Econ 4970-001: Understanding the Stock Market Fall 2023

Daily news is full of headlines about the "Dow Jones/NASDAQ" and prominent tech companies such as "Amazon" or "Tesla". This class will teach students to understand the economics behind the headlines. Students will learn how to interpret stock market information to better understand trends in technology or industries. We will cover questions such as "Is the stock market just a giant casino?" or "How can finance help to cure cancer?", and "How should I invest in the stock market?". We will also explain seemingly mysterious concepts, such as "crypto-currency", "leverage" or "PE-Ratio". Additionally, the class teaches key life-skills, such as how to understand loan costs, how to calculate mortgage payments for a home purchase and how to save/invest for retirement. Last but not least, the class helps students explore finance-related careers.

Course perequisites are: intermediate microeconomics (Econ 3113 or equivalent), statistics (Econ 2843 or equivalent).

Instructor

Professor Mu-Jeung Yang

- Office hours: Tuesdays and Thursdays, 1:45pm-2:45pm, or by appointment. Office hours are in-person, Cate Center One, Office 428
- If needed, Zoom information:
 - Meeting ID: 404 874 0860
 - Passcode: flowers123
- Email: mjyang@ou.edu. Please start your subject line with [Econ 4970-001]: doing so will ensure I read your emails first.

Class Meeting times

Tuesdays and Thursdays, 12:00pm - 1:15pm

COVID-19 Health Guidance

As you may already know - OU has several policies in place that I have every intension of following for this class. This means strongly recommending that persons vaccinate to enhance their personal health and safety and positively impact the future health and safety of others. I know from personal experience and from my review of the data that the vaccines are safe and effective.

Class website

The website for this class will be on **canvas.ou.edu**

Class Grading

• Problem Sets: 20%

• Stock trading simulation: 20%

• Midterm 1: 30%

• Midterm 2: 30%

If you cannot make an exam date, the following policy applies: major exceptions are only allowed in case of medical emergencies that concern either you or your family. In this case, please provide a certification by a doctor on the exam date, since later certification cannot be accepted (see Academic Conduct policies below). If you already know that you cannot make the final exam date, you will not be able to take this class.

If you miss a midterm, I will reweight the final and it will count 60% instead of 30%. If you miss the final, you will need to take a make-up exam next quarter. This exam will be significantly harder than the exam at the end of this term, reflecting the fact that you have more time for preparation and that the make-up final should only be taken in exceptional cases. In case you cannot make the final and do not take the make-up final, I will assign an incomplete for this class.

Exams will be closed book. That means that no notes, including previous midterms, are allowed.

Learning Goals

This class is a quantitative introduction to the economics of financial markets, with the goal to educate you to become an independent and self-reliant financial decision-maker. This overall goal will be facilitated by several intermediate learning goals

- Understanding the "time value of money" and net present value as concepts to evaluate asset values. At the same time, students will learn how to apply these concepts in key financial decisions, such as savings plans, mortgage calculations, interest costs of credit cards and many others.
- Understanding risk compensation in financial markets and how to be a self-reliant decision-maker in the stock market, while avoiding behavioral biases.
- Students learn how to conduct their own quantitative analysis.

Lecture attendence and email policies

- Attending lectures is strongly encouraged. In particular, although Canvas will
 contain a rough version of the slides discussed during lecture, there will be more
 detailed explanations, more discussion more material in live lectures.
 Lectures are exam relevant material, so students skipping lectures risk insufficient
 preparation for exams.
- Email policy: Please allow for 24 hour response time to emails, except in urgent cases. In particular, I usually do not answer emails after 5pm until the next morning and this applies especially for questions sent to me the evening before a due homework or exam.

Problem Set Guidelines

- If you cannot attend the date at which problem sets are due, email me an electronic version of your solution, completely formatted and with your name on the problem set. If the printed version of the problem set does not contain your name, you will not get credit for the submission. Problem sets need to be here by the end of the lecture.. Late problem sets cannot be accepted.
- You can work in groups but you need to submit individually.
- Solutions will be available in hard copy, to be picked up in class or at my office. There will not be electronic versions of the solution available, sorry.

