Rutgers Business School – Newark, Fall 2018 Analysis of Fixed Income for MQF (22:839:611:30) Professor Francis K.W. Ng

Time: Monday 9:00 AM - 11:50 AM

Place: 1WP-220

Office Hours: Monday 12:30 PM – 1:30 PM

Office: 1WP-1150

Contact: ng.franciskw@gmail.com (prefer text to email)

Mobile: 201-463-8362 (prefer text to voice)

Office Phone: 973-353-5732

Course Overview and Objectives

This course introduces various types of fixed income product including Money Market, Treasury, Corporates, ABS, MBS, CMO, Structure Finance and Credit products. It focuses on various aspects of bond pricing, bond analytics and structuring. In addition, it examines funding methods and tools for fixed income portfolio management.

This course is fundamental to students who are serious in pursuing a career relating to fixed income products.

Students are expected to use the Bloomberg Terminal. Students should be familiar with Excel and the Texas Instruments **BA II Plus** Financial Calculator.

Course Materials

All lecture notes, power points and assignments will be distribute via Blackboard. Some the lecture notes are written by Professor Ng. Students are strongly advised to buy an older edition of the book.

Textbook: **Bond Markets, Analysis, and Strategies**, by **Frank J. Fabozzi**, Publisher: Pearson, Prentice Hall. (*The 7th to 9th edition of this book will suffice*)

There will be some discussion of **case studies** to highlight real-world application of fixed income products. Students are expected to participate actively in these case studies. In addition, students are expected to work on the homework problems. Answers to homework questions are provided. Similar types of questions may show up in the exams. The grading system is shown below.

Grades	Points
Mid-Term	43
Final	43
Real World Case Study	10
EquitySim Bond Trading	4
	100
Bonus (100% class attendance)	2
Active Participation	2

Course Outline

Date	Topic	Lecture Note
Week 1	Introduction Loan Cash Flows Homework #1 & 1B	Chapter 1, PP-1 Private Lecture PP-1B
Week 2	Pricing of Bonds Examples of Bond Features Homework #2	Chapter 2, PP-2 PP-2B
Week 3	Measuring Yield Fixed Income Financial Calculator Homework #3	Chapter 3, PP-3 1 & 2
Week 4	Bond Price Volatility Homework #4	Chapter 4, PP-4
Week 5	Money Market Securities & Repos Homework #5	PP-5, Part of Chapter 6
Week 6	Mid-Term	
Week 7	Factors affecting Term Structure of Interest Rates Zero rates Homework #6	Chapter 5, PP-6
Week 8	Corporate Debt Instruments Homework #7	Chapter 7, PP-7
Week 9	Residential Mortgage Loans Agency MBS Homework #8, #8B	Chapter 10, PP-10 Chapter 11, PP-11
Week 10	CMO ABS, Senior-Sub Tranches Homework #9A, #9B	Chapter 12, PP-12 Chapter 15, PP-15; PP-15B
Week 11	Embedded Options in Bonds Convertible Bonds, Reverse Convertibles Homework #10	Lecture 10A Chapter 20, PP-20
Week 12	Zero rates and Forward rates FRA and Interest-Rate Swaps Credit-Default Swap (CDS) Homework #11	Chapter 31, PP-31 Chapter 32, PP-32
Week 13	Structure Finance products	Private Lecture
Week 14	Final Exam	