

The Hong Kong University of Science & Technology  
Department of Finance

**FINA 536: Fixed Income Analysis**  
**Fall 2007**

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### **Course Description**

This course teaches basic valuation techniques of the traditional fixed-income securities. It begins with discussion of basic concepts such as price-yield relationship, discount factors, par-bond yields, forward rates, and price sensitivity measures such as various durations and convexities. These concepts are followed by yield curve fitting techniques and portfolio strategies. It then moves on to the topics in repos and floating rate securities. Both economic intuition and quantitative skills are emphasized.

### **Required Textbook**

(MPP) Martellini, L., Priaulet, P. and Priaulet, S., 2003, *Fixed-Income Securities: Valuation, Risk Management and Portfolio Strategies*, The Wiley Finance Series.

### **Other Recommended Readings**

(FF) Frank Fabozzi, 2005, *Fixed Income Analysis for the Chartered Financial Analyst Program*, F.J. Fabozzi Associates.

(SS) Suresh Sundaresan, 2001, *Fixed Income Markets and Their Derivatives*, 2nd edition, Southwestern.

(BT) Bruce Tuckman, 2003, *Fixed Income Securities: Tools for Today's Markets*, 2nd edition, Wiley.

## Grading

Midterm exam (100 min.)	40 points	5th week
Final exam (150 min.)	60 points	8th week

## Topics

1. Basic Concepts
2. Term Structure of Interest Rates
3. Yield Curve Fitting
4. Portfolio Strategies
5. Repo Markets
6. Floating Rate Securities

## Miscellany

Unless I say otherwise, everything discussed in class may appear in the exams.

You may bring to the exams an 11" by 8.5" (A4-size) data sheet, on which you can write anything you like on both sides, but everything has to be hand-written.

The mid-term exam covers the first three lectures. The final exam covers the entire course, but it emphasizes the material after the midterm. The course grade depends on the exam performance relative to the class average.

Homework assignments will not be collected. Solutions will be available before exams.

## Suggested Homework: MPP end-of-chapter questions

**Ch.1:** 1, 3, 4, 8, 15.

**Ch.2:** 1, 2, 3, 7, 14, 20, 24.

**Ch.3:** 1, 3, 11, 12.

**Ch.4:** 1, 4, 7.

**Ch.5:** 1, 7, 11, 19.

**Ch.6:** 1, 6, 8.

**Ch.8:** 2, 3, 4, 5, 7, 9.

Additional exercises are provided in the class notes.