**FINA4200: INVESTMENTS**
Fall 2026

**PROFESSOR**: Ian Liu, Ph.D., CFA
**E-MAIL:** Ian.Liu@UNT.edu through Canvas
**Class:** Tue &Thu 11:10-12:30 BLB245
**OFFICE HOURS:** Tue &Thu 9:30-10:30 am BLB358H

## COURSE DESCRIPTION

This course introduces the fundamentals of investment, with a primary emphasis on equity markets and valuation techniques. Investment is a dynamic blend of theory and practice, and we learn that way. The theoretical foundation is drawn from the textbook and current research in finance, while practical applications connect these concepts to real-world financial markets.

## COURSE OBJECTIVES

The course is designed around three main objectives:

1. **Elements of Investments** – Develop the foundational knowledge needed to begin your journey as an investor.
2. **Valuation and Fundamental Analysis** – Build the skills to evaluate stocks and make more informed decisions.
3. **Portfolio Theory & Practice and Derivatives** – Advance your expertise to the level of a sophisticated investor, capable of applying advanced strategies in portfolio management and derivative instruments.

The instructional philosophy emphasizes critical thinking and active learning through investment practicing. Students are encouraged to actively engage in creating and applying knowledge rather than passively memorizing information. The ultimate goal is to equip students with the ability to address complex, real-world investment problems using the skills and frameworks developed in this course.

## PREREQUISITES:

Prerequisite(s): FINA 3770 with a grade of C or better; ECON 1100 or equivalent; ACCT 2010 or equivalent; MATH 1190 or equivalent, or consent of the department.

## COURSE MATERIALS

- Required Text: **Investments**, by Bodie, Kane and Marcus, **13th edition**, Publisher: McGraw-Hill, ISBN 978-1264412662
- Calculator: A calculator is required for this course. There is no sharing of calculators during the exam.
- Database and Platform: Bloomberg Terminal (BLB 1st floor trading room), Morningstar investment research center (through UNT library online)

- Suggested Reading:
  - Wall Street Journal Online *(Current UNT Students, Faculty and Staff may sign up to receive a 1 year of the Wall Street Journal at no charge.)*
  - Yahoo Finance

**GRADING**

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|---|---|
| Homework | 15% |
| Discussion participation | 5% |
| Investment Project (group project): Security Analysis | 20% |
| Midterm Exam | 30% |
| Final Exam | 30% |
| Trading Project Bonus | Extra 3% |
| Ad Hoc Bonus Discussions | Extra 3% |

Scale
- A = 90 and 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.

**OMEWORK**

- All homework must clearly show **major steps**. Final answers without supporting work will not receive credit.
- Homework must be **submitted online through Canvas** using either the text entry box or a file upload (Word or excel). Submissions via email, hard copy, or other formats will not be accepted.
- Homework is usually due on the **Monday** following the week of the lecture. Sometimes, multiple homework assignments may be due on the same day. Please refer to the Homework Assignments for specific due dates. **Late submissions will NOT be accepted under any circumstances.**
- Homework problems are assigned from the end-of-chapter **Problem Sets** or **CFA Problems** in the textbook.

**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. We also require the use of **two cameras** for exams using Respondus Monitor: the primary webcam plus a camera from a mobile device (phone, tablet). The second

device must be able to scan a QR code. 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.

**DISCUSSIONS**

We will have weekly online discussions, scheduled for most weeks. Topics and requirements for these discussions are available on Canvas under the "Discussions" section. Some discussions will be graded, while others will not. Regardless of grading, your active participation is crucial for achieving the desired learning outcomes in this course. You will learn from the professor, the real market, and also from your peers.

**KEY DATES**

***Due date is on Monday!***

- Homework due next Monday
- Discussion due on Monday

**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 ACCOMODATION**
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 Dishonestly 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**

