

NEW YORK UNIVERSITY STERN SCHOOL OF BUSINESS
Debt Instruments and Markets (FINC-UB 26)
Fall 2022, Mondays and Wednesdays, 9:30-10:45am
Tisch Hall, [REDACTED]

COURSE SYLLABUS

Instructor: Bruce Tuckman

Office Hours: Mondays after class and by appointment, KMC 9-92

Email: btuckman@stern.nyu.edu (Please do not use instructor's NYU email.)

Teaching Assistant: [REDACTED]

Course Overview

This course is divided into three parts. The first part (5 classes) provides an overview of fixed income markets and market participants. The second part (9 classes) teaches the analytic tools required for pricing, hedging, and investing in fixed income securities. The third part (12 classes) dives into selected securities and markets.

Lectures present and illustrate foundational materials, which are complemented by breakout sessions to discuss and solve sample problems and applications. Two in-class exams and one non-cumulative final exam will determine the course grade.

The mathematical complexity of the course is limited to what sophisticated practitioners require to understand the analytics commonly used across fixed income markets. Students should be aware, however, that fixed income is inherently a quantitatively demanding subject.

Course Meetings

There are 28 class meetings on Mondays and Wednesday, from 9:30-10:45am, from Wednesday, September 7, to Monday, December 12, EXCEPT:

Class **WILL NOT MEET** on Monday, October 10.

Class **WILL MEET** on Tuesday October 11 (“Legislative Day”).

Class **WILL NOT MEET** on Wed, November 23.

Although classes are recorded, *students are expected to attend class regularly*, to participate in class discussion, and to work through the problems and applications of the in-class breakout sessions. The three course exams will be modeled after the exercises in these breakout sessions.

Textbook

Bruce Tuckman and Angel Serrat, Fixed Income Securities: Tools for Today's Markets, Fourth Edition, John Wiley & Sons, 2022.

The textbook is expected to be released by the publisher in early September, 2022. Lectures will closely follow material in this newly-released text. Exact page numbers in the text will be supplied after the textbook appears in print.

Lecture Slides and Supplemental Material

Lecture slides and supplemental materials (e.g., links to articles or papers) will be posted to Brightspace throughout the semester.

Exams

There will be three exams over the course of the semester:

Tuesday, October 11: In-Class Exam #1

Monday, November 14: In-Class Exam #2

Final Exam: To be determined by the registrar during the final exam period, that is, from Friday, December 16, to Thursday, December 22.

Note that each exam will focus on material presented in a particular third of the class.

STUDENTS MUST ARRANGE THEIR SCHEDULES TO BE PRESENT AT ALL THREE EXAMS. NO MAKE-UPS WILL BE SCHEDULED APART FROM PERSONAL MEDICAL AND FAMILY EMERGENCIES.

Grading

The semester grade will be the average of the scores on the three exams.

Detailed Course Outline

Part I: Overview of Fixed Income Markets

Wed 7 Sep, Mon 12 Sep, Wed 14 Sep, Mon 19 Sep, Wed 21 Sep

Textbook: Chapter 0

Part II

Arbitrage, Discount Factors, Rates, and Spreads

Mon 26 Sep, Wed 28 Sep, Mon 3 Oct, Wed 5 Oct

Textbook: Chapters 1, 2, and 3

NO CLASS on Monday 10 Oct

IN-CLASS EXAM #1

Tues 11 Oct

Interest Rate Risk and Hedging

Wed 12 Oct, Mon 17 Oct, Wed 19 Oct, Mon 24 Oct, Wed 26 Oct

Textbook: Chapters 4, 5, and 6

Part III

Repo

Mon 31 Oct, Wed 2 Nov

Textbook: Chapter 10

Forwards and Futures

Mon 7 Nov, Wed 9 Nov

Textbook: Chapter 11

IN-CLASS EXAM #2

Mon 14 Nov

Forwards and Futures, continued

Wed 16 Nov

Swaps

Mon 21 Nov

Textbook: Chapter 13

NO CLASS on Wed 23 Nov

Swaps, continued

Mon 28 Nov, Wed 30 Nov

Corporate Credit and CDS

Mon 5 Dec, Wed 7 Dec

Textbook: Chapter 14

Mortgages and MBS

Mon 12 Dec, Wed 14 Dec

Textbook: Chapter 15

FINAL EXAM

TBD, between Fri 16 and Thurs 22 Dec

Summary of Course Calendar

Class	Date	Topic	Class	Date	Topic
1	Wed 7 Sep	Market Overview	15	Wed 26 Oct	IR Risk and Hedging
2	Mon 12 Sep	Market Overview	16	Mon 31 Oct	Repo
3	Wed 14 Sep	Market Overview	17	Wed 2 Nov	Repo
4	Mon 19 Sep	Market Overview	18	Mon 7 Nov	Fwds and Futs
5	Wed 21 Sep	Market Overview	19	Wed 9 Nov	Fwds and Futs
6	Mon 26 Sep	Arb, DFs, Rates, Spreads	20	Mon 14 Nov	In-Class Exam #2
7	Wed 28 Sep	Arb, DFs, Rates, Spreads	21	Wed 16 Nov	Fwds and Futs
8	Mon 3 Oct	Arb, DFs, Rates, Spreads	22	Mon 21 Nov	Swaps
9	Wed 5 Oct	Arb, DFs, Rates, Spreads	23	Mon 28 Nov	Swaps
10	Tues 11 Oct	In-Class Exam #1	24	Wed 30 Nov	Swaps
11	Wed 12 Oct	IR Risk and Hedging	25	Mon 5 Dec	Corporates and CDS
12	Mon 17 Oct	IR Risk and Hedging	26	Wed 7 Dec	Corporates and CDS
13	Wed 19 Oct	IR Risk and Hedging	27	Mon 12 Dec	Mortgages and MBS
14	Mon 24 Oct	IR Risk and Hedging	28	Wed 14 Dec	Mortgages and MBS

Final Exam : TBD, during the exam period Fri 16 to Thurs 22 Dec.