

University of Michigan Ross School of Business FIN 640: Financial Trading Winter B 2022

Class Information

Title: Financial Trading

Instructor: Pedram Nezafat, Ph.D. Email: nezafat@protonmail.com

Class Webpage: Canvas

Time and Location:

TuTh 12:40 - 2:10PM; R0400 BUS

Office Hours:

Thursdays from 3:30 to 5:00pm or by appointment (on Zoom)

Office house are open to anyone with any question whether class related or not.

Zoom link: https://umich.zoom.us/j/92030148873

Meeting ID: 920 3014 8873

Course grader and tutor: Nakul Chadha

Email: nchadha@umich.edu

Tutoring schedule:

Please click here.

Course Information

Prerequisites

The formal prerequisite for this course is FIN 503 or 513 or 551. I expect that you are familiar with concepts such as return, short selling, margin trading, and arbitrage. You should have a high interest in this course and be willing to work hard. You should not expect to understand the material by just coming to the lectures. Going over lecture notes, cross-reading, doing the projects, and coming to office hours regularly are extremely important to be successful in this course.

Description

Finance 640 is a 1.5 credit course about trading financial assets. The course is intended for students that expect to take trading jobs, but it is also relevant for all students that expect to trade securities. The course uses a



combination of lectures, news articles, practitioner books, and trading-simulation cases to make students comfortable with ideas like order types, bid-ask spreads, information trading, liquidity, dark pools, and price manipulation. The course does not discuss what/when people should buy and sell.

Teaching commitment and teaching style

- My decision to teach this course includes the commitment to offer sessions worth attending, and I ask my
 students to feel comfortable letting me know if they feel I am not doing so. The decision to take this course is
 yours and once you make that decision, you have responsibilities to everyone else in this community of
 learners and you should be willing to participate intellectually in the deliberation of each class.
- My goal is to create an educational environment that fosters learning and critical and creative thinking. To this end, my teaching style will not be procedural. The primary purpose of this course is for you to understand the basics of functioning of the equity market in the United States. I care that you understand the limitations of what you know and that not everything that you learn from the textbook works in practice. I care that you can apply what you know. I care that you know how much potential you have. I want you to have solid knowledge of the basics so that you can do well in interviews.
- I do not want you to memorize anything. Many people forget details shortly after the semester is over. I tend to forget details too. I want you to understand the big picture so that you can have an intelligent and concrete conversion about the topics that we cover in our course.
- You are encouraged to read the corresponding sections of the book <u>before and after</u> class. The first time you learn something new it may sound like total nonsense; the second time, you will be more familiar with it and things start being clearer.
- I will be available for any help that you need during your learning process. If you get frustrated with any concept/problem you should contact me and ask for help. Remember that "failure is not falling down but refusing to get up."

Textbook

Trading and Exchanges: Market Microstructure for Practitioners

Author: Larry Harris

Publisher: Oxford University Press; 1st edition (October 24, 2002)

ISBN-10: 0195144708 ISBN-13: 978-0195144703

Lecture slides

All lecture slides are posted on Canvas.

Recorded lectures

I will not record the lectures. By registering in this course, you have made the commitment to attend the class in person.



Workload expectation

This course has an extensive workload and <u>you should expect to work 4-6 hours a week on coursework outside</u> the classroom. The course load will not be uniform over the semester. The course requires extensive reading and writing.

Groups

The class will be divided into 12 groups at the beginning of the second week of the term. Each group will have 2-4 members. You collaborate with your group members to play the trading games.

Homework

This course does not have homework.

News articles [Estimate for the total time to read: 1-2 hours]

I have embedded news articles in each slide deck and I have already posted the articles on Canvas. **You are required to read these articles.** You should expect that <u>each article will take 2-5 minutes to read.</u> I highly recommend that you read each article before the class. I expect that we will discuss several of these articles during our lectures and students will lead the discussion. In addition, 20% to 30% of the final exam grade will be based on multiple-choice questions that will come from these articles.

Trading Simulations [Estimated time to prepare to play each game: 1-2 hours]

You will play 4 trading games in this course during the regular class time. See the schedule at the end of the syllabus for the game days. You must be physically present at Tozzi center to prepare and play these games using the terminals at Tozzi center. You can go to the Tozzi center starting on Monday of each week that a game is scheduled and play that game. You can play on your own or with your classmates to prepare for the time that we play a game in class.

