

Finance Course Number: 33:390:490 Course Title: Fixed Income

# **COURSE DESCRIPTION**

Course Overview: Students will develop a strong understanding of the fundamentals of investing in Fixed Income, Options <u>and</u> other financial instruments. Topics will include understanding the fundamental drivers of the fixed income and credit markets, bond pricing, and the understanding of both price volatility and risk.

The modern world of investments is varied, complex, and interesting. This course will provide students with the necessary background and many of the tools employed in the profession. Students will learn the jargon of the marketplace, useful analytics, and how things are done using a combination of academic and hands-on practical learning.

I'll assume you understand and can perform time value of money calculations, know what a bond is, have a basic understanding of a balance sheet, income statement plus a minimal knowledge of macro-economics.

# **COURSE MATERIALS**

to get you up and running on the system.

From the Rutgers Bookstore: BOND MARKETS, ANALYSIS, AND STRATEGIES: CUSTOMIZED EDITION FOR RUTGERS UNIVERSITY Frank J. Fabozzi ISBN: 1 931609 08 X Publisher: Frank J. Fabozzi Associates

We will be using **Top Hat Pro** (www.tophat.com) for class participation during the Night Sessions. You will be able to submit answers to in-class questions using Apple or Android smartphones and tablets, laptops, or through text message. You can visit the Top Hat Overview (https://success.tophat.com/s/article/Student-Getting-Started-with-Top-Hat) within the Top Hat Success Center which outlines how you will register for a Top Hat account, as well as providing a brief overview

An email invitation will be sent to you by email, but if don't receive this email, you can register by simply visiting our course website:

https://app.tophat.com/e/987089

Note: our Course Join Code is 987089

Top Hat Pro will require a paid subscription of \$20.

Should you require assistance with Top Hat Pro at any time please contact their Support Team directly by way of email (<u>support@tophat.com</u>), the in app support button, or by calling 1-888-663-5491. Specific user information may be required by their technical support team when troubleshooting issues.

#### Liar's Poker, Michael Lewis

(Buy it from Amazon, link below, you can get it used for \$5) https://www.amazon.com/Liars-Poker-25th-Anniversary-Wreckageebook/dp/B00KSHZT2O/ref=sr\_1\_2?ie=UTF8&qid=1532204954&sr=8-2&keywords=liars+poker+michael+lewis+paperback

Also use this link as a reference:

#### http://www.thinktrade.net/introduction-to-bonds.php

It will also be important to have (or have access to) an HP 12C, or another financial calculator. I will be using a 12C in class. The calculations that are needed for the course may be done using a scientific calculator, a financial calculator and/or a spreadsheet. Your benefit from the lecture will be enhanced if you are able to follow the calculations in class. A tutorial for the TI BA II PLUS financial calculator is available at

http://www.screencast.com/users/Quartic\_Training/folders/TI%20BA%20II%20PLUS%20calculator%20 tutorial/media/e31b353c-26db-459d-9de4-e7ec10d7e5d5 Fither are fine for the axams and homework

Either are fine for the exams and homework.

The course does not always revolve around a book – this is college. As a supplement to the textbook we will have interactive discussion regarding regulation, world events, and the changing landscape of the investment world. Students who read the papers and understand the current events effecting the investment world will have a higher level of success. Consequently, I encourage students to read the Wall Street Journal, FT, Bloomberg Website etc. Try connecting an event in the marketplace – there is always something – with the topic of the lecture and mentioning it in class.

## NO ELECTRONICS DURING CLASS!

## I WILL PERMIT LAPTOPS OR IPADS FOR NOTE TAKING.

Check Canvas and your official Rutgers email account regularly.

# LEARNING GOALS AND OBJECTIVES

-This course is designed to build a foundation in fixed-income.

The focus of the class will be to combine the understanding of interest rates, credit investing, and securitization to real world investing. My goal is that at the end of this class, you could have an intelligent conversation with anyone regarding the fixed-income market.

- Students who complete this course will demonstrate the following:

- Understanding the process of bond math and valuation.
- Understanding a Bloomberg Terminal.
- How to digest and interpret news and how if effects valuations on both a macro and security level.

