

FINA5210: INVESTMENTS
Internet Course (Spring 2024)

PROFESSOR: Ian Liu, Ph.D., CFA
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TA: Wang, Chi <ChiWang@my.unt.edu>
OFFICE HOURS: Wed. 10:00 -11:00 AM
Q&A TA Live SESSION (optional):
Thu7-8 pm Zoom ID 82907554542, passcode BullyBear

COURSE DESCRIPTION

This course covers the basics of investment with a focus on the equity market. Investment is a blend of theory and practice, and we learn that way. Theory is based on the textbook, but the applications extend beyond the book into the real stock market and derivative markets.

COURSE OBJECTIVES

We have three objectives: Topic one (Elements of Investments) guides you to start to be an investor, topic two (Valuation and Fundamental Analysis) teaches you to be a better investor and topic three, four and five (Portfolio Theory, Equilibrium in Capital Markets and Derivatives) train you to be a relatively sophisticated investor.

The philosophy of the instruction is to “Free Your Mind”. Students are encouraged and required to actively create and apply knowledge, not passively receive and memorize recycled information. Students are expected to be able to handle investment problems that they don’t see in class by using the skills they learn in class.

PREREQUISITES:

Prerequisite(s): FINA 5170 or equivalent; ECON 1100 or ECON 5000 or equivalent; ACCT 2010 or ACCT 5020 or equivalent; MATH 1190 or equivalent, or consent of department.

COURSE MATERIALS

- Required Text: **Investments**, by Bodie, Kane and Marcus, **12th edition**, Publisher: McGraw-Hill ISBN10: 1260013839 ISBN13: 9781260013832 (Loose Leaf: ISBN-10: 1260819388 ISBN-13: 978-1260819380 ; Paperback: ISBN-10 : 1260571157 , ISBN-13 : 978-1260571158)
- Calculator: A calculator is required for this course. There is no sharing of calculators during the exam.
- Database and Platform: Bloomberg Terminal, Morningstar Direct
- Suggested Reading: [Yahoo Finance](#), The Wall Street Journal (WSJ).

GRADING

Homework	15%
Discussion participation	5%
Investment Project (group project): Security Analysis	20%
Midterm Exam	30%
Final Exam	30%
Trading Project Bonus	3%

Scale

- A = 90 above (including 90)
- B = 80 – 89.9
- C = 70 – 79.9
- D = 60 – 69.9
- F = 0 – 59.9

I will try to adhere to the above grading scale but I reserve the right to deviate from it. **I don't negotiate grades. You earn them.** I will not respond to requests for “extra credits”, “special treatment”, “boost”, “bonus” or “curving”. Your grade won't change because you “need”, or “deserve” better grades.

GRADE APPEALS

All grade appeals must be done **within three days** of the posted grade. I will not look into grades appealed after three days past the date of grade postings for any exam. All appeals of exam grades must be written and emailed to me.

HOMEWORK

- Homework must show major steps. You cannot just provide a final answer.
- Homework should be submitted online through Canvas (a text entry box or a WORD file upload). Other forms (emails, hard copies etc.) will not be accepted.
- Homework is due every next **Monday** when there are homework assigned for the week. **Late homework will not be accepted.** There is no excuse for late homework.

EXAMS

- Exams will cover only lecture material.
- Any missed exam will receive a grade of zero if no legitimate reasons are provided by the student and **approved** by the instructor **before** the exam. When approved, the student can carry the weight of the missed midterm to the final. There will be **no** make up for the final.
- A web camera or a laptop with integrated camera is required for all remote exams. It is your responsibility to obtain a properly functioning camera for remote exams. Your test score will be invalid without a functioning camera. All remote exams will be administered through Canvas using Respondus Lockdown Browser with Camera option. Respondus Lockdown browser can be downloaded through your Canvas account.

LIVE ZOOM Q&A SESSIONS

- My TA will host a live Q&A and review session on Zoom (Zoom ID 829 0755 4542, passcode BullyBear) every Thursday starting at 7 pm, for about 60minutes. See course outline for exact days of live session. This live session is optional except for live final project presentation.

