Course Description and Objective

The objective of this course is to provide a practical and hands-on introduction to the theory and practice of finance. We will focus on understanding the most important financial models in Corporate Finance and Investments, and how these can be implemented in practice. The emphasis will be on developing working models that can be applied to financial data. The course is intensive, and requires extensive use of Excel (familiarity with simple programming concepts will be an advantage).

We will divide the semester into four roughly equal quarters. The first quarter will deal with basics of fundamental stock valuation. The second will deal with basics of portfolio theory. The third will deal with equity options, and the fourth will deal with bonds.

Prerequisites
FOMGT 301

Recommended Text
Financial Modeling, 2nd edition, Simon Benninga

In addition, it is understood that all students read the daily newspapers, including the Wall Street Journal and are familiar with daily movements of the markets.

Grading Policy
The final grade will be determined on the basis of performance in quizzes, projects, homework, and class participation. Projects can be done in groups, limited to a maximum of three individuals. Projects will be presented in class. Late submissions will not be accepted. Points are distributed as follows:
20% - Homework
There will be regular homework assignments. These assignments will require creation of spreadsheet models. The student will be tested on these models in the quiz.

40% - Quizzes
We will have 4 quizzes, each one dealing with the major topic that is covered in that quarter (i.e. stocks, portfolio theory, options and bonds). All quizzes will be in the computer lab, and will require creation of spreadsheet models.

30% - Final Project:
There will be a group project. Each group will present their project in class in the last week of the semester. The group size should be of 3 individuals.

10% - Class Participation and peer evaluation
The final component of the grade will relate to class participation. This will be measured along two dimensions. The first dimension will be regular class participation and attendance. This portion will be graded by me. The second part of this grade will be peer evaluations, and this will graded by the peers in your group. Please note that this portion of the grade can significantly impact your final overall grade.
Week 1: September 6  
Introduction and Overview of Class  
Chapter 1

Week 2: September 11 and 13  
Valuation methodology overview  
Cost of Capital and the Beta  
Chapter 2, 3, 10

Week 3: September 18 and 20  
Equity Valuation  
Chapter 3 and 4  
Homework on equity valuation is due on September 20.

Week 4: September 25 and 27  
Portfolio theory  
Chapter 7  
Quiz 1 on September 25.

Week 5: October 2 and 4  
Construction of an optimal risky portfolio  
Chapter 8

Week 6: October 11  
Applications of portfolio theory  
Class notes  
Homework on portfolio theory is due on October 11.

Week 7: October 16 and 18  
Equity option: payoff diagrams  
Chapter 13  
Quiz 2 is on October 16.

Week 8: October 23 and 25  
Valuation: Binomial Tree  
Chapter 14

Week 9: October 30 and November 1  
Valuation: Black Scholes and Monte Carlo simulation  
Chapters 15 and 16
Homework on option pricing is due on November 1.
Week 10:  November 6 and 8
Options: Applications
Quiz 3 is on November 6.

Week 11:  November 13 and 15
Bonds: Introduction
Class notes

Week 12:  November 20 and 22
Duration and Convexity
Chapter 20

Thanksgiving November 23

Week 13:  November 27 and 29
Risk management and bonds
Class notes
Homework on bonds is due on November 27.
Quiz 4 is on November 29.

Week 14:  December 4 and 6
Final Projects

Week 15:  December 11 and 13
Final Projects