Textbooks

- We will not really use a textbook. However, if you prefer to have a text to look for alternative explanations, I recommend Bodie, Kane and Marcus (BKM) "Investments", 10th edition. For the 10th edition, I have noted corresponding chapters in the "Lecture outline" below. Previous or newer editions can be used, but you need to figure out the corresponding pages on your own. I will follow the book for around 40% of the material, but you should make sure that you understand the lectures, especially if you aim for a very good grade in the class.
- For a review of intermediate micro-economics, I recommend to check out the following chapter's of Varian's Intermediate Microeconomics: "Intertemporal Choice", "Asset Markets", "Uncertainty" and "Risky Assets".

Additional Readings / Material (Optional)

I recommend finance/business related publications such as the WSJ (http://subscribe.wsj.com/semester), the FT or the Economist. In addition, there are

some additional readings listed that help to make you familiar with institutional details of todays financial markets and some of the major players. I also encourage you to check out the following blog:

Robert Shiller at Yale has a blog at:
 http://www.shillerfeeds.com. Shiller is a Behavioral Economist and Nobel Prize winner who has been emphasizing the human side of financial markets and the importance of the democratization of finance.

I also recommend to check out broadcasts of Jim Cramer's "Mad Money" on CNBC (http://www.cnbc.com/live-tv/mad-money). This has pure entertainment value but will introduce you to some practical investing issues (also: Cramer actually has a lot of clout of Wall Street through his show...) If you find yourself still hungry for finding out more about financial markets, here are three recommendations to further explore other complementary insights about finance and capital markets:

• Robert Shiller has a fantastic online class, accessible over Yale Open Course: http://oyc.yale.edu/economics/econ-252. This is a nice institutional overview about all types of financial institutions that enable risk management with a big emphasis on the human side of investing. Note especially his phenomenal guest speaker list from all corners of capital markets: institutional investors, private equity, regulators etc. (Couse is a bit dated, but not much.)

Copyright

Class material includes lecture slides and may include some sessions that may be recorded or live-streamed. This material is the intellectual property of the individual faculty member and may not be shared or reproduced without the explicit, written consent of the faculty member. In addition, privacy rights of others such as students, guest lecturers, and providers of copyrighted material displayed in the recording may be of concern. Students may not share any course recordings or slides with individuals not enrolled in the class or upload them to any other online environment.

Lecture outline (tentative and subject to change)

I will post a "handout version" of the lecture slides that constitute the class material. Note that these slides accessible slides will be an **incomplete** version of the actual lecture slides.

There is a rough correspondence of lecture material to the textbook Bodie, Kane and Marcus (BKM) "Investments", 10th edition. We will NOT follow the textbook closely, but chapter references might be useful for some of you, who are looking for alternative ways to explain concepts.

Class attendance and participation are strongly encouraged, especially if you plan to ask me to write a letter for graduate school or job applications.

I. Introduction

II. Present Value

III. Fundamental Company Analysis: Simple Stock Valuation Approaches and Earnings-based Pricing (BKM, Chapter 18)

IV. Risk, Diversification and Capital Market Equilibrium (BKM, Chapter 6, 7, 9)

V. Informational Content of Security Prices (Stocks IV)
(BKM, Chapter 11, 12)

Exam Dates

MIDTERM 1: October 5, 2023

MIDTERM 2: December 7, 2023

Academic Conduct

Cheating is strictly prohibited at the University of Oklahoma, because it devalues the degree you are working hard to get. As a member of the OU community it is your responsibility to protect your educational investment by knowing and following the rules. For specific definitions on what constitutes cheating, review the Student's Guide to Academic Integrity at http://integrity.ou.edu/students_guide.html

To be successful in this class, all work on exams must be yours and yours alone. You may not receive outside help. On examinations, you will never be permitted to use your notes, textbooks, calculators, or any other study aids. Should you see someone else engaging in this behavior, I encourage you to report it to myself or directly to the Office of Academic Integrity Programs. That student is devaluing not only their degree, but yours, too. Be aware that it is my professional obligation to report academic misconduct, which I will not hesitate to do. Sanctions for academic misconduct can include expulsion from the University and an F in this course, so don't cheat. It's simply not worth it.