DROPPING THE COURSE

Students wishing to drop a class should visit the Registrar's website for assistance:

<https://registrar.unt.edu/registration/dropping-class>

There are different procedures depending on whether the class is dropped before or after the census date for the term.

DISABILITY ACCOMMODATION

UNT makes reasonable academic accommodation for students with disabilities. Students seeking accommodation must first register with the Office of Disability Accommodation (ODA) to verify their eligibility. If a disability is verified, the ODA will provide a student with an accommodation letter to be delivered to faculty to begin a private discussion regarding one's specific course needs. Students may request accommodations at any time, however, ODA notices of accommodation should be provided as early as possible in the semester to avoid any delay in implementation. Note that students must obtain a new letter of accommodation for every semester and must meet with each faculty member prior to implementation in each class. For additional information see the ODA website (<https://disability.unt.edu/>).

ACADEMIC DISHONESTY

Academic dishonesty is defined in the UNT Policy on Student Standards for Academic Integrity. Any suspected case of Academic Dishonesty will be handled in accordance with the University policy and procedures. Possible academic penalties include a grade of "F" in the course. You will find the policy and procedures at <http://vpaa.unt.edu/academic-integrity.htm>

If I suspect that you have engaged in academic dishonesty, I will deal with the situation as outlined in the University Policy shown above. You will be allowed to remain in the class during the entire time that the academic misconduct accusation is being investigated, adjudicated, and appealed. As noted above, the maximum academic penalty that can be assessed by an instructor is an F in the course. However, university officials use the academic misconduct information to decide if other misconduct sanctions are then to be applied, and the student has separate rights to appeal those decisions, remaining in the class until all appeals are exhausted.

STUDENT PERCEPTIONS OF TEACHING (SPOT)

Student feedback is important and an essential part of participation in this course. The student evaluation of instruction is a requirement for all organized classes at UNT. The SPOT survey will be made available during **weeks 13 and 14** of the long semesters to provide students with an opportunity to evaluate how this course is taught. Students will receive an email from "UNT SPOT Course Evaluations via *IASystem* Notification" (no-reply@iasystem.org) with the survey link. Please look for the email in your UNT email inbox. Simply click on the link and complete your survey. Once you complete the survey you will receive a confirmation email that the survey has been submitted. For additional information, please visit the spot website at www.spot.unt.edu or email spot@unt.edu.

EAGLE CONNECT ACCOUNT

All students should activate and regularly check their EagleConnect (e-mail) account. EagleConnect is used for official communication from the University to students. Many important announcements for the University and College are sent to students via EagleConnect. For information about EagleConnect, including how to activate an account and how to have EagleConnect forwarded to another e-mail address, visit <https://eagleconnect.unt.edu/>

EMERGENCY EVACUATION PROCEDURES FOR BUSINESS LEADERSHIP BUILDING:

- **Severe Weather** In the event of severe weather, all building occupants should immediately seek shelter in the designated shelter-in-place area in the building. If unable to safely move to the designated shelter-in-place area, seek shelter in a windowless interior room or hallway on the lowest floor of the building. All building occupants should take shelter in rooms 055, 070, 090, and the restrooms on the basement level or in rooms 170, 155, and restrooms 122, 182 or 183 on the first floor.
- **Bomb Threat/Fire** In the event of a bomb threat or fire in the building, all building occupants should immediately evacuate the building using the nearest exit. Once outside, proceed to the designated assembly area. If unable to safely move to the designated assembly area, contact one or more members of your department or unit to let them know you are safe and inform them of your whereabouts. Persons with mobility impairments who are unable to safely exit the building should move to a designated area of refuge and await assistance from emergency responders. All building occupants should immediately evacuate the building and proceed to the south side of Crumley Hall in the grassy area, west of parking lot 24.

