Georgia Tech Scheller College of Business
MGT 3076 – Investments
Course Syllabus

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Office Hours	TBD	
Room & Time	TBD	

Course Content

This course is a rigorous introduction to the foundations of investment analysis and portfolio management. The course introduces students to the skills and tools required for financial decision-making across a range of market environments. We will explore both theoretical frameworks and practical applications relevant to individual and institutional investors. Topics include the risk-return tradeoff, market efficiency, portfolio theory, and macroeconomic trends that supplement the valuation analysis of a wide range of securities, including stocks, options, ETFs, and mutual funds.

By the end of the course, you should be able to evaluate investment opportunities critically, understand the trade-offs inherent in portfolio design, and apply core investment principles in both academic and real-world settings.

Course Objectives

This course is designed to help you analyze a company as a potential investment and understand its valuation. By the end of the course, you will be able to make the following statements:

‣ I understand financial markets and Wall Street and can talk the language of finance;

‣ I know the 'where' and 'how' to execute a trade, and how to hedge a trade;

‣ I understand risk, sources of risk, and the benefits of diversification;

‣ I understand how monetary policy impacts financial markets;

‣ I can analyze the alpha and beta of any stock, portfolio, or trading strategy;

‣ I know different methods for valuing a firm;

‣ I can read, analyze, and interpret financial statements;

‣ I can evaluate a firm within the context of its industry and the macroeconomy;

‣ I can make an effective stock pitch and an informed buy/sell recommendation.

Prerequisites

MGT 3062 or MGT 3078. The course assumes proficiency in mathematics, statistics, and spreadsheet software (e.g., correlations, regression analysis).

Textbooks & Reading Material

Lecture slides will be posted on Canvas. Additional readings from the financial press will be assigned and provided as the course progresses. One of the goals of this class is to ensure that you are conversant in and have defensible opinions on financial markets. Please come prepared for these discussions by reading the assigned articles.

Regular access to a financial news source (e.g., Wall Street Journal, Financial Times, Bloomberg) is strongly encouraged. Some financial commentators worth following are Andrew Ross Sorkin, Matt Levine, John Authers, Jason Zweig, Joe Weisenthal, and Tracy Alloway. I will share articles, and I encourage you to do the same. If you'd like additional reading suggestions on any topic, feel free to reach out.

Textbook: *Essentials of Investments (12th Edition)*
  Zvi Bodie, Alex Kane, and Alan J. Marcus, McGraw-Hill, 2021
  ISBN 978-1260772166.

Optional Textbook: *Corporate Finance (5th Edition)*
  Jonathan Berk, Peter DeMarzo, Pearson, 2019
  ISBN 978-1292304151

Course Pace

This class is fast-paced, technical, and heavy-loaded. You should expect a fast pace and heavy quantitative load in the form of weekly problem sets and daily pop quizzes.

Workload is asymmetric across the semester. The first half focuses heavily on mathematical tools, pricing models, and risk-return frameworks. The second half applies these tools in institutional and market settings. Staying on top of the early material will make the rest of the course much more manageable.

- The **first half of the semester** (approximately Weeks 1–5) is front-loaded and focuses on building the core analytical toolkit used throughout the course. During this period, you should expect mathematically rigorous problem sets and a heavier quantitative workload. This phase is designed to ensure that you develop the mathematical and conceptual foundations required to analyze financial markets rigorously and to prepare you for the midterm exam. Staying on top of the early material is essential; falling behind in the first half will make the remainder of the course substantially more difficult.

- The **second half of the semester** (Weeks 6–14) shifts from tool acquisition to application, judgment, and exploration. Class time focuses on applying the tools learned earlier to real-world market settings, institutional features, and investment decisions. Assessments during this phase emphasize synthesis, interpretation, and professional judgment through the group project and in-class engagement, while keeping up with the mathematical rigor developed in the first half.

The asymmetric workload across the semester is intentional and reflects how finance is learned and practiced in professional settings. You should plan your time accordingly.