Academic honesty

- 1. Exams are individual work and cheating or plagiarism will not be tolerated. Students must not glance at their neighbors' exams. Students must not change their answers after they have turned their exam in.
- 2. Check the Student's Guide to Academic Integrity at http://integrity.ou.edu/students_guide.ht Cheating of any kind may result in expulsion from the university. The Department of Economics will follow university policy in case of academic dishonesty.

Academic integrity is the cornerstone of the Department's rules for student conduct and evaluation of student learning. Students accused of academic misconduct will be referred directly to the Office of Community Standards and Student Conduct for disciplinary action pursuant to the Student Conduct Code and, if found guilty, will be subject to sanctions. Sanctions range from a disciplinary warning, to academic probation, to immediate dismissal for the Department and the University, depending on the seriousness of the misconduct. Dismissal can be, and has been, applied even for first offenses. Moreover, a grade of zero can be assigned by the instructor for the course.

Plagiarism

Plagiarism is one of the most widespread and elusive kinds of cheating and is defined as:

- 1. "Using another writer's words without proper citation."
- 2. "Using another writer's ideas without proper citation."
- 3. "Citing your source but reproducing the exact words of a printed source without quotation marks."

- 4. "Borrowing the structure of another author's phrases or sentences without crediting the author from whom it came."
- 5. "Borrowing all or part of another student's paper or using someone else's outline to write your own paper."
- 6. "Using a paper writing "service" or having a friend write the paper for you."

Examination rules

Exam Absence Policy

- 1. If you are unable to make it to an exam period due to illness or another serious unexpected happening, do the following:
 - (a) Contact your instructor the same day to notify him/her that you are not able to take the exam and why.
 - (b) If you missed the exam for health reasons, you need to show as soon as possible to your instructor a valid medical note issued by a medical professional, on the original exam date. The instructor may check with the medical authorities writing the note to ascertain the veracity of your visit. There is no flexibility on this matter. The arrangement for making up the missing credits may vary from instructor to instructor (make-up exam etc.).
 - (c) If there was some other reason for missing the exam (car accident, meteor shower etc.) come and see your instructor to explain these reasons you will need to show proper valid documentation. Not waking up or missing your bus/plane is not an acceptable excuse.
- 2. If you know that you are going to be away due to an university related activity (e.g. sport, debate), let your instructor know well in advance (preferably in the first week of the quarter) so that arrangements for make up can be made upon presentation of proper valid documentation.

Exam Taking Rules

- 1. Material allowed during a closed book exam.
 - (a) All books, papers, notebooks etc. must be placed inside your bag (backpack etc.) and the bag must be securely and fully closed. If you do not have a bag, you must place all your material out of your reach (classroom window sill etc.)
 - (b) Only keep writing tools and basic calculators (i.e. simple 4-functions calculators). Graphing calculators or calculators with memories will not be allowed. Sharing of calculators is not permitted.
 - (c) Cellular phones must be turned off before entering the class and placed in your closed bag (not in your pocket). You are not allowed to use a cellular phone during an exam. Doing so will result in the termination of your exam time

- (your exam being taken from you at this point). Likewise i-pads or i-pods (or similar devices) are not allowed. The use of personal computers is not allowed during an exam.
- (d) Baseball caps with visors and any kinds of headgear hiding your eyes are not permitted.

2. Attendance and special accommodation

- (a) You are expected not to leave the room during the exam except in case of emergency. This includes restroom use; be sure to use the restroom before the beginning of the exam.
- (b) If you arrive late to an exam, you cannot expect to get extra time after the official end of the exam to make up for the missing time at the beginning.
- (c) If you have a documented disability, please show your instructor your documentation from the Office of Disability Resources for Students on the first day of class, so that your instructor can make all the necessary arrangements if you wish to take your exam in a separate place.

