

Fordham Graduate School of Business

Fixed Income Analysis

Syllabus FNGB-7433, Fall 2007

Professor Pamela Moulton

Office: Lowenstein 604B

Phone: 212-636-6135

Office hours: Mon 1:30-3:30 pm or by appointment

pmoulton@fordham.edu

Teaching Assistant

Rob Keays

Library hours: TBA

rkeays@fordham.edu

Course Objectives

This course provides an in-depth analysis of the concepts that are most often encountered in the market for fixed income securities. The goals of the course are threefold: (1) to develop the set of tools required to evaluate virtually any fixed income instrument; (2) to illustrate the mechanics and intuition of hedging and other trading and portfolio strategies; and (3) to explore the key features of both traditional and derivative fixed income instruments. The course will focus on topics that are most likely to have practical relevance for students.

Mathematical Preparation

By its very nature, the study of fixed income securities involves mathematics. Our general approach will emphasize the intuition behind the math, and all of the material is accessible to students with a solid understanding of algebra. (See the algebra self-test distributed in the first class meeting.) In particular, one does not need to be an expert at calculus to succeed in this course, although the textbook does use calculus in explaining some concepts, such as duration and convexity.

Pre-requisite

This class assumes thorough knowledge of the material taught in **FNGB-7421, Principles of Modern Finance**.

Course Materials

- Lecture slides and Technical notes: distributed in class
- Wall Street Journal: read (at least) the Credit Markets column daily (for discount student rate use www.wsjstudent.com, click Subscribe Now, select my name from professor list)
- Textbook:
Bond Markets, Analysis and Strategies, 6th Edition, by Frank J. Fabozzi
(Pearson/Prentice Hall, available in the Fordham Bookstore)
- Financial calculator with built-in bond calculations (such as Texas Instruments BA II Plus Professional or HP-17B II Business Calculator)
Note: If you use an HP-12C, you will have to program it yourself to do calculations for non-Treasury bonds. I do not recommend it, but if you want to use the HP-12C check your manual for programming instructions.

Schedule of Lectures

Schedule of Lectures		Fabozzi Reading; TN*	
1)	9/10	Course overview, Review of bond pricing	p.1-10, 20-29, 31, 35-44, 46-55; TN-004
2)	9/17	Duration and hedging	p. 58-72
3)	9/24	Convexity and spread trades	p.73-86, 522-533
4)	10/1	Yield curve, spot and forward rates – <i>PS 1 due</i>	p.101-123, 146-147
5)	10/12-Fri	Repo and carry	p. 542-545; TN-002
6)	10/15	Bond futures	p.609-620, 622-630
7)	10/22	Eurodollar futures and swaps – <i>PS 2 due</i>	p.683-705
8)	10/29	<i>Midterm Exam</i>	
9)	11/5	Fixed income options	p.640-673, 707-715
10)	11/12	Embedded optionality	p.378-403
11)	11/19	Mortgage-backed securities – <i>PS 3 due</i>	p.225-300; TN-001
12)	11/26	Credit, Corporates and Structured products	p.156-173, 182-184, 493-504; TN-003
13)	12/3	Credit derivatives – <i>PS 4 due</i>	p.727-730, 736-737
14)	12/10	<i>Review session</i>	
15)	12/17	<i>Final Exam</i>	

* TN = technical note, distributed in class, numbered GBA-PCM-00x.

Grading

Grades will be based on the following:

Problem Sets (30%)

Midterm (30%)

Final (40%)

Problem Sets

Because the material in this course is analytical, it is essential that you work through the problem sets. I encourage students to work together on the problem sets in *groups of up to three students*. All students in the same group will get the same grade. Groups of students working together should submit just one copy of the problem set, at the beginning of the class listed on the schedule. As I'll distribute solution sets in that class, I will not accept late assignments. I strongly encourage you to keep a copy of your answers.

Exams

The midterm and final exams will be open book and open notes, and the use of a financial calculator will be permitted. Exams will be individual effort.