INVESTMENT MANAGEMENT

FINANCE 367 (FIN F367, 71365)

SUMMER 2024, FIRST TERM

Instructor	Zirui Wang	Zirui.Wang@mccombs.utexas.edu
Office Hours	Thursdays, 4 – 5 PM, or by appointment	CBA 1.312J
Class Time & Room	M-Tu-W-Th, 2 – 4 PM	CBA 4.332
Review Session	Sundays, 3 – 4 PM (optional)	CBA 4.332
Course Web Page	Via Canvas	

Course Objectives

This is an introductory course in the field of Investments. The course will focus on the application of financial theory to the issues and problems of investment management. Topics will include portfolio optimization and asset allocation, the basics of bond and derivative pricing, the theory of asset pricing models and their implications for investments, as well as evaluating investment management performance.

The main objective of this course is to provide students with a framework for making financial decisions related to Investments. These decisions are relevant for institutional investors (pension, mutual, and hedge funds), individual investors, corporate treasurers, and anyone who seeks to use or understand domestic or international investing.

Teaching Method

This course has a substantial quantitative component. The only way to learn these concepts is to continually apply them through frequent questions and practice. As such, the lectures and homework are both critical parts to this class.

This course will be taught in-person. During class, I will use slides to discuss major concepts and move to the board for demonstrations and exercises. I will post the slides to Canvas prior to class, but these slides are not a substitute for lectures.

Prerequisites

Finance 367 is a Restricted Course for students who are currently enrolled in a major program in the College of Business and Administration. Note that several prerequisites apply for this course and are published in the Course Schedule. Prior completion of Finance 357 or Finance 357 H, Statistics 371G or Statistics 371 H are among these requirements. In addition, proficiency in mathematics and spreadsheet software is assumed. Students who are uncertain as to whether they satisfy these requirements should notify the instructor.

Text and Materials

Required Textbook: Bodie, Kane, and Marcus, Investments (with Connect Plus access), 2024, 13th Edition, McGraw-Hill. The course outline will follow specific chapters from this book. Please complete the readings before class and bring any questions you may have. Homework will also be assigned from this textbook.

McGraw-Hill Connect: Connect will be used to assign and grade homework. To get started, go to the FIN 367 page on Canvas and click on the link called "McGraw-Hill Connect." Detailed instructions are posted on Canvas. For assistance, click on "Help" in the upper-right hand corner of the screen, or call (800) 331-5094.

Lecture Notes: Available online on the UT Canvas system before class. Lecture notes are meant as an outline to reduce the amount of rote copying of definitions and formulas but certainly not as a self-contained lecture summary. Reading the lecture notes without attending class will most likely be of little benefit.

Course Requirements and Grading

Course assignments will include homework assignments, cases, a midterm and a final exam. Students will be evaluated on each of these, as well as their class participation. Final course grades will be assigned based on the following weighting:

Midterm (1 Exam)	30%
Final Exam	35%
Homework	15%
Case Study (2 Cases)	15%
Participation	5%
Total	100%
Extra Credit (5 Problem Sets)	5%

There will be 5 weekly problem sets for a chance to earn extra credit. If you are taking the course as pass/fail, you must complete all homework assignments and cases, take all exams, and earn a passing grade to pass the course.

Exams

There will be one midterm exam and one final exam. Midterm exam will be held on Monday, July 1st during the normal class time in the classroom. The final exam is scheduled at a common time by the registrar. The final exam will be from 2 - 5 PM on Saturday, July 13, in WAG 201. Exam dates and times are listed in the section *Summary of Key Dates and Deadlines* on page 8. Please record these dates and times on your calendar and plan around them. Students may request a makeup exam in case of medical issues, supported by school documentation.

The midterm exam will include questions up to that point in the class. The final exam will be cumulative and will cover material from lectures, class discussions, assigned readings, and cases. Exams will strive to test comprehension, not merely memorization skills. Exams will include a mix of multiple choice, numerical, and short answer questions. Exams will not be returned and can be reviewed only during office hours during the week after they are graded.

Keeping up with the course material throughout the semester is by far the best way of studying for the examinations. After each class, you should do your best to make sure you understand everything we talked about in that class. Doing the homework, reviewing notes, reading relevant chapters from the textbook, looking at solutions to homework, and asking questions during office hours or the next lecture are all good ways of keeping up with the material in the course.