Grading

This class is quantitative. It is your responsibility to ensure that you keep up with the material.

Grades will be determined by attendance & class engagement (30%), assignments (30%), a midterm test (20%), and a final exam (20%). Your final grade will be assigned as a letter grade according to the following scale:

A   90-100%

B   80-89%

C   70-79%

D   60-69%

F   0-59%

Attendance & Class Engagement: Attendance is mandatory. I expect you to come to class prepared to discuss the assigned material and ask questions. **Absence from class will affect your grade.** In each class, we will discuss current events and relate them to class material. I will "warm call" on you to discuss and analyze recent developments in financial markets. We will also have in-class board problems, which are straightforward applications of the course content covered in the previous session and serve as practice questions for the tests. Attendance and engagement will be monitored using board problems and unannounced pop quizzes, with the three lowest grades dropped (3 for free).

Assignments: Assignments consist of 7 problem sets (14%) and a project (16%). Problem sets are designed to build fluency with core concepts, formulas, and analytical tools. They apply material introduced but not fully explored in class and are designed to push you to engage actively with the material outside of lecture.

The project applies the knowledge of the classroom to real-world companies. The idea is to replicate a typical assignment found in Wall Street training programs. You will be divided into groups of 2-3. Group members are required to select a publicly traded company which they will study and provide a full valuation research report with a bottom-line investment recommendation. I expect you to apply the various tools learned throughout the class in your analysis. The project due date is listed below. Your project grade will depend on the justification of your assumptions and the level of professionalism in all components of the project. Detailed information will follow.

Tests: There will be a midterm (20%) and a final (20%). Exams are closed-book and test conceptual understanding, not rote memorization. They will draw on lectures, readings, and assignments. The exams may include questions on current events discussed in class. The midterm covers your understanding of the material covered to that point, while the final is comprehensive. Exam dates are tentative and will follow the registrar's policies.

Course Policies
Classroom Expectations

- Devices: To foster a focused and engaging classroom environment, cell phones, tablets with keyboards, and laptops are not allowed in class. Only tablets with pencils are allowed for the sole purpose of note-taking. *Unauthorized use will affect your grade.*

- Attendance: Attendance is mandatory. You are allowed three absences. *Unexcused absences will affect your grade.*

- Punctuality: You are expected to arrive on time and stay to the end of the session. *Arriving late and leaving early will affect your grade.*

- Respect to Classmates: Engage respectfully and thoughtfully in class discussion, especially when views differ. Our goal is to foster a professional, open learning environment and adhere to the Georgia Tech Student-Faculty Expectations.

Calculator

You must bring a calculator to all exams. At a minimum, your calculator should have square root, exponent, and natural log functions. A financial calculator is sufficient. You are responsible to learn how to use your calculator by working out problems, especially discounted cash flow problems.

Programmable calculators must be cleared before exams. Sharing calculators during exams is not permitted. Phones, tablets, laptops, or any device with internet access may not be used as a calculator.

Class Sessions

All sessions will be held in person and will not be recorded or streamed unless otherwise noted. Please attend regularly and participate actively.

Grading Appeals

If you believe a grade was assigned in error, submit a written request within 1 week of receiving your grade. The entire assignment or exam will be regraded, and the grade may go up, down, or remain the same. Verbal appeals will not be considered.

Academic Integrity

Georgia Tech aims to cultivate a community based on trust, academic integrity, and honor. Students are expected to act according to the highest ethical standards. Review Georgia Tech's Honor Code and the student Code of Conduct.

Any student suspected of cheating or plagiarizing on a quiz, exam, or assignment will be reported to the Office of Student Integrity, who will investigate the incident and identify the appropriate penalty for violations.

