The Hong Kong University of Science & Technology
Department of Finance

FINA 553: Fixed Income Securities
Fall 2004

Saturday 2:30–5:50, room 3308

Instructor:	Chu ZHANG
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Course Description

This is a course on fixed-income securities and related derivatives. It covers basic analytical tools in fixed-income markets. Topics include relative pricing of fixed-income securities, forward rates, yield-to-maturity, yield-curve trading strategies and immunization techniques. It also discusses term structure models, fixed-income securities with embedded options, and derivatives with fixed-income underlying securities. Instruments to be discussed are forward rate agreements, bond and interest rate futures, interest rate swaps, fixed-income options, mortgage-backed securities, and credit derivatives. The course emphasizes analytical techniques, rather than institutional details.

Required Textbook

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

Other Reference Books and Readings

MPP Lionel Martellini, Philippe Priaulet, and Stphane Priaulet, 2003, *Fixed-Income Securities: Valuation, Risk Management and Portfolio Strategies*, The Wiley Finance Series.

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

(FF) Frank J. Fabozzi, 2003, *Bond Markets, Analysis and Strategies*, 5th edition, Prentice Hall.

(KG) Kenneth Garbade, 1996, *Fixed Income Analytics*, MIT Press.

A few journal papers are available in the course website.

Grading

Midterm exam	40 points
Final exam	60 points

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

The midterm exam covers Chapter 1 to Chapter 8 of BT. The final exam covers Chapter 9 to Chapter 21.

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

Homework (HW) assignments will be collected before the lecture on due dates. Solutions will be distributed to class later. Each overdue assignment results in minus 10 points in the total grade.

Miscellany

Each student is required to hand in a name card with a recent photo in the following format by the end of the third week.

Your Photo

HKUST, FINA553, Spring 2004
Name (English): Law Suet-Ming, Lisa
Name (Chinese characters): □ □ □
ID number: 03000001
E-mail Address: fn_smlaw@stu.ust.hk
Company/Dept: ING Barings/credit control

Homework Assignments

The questions marked with a * are optional.

Homework assignment 1: due Oct. 2
1.3, 1.4, 1.5, 1.6,
2.1, 2.2, 2.3, 2.5, 2.6,
3.1, 3.2, 3.3, 3.5, 3.6, 3.7, 3.8
4.2, 4.5, 4.6, 4.7.

Homework assignment 2: due Oct 23
5.1, 5.2, 5.3, 5.4, 5.5, 5.6, 5.7,
6.1, 6.3, 6.5,
7.1, 7.2, 7.3, 7.4, 7.5, 7.6,
8.1*, 8.2, 8.3*.

Homework assignment 3: due Nov. 20
9.2, 9.3, 9.4
10.1, 10.2
11.1, 11.2, 11.3, 11.4
12.1, 12.2, 12.3
13.1
14.1, 14.2

Homework assignment 4: due Dec.11
15.1, 15.2, 15.3, 15.4
16.2, 16.3
17.1, 17.2, 17.3
18.2, 18.3
19.3

Additional optional assignments will be distributed in class.