Homework

Homework questions must be answered and submitted individually but may be discussed with other students. Online homework is assigned through McGraw-Hill's Connect system. Homework will be assigned semi-weekly and is due by Monday and Wednesday at noon, 11:59 AM. Each homework assignment consists of approximately 5 numerical and 5 conceptual questions. Numerical questions will review material from the last two lectures previously taught, whereas the conceptual questions will help you preview the next two lectures. There will be a total of 9 homework assignments. Each homework is equally weighted. The Connect system will give you two attempts to answer each question without impacting your grade. Homework solutions will be available on Connect *one hour* after the due date. Your overall homework grade will be based on your 8 best homework assignments (i.e., you may drop one homework assignment). If you are sick, traveling, or have any other excused or unexcused absence, this may be your dropped homework.

Cases

There will be two cases. Cases will be done in groups of 3 students that will be randomly assigned in Canvas. Each group should submit a single write-up with the names of all group members. Please review the case deadlines under the heading, *Summary of Key Dates and Deadlines*, on page 8. Cases are to be uploaded to Canvas by midnight, 11:59 PM, on the due date. Submissions will consist of two uploads – one for the written document (PDF file) and one for the spreadsheet containing your calculations (Excel file).

The cases we will use are real-world situations where a decision-maker needs to address or resolve some type of financial problem. Part of the task will be to analyze the problem outlined in the case, and an equally important part will be to make decisions and to develop action implementations. Making decisions and planning actions based on your analysis is hard work, but it can also be fun. Most decisions in this class (and in the real world) will need to be made with incomplete information. Some problems will be clearly stated, others will be more difficult to discern. It is important to remember that the process in arriving at your answers or decisions may be the most important part of the exercise. Intelligent and reasonable people can end up with far- different conclusions depending on their initial assumptions (and still both get good grades!).

In general, the write-ups are to be brief and focused. You will not be awarded points for explaining aspects in the case but should focus on the solutions to the problems in the case. All exhibits, such as spreadsheet analysis or figures and tables, should be clearly labeled and referenced, and included in your word or pdf document. The report will be graded based on the quality of the research, as well as the professionalism of your presentation (neatness, clarity of exposition, etc.). The solutions must respond carefully to the course questions. All answers should be in a PDF file with supporting calculations included in an Excel file.

Cases are often screened for plagiarism and similarities. Any material used in the case should be cited appropriately.

Attendance and Participation

Students are expected to attend every class and act in a professional manner. I expect you to come to class on time, fully prepared, and ready to participate in the discussion. Please bring your name cards to class; I may use these to periodically cold call to foster discussion. If an absence should arise, please email me at least one week in advance. If there is an emergency situation, please email me and Student Services for accommodations. Electronic devices should be only used for note-taking purposes. Please refrain from activities such as eating or using electronic devices that may distract other students. Class participation consists of positive and constructive comments, questions, remarks, and answers in class, as well as answering questions on Piazza (more details will be provided later).

Problem Sets

There will be 5 weekly problem sets to prepare you for the exams. Students are encouraged to work on each of the questions before reviewing the solutions. Students can earn extra credits by uploading their step-by-step solutions on Canvas before the due date. Each problem set is equally weighted and will be graded by the instructor. The problem set is due by Sunday at noon, 11:59 AM. Specific due dates are listed in the section *Summary of Key Dates and Deadlines* on page 8. Solutions will be posted on Canvas after the due date. The problem set is valuable for exam preparation, so they are highly recommended even if not for the purpose of earning extra credit.

Review Sessions

The weekly review sessions are optional but strongly recommended. We will cover some of the most frequently asked questions from each week's problem set. They will be held in person during 3 – 4 PM on Sunday, June 16th, June 23rd, June 30th, and July 7th. The review session on June 30th will be served as the midterm exam review.

Piazza

We will use Piazza as a Q&A platform for class materials and concepts. The platform is catered to getting you help fast and efficiently from your classmates and myself. I encourage you to post questions on Piazza instead of emailing them, as this allows everyone to benefit from the discussion. Please also feel free to answer questions from your classmates. Both raising good questions and providing insightful answers contribute to class participation. For administrative questions, such as missing a class due to sickness, please email me directly instead of posting on Piazza. Additionally, please refrain from posting any worked solutions to assignments on Piazza. Find our class signup link on Canvas frontpage.

Calculator

Each student is required to bring a scientific calculator to classes and exams. At a minimum, the calculator must have *ln*, e^x, and y^x, buttons. Financial calculators are allowed during the exam, but it's not necessary. Programmable calculators must be cleared before each test. There is no sharing of calculators during any exam. Phones, tablets, laptops, or anything else with an internet connection cannot be used as a calculator during the exam.

