



# **FINANCE 611: CORPORATE FINANCE**

## **FALL 2014**

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Office hours: By Appointment

**Course Website: Available on Canvas**

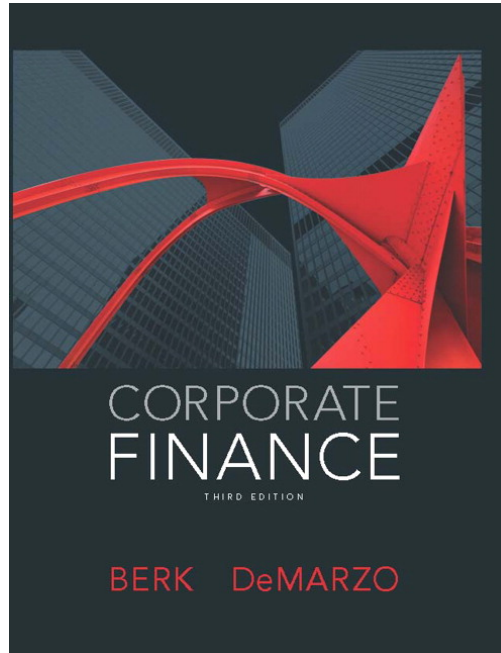
### **COURSE DESCRIPTION**

This course covers the foundations of finance with an emphasis on applications that are vital for corporate managers. We will discuss most of the major financial decisions made by corporate managers both within the firm and in their interactions with investors. Essential in most of these decisions is the process of valuation, which will be emphasized throughout the course. Topics include criteria for making investment decisions, valuation of financial assets and liabilities, relationships between risk and return, capital structure choice, payout policy, the effective use and valuation of derivative securities (futures, options, and convertible securities), and risk management.

## **COURSE MATERIALS**

### ***Textbook***

The textbook for the course is:



**Corporate Finance (plus MyFinanceLab), Jonathan Berk and Peter DeMarzo, 3rd ed., Pearson - Prentice Hall, 2014. (SBN-10: 0-13-342415-4; ISBN-13: 978-0-13-342415-7)**

Other required readings are listed in the syllabus and made available through Canvas or Study.net.

### ***Slides***

PowerPoint slides for all of the class sessions are available on Canvas.

### ***Cases***

Cases are available on Study.net. Case-related material, if any, will be made available on Canvas.

### ***Additional Material***

Additional copywritten material (e.g., readings) will be made available on Study.net, non-copywritten material (e.g., notes, supplemental exercises) will be made available on Canvas.

### **CLASS PREPARATION**

Coming to class prepared is crucial for your success in the course, and the success of the course. Class participation comprises a significant component of your overall grade for the course (discussed below), where participation refers to active engagement in the classroom discussion on a recurring basis. The classroom environment will be one of discussion and collaboration. An integral part of the learning experience is learning from your colleagues, their experiences, and the classroom discussion.

Preparation consists of completing the relevant readings and cases *prior* to the session in which they will be discussed. Cold calling will be used liberally. Answers to case questions must be placed in a PowerPoint file – one slide per question – and turned in the night before the case is discussed in class. I will randomly choose case solutions to discuss in class.

An important by-product of proper preparation is that it lessens the chances of falling behind in the course and being unable to catch up. This course covers a large amount of material in significant depth. It is very easy to fall behind. Consider this a warning. *Do not fall behind.*

### **COURSE ETIQUETTE**

You should bring a laptop or tablet with a spreadsheet application to class. You may need these for problem solving sessions during class. Other than these indicated times, no electronics (e.g., laptops, tablets, phones, etc.) should be used in class.

Students are expected to respect the University of Pennsylvania's Code of Academic Integrity ([http://www.upenn.edu/academicintegrity/ai\\_codeofacademicintegrity.html](http://www.upenn.edu/academicintegrity/ai_codeofacademicintegrity.html)) and to behave with integrity in all aspects of the course. Students are encouraged to discuss the cases and other content of the course with first-year MBA student in their own section and in other sections. However, students should not discuss the content related to the current day's class discussion or exam during the time period between sections to avoid giving later sections an unfair advantage.

Violations of the honor code will be immediately reported to the administration.

## **GRADING**

Your course grade will be determined by your class participation (20%), completion of the MyFinanceLab homework assignments (20%), a midterm (20%), and a final exam (40%). If your score on the final exam is greater than that on the midterm, I will replace your midterm score with your final score, which will then count for 60% of your grade. However, this substitution can only occur if you take the midterm and receive a minimum number of points to be determined at the time of the exam.