Religious Observance

It is the policy of the University to excuse the absences of students that result from religious observances and to reschedule examinations and additional required classwork that may fall on religious holidays, without penalty. [See Faculty Handbook 3.15.2]

Reasonable Accommodation Policy

Students requiring academic accommodation should contact the Accessibility and Disability Resource Center for assistance at (405) 325-3852 or TDD: (405) 325-4173. For more information please visit http://www.ou.edu/drc/home.html. Any student in this course who has a disability that may prevent them from fully demonstrating his or her abilities should contact me personally as soon as possible so we can discuss accommodations necessary to ensure full participation and facilitate your educational opportunities.

Title IX Resources and Reporting Requirement

For any concerns regarding gender-based discrimination, sexual harassment, sexual assault, dating/domestic violence, or stalking, the University offers a variety of resources. To learn more or to report an incident, please contact the Sexual Misconduct Office at 405/325-2215 (8 to 5, M-F) or smo@ou.edu. Incidents can also be reported confidentially to OU Advocates at 405/615-0013 (phones are answered 24 hours a day, 7 days a week). Also, please be advised that a professor/GA/TA is required to report instances of sexual harassment, sexual assault, or discrimination to the Sexual Misconduct Office. Inquiries regarding non-discrimination policies can be directed to University Equal Opportunity Officer and Title IX Coordinator at 405/325-3546 or smo@ou.edu . For more information, visit http://www.ou.edu/eoo.html.

Adjustments for Pregnancy/Childbirth Related Issues

Should you need modifications or adjustments to your course requirements because of documented pregnancy-related or childbirth-related issues, please contact your professor or the Disability Resource Center at 405/325-3852 as soon as possible. Also, see http://www.ou.edu/eoo/faqs/pregnancy-faqs.html for answers to commonly asked questions.

Final Exam Preparation Period

Pre-finals week will be defined as the seven calendar days before the first day of finals. Faculty may cover new course material throughout this week.

Emergency Protocol

During an emergency, there are official university procedures that will maximize your safety. Severe Weather: If you receive an OU Alert to seek refuge or hear a tornado siren that signals severe weather 1. LOOK for severe weather refuge location maps located inside most OU buildings near the entrances 2. SEEK refuge inside a building. Do not leave one building to seek shelter in another building that you deem safer. If outside, get into the nearest building. 3. GO to the buildingâ $\mathfrak{C}^{\mathbb{T}}$ s severe weather refuge location. If you do not know where that is, go to the lowest level possible and seek refuge in an innermost room. Avoid outside doors and windows. 4. GET IN, GET DOWN, COVER UP. 5. WAIT for official notice to resume normal activities.

Armed Subject/Campus Intruder

If you receive an OU Alert to shelter-in-place due to an active shooter or armed intruder situation or you hear what you perceive to be gunshots: 1. GET OUT: If you believe you can get out of the area WITHOUT encountering the armed individual, move quickly towards the nearest building exit, move away from the building, and call 911. 2. HIDE OUT: If you cannot flee, move to an area that can be locked or barricaded, turn off lights, silence devices, spread out, and formulate a plan of attack if the shooter enters the room. 3. TAKE OUT: As a last resort fight to defend yourself. For more information, visit http://www.ou.edu/emergencypreparedness.html

Fire Alarm/General Emergency

If you receive an OU Alert that there is danger inside or near the building, or the fire alarm inside the building activates: 1. LEAVE the building. Do not use the elevators. 2. KNOW at least two building exits 3. ASSIST those that may need help 4. PROCEED to the emergency assembly area 5 ONCE safely outside, NOTIFY first responders of anyone that may still be inside building due to mobility issues. 6. WAIT for official notice before attempting to re-enter the building.

Mental Health Support Services

If you are experiencing any mental health issues that are impacting your academic performance, counseling is available at the University Counseling Center (UCC). The Center is located on the second floor of the Goddard Health Center, at 620 Elm Rm. 201, Norman, OK 73019. To schedule an appointment call (405) 325-2911.