Course Policies

Fairness to Students: I will strive to be fair to all students and treat each class participant with respect. If you feel that I have been unfair in any way, please let me know.

Readings: Readings should be done in advance of the class in which material will be discussed. The outline below will advise of the relevant topic of discussion. In addition to the textbook, I will occasionally assign additional readings, which are also mandatory.

Electronic devices: Electronic devices, such as laptops and tablets, should be only used for note-taking purposes. Please put away and silence your cellphones before class starts.

Grading: There are no verbal appeals of grade changes. Exams will not be returned and can be reviewed only during office hours during the week following the reception of the grade. You should submit a written statement explaining the problem within one week of receiving your grade and we will be happy to regrade any exam or assignment. The entire exam or project will be re-graded, and the score may increase, remain the same, or decrease.

Academic Honesty: I take academic honesty very seriously. I expect you to adhere to The McCombs Code of Ethics and to comply with collaboration restrictions noted in the syllabus and on assignments throughout the semester.

Recruiting Conflicts: Conflicts occasionally arise between classes and the search for employment. We understand how important the job search process is to you, and McCombs provides many resources in support of career exploration and search. However, UT is first and foremost an educational institution and your BBA degree will be the credential that certifies your education. As such, education will take precedent whenever such a conflict arises. All companies recruiting at McCombs are informed of this fact.

For Finance 367, you will not be excused from Exams, Projects, or Homework, due to a recruiting conflict. If you choose to miss an Exam or another assignment due to recruiting, you will receive a zero. If you choose to miss a lecture for recruiting, inform your instructor well in advance and be sure to catch up on the material you miss. Catching up on material you miss is solely your responsibility. At their discretion, your instructor may or may not excuse this absence when computing your participation grade.

Tentative Class Schedule

All readings correspond to Bodie, Kane, and Marcus, 13th Edition. Readings are to be read ahead of class. Schedule Subject to change - check for the latest version via Canvas.

Week		
		Thursday, June 6th
0		Lecture 1 **The Investment Environment & Asset Classes and Allocation** CH 1, 2
1	Monday, June 10th	Tuesday, June 11th
1	Lecture 2 **Securities Trading** CH 3	Lecture 3 **Risk, Return, and the Historical Record** CH 5
1	Wednesday, June 12th	Thursday, June 13th
1	Lecture 4 **Capital Allocation to Risky Assets** CH 6	Lecture 5 **Diversification and Investment Companies** CH 4, 7 **Case 1 Due Sunday, June 16th**
2	Monday, June 17th	Tuesday, June 18th
2	Lecture 6 **Optimal Risky Portfolios & the Harvard Management Company** CH 7, HMC Case	Lecture 7 **Capital Asset Pricing Model (CAPM)** CH 9
2	Wednesday, June 19th	Thursday, June 20th
2	Juneteenth (No class)	Lecture 8 **Market Index Model and CAPM Applications** CH 8, 9
3	Monday, June 24th	Tuesday, June 25th
3	Lecture 9 **CAPM Evidence and Multifactor Models** CH 8, CH 10.1 - 10.5	Lecture 10 **The Efficient Market Hypothesis and Empirical Evidence** CH 11, CH 13.1-13.3
3	Wednesday, June 26th	Thursday, June 27th
3	Lecture 11 **Bond Pricing and Yields** CH 14	Lecture 12 **Midterm Exam Review**

Schedule continues next page…

<table>
<tr><th>Week</th><th>Monday, July 1st</th><th>Tuesday, July 2nd</th></tr>
<tr><td rowspan="4">4</td><td><u>Midterm Exam</u>
2:00 – 4:00 PM at UTC 4.332
Review Session on Saturday, June 29, 3-4pm</td><td>Lecture 13
<u>Bond Term Structure and Interest Rate Risk</u>
CH 15, 16</td></tr>
<tr><td>Wednesday, July 3rd</td><td>Thursday, July 4th</td></tr>
<tr><td>Lecture 14
<u>Options Markets: Introduction</u>
CH 20</td><td><u>Independence Day (No class)</u>

Case 2 Due Sunday, July 7th</td></tr>
<tr><td></td><td></td></tr>
<tr><td rowspan="4">5</td><td>Monday, July 8th</td><td>Tuesday, July 9th</td></tr>
<tr><td>Lecture 15
<u>Option Valuation and Dynamic Trading</u>
CH 21</td><td>Lecture 16
<u>Futures Markets</u>
CH 22</td></tr>
<tr><td>Wednesday, July 10th</td><td>Thursday, July 11th</td></tr>
<tr><td>Lecture 17
<u>Final Exam Review I</u></td><td>Lecture 18
<u>Final Exam Review II</u></td></tr>
<tr><td colspan="3">Final Exam, Saturday, July 13th, 2-5pm</td></tr>
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Summary of Key Dates and Deadlines

