

**FINOPMGT 304 Info Tech Finance**  
**Prof. Nikunj Kapadia**

**SOM 106 M-W 1:25 to 2:40 pm**

**Fall 2007**

**Office Hours: Tue 1:30 to 2:30 and by appointment**

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**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, 2<sup>nd</sup> edition, Simon Benninga

The textbook is optional, and will be useful for reference (you may, if you choose, buy the 3<sup>rd</sup> 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 be 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 5<sup>th</sup>.

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