

# Corporate Finance II

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**Course Objectives:** The course covers selected advanced topics in corporate finance, with the focus on real options, issuing corporate securities, capital structure, and valuation examples. My goal is to present a very simple material, while advanced students can benefit from the scaled-up textbook and the suggested readings.

**Prerequisites:** I assume that you have taken Corporate Finance I class. You would feel much more comfortable taking this class, if you have taken a class in Investments and Introductory Accounting. I will also assume that you are familiar with Excel spreadsheets.

**1. No textbook is required, but the primary readings are from:** Berk and DeMarzo, *Corporate Finance*, Pearson International Edition First Edition, 2007.

**2. Recommended Text:** Ross/Westerfield/Jaffe, *Corporate Finance*, McGraw-Hill, Seventh edition.

**3. Additional (Advanced) Reading:** Grinblatt, M., and Titman, S., *Financial Markets and Corporate Strategy*, Irwin/McGraw Hill, 2<sup>nd</sup> edn, 2001. This is a more advanced textbook and treats some issues that we can not discuss in detail in class.

**Grading Policy:** Your grade will be calculated as follows:

Problem Sets: 21%

Case Analysis: 18%

Final Exam: 56%

Class Participation: 5%

**Lecture Notes Policy:** I do not plan to distribute the lecture notes in class. Based on the past experience, students learn much more if they copy the lecture by hand or, alternatively, download the posted slides and look through before the lecture. Note that much of what we discuss in the lecture is not on the slides.

*Problem Sets:* There will be a total of three problem sets assigned (each worth 7% of your final grade). The problem sets have to be done individually. Working on these problem sets will help you to understand the class material better and will give you a solid preparation for the final exam. A hard copy of your solution (clearly indicating your student number and the student name in the upper right corner) has to be handed in at the beginning of class on the due dates. All pages have to be stapled together. No electronic submissions will be accepted. To understand the material better, you can also try solving some problems from the end of relevant chapters of the textbook.

*Case Write-Ups:* There will be two cases assigned. You can work on cases in groups of up to six people. You should be ready to present your case solution in class in a 15-minute presentation. Please make sure that your group sits together in the class. Case write-ups have to be turned in at the beginning of each class at the due dates. Late submissions will not be graded. Please use the following as guidance:

1. Please turn in a hardcopy of the report (3 pages maximum, not counting exhibits). Softcopies (disk or email-attachments) will not be graded.
2. You should have a section called “Key Assumptions” where you list the important assumptions you have made throughout the answer. The next section called “Analysis” should provide the details on your estimations, methodology, etc. Finally, the last section “Results” should provide a point-by point answers to the questions supplied with the case. The question the answer is referring to should be clearly marked.
3. Please provide a detailed analysis of cases. Charts or tables do not constitute an answer – they are considered as supporting material for your analysis.
4. For the in-class presentation, prepare the electronic copy of your write-up and a spreadsheet with your calculations, if applicable. You do not need to prepare a formal presentation

*Final Exam:* The final exam is a closed book exam but I will provide you with a cheat sheet that will contain all necessary formulas. I will give you the cheat sheet couple of days before the exam so that you can familiarize yourself with layout. You will need a simple calculator for the exam. You cannot take the final exam early and there will be NO MAKEUP exam for those who miss it.

*Class Participation and Attendance:* Your class participation will count 5% towards your final grade. An important pre-requisite for getting participation points is attending the class. You cannot participate if you are frequently absent.

Please be on-time for the class. Coming to class late will lower your participation grade and I may call you more frequently to answer the questions in class.

Please switch off your cell-phones completely for the class time.

## **Teaching Assistant**

Sergey Goncharov, currently at NES. More details to be added.

*Auditing:* Students may not audit this class.

*Name Cards:* Please put name cards (if available) in front of your seat each time you come to class. Please be attentive during the class, I will use cold calling.

*Email-List:* Occasionally, we will send E-mails to the class E-mail list. If you are registered for this course, you should be automatically on the list.

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## **Approximate List of Topics**

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### **INTRODUCTION (first part of the first lecture)**

1. What do we expect to learn in this class? Discuss the organization of the classes.
2. Using data of comparable firms: BD Chapter 7 and 9.3. Applications. The role of the risk corrections. BD Chapter 3.6, 10.4, (advanced 10.5, 10.7, 10.8, 12.2, 12.4)

### **PART 1. ADVANCED CAPITAL STRUCTURE TOPICS**

- 1 Financing in the imperfect world. WACC, APV, FTE, Cost of Equity and Debt. Read BD Chapter 15. Capital Structure with Bankruptcy Costs. Valuation using comparables. Read BD Chapter 18 and some of Chapter 19
- 2 Agency Costs and Asymmetric Information. Read BD Chapter 16.
- 3 Payout issues. The role of the informational imperfections. The role of individual interest income tax, capital gains tax, dividend tax.

### **PART 2. REAL OPTIONS IN CORPORATE FINANCE**

1. Real Options: examples and applications

Introduction: opportunity costs and optimal replacement problem.  
Read BD Chapter 7.1. Read BD Chapter 22.

2. Using binomial trees to value the real options. Comparing to financial options

CASE

**PART 3. ISSUING EQUITY AND DEBT.**

- 1 Issuing Equity, VC, IPOs and SEOs: Read BD Chapter 23.
- 2 Valuation of Rights, Warrants, ESOs. Optimal contracting issues. Valuation using simple binomial tree.
- 3 Issuing debt. Examples.
- 4 Valuation of Convertible Bonds, Warrants, and hybrid corporate securities. Relation to the agency problems, taxation.