-Students will develop skills necessary to evaluate and understand the importance of equities, beta and alpha, fixed income instruments, options, duration, and risk.

# PLEASE REMEMBER THAT YOU ARE ULTIMATELY RESPONSIBLE FOR YOUR OWN SUCCESS.

# **TESTING POLICY**

During exams, the following rules apply:

- If you have a disability that influences testing procedures, provide me an official letter from the Office of Disability Services at the start of the semester.
- No cell phones or other electronics are allowed in the testing room, just your calculator.
- You must show a valid Rutgers photo ID to turn in the exam.
- Alternate seating; do not sit next to another student or in your usual seat.
- Use the bathroom prior to the exam start; bathroom breaks are not allowed.

# ACADEMIC INTEGRITY

*I do* NOT *tolerate cheating*. Students are responsible for understanding the RU Academic Integrity Policy (http://academicintegrity.rutgers.edu/)

I will strongly enforce this Policy and pursue *all* violations. On all examinations and assignments, students must sign the RU Honor Pledge, which states, "On my honor, I have neither received nor given any unauthorized assistance on this examination or assignment." I will screen all written assignments through *SafeAssign* or *Turnitin*, plagiarism detection services that compare the work against a large database of past work. Don't let cheating destroy your hard-earned opportunity to learn. See <u>business.rutgers.edu/ai</u> for more details.

# ATTENDANCE AND PREPARATION POLICY

The course agenda is very ambitious. Attendance is critical because, for the most part, each topic builds upon the last. Attendance may be formally taken, so it would be best to not miss a class unless necessary. *Exams are based on the class lectures.* 

If your absence is due to religious observance, a Rutgers-approved activity, illness, or family emergency/death <u>and</u> you seek to makeup a <u>test</u>, send an email with full details and supporting documentation.

# **EMAIL AND OFFICE HOURS**

Please notify me via email if you plan to attend. Email is best (). Priority for office hours are for those who emailed, then first come first serve. I have found many questions can be solved via email, so please feel free to try that first.

I would also ask that you follow the simple guidelines for communications regarding the class.

If your question or concern is regarding something class-related, i.e. homework, office hours, projects, etc. please do NOT use Outlook mail. Instead, use the email system integrated into Canvas.

If your question is regarding professional or personal advice please DO USE Outlook Mail.

This will help me be more responsive to your emails if you please follow these simple rules.

# CLASSROOM CONDUCT

**Class Participation** is strongly encouraged, as is the ability to speak to current financial events. You are responsible to know what goes on in class, which will from time to time include handouts, additional readings, and possible changes to the syllabus. Most course announcements will be made by notices via Canvas. Email will also be sent so... be sure your Canvas email is correct

Put your phones away --- if it rings or your caught texting I will ask you to leave class. If it's something critical (someone in surgery for example) I will grant you a one-time exemption. Just let me know BEFORE class. Your friend picking you up after class in NOT critical.

We're all adults, disruptive behavior will not be tolerated. We will respect everyone in the class. I'm here to teach and you are here to learn. There is no class that 30+ students will find perfect.

## EXAM DATES AND POLICIES

Exams may be online or in-person. This will be decided at a later date.

Your course grade will be based primarily upon these examinations. There may be homework or a surprise quiz.

•	QUIZ -	5%
•	Hourly #1 -	15%
•	Hourly #2 -	20%
•	Final Exam -	35%
•	Current Events Report -	10%
•	Lehman Paper -	10%
•	Bloomberg Homework	

- Bloomberg Homework
- And TopHat Points 5%
- Two Final Exam Points for Bloomberg course\*

Current Events Report: During the semester, students will research some current news aspect of the Fixed – Income Markets and write a brief (2 - 3 page) report. <u>Due Date:</u>

Lehman Paper: Why did Lehman fail, and was the U.S. Government right to let it fail? (2-3 pages) <u>Due Date: ()</u>

MAKE – UP POLICY: There will be no make-ups unless the excuse is approved by the Dean of Students Office (http://deanofstudents.rutgers.edu/). If you miss one quiz or exam, I will simply count your final exam grade in its place. For example, if you miss the second hourly, your final is now worth 50% of your grade.

If you miss two exams, this will not apply to the second; you will receive a zero for the second exam.