The purpose of the MyFinanceLab homework, like preparing for course, is to keep you up to date with the course material. Because students have unlimited attempts on MyFinanceLab to get each assignment right (before its due date), almost all students receive full points on the homework. This means that not doing an assignment (or getting less than full points on it) puts you at a considerable disadvantage when the final grade is computed.

Grades are determined using a class-wide (i.e., across all of my sections) curve that respects any constraints imposed by the University or Wharton.

## **REGRADES**

Students have exactly one week from the day they receive their midterm exam to request a regrade. The request must be attached to the exam and clearly state the reason(s) for the regrade. The only valid reason for a regrade is an error on my part. I will not debate the merits of my grading scheme. If the regrade request is accepted, the exam will be regarded in its entirety. As a result, the revised score may go up, down, or stay the same.

I will schedule two days during the Spring semester during which you may view your final and discuss your grades. These days will be announced during the semester. Any concerns regarding final exam or course grade will be settled at that time.

## **ATTENDANCE**

Students are expected to attend all classes. It is also expected that students will be on time for class and will not disrupt the class by leaving early or by leaving and returning to class. I recognize that personal emergencies can arise, causing a student to miss a class or part of a class. If such a

circumstance arises, please notify me via email of the situation. If circumstances do not permit prior notification, please do so as soon after the missed class as possible.

### **FACULTY MEALS**

If you are interested in getting lunch, please sign up on Canvas. I have allocated a number of days during the semester.

### **EXAMS**

The midterm exam will be given on October 14 from 6pm-8pm. The final exam will be given on December 16 from 9am-11am. Please reserve these times in your calendar as there will be no scheduled alternatives. All exam dates and times are subject to change.

There are no makeup exams. If you miss the midterm exam, regardless of the reason, your final score will be used in its place. If you miss the final exam, you will automatically fail the course. The only excuse for missing the final exam is a medical emergency, the validity of which will be verified by the University.

### **COMMUNICATING WITH ME**

The best way to contact me outside of the classroom is via email. Please do not ask me long, detailed questions about the course, or questions that (may) require a long, detailed response. I am happy to meet with students outside the classroom so email me to schedule an appointment.

Please let me know of any difficulties you may be having with the course as soon as possible. These difficulties may arise from the course itself, or external forces (e.g., other courses, personal issues). Regardless of the source, let me know as soon as possible so we can work together to avoid larger problems later on. Wharton and the University offer a wide range of support services that are geared towards helping students.

# Corporate Finance Course Outline

*Preliminary and Subject to Change*

## Topic 0: Course Introduction and Overview

- Read:
  - Syllabus
  - Canvas course website containing all non-copywritten material
  - Study.net containing all copywritten material

## Topic 1: Time Value of Money

- Read:
  - Chapter 3: Financial Decision Making and the Law of One Price
  - Chapter 4: The Time Value of Money
- Concepts:
  - Compounding and discounting
  - Future value and present value
  - Annuities
  - Retirement savings
- Applications:
  - Valuing zero-coupon bonds
  - Valuing and structuring annuities
  - Retirement planning

## Topic 2: Financial Decision Making and Capital Budgeting

- Read:
  - Chapter 2: Introduction to Financial Statement Analysis
  - Chapter 8: Fundamentals of Capital Budgeting
- Prepare:
  - Case: Callaway Golf FX-1
- Concepts:
  - Free cash flow
  - Discount rates and cost of capital
  - Discounted cash flow (DCF)
  - Net present value (NPV)
  - Sensitivity analysis
  - Scenario analysis
  - Breakeven analysis
  - Value drivers
  - Profit margins and operating leverage
  - Profitability index
- Applications:
  - Strategic decision-making

- Capital budgeting
- Financial statement analysis
- Strategic decision making with resource constraints

### **Topic 3: Financial Analysis: Return on Investment**

- Read:
  - Chapter 5: Interest Rates
  - Chapter 7: Investment Decision Rules
- Prepare:
  - Should you pay cash for a new car?
- Concepts:
  - Internal rate of return
  - Hurdle rate
- Applications:
  - Amortizing loans
  - Personal finance (auto loans, leases, mortgages)

### **Topic 4: Interest Rates and Bond Valuation**

- Read:
  - Chapter 6: Valuing Bonds
  - Chapter 30: Duration (§30.4)
- Prepare:
  - Case: Orange County
- Concepts:
  - Yield to maturity
  - Yield curves
  - Bond Institutions and Markets
  - Valuing risk-free bonds
  - Bond-interest Rate Relation
  - Bond arbitrage
  - Interest rate sensitivity of bond prices (Duration)
  - Leverage
- Applications:
  - Valuing and investing in treasury securities
  - Managing a bond portfolio
- Further Concepts:
  - Collateralized debt obligations (CDOs)
  - Immunization and duration matching
  - Forward rates
  - Credit risk

