FINANCE 4200-003: INVESTMENTS
Spring 2021

PROFESSOR: Ian Liu, Ph.D., CFA
CLASS: Mon 2:00-3:20 PM  Zoom ID: 872 4873 3628
OFFICE HOURS: Fri 6:30-7:30 PM  Zoom ID: 886 197 0497
TA: Youngkwang Kwon  TA email: youngkwang.kwon@unt.edu
E-MAIL: Ian.Liu@UNT.edu

COURSE OBJECTIVES
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. Topic one (Elements of Investments) guides you to start to be an
investor, topic two (Security 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 use 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 3770 and ACCT 2010 and 2020 or equivalent with grades of C or
better.

COURSE MATERIALS
- Required Text: Investments, by Bodie, Kane and Marcus, 12th edition, ISBN-
- Calculator: A calculator is required for this course. There is no sharing of
calculators during the exam.
- Database and Platform: Bloomberg Terminal, Morningstar Direct

GRADING

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<tr>
<th>Component</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Homework</td>
<td>10%</td>
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<tr>
<td>Investment Project (group project): Security Analysis</td>
<td>20%</td>
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<tr>
<td>Midterm Exam</td>
<td>35%</td>
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<td>Final Exam</td>
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Scale
- A = 90 – 100
- 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.
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 Sunday when there are homework assigned for the week. Late homework will not be accepted.

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.

CLASS PARTICIPATION
➢ Participation: The course is to be taught in an interactive style. Raising and answering questions are extremely important.
➢ Class attendance is required. You can miss one class without any penalty. If you miss more than one, missing each additional class will result in a ½ grade reduction in your overall grade. Any exceptions must be discussed with me prior to the absence.
➢ If a student misses a class it is the student’s responsibility to find out what material was covered in class and to catch up.
➢ You should try to read the chapter before we cover it in class. Use the PPT notes to help you read. Reading ahead will help you participate in the conversation in class.

CLASSROOM BEHAVIOR
➢ Be respectful to your classmates. I will not tolerate behaviors that interrupt the class. No chit chat with students sitting around you. Keep your private conversations out of the classroom. It is not acceptable to have your phone go off during the class. It is not acceptable to leave the classroom during the lecture without informing me before the class. Use electronic devices only for strict class related matters.

ONLINE ZOOM CLASS
➢ For Zoom classes, please keep your background quiet, or mute yourself except when you are asking or answering questions. 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.
STUDENT EVALUATION ADMINISTRATION DATES
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 survey will be made available during weeks 13, 14 and 15 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" (noreply@iasystem.org) with the survey link. Students should look for the email in their UNT email inbox. Simply click on the link and complete the survey. Once students complete the survey they 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.

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.

ACADEMIC INTEGRITY STANDARDS AND CONSEQUENCES
According to UNT Policy 06.003, Student Academic Integrity, academic dishonesty occurs when students engage in behaviors including, but not limited to cheating, fabrication, facilitating academic dishonesty, forgery, plagiarism, and sabotage. A finding of academic dishonesty may result in a range of academic penalties or sanctions ranging from admonition to expulsion from the University.

ADA ACCOMMODATION STATEMENT
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 at disability.unt.edu.

EMERGENCY NOTIFICATION & PROCEDURES
UNT uses a system called Eagle Alert to quickly notify students with critical information in the event of an emergency (i.e., severe weather, campus closing, and health and public safety emergencies like chemical spills, fires, or violence). In the event of a university closure, please refer to Blackboard for contingency plans for covering course materials.

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.

**ACCEPTABLE STUDENT BEHAVIOR**

Student behavior that interferes with an instructor’s ability to conduct a class or other students' opportunity to learn is unacceptable and disruptive and will not be tolerated in any instructional forum at UNT. Students engaging in unacceptable behavior will be directed to leave the classroom and the instructor may refer the student to the Dean of Students to consider whether the student’s conduct violated the Code of Student Conduct. The University's expectations for student conduct apply to all instructional forums, including University and electronic classroom, labs, discussion groups, field trips, etc. The Code of Student Conduct can be found at deanofstudents.unt.edu/conduct.
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<thead>
<tr>
<th>Week</th>
<th>Date</th>
<th>Content</th>
<th>Topic</th>
<th>Chapter</th>
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<tbody>
<tr>
<td>Week 1</td>
<td>1/11</td>
<td>The Investment Environment and Major investment Issues</td>
<td>I: Elements of Investments</td>
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<td>1/13</td>
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<td>Week 2</td>
<td>1/18</td>
<td>How Securities are Traded</td>
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<td>Week 3</td>
<td>1/25</td>
<td>Equity Valuation</td>
<td>II: Security Analysis</td>
<td>18</td>
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<td>1/27</td>
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<td>Week 4</td>
<td>2/1</td>
<td>Advanced Equity Valuation</td>
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<td>18</td>
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<td>Week 5</td>
<td>2/8</td>
<td>Equity Valuation-application</td>
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<td>Week 6</td>
<td>2/15</td>
<td>Macroeconomic and industry analysis</td>
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<td>2/17</td>
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<td>Week 7</td>
<td>2/22</td>
<td>Financial Statement Analysis</td>
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<td>2/24</td>
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<td>Week 8</td>
<td>3/1</td>
<td>3/1: Midterm Exam (Chapter 1,3,17,18,19)</td>
<td>III: Portfolio Theory: Risk and Return</td>
<td>5, 6,7</td>
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<td>Week 9</td>
<td>3/8</td>
<td>Project Presentations (first round)</td>
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<td>Week 10</td>
<td>3/15</td>
<td>Risk and Return</td>
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<td>3/17</td>
<td>Capital Allocation to Risky Assets Diversification</td>
<td>III: Portfolio Theory: Risk and Return</td>
<td>5, 6,7</td>
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<td>3/24</td>
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<td>Week 12</td>
<td>3/29</td>
<td>The Efficient Market Hypothesis and Behavioral Finance</td>
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<td>11,12</td>
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<td>Week 13</td>
<td>4/5</td>
<td>Option Markets</td>
<td>IV: Options and Futures</td>
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<td>4/7</td>
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<td>Week 14</td>
<td>4/12</td>
<td>Future Markets</td>
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<td>4/14</td>
<td>Project Due on 4/17, Saturday</td>
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<td>Week 15</td>
<td>4/19</td>
<td>Project Final Presentations</td>
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<td>Week 16</td>
<td>4/26</td>
<td>Final exam (Chapter 5,6,7,9,11,12,20,22)</td>
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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 PowerPoint presentation (about 30 minutes) in class. 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 me two days before your group’s presentation.

Framework of Security Analysis Project

Your group will choose one of the following stocks to analyze: Apple, Alphabet, Amazon, AT&T, Airbnb, Boeing, iRobot, Netflix, Facebook, Tesla, Chipotle and ViacomCBS.

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 sides 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.

   o 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.

   o 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.

   o You can use external resources for historical financial statement data, but projections for future performance and calculations of intrinsic values must be your own.

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¹ Morning star report on KFT, October 2010