Late Work & Extensions

Assignments are due on the date and time specified in the course schedule. Extensions are granted only in cases of documented extenuating circumstances, such as serious illness, family emergency, or other unavoidable events beyond the student's control. Documentation may include a doctor's note, official notice from the Institute, or other verifiable evidence. Routine scheduling conflicts, travel plans, or workload from other courses do not qualify. Requests for extensions should be made at least **24 hours** in advance when possible.

Late submissions will incur a **15% deduction** from the earned grade for each day past the deadline, up to a maximum of **three days late**. After three days, the assignment will receive no credit.

The midterm exam will only be rescheduled for documented, unavoidable conflicts (e.g., serious illness, family emergency, or Institute-sanctioned activities). A missed exam without approved documentation will result in a score of zero. If a student misses more than one exam (including make-up exams), additional accommodations will be considered only for extraordinary, documented circumstances.

This policy is designed to be fair to students who submit their work on time, and I will apply it consistently.

Accommodations for Students with Disabilities

If you are a student with learning needs that require special accommodation, please contact the Office of Disability Services (404-894-2563) as soon as possible to make an appointment to discuss your special needs and to obtain an

accommodations letter. Please also e-mail me as soon as possible in order to discuss your learning needs.

Student-Faculty Expectations Agreement

At Georgia Tech, we believe that it is important to strive for an atmosphere of mutual respect, acknowledgement, and responsibility between faculty members and the student body. The Student-Faculty Expectations articulate some basic expectations that you can have of me and that I have of you. In the end, simple respect for knowledge, hard work, and cordial interactions will help build the environment we seek. Therefore, I encourage you to remain committed to the ideals of Georgia Tech while in this class.

Artificial Intelligence

You may use AI to generate ideas and further your understanding of course content. However, please know that these programs frequently hallucinate, i.e., they generate incomplete and/or inaccurate content. Be aware that relying on AI too heavily may limit your own independent thinking and creativity.

You may not present any AI-generated work as your own. If you include AI-generated content in your work, you should properly cite it like any other reference.

Any plagiarism or cheating will be dealt with severely under relevant Georgia Tech policies.

More information on Georgia Tech's policy regarding the use of AI can be found at the OIT website.

Tentative Class Schedule

Below is a preliminary schedule of class sessions, <u>subject to change</u>. The Canvas calendar will be updated with class meeting information and assignment due dates. Make sure to check Canvas at least once a week for course updates. In extenuating circumstances, some sessions might be recorded or occur on Zoom.

Week	Day 1	Day 2
1	**Introduction & Overview** Chapter 1	**Asset Classes & Financial Instruments** Chapter 2
2	**Primer on Interest Rates, Financial Statements** Chapters 5 and 14	**Bond Valuation** Chapter 10
3	**The Fed and Bond Markets** Chapter 10 **Homework 1 Due**	**Risk and Return** Chapter 5
4	**Portfolio Theory** Chapter 5 **Homework 2 Due**	**Portfolio Optimization** Chapter 6
5	**Capital Asset Pricing Model** Chapter 7 **Homework 3 Due**	**Factor Models** Chapter 7
6	**Midterm Exam**	**Macro & Industry Analysis** Chapter 12
7	**Fundamental Valuation** Chapter 13 **Homework 4 Due**	**Relative Valuation** Chapter 13
8	Fall Break	**Cash Flow Valuation** Chapter 13
9	**Perfect Capital Markets** **Homework 5 Due**	**Imperfect Capital Markets**

Week	Day 1	Day 2
10	**Options & Futures** Chapter 15 **Homework 6 Due**	**Behavioral Finance** Chapters 8 & 9
11	**Arbitrage & Bubbles** Chapter 9 **Homework 7 Due**	**Market Structure** Chapter 3
12	**Trading** Chapter 3 **Company + Thesis Due (Project)**	**Mutual Funds & ETFs** Chapter 4
13	**Hedge Funds** Chapter 20 **Project Deadline**	**Banks & Broker-Dealers**
14	**International Finance**	**Review**
15	**Rescheduled**	Thanksgiving Break
16	**Review**	
	Final Exam	