Homework, Examination, Case, and Final Examination Dates			
Week 1			
Monday	June 10th	Noon, 11:59 AM	Homework 1
Wednesday	June 12th	Noon, 11:59 AM	Homework 2
Sunday	June 16th	Noon, 11:59 AM	Problem Set 1
Sunday	**June 16th**	**Midnight, 11:59 PM**	**Case 1**
Week 2			
Monday	June 17th	Noon, 11:59 AM	Homework 3
Wednesday	June 19th	Noon, 11:59 AM	Homework 4
Sunday	June 23rd	Noon, 11:59 AM	Problem Set 2
Week 3			
Monday	June 24th	Noon, 11:59 AM	Homework 5
Wednesday	June 26th	Noon, 11:59 AM	Homework 6
Sunday	June 30th	Noon, 11:59 AM	Problem Set 3
Week 4			
Monday	**July 1st**	**2:00 - 4:00 PM**	**Midterm Exam**
Friday	July 5th	Noon, 11:59 AM	Homework 7
Sunday	July 7th	Noon, 11:59 AM	Problem Set 4
Sunday	**July 7th**	**Midnight, 11:59 PM**	**Case 2**
Week 5			
Monday	July 8th	Noon, 11:59 AM	Homework 8
Friday	July 12th	Noon, 11:59 AM	Homework 9
Thursday	July 11th	Noon, 11:59 AM	Problem Set 5
Final Exam, Saturday, July 13th, 2-5pm			

Important Notifications

Students with Disabilities

Students with disabilities may request appropriate academic accommodations from the Division of Diversity and Community Engagement, Services for Students with Disabilities, 512-471-6259, http://diversity.utexas.edu/disability/.

Religious Holy Days

By UT Austin policy, you must notify me of your pending absence at least fourteen days prior to the date of observance of a religious holy day. If you must miss a class, an examination, a work assignment, or a project in order to observe a religious holy day, you will be given an opportunity to complete the missed work within a reasonable time after the absence.

Policy on Scholastic Dishonesty

The McCombs School of Business has no tolerance for acts of scholastic dishonesty. The responsibilities of both students and faculty regarding scholastic dishonesty are described in detail in the BBA Program's Statement on Scholastic Dishonesty at http://my.mccombs.utexas.edu/BBA/Code-of-Ethics. By teaching this course, I have agreed to observe all faculty responsibilities described there. By enrolling in this class, you have agreed to observe all student responsibilities described there. If the application of the Statement on Scholastic Dishonesty to this class or its assignments is unclear in any way, it is your responsibility to ask me for clarification. Students who violate University rules on scholastic dishonesty are subject to disciplinary penalties, including the possibility of failure in the course and/or dismissal from the University. Since dishonesty harms the individual, all students, the integrity of the University, and the value of our academic brand, policies on scholastic dishonesty will be strictly enforced. You should refer to the Student Conduct and Academic Integrity website at http://deanofstudents.utexas.edu/conduct/ to access the official University policies and procedures on scholastic dishonesty as well as further elaboration on what constitutes scholastic dishonesty.

Use of Artificial Intelligence (AI)

To ensure all students have an equal opportunity to succeed and to preserve the integrity of the course, students are not permitted to submit text that is generated by artificial intelligence (AI) systems such as ChatGPT, Bing Chat, Claude, Google Gemini, or any other automated assistance for any classwork or assessments. This includes using AI to generate answers to assignments, exams, or projects, or using AI to complete any other course-related tasks. Using AI in this way undermines your ability to develop critical thinking, writing, or research skills that are essential for this course and your academic success. Students should also be aware of the potential benefits and limitations of using AI as a tool for learning and research. AI systems can provide helpful information or suggestions, but they are not always reliable or accurate. Students should critically evaluate the sources, methods, and outputs of AI systems. Violations of this policy will be treated as academic misconduct. If you have any questions about this policy or if you are unsure whether a particular use of AI is acceptable, please ask for clarification.

Campus Safety

Please note the following recommendations regarding emergency evacuation, provided by the Office of Campus Safety and Security, 512-471-5767, https://preparedness.utexas.edu/:

- Occupants of buildings on The University of Texas at Austin campus are required to evacuate buildings when a fire alarm is activated. Alarm activation or announcement requires exiting and assembling outside.

