

**STERN SCHOOL OF BUSINESS - GRADUATE DIVISION
DEPARTMENT OF FINANCE
NEW YORK UNIVERSITY**

**B40.3333
Debt Instruments and Markets
KMEC 1-170**

**Professor Edwin J. Elton
Fall 1999
M/W 5:30-6:50**

COURSE OUTLINE

This is an advanced course in bonds and bond portfolio management. I assume you have taken the core course in finance and understand basic bond pricing. Options and futures.

• **Textbook**

Fabozzi, Frank - Bond Markets, Analysis and Strategies, Prentice-Hall, Inc. 1999, 4th Edition (FF)

• **Reading and Lecture Notes**

Packets of readings and lecture notes are available at the bookstore.

Supplemental:

1. Elton, Edwin and Gruber, Martin J., Modern Portfolio Theory and Investment Analysis, 5th Edition, John Wiley, 1995. (E&G)
2. HO, Thomas S.Y., Strategic Fixed Income Investment, Richard D. Irwin, Inc. 1990. (Ho)

There will be a final exam on Wednesday, December 22, 1999 at 5:30, room 170. The grade will depend on the midterm, final, and the problems. There will be problems assigned from time to time.

Office Hours:

Monday	10:00 - 12:00	Office: Tisch 9-02
Wednesday	3:00 - 5:00	Phone: (212) 998-0361

Suggested Grade Distribution:

Although sections may vary somewhat, the Department of Finance suggests a grade distribution of:

A/A-	20-25%
B	55-70%
C & Below	10-20%

This distribution is intended to make standards comparable across advanced classes, as required by the school. I intend to follow this distribution on average.

I. **Background(1)**

FF; Chapter 1,5,6,7,10
N; Fixed Income Securities

II. **Simple Analytics (1)**

FF; Chapters 2 and 3
N; Yield to Maturity, Accrued Interest, Quoted Price Invoice Price

Reading

1. Invoice Prices, Cash Flows, and Yields on Treasury Bonds.
2. Invoice Prices, Special Redemption Features, Cash Flows and Yields on Eurobonds.

III. **Spot and Forward Rates (1)**

FF; Chapter 9 to page 204
E&G; Chapter 20
N; Multiplying

IV. **Tax and Accounting Issues (1)**

N; Tax Treatment

V. **Term Structure (1)**

FF; Chapter 9 to page 209
E&G; Chapter 20

VI. **Protecting Against Term Structure Shifts (2)**

FF; Chapter 4 and Chapter 22
N; Protecting against Term Structure Shifts

Reading

1. An Introduction to Duration Convexity and Yield Curve Risk.
2. Immunization and Duration: A Review of Theory.
3. Convexity: An Introduction.
4. Risk Constrained Portfolio Reallocations and the Prices of Interest Rate Risk.

VII. **Forward Contracts (1)**

FF; Chapter 17
E&G; Chapter 21
N; Forwards and Futures

Reading

1. Money Market Futures

VIII. **Floating Rate Notes and Swaps**

FF; Chapter 19
N; Floaters and Inverse Floaters, Swaps

Reading

1. Lucas, The Effectiveness of Downgrade Provisions in Reducing Counterparty Risk.
2. Swaps and the Derivative Market.
3. Derivatives at Banc One.

IX. **Bond Options (2)**

FF; Chapters 13,14,16, and 18
N; Option Valuation

Reading

1. A One Factor Model of Interest Rates and its Application to Treasury Bond Options.
2. Interest Rate Caps and Floors.

X. **Corporate Bonds (1)**

FF; Re-read Chapter 6
N; Corporate Bonds

Reading

1. Defaults and Returns on High Yield Bonds.
2. Corporate Bond Valuation and the Term Structure of Credit Spreads.

XI. **Mortgages**

FF; Chapters 10,11,12, and 15
N; Mortgage-Backed Securities

Reading

1. Complexities of Hedging Mortgages
2. GNMA Pass-Throughs-----What Do They Pass Through and What Do They Yield?

XII. **International Bond Management**

FF; Chapter 8
N; International Diversification

Reading

1. Institutional Characteristics of the Japanese Government Bond Market.

XIII. **Active Bond Strategies (2)**

FF; Chapters 20 and 21
Ho; Chapter 14
N; Multi-Index Models in the Bond area and Bond Portfolio Management

Reading

1. Matched Funding Techniques
2. Cross-Currency Bond Positions: Spreading and Hedging.

XIV. **Bond Evaluation (1)**

Ho; Chapter 15