Course Objectives and Descriptions

The primary objective of this course is to develop skill sets required for an integrated corporate financial modeling. The course starts out with a quick review of critical excel skills required for this module, followed by developing coherent frameworks for financial modeling. The course takes an approach of first developing the building blocks of financial models and wrap them into pro forma financial statements forecasting from which cash flows can be built for valuation. The course also exposes students to methods of estimating appropriate discount rate required for corporate valuation. Instruction will be done on the basis of a combination of lectures, cases, hands on assignments and a major financial modeling project of real companies that students will
be working on in a group of three students throughout the module. Students are required to present their company financial models and valuation during the last class of the module. This module should appeal to students with career goals in investment banking, investment management, risk management, credit analysis and variety of professional career tracks where modeling skill sets are required.

**Prerequisite:** This module requires corporate finance (FIN 202a) or Advanced Corporate Finance (204a), financial accounting and basic excel as pre-requisites. Students may take FIN 202a or 204a concurrently. To satisfy excel pre-requisite, students should take an online excel training, available here at IBS on Latte, Lynda.com, titled “Excel 2016: Essential Training” during the first week of the module. You need about 5 hours to complete the lesson and a few more hours to do the exercises. I will talk about this requirement during the first class.

**Course Materials**

**Required Textbooks:** Simon Benninga, *Financial Modeling 4rd edition, 2014, MIT Press*

**Course Packet** from Harvard Business School Publishing: The link that you need to use to purchase the course packet will be posted on Latte.

Other course materials will be posted on Latte

*The learning goals of this course are to develop skill sets for*

- understanding the (business) drivers of financial results of companies
- understanding interrelationships of different schedules of financial models
- developing integrated financial models, forecasting and scenario analysis
- Understanding & developing different models of estimating appropriate discount rates
- Application of valuation models
- Developing an integrated financial model of a real company through a final corporate modeling & valuation project

**Course Requirements and Final Grade Determination**

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Financial Modeling Project</td>
<td>35%</td>
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<tr>
<td>Final Presentation of Financial Modeling Project</td>
<td>15%</td>
</tr>
<tr>
<td>Financial Modeling Case Assignments Parts 1-3</td>
<td>30%</td>
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<tr>
<td>Class Participation</td>
<td>20%</td>
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</tbody>
</table>
Financial Modelling Project

The best way to learn financial modeling is doing it! This project is designed and is intended to give students an opportunity to develop an integrated financial model of a real company. Early in the semester, I will layout the framework and the expected final deliverables of the project. Students will form a group of 3 students and choose a publicly traded company with a minimum of five years stock market trading history. The groups are required to submit their group names and the company of their choice during the second week of the module. Students will work on the modelling project throughout the module and culminate with presentation of their integrated model and valuation of their company during the final exam schedule for the course. I will provide more detailed written guidance on this project as the course progresses early in the semester. Reflecting the importance of this project in achieving the course objectives, this modeling project carries a relatively high weight of the grading for the course and should be taken very seriously by students to succeed in this course.

Financial Modeling Case Assignments Parts 1-3

Using an HBS case, we will develop a step by step building blocks of an integrated financial model of a company. These series of assignments lay out the framework that students will apply in their financial modeling project.

Class Participation and Case Discussions

The teaching methodology of this course combines lectures, cases and textbook readings as stated above and hence students are expected to come prepared to each class and actively participate in class discussions.

Workload Expectation

Success in this two-credit course is based on the expectation that students will spend a minimum of 9 hours of study time per week in preparation for class (readings, papers, discussion sections, preparation for exams, etc.)

Academic Honesty

You are expected to be honest in all of your academic work. Please consult Brandeis University Rights and Responsibilities for all policies and procedures related to academic integrity. Students may be required to submit work to TurnItIn.com software to verify originality. Allegations of alleged academic dishonesty will be forwarded to the Director of Academic Integrity. Sanctions for academic dishonesty can include failing grades and/or suspension from the university. Citation and research assistance can be found at LTS - Library guides.
**ACCOMMODATION FOR DISABILITIES:**

If you are a student with a documented disability on record at Brandeis University and wish to have a reasonable accommodation made for you in this class, please see me immediately. For more information go to: http://www.brandeis.edu/disability

**Office Hours**

You may see me during my regular office hours or by appointment (which you should request by email).

**Course Outline**

<table>
<thead>
<tr>
<th>Class</th>
<th>Date</th>
<th>Topics</th>
<th>Readings/Assignments</th>
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<tbody>
<tr>
<td>1</td>
<td></td>
<td>Introduction to Financial Modelling</td>
<td>Financial Modelling, 4th ed. Chapters 1, 31 and 35</td>
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<td></td>
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<td>Data Tables and Some Critical Excel Functions for Financial Modelling.</td>
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<td>2</td>
<td></td>
<td>Business Analysis: Risk and Success Factors</td>
<td>Financial Modeling chapter 33 and Read the Case and Set up modeling parameters</td>
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<td>Scope of Business Operations</td>
<td>First Assignment Due</td>
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<td>Industry Analysis</td>
<td>Please see Latte for assignment questions</td>
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<td></td>
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<td>Company Analysis</td>
<td>Read Note on Good practice in Excel modeling.</td>
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<td>UPS IPO Case Discussion</td>
<td>In HBS publishing case packet</td>
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<td>Setting Up Modeling Parameters</td>
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<td>UPS IPO Integrated Modeling</td>
<td>UPS IPO Modeling Assignment 2 due</td>
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<td>4</td>
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<td>Models of Cost of Capital Estimation and Applications</td>
<td>Financial Modelling, 4th ed. Chapters 3</td>
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<td>5</td>
<td></td>
<td>Integrated Financial Modeling and Corporate Valuation</td>
<td>Financial Modelling 4th Chapters 2, 4, 5,6</td>
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<td>UPS IPO Modeling Assignment 3 Due</td>
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<tr>
<td>During final Exam schedule</td>
<td>Final Presentation of Corporate Financial Modeling Project</td>
<td>Group Presentations</td>
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Please note I reserves the right to add and remove readings from the course and to alter or modify the lecture schedule as required. I will give you advance notice of any such changes or modifications.