

NEW YORK UNIVERSITY STERN SCHOOL OF BUSINESS

**Debt Instruments and Markets (GB.3333.01)**

Fall 2014, TR 1:30-2:50pm, KMC 3-60

Instructor: Bruce Tuckman

Office: KMC 9-92

Office Hours: Tuesdays 3-6pm and by appointment

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**Course Description**

This course will cover a broad range of fixed income markets in the United States, the Eurozone, and Japan: who trades what and why, how relative security prices are determined, how to quantify and hedge their risks, and recent policy developments. The material is designed to balance institutional knowledge, theory, and application.

While every effort has been made to limit the mathematical complexity of the course, students should be aware that fixed income is inherently a quantitatively demanding subject.

**Text and Materials**

Bruce Tuckman and Angel Serrat, *Fixed Income Securities: Tool's for Today's Markets*, Third Edition, John Wiley & Sons, 2012.

Lecture slides and problems/sample exam questions with answers will be distributed at the start of the semester.

**Exams and Grading**

There will be a midterm and a final. Each exam will be multiple choice and closed book, although a calculator is expected. Smart phones will NOT be permitted. Each exam will focus on a particular set of lectures, but knowledge of material presented earlier may certainly be required.

The course grade will be determined by the average of the two exam grades.

## Course Outline

(Chapter numbers refer to Tuckman and Serrat.)

Overview of Global Fixed Income Markets (Overview Chapter)

Prices, Discount Factors, and Arbitrage (Chapter 1)

Spot, Forward, and Par Rates (Chapter 2)

Returns, Spreads, and Yields (Chapter 3, pp. 99-105, 110-112, 113-116;  
Chapter 8, pp. 245-248)

One-Factor Risk Metrics and Hedges (Chapter 4)

Multi-Factor Risk Metrics and Hedges (Chapter 5)

Empirical Approaches to Risk Metrics and Hedging (Chapter 6)

Repurchase Agreements and Financing (Chapter 12)

Additional reading: "The Deal of the Century," by Tom Junod, Esquire,  
September 11, 2009.

<http://www.esquire.com/features/barclays-deal-of-the-century-1009>

Forwards and Futures: Preliminaries (Chapter 13, pp. 351-357)

Note and Bond Futures (Chapter 14, pp. 373-383, 386-390; Chapter 13, pp.  
359-363)

Short-Term Rates and Their Derivatives (Chapter 15, pp. 401-411, 417-422,  
424-432; Chapter 13, p. 371)

Swaps (Chapter 16, pp. 435-450)

Corporate Bonds and Credit Default Swaps (Chapter 19)

Mortgages and Mortgage-Backed Securities (Chapter 20, pp. 563-580, 584-  
589)

Midterm: Tuesday 21 October, in class

Final: Tuesday 16 December, 1:30-3:00pm, KMC 2-90