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

The textbook is optional, and will be useful for reference (you may, if you choose, buy the 3rd edition, which is newer but more expensive). I will largely rely on class notes. 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 5
Introduction and Overview of Class
Chapter 1

Week 2: September 10 and 12
Valuation methodology overview
Cost of Capital and the Beta
Chapter 2, 3, 10

Week 3: September 17 and 19
Equity Valuation
Chapter 3 and 4
Homework on equity valuation is due on September 20.

Week 4: September 24 and 26
Portfolio theory
Chapter 7

Quiz 1 on September 24.

Week 5: October 1 and 3
Construction of an optimal risky portfolio
Chapter 8

Week 6: October 9 and 10
Applications of portfolio theory
Class notes
Homework on portfolio theory is due on October 10.

October 8 is Columbus Day and Monday schedule is followed on October 9.

Week 7: October 15 and 17
Equity option: payoff diagrams
Chapter 13
Quiz 2 is on October 15.

Week 8: October 22 and 24
Basic arbitrage relationships of option prices
Valuation: Black-Scholes and Monte Carlo simulation
Chapter 14
Week 9: October 29 and October 31
Trading options: Hedging
Chapters 15 and 16

Week 10: November 5 and 7
Options: Applications

Homework on option markets is due on November 5th.

Week 11: November 14

November 13 is Veteran’s Day.
Quiz 3 on November 14.

Week 12: November 19 and 21
Bonds: Pricing, duration and convexity
Chapter 20

Thanksgiving November 21 onwards

Week 13: November 26 and 28
Bond portfolio management
Class notes

Week 14: December 4 and 6

HW due on November December 4
Quiz 4 on Dec 6

Week 15: December 11 and 13
Final Projects