On the days in which games are scheduled, I lecture for about 40 minutes and you play games for about 40 minutes. The outcome of each game is generally a P/L. Each game usually lasts for a few minutes. We will run each game multiple times so that each group member plays the game at least once. The members of small groups may end up playing the same game multiple times. The total P/L of each group will be used to rank the groups. Each game is worth 100 points and your rank relative to the rest of groups would determine the number of points that you obtain as follows.

- 1) All the team members with the highest total P/L will get 100 points as long as they are present to play the game. If you do not come to class to play the game, you will get 0 regardless of the performance of your team members. *
- 2) All the team members with the second highest P/L will get 95 and so on.

I expect that we will have 12 teams, and if your group ranks last in a game (in the absence of any tie), your score will be 45 points.

If you miss a game day due to a well-documented valid written excuse, your final exam will be reweighted. Please note that any excuse must be documented and all the documents must be sent to me prior to the day



that you missed the class. Any health-related excuse to miss a game day must be accompanied by a doctor note.

Your username and password for accessing the RIT platform will be provided to you at the beginning of the second week of the term. If you registered in class late, please contact Kai directly and he will create an account for you.

Individual Book Report [Estimated time to complete: 10-15 hours for completing the book report]

You are required to read one of the following three books and write a report on it. Your report should be in .PDF format. If you submit your report in any other format, you will not get any credit for your submission.

1. The following books are easy reads that are interesting and provide some good insights.

Flash Boys: A Wall Street Revolt by Michael Lewis

Publisher: W. W. Norton & Company; Reprint edition (March 23, 2015)

ISBN-10: 0393351599 ISBN-13: 978-0393351590

2. <u>Dark Pools: The Rise of the Machine Traders and the Rigging of the U.S. Stock Market by Scot</u> Patterson

Publisher: Crown Business; 1st edition (June 12, 2012)

ISBN-10: 0307887170 ISBN-13: 978-0307887177

3. The following book is more technical than the first one and provides in-depth information about how trading algorithms work in practice. Please note that Jeff Bacidore was the Head of Algorithmic Trading at both Goldman Sachs and ITG, the Head of Research and Consulting in Credit Suisse's Advanced Execution Services (AES) group, and Head of Research at the New York Stock Exchange and the book is quite informative about the practice of financial trading. You just need be aware that in our course, we would not discuss many of the topics that are covered in this book and thus the book complements our course.

Algorithmic Trading: A Practitioner's Guide by Jeffrey M Bacidore

Publisher: TBG Press (July 20, 2020)

ISBN-10: 0578715236 ISBN-13: 978-0578715230

Your report should be <u>no more than 14 pages and no less than 8 full pages</u>. It should be <u>typed, font size of 11, and one and half spaced</u>. Top and bottom margins should be 1 inch, left margin should be 1.5 inches, and right margin should be 1 inch.

Your report should <u>have two sections</u>. In the first section, you should summarize <u>each chapter</u> (total of 5-7 pages; 70% of the grade). You do <u>not</u> need to summarize/read the appendixes. In the second section, you should connect the book to the topics that we discuss in the course, provide personal insights, and offer your own



thoughts on the material, including areas with which you particularly relate or disagree (2-3 pages; 30% of the grade). Your report should look something like this:

Name: Market Wizard

Section 1: Summary of Chapters

A. Summary of Chapter 1:

This chapter....

B. Summary of Chapter 2:

This chapter ...

Section 2: Reflection and Connection to the Course

This book...

The report should represent your work which means that you should not copy/paste any sentence that is written by someone else unless you clearly give credit to the source that you are citing. I will read each report.

Exam

<u>There is one open-book, multiple-choice exams.</u> There are no surprises in the exam. The exam will be fair and based on the slides, class discussions, problems that we solve in class, and the news articles. Trading games will not be included in the exam.

Grading Distribution

Grading will be based on a combination of the following:

Trading Games (Each game is 5%)

Book Report

Exam

20%

30%

Course Grade

I will grade students according to the grading policy set by the Ross School of Business. Please note that my exams are fair but challenging. The average score in the final exam is generally in 55-65 range.

Instructor grade discretion

I use my discretion to consider positive class participation and contribution towards your final grade. There is no appeal or discussion in the discretionary component.

Please note that if you do not participate in class discussions, your grade will not be negatively affected. However, if you do, your grade may be positively affected.

Course Policies

Name tent

Please bring your name tent card to class and display it at all time.



Smartphones

Please do not use your phone during the lectures.

Class attendance and participation

The decision to take this course implies your commitment to attend the class every time it meets. However, if you are not planning to attend the class for any reason you do not need to inform me.