\*A number of you have already completed the BMC course. There is no need to recomplete. Just resend me your certificate from last year!

# **GRADING POLICY**

Course grades will be determined at the end of the semester based on your cumulative points and the relative performance of the class based on the material presented. The points you earn in the course will determine the grade you receive.

Your final grade is not subject to negotiation. If you feel I have made an error, submit your written argument to me within three days of receiving your final grade. Clarify the precise error I made and provide all due supporting documentation. If I have made an error, I will gladly correct it. But I will adjust grades only if I have made an error. I cannot, and will not, adjust grades based on consequences, such as hurt pride, lost scholarships, lost tuition reimbursement, lost job opportunities, or dismissals. Do not ask me to do so.

The guideline specifies that the average grade (where A=4, B+=3.5, B=3, C+=2.5, C=2, D=1 and F=0) should be between 2.95 and 3.15.

# **COURSE SCHEDULE**

To get maximum return from your investment in this course, it's strongly recommended that you read the assigned chapters **before** class and review the PowerPoint presentations associated with each lecture.

Treat this schedule as subject to change and best case, as we will have a number of guest speakers and will need to adjust as we go along. I will keep everyone up to date via class and Canvas.

Торіс	Reading			
Fixed Income Essentials	FABOZZI Chap. 1			
Overview and features of a fixed- income securities. Coupon vs. Principal	Chapter 1 of Custom Book			
Pricing of Bonds	FABOZZI Chap. 2 - 3			
PV, FV, Price and Yield Relationship				
Yields				
Understanding current yield, yield to maturity, yield to call, yield to put, and cash flow yield				
Bloomberg Functions				
Bond Price Volatility	FABOZZI Chap. 4 - 5			
Understanding Duration, 3 Types of Durations				
Factors Affecting Bond Yields and the Term Structure of Interest Rates				
Set Up Your Bloomberg Accounts if				
you don't have one already. There will be homework coming.				
Treasury and Federal Agency Securities	FABOZZI Chap. 6			

Pricing and conventions. Auction Process, Type of Securities				
Q/A Review for Midterm				
Small Quiz on Chapters 1,2,3				
Corporate Debt Instruments	FABOZZI Chap. 7			
The different types of corporate debt obligations: corporate bonds, medium- term notes, commercial paper, bank loans, convertible corporate bond, and asset-backed securities, greenwashing, greenbonds, ESG				
Corporate Debt Instruments (cont)	FABOZZI Chap. 7			
Betsi Hill Video – please watch before this lecture!				
FIRST MIDTERM EXAM	FABOZZI Chap. 8			
Municipal Bonds				
G.O. vs. Revenue Bond				
Taxable Yields and Equivalent				
Regulation, Federal Reserve, Central Banks	FABOZZI Chap. 9,			
Discussion of "Liar's Poker"				
International Bonds				
the classification of global financial markets				
motivation for investing in non-dollar denominated bonds				
non-U.S. issuers of international bonds: sovereign governments, sub- sovereign, governments, supranational agencies, financial institutions, and corporations.				

infrastructure debt and its role in international markets				
Residential Mortgage Loans	FABOZZI Chap.10,			
what a prepayment is				
the cash flow of a mortgage loan				
what a prepayment penalty mortgage is				
the risks associated with investing in mortgages				
Agency Mortgage Pass-Through Securities	FABOZZI Chap 11			
Agency Collateralized Mortgage Obligations and Stripped Mortgage- Backed Securities				
Repurchase Agreements				
Intro to Asset Backed Markets	FABOZZI Chap 12			
Discussion of CLO's and CDO's	FABOZZI Chap 13			
Analysis of Bonds with Embedded Options	FABOZZI Chap 15,			
Second Midterm	FABOZZI Chap 18			
Corporate Bonds, CDS,	FABOZZI Chap 32			
Capital Structure, Loan Market				
Bond Portfolio Management Strategies	FABOZZI Chap 24, 25			
Interest Rate Strategies	FABOZZI Chap 29, 30, 31 (parts)			
FINAL AS SCHEDULED				

## **SUPPORT SERVICES**

If you need accommodation for a *disability*, obtain a Letter of Accommodation from the Office of Disability Services. The Office of Disability Services at Rutgers, The State University of New Jersey, provides student-centered and student-inclusive programming in compliance with the Americans with Disabilities Act of 1990, the Americans with Disabilities Act Amendments of 2008, Section 504 of the Rehabilitation Act of 1973, Section 508 of the Rehabilitation Act of 1998, and the New Jersey Law Against Discrimination. More information can be found at <u>ods.rutgers.edu</u>.