| Week | Class | Content | Topic | Chap | Homework |
|---|---|---|---|---|---|
| Week 1 | | Warming Up | | | |
| Week 2 | | A Taste of Investment | | | |
| Week 3 | 9/1<br>9/3 | The Investment Environment and Major investment Issues | **I: Elements of Investments** | 1 | |
| Week 4 | 9/8<br>9/10 | How Securities are Traded | | 3 | Problem Set:9a,14,16<br>Due 9/14 |
| Week 5 | 9/15<br>9/17 | Equity Valuation | **II: Valuation and Fundamental Analysis** | 18 | Problem Set:7,9,14,20a, 23a,b<br>Due 9/28 |
| Week 6 | 9/22<br>9/24 | Equity Valuation-Application | | | |
| Week 7 | 9/29<br>10/1 | Macroeconomic and Industry analysis | | 17 | |
| Week 8 | 10/6<br>10/8 | Financial Statement Analysis | | 19 | |
| Week 9 | 10/13<br>10/15 | **Midterm Exam** (Chapter 1,3,17,18,19)<br>**10/15** | | | |
| Week 10 | 10/20<br>10/22 | Risk and Return | **III: Portfolio Theory and Practice** | 5 | Chapter5(**CFA Problems**: 3, 4, 5,7)<br>Due 10/26 |
| Week 11 | 10/27<br>10/29 | Capital Allocation to Risky Assets | | 6 | Chapter 6(Problem sets 13, 14, 17, 18)<br>Due 11/2 |
| Week 12 | 11/3<br>11/5 | Efficient Diversification | | 7 | Chapter 7 (**CFA Problems**: 12a, b)<br>Due 11/9 |
| Week 13 | 11/10<br>11/12 | The Capital Asset Pricing Model | | 9 | Chapter 9 (Problem sets 1,21. **CFA Problems**:2)<br>Due 11/16 |

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|---|---|---|---|---|---|
| Week 14 | 11/17<br>11/19 | Option Markets | **IV: Derivatives** | 20 | Chapter 20 (Problem Sets: 5, 6)<br>Due 11/23 |
| Week 15 | | Thanksgiving Break<br>11/23-11/29<br>No Class | | | |
| Week 16 | **12/1**<br>**12/3** | **Project**<br>**Final Presentations** | | | |
| Week 17 | **12/10**<br>**Thur.** | **Final Exam (Chapter 5,6,7,9,11,12, 20)**<br>**10:30-12:30 PM**<br>**12/10** | | | |

*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 20-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 PowerPoint presentation on Dec 1st or Dec 3rd.** Some guidelines:

- **Report Submission:** The group leader should submit the Written report, PowerPoint, and Excel files through Canvas Assignments by **November 30th**. Only one submission is needed per group.
- **Presentation:** Each team member is expected to participate in the final presentation. Any student who is unable to present due to extraordinary circumstances must provide official documentation and notify the professor at least **one week in advance.** The project should be presented professionally. Please rehearse thoroughly before the presentation to ensure smooth transitions between team members and effective time management.
- **Peer Evaluation:** You will also be evaluated by your group members based on your participation and contribution to the project.
- **Progress Report:** The group leader will submit two Group Project Progress and Contribution Reports through the Canvas Assignments: one at mid-semester and one at the end of the semester.
- **AI Policy for Group Project:** Students may use AI tools to brainstorm ideas, organize information, or improve clarity. However, all submitted work must reflect the group's own understanding, analysis, and original contribution. Any AI-assisted content should be reviewed carefully for accuracy and must **be cited or acknowledged when used.**
- **Sign up for your team:** go to Canvas → People → Security Analysis Group Project and select your group. The first person to join a group will serve as the group leader. Serving as group leader is a significant positive factor in the contribution evaluation.

### 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, Microsoft, Micro, Netflix, Nvidia, AMD, Oracle, PayPal, Pfizer, Pinterest Roblox, Roku, Sandisk, Spotify, Shopify, Snap, Sofi, Stellantis, Teladoc, Tesla, Tencent, TSM, 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.

[1] Morning star report on KFT, October 2020

**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:**

The team leader should submit a two pages report by October 19th, 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

**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!**

a. Register and Log-in to Virtual Stock Exchange Games (**www.marketwatch.com/game**). You must use your real name to be graded.
b. Join game: UNT2026Fall Game Password: TradeOrTrick
c. Start trading stocks from "UNT2026Fall". You can also view your portfolio, trade history, benchmarks, and rankings.
d. 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.
e. The project is due on November 30th Monday. That is your last trading day. All you need to do is trading and taking notes. No report needed. You can still continue to trade for fun after the due date till September 1st next year.

## About This Game

**Trade to learn, Trade to Enjoy, Trade to win.**

Portfolio Settings

| | |
|---|---|
| Starting Balance for Players | $100,000.00 |
| Commission | $0.00 |
| Credit Interest Rate | 1.00% |
| Leverage Debt Interest Rate | 5.00% |
| Minimum Stock Price | $1.00 |
| Maximum Stock Price | $50,000.00 |
| Short Selling | Enabled |
| Margin Trading | Enabled |
| Limit Orders | Enabled |
| Stop Loss Trades | Enabled |
| Partial Share Trading | Enabled |