Class participation is highly encouraged. If you do not understand a concept or an equation you should raise your hand and ask for clarification. On a regular basis, I rely on cold calling and warm leads to encourage you to participate in class discussions. Lack of participation does not affect your grade negatively, but I do believe that it would negatively impact your learning. If you are attending the sessions and would not like to be called on, please add "(No)" to your name. Please note that you are more than welcome to ask questions anytime during the lecture. By adding "No" to your name tent, you are informing me not to cold call you.

I understand and acknowledge that cold calling can make some students uncomfortable and I will do my best so that the cold calling is done in a constructive and encouraging manner. Below are some of my former students' comments on the use of cold calling in my courses:

- 1. "I liked that he pushed me out of my comfort zone. I'm not used to be called on during class. At first, it would make me nervous because I didn't want to look bad in front of the class. As the class went on, I tried harder to focus during class and was ready to be called on. This helped me think faster on my feet."
- 2. "While I enjoyed the class as a whole, the random calling on people for the answer to a question posed in class made it kind of nerve wracking. However, looking back on it now, I realize that this was extremely beneficial as it required me to keep up with the material so that it made studying for exams easier."
- 3. "I can honestly say that I never wanted to attend a class so much and that is because of how engaging Professor Nezafat is. The course was hard but I was able to excel because our professor kept us on our toes. I loved how much active participation he required. It allowed us to think more deeply about the information."

Late submissions

No late submission will be accepted.

Rescheduling exams

No exam will be rescheduled. Missing the exam is equivalent to getting a grade of zero for the exam.

Contacting me

It is best to contact me by email. I will respond to course related emails promptly (within two business day). All emails should be sent to nezafat@protonmail.com. I use this email address only for communicating with my students so your email will not accidentally be overlooked.



Please note that I will <u>not solve or explain concepts or problems</u> through email as I have found it to be quite ineffective. You can meet with me on Zoom during office hours or by appointment to review a concept or go over a problem.

Course announcements

Important information such as changes to the schedule, due dates of assignments, and additional readings will be announced in class. You are responsible for announcements made in class even if they are not posted on Canvas,

Regrade policy

• Unless otherwise announced, you will have <u>one week</u> after you receive the grade to request a regrade.

Suggestions for class behavior discussion

- Classroom participation is important to this class. Questions and comments must be appropriate and relevant to the topic at hand and must not disrupt the class.
- Classroom discussion should be civilized and respectful to everyone and relevant to the topic we are
 discussing. Everyone is entitled to their opinions. Classroom discussion is intended to allow us to hear and
 learn from a variety of viewpoints. This can only be achieved if we are respectful of one another and our
 differences.

Grade negotiation

Please notice that my grading policy would be fair/uniform and based on your performance as well as the performance of your classmates on the course requirements. You should not try to negotiate your grade based on reasoning that you would lose your scholarship or your company would not reimburse your tuition. If you have difficulty with the course material, please contact me well before the exams. I will do my best to help you understand the course materials so that you can do well in the exams.

Academic misconduct

Academic misconduct is defined as any act by a student that misrepresents the student's own academic work or that compromises the academic work of another. Scholastic misconduct includes (but is not limited to) cheating on assignments or examinations, plagiarizing, i.e., misrepresenting as one's own work any work done by another, submitting the same paper, or substantially similar papers, to meet the requirement of more than one course without the approval and consent of the instructors concerned, or sabotaging another's work. Within this general definition, however, I determine what constitutes academic misconduct in the courses. It is your responsibility to familiarize yourself with the Ross School Academic Honor Code. Academic dishonesty will not be tolerated in any form, there is no exception to this.

Ambiguity in the honor policies is not an excuse for a violation. If you have any questions about how the Honor Code applies to specific scenarios, please discuss them with me.



Course Schedule (subject to change)

- 1. Basics of modern securities markets (Chapter 3)
- 2. Order types (Chapter 4)
- 3. Order-driven markets (Chapter 6)
- 4. Brokers (Chapter 7)
- 5. Dealers (Chapter 13)
- 6. Dark pools
- 7. Traders, prices and market efficiency (Chapters 8 and 10) [if time allows]
- 8. Arbitrage (Chapter 17) [if time allows]

Important dates:

<u>Trading Simulation 1: Thursday March 24th: Liability Trading 1</u>

<u>Trading Simulation 2: Thursday March 31st: Liability Trading 2</u>

Trading Simulation 3: Thursday April 7th: Agency Trading 1

Trading Simulation 4: Thursday April 14th: Price Discovery 0

Book Report: Tuesday April 12th at 11:59PM.

Upload link: https://www.dropbox.com/request/QzeTD3NoNP9hO4QGqO6P

Exam: Tuesday April 19th (regular class time).