[Rutgers University-New Brunswick ODS phone (848)445-6800 or email dsoffice@echo.rutgers.edu]

[Rutgers University-Newark ODS phone (973)353-5375 or email ods@newark.rutgers.edu]

If you are *pregnant*, the Office of Title IX and ADA Compliance is available to assist with any concerns or potential accommodations related to pregnancy.

[Rutgers University-New Brunswick Title IX Coordinator phone (848)932-8200 or email jackie.moran@rutgers.edu]

[Rutgers University-Newark Office of Title IX and ADA Compliance phone (973)353-1906 or email <u>TitleIX@newark.rutgers.edu</u>]

If you seek *religious accommodations*, the Office of the Dean of Students is available to verify absences for religious observance, as needed.

[Rutgers University-New Brunswick Dean of Students phone (848)932-2300 or email deanofstudents@echo.rutgers.edu]

[Rutgers University-Newark Dean of Students phone (973)353-5063 or email DeanofStudents@newark.rutgers.edu]

If you have experienced any form of *gender or sex-based discrimination or harassment*, including sexual assault, sexual harassment, relationship violence, or stalking, the Office for Violence Prevention and Victim Assistance provides help and support. More information can be found at <a href="http://vpva.rutgers.edu/">http://vpva.rutgers.edu/</a>.

[Rutgers University-New Brunswick incident report link: <u>http://studentconduct.rutgers.edu/concern/</u>. You may contact the Office for Violence Prevention and Victim Assistance at (848)932-1181]

[Rutgers University-Newark incident report link:

<u>https://cm.maxient.com/reportingform.php?RutgersUniv&layout\_id=7</u>. You may also contact the Office of Title IX and ADA Compliance at (973)353-1906 or email at <u>TitleIX@newark.rutgers.edu</u>. If you wish to speak with a staff member who is confidential and does **not** have a reporting responsibility, you may contact the Office for Violence Prevention and Victim Assistance at (973)353-1918 or email <u>run.vpva@rutgers.edu</u>]

If students who have experienced a temporary condition or injury that is adversely affecting their ability to fully participate, you should submit a request via <u>https://temporaryconditions.rutgers.edu</u>.

If you are a military *veteran* or are on active military duty, you can obtain support through the Office of Veteran and Military Programs and Services. <u>http://veterans.rutgers.edu/</u>

If you are in need of *mental health* services, please use our readily available services.

[Rutgers University-Newark Counseling Center: http://counseling.newark.rutgers.edu/]

[Rutgers Counseling and Psychological Services-New Brunswick: http://rhscaps.rutgers.edu/]

If you are in need of *physical health* services, please use our readily available services.

[Rutgers Health Services – Newark: <u>http://health.newark.rutgers.edu/]</u>

[Rutgers Health Services - New Brunswick: http://health.rutgers.edu/]

If you are in need of *legal* services, please use our readily available services: <u>http://rusls.rutgers.edu/</u>

Students experiencing difficulty in courses due to *English as a second language (ESL)* should contact the Program in American Language Studies for supports.

[Rutgers-Newark: PALS@newark.rutgers.edu]

[Rutgers-New Brunswick: eslpals@english.rutgers.edu]

If you are in need of additional *academic assistance*, please use our readily available services.

[Rutgers University-Newark Learning Center: http://www.ncas.rutgers.edu/rlc

[Rutgers University-Newark Writing Center: <u>http://www.ncas.rutgers.edu/writingcenter</u>]

[Rutgers University-New Brunswick Learning Center: <u>https://rlc.rutgers.edu/</u>]

[Optional items that many faculty include:

- Students must sign, date, and return a statement declaring that they understand the RU Academic Integrity Policy.

- Students must sign, date, and return a statement declaring that they understand this syllabus.]