COURSE OUTLINE (Tentative)

Week	Content	Live Q&A Session	Topic	Chap	HW
Week 1	The Investment Environment and Major investment Issues		I: Elements of Investments	1	
Week 2	How Securities are Traded			3	Problem Set:9a,14,16 Due 1/29
Week 3	Equity Valuation	2/1	II: Valuation and Fundamental Analysis	18	
Week 4	Equity Valuation-Application	2/8		18	Problem Set:7,9,14,20 a, 23a,b Due 2/12
Week 5	Macroeconomic and Industry analysis	2/15		17	
Week 6	Financial Statement Analysis	2/22		19	
Week 7	Project Midterm Presentations & Discussions	2/29 Mid exam review			
Week 8	Midterm Exam (Chapter 1,3,17,18,19) on 3/8, Friday	3/7			
Week 9	Spring break				
Week 10	Risk and Return Capital Allocation to Risky Assets	3/21	III: Portfolio Theory and Practice	5, 6	Chapter5(CF A Problems: 3, 4, 5,7) Chapter 6(Problem sets 13, 14, 17, 18) Due 3/25
Week 11	Diversification	3/28	IV: Equilibrium in Capital Markets	7	Chapter 7 (CFA 12a, b) Due 4/1

Week 12	The Capital Asset Pricing Model	4/4		9	Chapter 9 (Problem sets 1,21, CFA2) Due 4/8
Week 13	The Efficient Market Hypothesis and Behavioral Finance			11,12	
Week 14	Option Markets	4/18	IV: Derivatives	20	Chapter 20 (Problem Sets: 5, 6) 4/22
Week 15	Future Markets	4/25		22	
Week 16	Project Live Final Presentations on 5/2 Project Written Report Due on 4/29	5/2 Final exam review			
Week 17	Final Exam (Chapter 5,6,7,9,11,12, 20) on 5/10 Friday	5/9			

The stated schedule and procedures in this course are subject to change in the event of extenuating circumstances.

Security Analysis Project

As a stock market analyst, you should recommend one stock to your investors. Write a 25 page (double space) report (not including tables or charts copied from other recourses) following the stock analysis template. You should also include any Excel spread sheets used in your analysis. **Each team (including every team member) will do a live PowerPoint presentation (about 30 minutes) via Zoom on May 2nd from 7 pm to 9:30 pm.** Canvas automatically create groups and assign a group leader. (You can change your group leader later and inform the instructor). Some guidelines:

- Each team member should contribute to and understand the whole project.
- The project should be presented in a professional way.
- The report should be assembled in a professional way.
- The written report, PowerPoint and Excel files should be emailed to the instructor by **April 29, Monday**.

Framework of Security Analysis Project

Your group can choose one of the following stocks to analyze: Apple, Alphabet, Amazon, Alibaba, AT&T, Airbnb, Bank of America, Boeing, BYD, Chipotle, DocuSign, Fiverr, Ford, GM, Groupon, iRobot, iMax, JPMorgan, Lyft, Meta, Netflix, PayPal, Pfizer, Pinterest Roblox, Roku, Spotify, Shopify, Snap, Sofi, Stellantis, Teladoc, Tesla, Tencent, Uber, Verizon, and Zoom. You can also choose any stock that is not on the list.

- I. Quick opinion. Summarize your analysis by simple numbers, including: Report Date, S&P value, Last Price (when the report is submitted), **Intrinsic Value**, Economic Moat, and Recommendations. Use the Morningstar style and put this session on the top your report.
- II. **The Theme:** This part highlights **your** major insights into the company and its stock.
- III. **Business Analysis:** When you buy stock of a company, essentially you are buying the business. Analyzing a stock starts with understand its business.
 - Profile of company (in your own words)
 - Macroeconomic and industry analysis
 - Analysis of the company and the prospects of its major products and services.
- IV. **Financial analysis:** Major financial statements and ratio analysis. More important is **forecasting the future**. More specifically, a projection of sales, margins (gross margin, operating margin, profit margin), profits and most important, earning per share (EPS) for the coming quarter and fiscal year end. It should also project growth rate of sales and earnings for next five years. Extensive use of spreadsheets is expected. Use historical data from Morningstar Direct in your analysis. From Morningstar Direct, you should be able to obtain historical moat rating, star rating, all historical financial statement data and data derived from financial statements. Try to project long term trend using those historical data.
- V. **Stock Valuation:** Calculating the fair current value (**Intrinsic Value**) of the stock. In theory, fair value (also called intrinsic value) is what the stock price should be given the market is free from errors. It can be calculated in various ways, depending on what model you use. Commonly used models are P/E multiples, Dividend discount models and Free Cash Flow models. This analysis needs the help of

