**Freeman School of Business Online MBA**

**Syllabus: FINE 7110 Investments**

# **Course Overview**

## **Course Description**

This course will be organized into two distinct parts. The first half of this course will be an in-depth study of portfolio theory. You will develop the foundations of Modern Portfolio Theory and show how you would use its principles to calculate mean/variance efficient portfolios. You will look at both the traditional Capital Asset Pricing Model (CAPM), and multifactor models, specifically the Fama/French 3-factor model. The second half of the course will focus on fixed income analytics. You will discuss how to price various types of fixed income securities and how to measure their interest rate risk. You will learn how to hedge interest rate risk using interest rate futures and interest rate futures options contracts. You will also examine various theories about the term structure of interest rates. Finally, you will get a brief introduction to the topics of Market Efficiency and Behavioral Finance and learn what their implications are for investors and markets.

## **Learning Objectives**

1. **Apply** Modern Portfolio Theory and an understanding of theoretical and empirical asset pricing models to calculate expected returns and standard deviations for portfolios of investments using the Capital Asset Pricing Model (CAPM) and the Fama/French 3-Factor Model (FF3).
2. **Calculate** Mean/Variance efficient portfolios using Modern Portfolio Theory.
3. **Analyze and price fixed-income securities** by assessing their sensitivity to interest rate changes, constructing yield curves, deriving implied forward rates, and determining their interest rate risk. Once determined, be able to hedge those risks with futures, options, and other means.
4. **Evaluate** various investment management funds, including mutual funds, exchange traded funds, and hedge funds.
5. **Assess** how psychological biases and market conditions influence investment decisions. Contrast these theories with those of market efficiency.
6. **Determine** how different market indexes are calculated and why they give different values.

## **Instructor**

Bill Reese

M.B.A. from Virginia Tech

Ph.D. from University of Arizona

Adjunct Instructor at Tulane University

### **Communication**

**Email:** [wreese@tulane.edu](mailto:wreese@tulane.edu)

**Office Hours:** Virtually via Zoom, immediately following our in-class weekly sessions.

If you email me and don’t hear back within two business days, please send a follow-up email. I will appreciate the gentle reminder.

If you have a question about the course that is not of a personal nature, please post it to the **Student Lobby discussion forum** in our Canvas site. If you have a question about course materials or assignments, your peers will usually share that question. Posting in the Student Lobby will allow everyone in the course to benefit from the answers to each other’s questions. If you see a question that has not been answered yet and you know the answer, please share that knowledge with your classmates. Be mindful that everyone in the course can view the discussion posts. If you need to discuss something personal, please reach out via email.

## **Required Materials**

The **required textbook** for the course is Bodie, Z., Kane, A., & Marcus, A. (2024). *Investments* (13th ed.). McGraw Hill Education.

**Additional required readings** are available in the course Canvas site, under the university license policy.

**Course Website:** I have put together a website for this course at <https://breesefine7110.tulane.edu/> On this website, you will find Class Notes, Spreadsheets and Other Materials, Readings (Required and Optional), and Videos showing how to complete assignments, work through spreadsheets. Additionally, I have included (as an optional resource) Zoom videos I recorded during Covid, in which I discuss each topic we will cover in this course in detail. I think you’ll find them to be very helpful.

## **Course Structure**

Course content, including learning resources, activities, assignments, and discussion forums, is presented online via the university’s learning management system, Canvas. Although this content is consumed asynchronously, there are due dates to adhere to. Review the course schedule for important dates. The content in Canvas will prepare you for the weekly Roundtable sessions.

Roundtables are live sessions for discussion and application during which you will engage directly with your instructor and peers. They will occur via Zoom on eight Wednesdays from 6:30-7:30 p.m. CT. Please refer to the announcements in Canvas for more information about the specific date and time for each session.

You are expected to attend every Roundtable session with your webcam video on. If you cannot attend a Roundtable session live, you should watch the recording. These recordings should not be shared beyond the confines of the class.

# **How You Will Be Assessed**

## **Grading**

Please carefully review the Grading section of the OMBA Student Handbook for information about grading schemes, withdrawals, incompletes, etc.

**Grade Symbols**

This course and all graduate program courses in the Freeman School use a letter grade system with the following quality point equivalents:

| **LETTER GRADE** | **POINTS** |
| --- | --- |
| A | 4.00 |
| A- | 3.67 |
| B+ | 3.33 |
| B | 3.00 |
| B- | 2.67 |
| C+ | 2.33 |
| C | 2.00 |
| C- | 1.67 |
| D+ | 1.33 |
| D | 1.00 |
| D- | 0.67 |
| F | 0.00 |

The quality point total for each course is computed by multiplying the numerical value of the grade received by the course credit hours.

**Grading Guidelines**

## As approved by the Freeman School faculty, this course follows the recommended grading policy for a class GPA by program. 6000-level courses are expected to have a mean class GPA in the range of 3.00 to 3.33 and 7000-level courses are expected to have a mean class GPA in the range of 3.33 to 3.67.

Faculty members teaching more than one section of the same course will pool the students in the different sections and compute one class GPA.

In this course, your final grade will be determined as follows:

| **ASSIGNMENT** | **WEIGHT / POINTS** |
| --- | --- |
| Class Attendance  Portfolio Theory Assignments  Fixed Income Analysis Assignments  Exam 1  Exam 2 | 10%  20% (5% each)  30% (10% each)  20%  20% |
| Final Grade: | 100% |

## **Assignment Descriptions**

**Roundtable:** Roundtable sessions allow you to engage in a fruitful dialogue with your instructor and peers. Roundtable sessions will cover the specific topics and concepts addressed in each of the modules.