### **Topic 5: Valuing Stocks**

- Read:
  - Chapter 9: Valuing Stocks
- Prepare:
  - Case: Interco

- Concepts:
  - Measuring returns
  - Equity cost of capital
  - Dividend yield
  - Capital gains
  - Dividend discount model
  - Cum- and Ex-dividend prices
  - Share repurchases
  - Price-earnings (P/E) ratio
  - Return on investment
  - Enterprise value
  - Comparables analysis
- Applications:
  - Mergers and acquisitions

### **Topic 6: Risk and the Cost of Capital**

- Read:
  - Chapter 10: Risk and Return
  - Chapter 11: Portfolio Choice and Diversification
- Prepare:
  - Case: Partners Healthcare
- Concepts:
  - Expected return
  - Stock volatility
  - Risk-return tradeoff
  - Portfolio risk
  - Diversification
  - Equity market integration
  - Mean-variance frontier
  - Minimum variance portfolios
  - Short sales
  - Leverage
  - Sharpe ratio
- Applications:
  - Portfolio management
- Of Interest:
  - Portfolio Optimizer and Instructions (on the course website)

### **Topic 7: Market Pricing of Risk**

- Read:
  - Chapter 12: Capital Asset Pricing Model
- Prepare:
  - Case: Cost of Capital at Ameritrade
- Concepts:
  - Capital market line
  - Security market line



- Beta
- Market risk
- Volatility
- Estimating beta
- Alpha
- Security mispricing
- Efficient portfolios
- Applications:
  - Portfolio management
  - Capital budgeting

## **Topic 8: Corporate Capital Structure**

- Read:
  - Chapter 14: Capital Structure in a Perfect Market
  - Chapter 15: Debt and Taxes
  - Chapter 16: Financial Distress, Incentives, and Information
  - Chapter 17: Payout Policy (optional)
- Prepare:
  - Case: Blaine Kitchenware Inc.
- Concepts:
  - Leverage
  - Modigliani and Miller Irrelevance Propositions
  - Weighted Average Cost of Capital (WACC)
  - Arbitrage
  - Equity issuance dilution fallacy
  - Earnings per share (EPS) fallacy
  - Market Imperfections
  - Interest Tax Shields
  - Bankruptcy
  - Bankruptcy costs
  - Direct and indirect costs of financial distress
  - Tradeoff theory
  - Valuation with leverage
  - Adjusted Present Value (APV)
  - Project specific risk
  - Incentives and agency costs
  - Debt overhang
  - Overinvestment
  - Information asymmetry and security mispricing
  - Signaling
  - Announcement Effects
  - Initial public offerings (IPOs)
  - Personal taxes
- Applications:
  - Industry capital structure
  - Optimal capital structure

- Refinancing

### **Topic 9: Risk Management**

- Read:
  - Chapter 30: Futures and Forwards (§ 30.2, 30.3)
  - Chapter 20: Financial Options (§ 20.1-20.2)
- Prepare:
  - Case: Hedging Currency Risks at AIFS
- Concepts:
  - Price-Fixing Contracts
  - Forwards
  - Futures
  - Swaps
  - Price-Insurance Contracts
  - Options
  - Basis Risk
  - Covered interest parity
  - European Options
  - Option premia
- Applications:
  - Hedging currency risk via futures and options
  - Value creation via hedging

### **Topic 10: Financial Option Valuation**

- Read:
  - Chapter 20: Financial Options (§ 20.3-20.5)
  - Chapter 21: Option Valuation
- Prepare:
  - Case: Retaining Top Talent
- Concepts:
  - Portfolio insurance
  - Put-Call Parity
  - American Options
  - Binomial Option Pricing Model
  - Black-Scholes Formula
  - Implied volatilities
  - Option Sensitivities (Greeks)
- Applications:
  - Employee Stock Option (ESO) Valuation
- Downloads:
  - Options Calculator (on the course website)

### **Topic 11: Real Options**

- Read:
  - Chapter 21: Review Option Valuation (§ 21.1-21.2)
  - Chapter 22: Real Options (§ 22.1-22.5)

- Prepare:
  - Case: When to Build
- Concepts:
  - Option to delay
  - Option to expand
  - Option to abandon
- Applications:
  - R&D Staging

## **Topic 12: Further Applications**

- Prepare:
  - Case: Twitter IPO
  - Case: Priceline Acquisition of OpenTable (or LBO)