# UNIVERSITY OF PENNSYLVANIA The Wharton School

# FNCE612 ACCELERATED CORPORATE FINANCE COURSE SYLLABUS

Prof. Vito D. Gala Fall 2016

E-mail: <u>vgala@wharton.upenn.edu</u>

Office: 2451 SHDH

Office Hours: Tuesdays, 4:30pm - 5:30pm

Classes: Section 001: Tue/Thu 9:00am-10.30am, JMHH 345

Section 003: Tue/Thu 10:30am-12.00pm, JMHH 345 Section 005: Tue/Thu 12:00pm-1.30pm, JMHH 345

# **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.<sup>1</sup>

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.

<sup>&</sup>lt;sup>1</sup> 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.

# **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.<sup>2</sup>

The course makes use of mathematical and statistical manipulations at the level taught in the preterm "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*, 3<sup>rd</sup> 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. This web platform will be used for homework assignments and course grading. A soft copy of this textbook, along with the MyFinanceLab access option, is also available. The textbook can be purchased at the University bookstore.

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 material for the course will be made available only electronically. In particular, my notes for every lecture will be available on Canvas before each lecture. 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 problem sets (and their solutions), practice exams (and their solutions), and other useful handouts.

<sup>&</sup>lt;sup>2</sup> Students who placed into the course by credentials should make sure that they are still comfortable with all the topics covered in FNCE604.

# Grading and Exam Schedule

#### Grade Decomposition

The course grade will be based on two exams (75%), two 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.<sup>3</sup> By default, Exam I and Exam II will account for 1/3 and 2/3, respectively, of the exam weight of 75%. However, the entire exam weight will be put on Exam II if your performance in it exceeds that on your Exam I. Your letter grade for the course will be based on your ranking in the course (curve) following University's guidelines.

#### Exams

There are two exams. Exam I is scheduled for **Thursday**, **September 15**, **6-8pm**, and Exam II is scheduled for **Tuesday**, **October 4**, **6-8pm**. The exam times are non-negotiable. Exam I will test all the material already covered <u>before</u> September 15. Exam II is comprehensive, and it will test all the material covered up to the exam date. Both exams will be closed-book, closed-notes exams. Students can use one two-sided formula sheet. There is no format requirement for the formula sheet. Students can use a calculator, but email-capable devices (laptops, tablets, cell phones, etc.) will not be allowed. Any calculator that has a "xy" button will do for the exams. The material covered in FNCE604 will not be directly examined again in FNCE612. Of course, we will still need to use many tools developed in that course (e.g., annuity formulas, NPV rule, free cash flows, etc.).

To ensure fairness, there is a deadline for exam-related questions. We will answer questions that you send or post on Canvas by **8:00pm** on the day before an exam. Questions sent or posted afterwards will not be answered until after the exam.

#### Make-Up Exams

There will be **no** make-up exam for Exam I. If a student cannot take or even chooses not to take Exam I, then Exam II will count for the entirety of the exam weight in his/her final course grade. There is no need to notify the instructor in that event. Exam II may be postponed in case of "illness, a death in the family, or some other unusual event". If such an extraordinary circumstance arises, it is the student's responsibility to notify the instructor at least <u>one</u> week before the exam date (whenever possible) and provide reliable proof of absence. (e.g. a signed doctor's note, etc.). As per Wharton policy, traveling, interviews and job-related absences are <u>not</u> considered extraordinary circumstances.

<sup>&</sup>lt;sup>3</sup> More information about the cases and individual homework assignments is provided below.

#### Regrading Policy

Grades are non-negotiable. You may request a regrade on any exam written with a pen. Each regrade request must be accompanied by a concise written explanation of the request and submitted to the instructor within <u>one</u> week after the exams are graded. 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, please note that the whole exam is potentially subject to regrading.

#### Case Studies

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

A total of three mini-cases will be discussed in class according to the Course Outline provided below. For each mini-case, teams are expected to prepare a short PowerPoint (or pdf) presentation and submit it via Canvas by 11:55pm on the day before the class discussion. No late submission will be accepted. These presentations should not exceed five slides (excluding the cover page). A cover page should report the team number and team members' names.

For each class discussion, one team will be picked randomly to present their slides (they will have about five minutes to do so), and one other team will be asked to initiate the discussion following this presentation. I will notify both teams on the day before the class discussion. The presentations and discussions will be factored into the teams' performance on these minicases. Of the three minicases, only the top two will count towards the minicase 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 a practical overview of many of the topics covered in FNCE604/612. For this last case, team reports must be submitted via Canvas by 11:55pm on Monday, October 10. 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 (figures and tables). All students should be ready to discuss the case.

Also for this 'final case', one team will be picked randomly to present a short PowerPoint (or pdf) presentation (they will have about <u>ten</u> minutes to do so), and one other team will be asked to initiate the discussion following this presentation. Both teams will be notified in advance. This presentation should not exceed <u>eight</u> slides (excluding the cover page). The presentation and discussion will be factored into the teams' performance on this 'final case'.

#### **Individual Homework Assignments**

Individual homework assignments will be assigned periodically from MyFinanceLab. The site can be accessed from the following address: www.pearsonmylabandmastering.com. Instructions to register for "Wharton – FNCE612" on MyFinanceLab are included on the last page of this syllabus. Each of five assignments is to be completed before 11:55pm every Sunday, starting on September 4 and ending on October 2.