analytical tools like Excel. Some reports also project expected stock price in one year.

- VI. **Bulls vs. Bears:** There are always bull and bear views for any stock. That is why at any price, there are buying and selling orders—the two side of the same coin of a transaction. Try to see the arguments for two sides.
- VII. **The moat:** You should also discuss the economic moat (a concept borrowed from Warren Buffet), which is the sustainable competitive advantage in the long term.
- VIII. **Risk:** the risks of investing in the company
- IX. **Investing strategy:** this is your action plan as an investor. Your strategy choices include buy, sell, hold, wait, avoid, short, etc...
- X. **Notes:** A timely records of analysis of important events of the company and its stock
- XI. **Reference:** You **MUST** cite **ALL** resources your analysis uses.
 - It is OK to use information from various resources. It is not acceptable not to cite them. Just listing several websites at the end is not the correct way of citation. Citation is always important for other investors to check your facts and numbers.
 - Whenever an external recourse is used, you should use footnotes like this: Recent Morningstar reports states that *“Unprecedented increases in commodity costs have put a strain on Kraft's profitability.”*¹ All cited information must be quoted using quotation marks and Italicize the text like the example. Each citation cannot be longer than three sentences.
 - You can use external resources for historical financial statement data, but projections for future performance and calculations of intrinsic values must be your own.

Analysis/Presentation Tips

1. Do not just list facts, form opinions, especially opinions that are related to intrinsic value.
2. It is an investment analysis, not a business/strategy project.
3. Discuss your key valuation assumptions in your presentation (short term growth, long term growth rate, discount rate, etc..) and focus on key findings.

Project midterm report:

Submit a two pages report summarizing your progress and findings, including

- Stock choice, group names
- Your theme, in less than 100 words.
- Preliminary Business analysis and key findings
- Preliminary Financial analysis and key conclusions
- Fair value estimation

A team leader (or representative) will **present** (with PPT) your preliminary findings. The presentation is about 10 minutes. The report should be submitted by Feb 28th. The presentation is at 7 pm during our live Q&A session on Zoom, on Feb 29th.

¹ Morning star report on KFT, October 2020

Bonus Trading Project: Who wants to be a millionaire! (This is an individual trading simulation project)

You can earn up to 3% of your course score for this bonus project!

- Register and Log-in to Virtual Stock Exchange Games (www.marketwatch.com/game). You must use your real name to be graded.
- Join game: UNT2024Spring Game Password: JustTradeIt\$
- Start trading stocks from “UNT2024Spring”. You can also view your portfolio, trade history, benchmarks, and rankings.
- Your grade of the project is related with the relative performance of your portfolio (at the end of the term) and how active you are in trading.
- The project is due 1 week before the final exam, that is May 3, 2024 (last trading day). All you need to do is trading and taking notes. No report needed.

Game Details:

Game Name	UNT2024Spring
Vanity URL	https://www.marketwatch.com/games/unt2024spring
Start Date	1/16/2024
End Date	5/3/2024
Players Can Join After Start	Yes
Enable Commenting	Yes
Game Description	
Player Starting Balance	\$100000
Commission Value	\$0
Credit Interest Rate	1%
Debt Interest Rate for Leverage	8%
Minimum Price Limit	\$1
Maximum Price Limit	\$500000.00
Enable Short Selling	Enabled
Enable Margin Selling	Enabled
Enable Limit Order	Enabled