- Familiarize yourself with all exit doors of each classroom and building you may occupy. Remember that the nearest exit door may not be the one you used when entering the building.
- Students requiring assistance in evacuation should inform the instructor in writing during the first week of class.
- In the event of an evacuation, follow the instruction of faculty or class instructors.
- Do not re-enter a building unless given instructions by the following: Austin Fire Department, The University of Texas at Austin Police Department, or Fire Prevention Services office.

Behavior Concerns Advice Line (BCAL): 512-232-5050 or on-line. In case of emergency, further information will be available at: http://www.utexas.edu/emergency.

Diversity and Inclusion

It is my intent that students from all diverse backgrounds and perspectives will be well served by this course, that students' learning needs will be addressed and that the diversity that students bring to this class can be comfortably expressed and be viewed as a resource, strength, and benefit. Please let me know immediately if this ever is not the case.

Privacy in Canvas

Information in Canvas is protected by your UTEID login. Please be aware that I will use a merged Canvas site for all sections of the course that I am teaching this semester. This will allow students in other sections to see that you are enrolled in the course and send you email from within Canvas. However, they will not actually learn your email address and no other personal data will be revealed through Canvas. If you have any concerns, please contact the ITS Help Desk at 475-9400 for help removing your name from the view of other students.

Title IX Reporting

Title IX is a federal law that protects against sex and gender-based discrimination, sexual harassment, sexual assault, sexual misconduct, dating/domestic violence and stalking at federally funded educational institutions. UT Austin is committed to fostering a learning and working environment free from discrimination in all its forms. When sexual misconduct occurs in our community, the university can:

1. Intervene to prevent harmful behavior from continuing or escalating.
2. Provide support and remedies to students and employees who have experienced harm or have become involved in a Title IX investigation.
3. Investigate and discipline violations of the university's relevant policies.

Beginning January 1, 2020, Texas Senate Bill 212 requires all employees of Texas universities, including faculty, report any information to the Title IX Office regarding sexual harassment, sexual assault, dating violence and stalking that is disclosed to them. Texas law requires that all employees who witness or receive any information of this type (including, but not limited to, writing assignments, class discussions, or one-on-one conversations) must be reported. **I am a Responsible Employee and must report any Title IX related incidents** that are disclosed in writing, discussion, or one-on-one. Before talking with me, or with any faculty or staff member about a Title IX related incident, be sure to ask whether they are a responsible employee. If you would like to speak with someone who can provide support or remedies without making an official report to the university, please email advocate@austin.utexas.edu. For more information about reporting options and resources, visit http://www.titleix.utexas.edu/, contact the Title IX Office via email at titleix@austin.utexas.edu, or call 512-471-0419.

Although graduate teaching and research assistants are not subject to Texas Senate Bill 212, they are still mandatory reporters under Federal Title IX laws and are required to report a wide range of behaviors we refer to as sexual misconduct, including the types of sexual misconduct covered under Texas Senate Bill 212. The Title IX office has developed supportive ways to respond to a survivor and compiled campus resources to support survivors.

UT Zoom Account

Without exception, this is an in-person class. If, however, a Zoom session is provided, all students must use a UT Zoom account to participate in any UT affiliated events. For detailed instructions on how to sign up for a UT Zoom account, see Getting Started with Zoom. You will be denied access to Zoom sessions if you attempt to access without a valid UT account.

Class Recording Privacy

Should a class be recorded, the recording itself is reserved only for the use of members of this class (students and the instructor) and only for educational purposes. Recordings should not be shared outside the class or posted in any form. Violation of this restriction could lead to Student Misconduct proceedings. For more information, please see FAQs on Student Confidentiality (FERPA) Issues Associated with Recordings.

Sharing of Course Materials is Prohibited

No materials used in this class, including, but not limited to, lecture hand-outs, videos, assessments (quizzes, exams, papers, projects, homework assignments), in-class materials, review sheets, and additional problem sets, may be shared online or with anyone outside of the class without explicit, written permission of the instructor. Unauthorized sharing of materials promotes cheating. It is a violation of the University's Student Honor Code and an act of academic dishonesty. The University is well aware of the sites used for sharing materials, and any materials found on such sites that are associated with a specific student, or any suspected unauthorized sharing of materials, will be reported to Student Conduct and Academic Integrity in the Office of the Dean of Students. These reports can result in sanctions, including failure of the course.