Each assignment is optional and will potentially count for 3% of your total exam score (Exam I and Exam II). More specifically, the total weight given to your two exams will be reduced by your total score on these five 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 one, then your two exams will count for 75% - 2% - 3% - 3% - 2% = 65% of your final course grade, and I will add 10% to it to get to 75%.

# 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 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.

In every aspect of the course, students are required to adhere to the Code of Academic Integrity. Submitted assignments for grading should be your own or your team's own work only. Most cases in this course involve actual companies. You may use firm specific or market data that are publicly available for your analysis. You cannot, however use old notes, handouts, or solutions to the cases from previous or other sections of this course or similar courses elsewhere for your written reports and class discussions. Obtaining access to such materials (in hardcopy or electronically) will count as a violation of the Code of Academic Integrity. Failure to observe this rule will result in severe penalties and referral to the Office of Student Conduct.

# **Preparing for Classes**

The material for this course needs to be absorbed consistently. As the course progresses, students are encouraged to work on the individual homework assignments assigned on MyFinanceLab and on the supplementary problem sets distributed on Canvas. 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 might include questions that are similar to these recommended 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.

# Calculators and Computers

You will need a calculator for the course (and the two exams). Any calculator with a " $x^y$ " button will do. Financial calculators are not necessary for this course. Finally, please note that email-capable devices (like laptops, tablets, cell phones, and so on) will not be allowed for both 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.

Teaching Assistants and Review Sessions

One PhD student and three 2nd-year MBA students will be assisting me in this course. Their

principal duties will be to hold office hours and review sessions, answer questions (by email and on

Canvas), and grade case studies and exams. Their names and office hours (starting on Tuesday,

September 6) are:

Marco Grotteria (PhD - grottm@wharton.upenn.edu), Friday, 4pm-5pm, SHDH 2316

Allison Dender (MBA - dendera@wharton.upenn.edu), Monday, 4:30pm-5:30pm, SHDH 2004

• Denise Wang (MBA - wangde@wharton.upenn.edu), Wednesday, 4:30pm-5:30pm, SHDH 2004

Varun Telaprolu (MBA- tvarun@wharton.upenn.edu), Thursday, 4:30pm-5:30pm, SHDH 2004

Marco Grotteria will also hold two review sessions before the exams as follows:

Wednesday, September 14, 5:30pm - 7:00pm

Monday, October 3, 3:00pm - 4:30pm

Students should use the discussion boards on Canvas to ask course-related questions (i.e.,

administrative items, course material, case studies, problem sets, practice exams, etc.). The TAs will monitor these boards frequently. This board helps ensure that all students have access to the

same information, it reduces the duplication of answers, and provides a more efficient and faster

response. Please avoid using e-mail to ask case and practice exam related questions. If your question

requires an elaborate answer, please come to the office hours.

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.

• Class 1 – Tue, Aug 30

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.

#### • Class 2 – Thu, Sept 1

#### Risk and Return: Capital Asset Pricing Model (CAPM) - Part I

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.

## • Class 3 – Tue, Sept 6

#### Risk and Return: Capital Asset Pricing Model (CAPM) - Part II

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.

#### • Class 4 – Thu, Sept 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 12.4-12.5.

MINI-CASE: Cost of Capital at Ameritrade.

#### • Class 5 – Tue, Sept 13

#### 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.

#### • Class 6 – Thu, Sept 15

#### Capital Structure - Part I

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.

#### • Class 7 - Tue, Sept 20

#### Capital Structure - Part II

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.

#### • Class 8 - Thu, Sept 22

#### **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.

# • Class 9 - Tue, Sept 27

#### Valuation

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

READINGS FROM BD: Sections 18.1-18.3 and 18.5.

#### • Class 10 – Thu, Sept 29

#### **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.

• Class 11 – Tue, Oct 4

# **Review Key Concepts**

TOPICS: Measurement of Risk and Return, CAPM, Cost of Capital, Market Efficiency and Asset Management, Capital Structure, Payout Policy, Valuation and Options.

• Class 12 – Tue, Oct 11

Case: Harris Seafoods Inc.

# Disclaimer

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



MyFinanceLab™

# To register for Wharton -- FNCE 612:

- 1. Go to www.pearsonmylabandmastering.com.
- 2. Under Register, select Student.
- 3. Confirm you have the information needed, then select **OK! Register now**.
- 4. Enter your instructor's course ID: gala15808, and Continue.
- 5. Enter your existing Pearson account **username** and **password** to **Sign In**.

You have an account if you have ever used a Pearson MyLab & Mastering product, such as MyMathLab, MyITLab, MySpanishLab, MasteringBiology or MasteringPhysics.

- > If you don't have an account, select **Create** and complete the required fields.
- 6. Select an access option.
  - > Enter the access code that came with your textbook or was purchased separately from the bookstore.
  - > Buy access using a credit card or PayPal account.
  - ➤ If available, get temporary access by selecting the link near the bottom of the page.
- 7. From the You're Done! page, select Go To My Courses.
- On the My Courses page, select the course name Wharton -- FNCE 612 to start your work.

#### To sign in later:

- 1. Go to www.pearsonmylabandmastering.com.
- 2. Select Sign In.
- 3. Enter your Pearson account username and password, and Sign In.
- 4. Select the course name Wharton -- FNCE 612 to start your work.

#### To upgrade temporary access to full access:

- 1. Go to www.pearsonmylabandmastering.com.
- 2. Select Sign In.
- 3. Enter your Pearson account username and password, and Sign In.
- 4. Select Upgrade access for Wharton -- FNCE 612.
- 5. Enter an access code or buy access with a credit card or PayPal account.