short PowerPoint presentation and submit it by 11:55pm on the day before the class discussion. These presentations should not exceed **four slides**; a cover page/slide is not required, as long as the team number and team members' names appear somewhere on the first slide and/or in the footer on each slide.

For each class discussion, one team will be picked randomly to present their slides (they will have five minutes to do so), and one other team will be asked to initiate the discussion following this presentation. The presentations and discussions will be factored into the teams' performance on these mini-cases. Note that the first case (The State of South Carolina) will be used as practice and will not be graded. Note also that, of the other four mini-cases, only the top three will count towards a team's mini-case performance.

The course will end with a wrap-up class discussion revolving around one more case: Harris Seafoods, Inc. This "final case" is meant to provide students with an overview of many of the topics covered in FNCE604/612. For this last case, team reports must be turned in by 11:55pm on Monday, October 6. Specifically, every team will be required to submit one pdf file that includes three to five pages of text, and an appendix for supporting material (such as figures and tables). Every team will also be required to submit the Excel spreadsheet that contains their analysis. All students should come to this last class ready to discuss issues relevant to the case.

Supplementary Problem Sets

In addition to the team cases and individual 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 class, it is essential to (a) attend class in order to absorb the material, and (b) ask questions if anything in the lecture is unclear.

⁵They are listed in the Course Outline below.

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 (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 exam, 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 or subsequent finance courses at Wharton. 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. Unfortunately, this also means that it will be impossible to consult digital versions of the textbook during the exams.

Semester Deadlines

Students are allowed to drop the course (and join FNCE611) during Wharton's official drop/add period. Students who choose to join the FNCE611 course are encouraged to promptly contact the instructor in that 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 four modules of the FNCE604/612 sequence were covered during the pre-term.

- **Module 5 – Risk and Return: Measurement**

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

READINGS FROM BD: Sections 10.1-10.4 and 10-6; sections 11.1-11.3.

MINI-CASE: The State of South Carolina.

- **Module 6 – Risk and Return: Capital Asset Pricing Model**

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

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

MINI-CASE: Alex Sharpe's Portfolio.

- **Module 7 – 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 12.4-12.5.

MINI-CASE: Cost of Capital at Ameritrade.

- **Module 8 – 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.

MINI-CASE: Ballis's Benchmark A&B.

- **Module 9 – 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 16.1-16.5.

MINI-CASE: Blaine Kitchenware, Inc.: Capital Structure.

- **Module 10 – 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 11 – Valuation**

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

READINGS FROM BD: Sections 18.1-18.3 and 18.5.

CASE: Harris Seafoods, Inc. (to be covered in the course's last class)

- **Module 12 – 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.

To register for **Wharton -- FNCE604/612 -- Fall 2014:**

1. Go to pearsonmylabandmastering.com.
2. Under Register, click **Student**.
3. Enter your instructor's course ID: **gervais05227**, 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 2014** 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 2014** 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.