

Syllabus for Fixed Income Independent Study

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6 Credits-for Grade

Professor Pavel Kapinos

Goal of Independent Study: Building on the foundation of Financial Markets 282, we wish to create this independent study to gain comprehensive knowledge of the fixed income market.

Texts

Bodie, Kane, and Marcus. Investments.

Fabozzi, Frank. The Handbook of Fixed Income Securities.

Truckman, Bruce. Fixed Income Securities.

Bruck, Connie. The Predator's Ball.

Brookstaber, Richard. A Demon of our own Design.

Grading

Weekly Problem Sets.....	20%
Exam 1	20%
Exam 2	20%
Empirical Research Project.....	30%
Weekly Discussion.....	10%

Outline

Week 1:

Review the bond chapters in Bodie, Kane, and Marcus.

Week 2:

Chapter 1: Bond Prices, Discount Factors, and Arbitrage (Tuckman)

Chapter 2: Bond Prices, Spot Rates, and Forward Rates (Tuckman)

Chapter 3: Yield to Maturity (Tuckman)

Week 3:

Chapter 4: Generalizations and Curve Fitting (Tuckman)

Chapter 5: One-Factor Measures of Price Sensitivity (Tuckman)

Chapter 6: Measures of Price Sensitivity Based on Parallel Yield Shifts (Tuckman)

Week 4:

Chapter 7: Key Rate and Bucket Exposures (Tuckman)
Chapter 8: Regression-Based Hedging (Tuckman)
Chapter 9: The Science of Term Structure Models (Tuckman)

Week 5:

Chapter 10: The Short-Rate Process and the Shape of the Term Structure (Tuckman)
Chapter 11: The Art of Term Structure Models: Drift (Tuckman)
Chapter 12: The Art of Term Structure Models: Volatility and Distribution (Tuckman)

Week 6:

Chapter 13: Multi-Factor Term Structure Models (Tuckman)
Chapter 14: Trading with Term Structure Models (Tuckman)
Chapter 15: Repo (Tuckman)

Week 7:

Chapter 16: Forward Contracts (Tuckman)
Chapter 17: Eurodollar and Fed Funds Futures (Tuckman)
Chapter 18: Interest Rate Swaps (Tuckman)

Week 8:

Chapter 19: Fixed Income Options (Tuckman)
Chapter 20: Note and Bond Futures (Tuckman)
Chapter 21: Mortgage-Backed Securities (Tuckman)

Week 9:

Empirical research project

Week 10:

Empirical research project

Extra Credit

- Read The Predator's Ball and/or A Demon of our own Design.
- Visit Piper Jaffray in Minneapolis fixed income trading floor through John Hogan '91.
- Seminar with David Joo '00 on fixed income origination.

- Phone call with Warren White ('08 parent), First-American Municipals, on municipal bonds.

Problem Sets

The Tuckman text contains practice problems on each chapter.

Weekly Discussion

Attendance of semiweekly class meetings with Professor Kapinos.

Empirical Research Project

The Tuckman text cites numerous seminal academic works on each topic of fixed income securities. The project will be to research a topic of interest by exploring several of these papers and to repeat and manipulate one of their regressions.

Exams

A selection of problems taken from the weekly problem sets.