**Individual Homework Assignments:** The individual homework assignments will help you prepare for our exams. These problems are your opportunity to test your understanding of the concepts presented throughout the modules. Some of these assignments will have correct/incorrect answers.

**Exams:** The exams will be a cumulative exam testing your knowledge of all of the concepts and topics covered throughout the course. There will be two exams. The first one will cover Portfolio Theory and the second one will cover Fixed Income Analysis.

## **Feedback**

I strive to grade your assignments as soon as possible. Being open to suggestions for improvement and engaging in self-reflection are key to your continued growth.

# **Course Policies**

It is essential that you review the OMBA Student Handbook for important information about program policies, expectations, and procedures.

## **Late Work**

**All quizzes, the exam, and all discussions must be completed by the date and time indicated in the syllabus and/or on the course Canvas site**. In the business world, there can be substantial penalties for missing deadlines, and significant business opportunities may be lost by neglecting to adhere to schedules, deadlines, and other important dates.

If you experience a critical situation and/or a medical or family emergency that forces you to miss a deadline, please send me an email.

## **Class Conduct**

This program will prepare you to be a responsible manager who leads with integrity and maintains ethical standards. I hope you will join me in creating a learning environment in which diverse perspectives are recognized and valued. I ask that we create a class culture based on mutual respect, professionalism, and inclusion. Disagreements and debates within academic discourse are expected and welcome, but personal attacks are never appropriate and will not be tolerated. We will approach all discussions with civility.

During the Roundtables, you are expected to have your webcam turned on. This is essential to build community, encourage focus, and facilitate discussions. You will not earn attendance points unless your camera is on with your face in the picture.

## **Teamwork**

Teamwork enables collaborative problem-solving that can lead to innovative solutions. Being able to effectively work with others who have different experiences, expertise, and perspectives is essential for professional success. Therefore, your coursework may include occasional opportunities for teamwork and collaboration, including Roundtables, study groups, and projects. You are expected to participate actively, contribute positively, and communicate professionally when engaged in teamwork. “Social loafing” will not be tolerated.

## **Academic Integrity**

As a student of the Freeman School of Business at Tulane, you are part of a community that is committed to integrity, honesty, trust, fairness, respect, and responsibility. This class will be conducted in full accordance with Tulane’s policies about academic integrity including, but not limited to, the [Unified Code of Graduate Student Academic Conduct](https://ogps.tulane.edu/graduate-policies) and the [Tulane University Code of Student Conduct](https://conduct.tulane.edu/resources/code-student-conduct).

There will be no tolerance for any form of academic dishonesty. Students must respect others' intellectual work and be fair and honest in all their interactions with members of the Freeman community. Refer to the OMBA Student Handbook for more information about academic integrity.

## **Equity, Diversity, and Inclusion**

"Equity, diversity, and inclusion (EDI) are important [Tulane values](https://tulane.edu/core-values) that are key drivers of academic excellence in our learning environments. In our drive for academic excellence, we seek to ensure that students, faculty, and staff across diverse social identities, cultural backgrounds, and lived experiences can thrive–especially those from underrepresented and underserved communities (e.g., race/ethnicity, gender identity and expression, sexual orientation, disability, social class, international, veterans, religious minorities, age, and any other classification protected by applicable law–see [Tulane’s Nondiscrimination Policy](https://hr.tulane.edu/institutional-equity)).

In order to build a supportive culture and climate for every member of our community, we recognize that we each have unique EDI strengths to share with others and that we also have areas for EDI growth, learning, and change. This EDI commitment and cultural humility helps us collectively build a university community and culture where everyone experiences belonging."

## **Religious Accommodation**

Per Tulane’s religious accommodation policy as stated at the bottom [Tulane’s academic calendar](https://registrar.tulane.edu/Academic_Calendar) I will make every reasonable effort to ensure that students are able to observe religious holidays without jeopardizing their ability to fulfill their academic obligations. Excused absences do not relieve the student from the responsibility for any coursework required during the period of absence. Please notify me within the first two weeks of the semester about your intent to observe any holidays that fall on a live session day.

## **Title IX**

Tulane University recognizes the inherent dignity of all individuals and promotes respect for all people. As such, Tulane is committed to providing an environment free of all forms of discrimination, including sexual and gender-based discrimination; harassment; and violence like sexual assault, intimate partner violence, and stalking. If you or someone you know has experienced or is experiencing these types of behaviors, know that you are not alone. Resources and support are available at [All In](https://allin.tulane.edu/).

Please know that if you choose to confide in me, I am mandated by the university to report to the Title IX coordinator, as Tulane and I want to be sure you are connected with all the support the university can offer. You do not need to respond to outreach from the university if you do not want to. You can also make a report yourself, including an anonymous report, through the [Campus Reporting Form.](https://cm.maxient.com/reportingform.php?TulaneUniv=&layout_id=0)

# **Student Support**

## **Balancing School and Life**

I greatly respect that students must balance their pursuit of education with the responsibilities of caregiving, work, and more. If you encounter challenges that interfere with your ability to engage in learning, please contact me. We can discuss ways the university and I can support your academic success.

## **Accessibility and Accommodations**

Tulane University is committed to offering classes that are accessible. If you anticipate or encounter disability-related barriers in a course, please contact the Goldman Center for Student Accessibility to establish reasonable accommodations. If approved by Goldman, make arrangements with me as soon as possible to discuss your accommodations so that they may be implemented in a timely fashion. I will never ask for medical documentation from you to support potential accommodation needs.

Goldman Center contact information:

* Email: goldman@tulane.edu
* Phone: (504) 862-8433
* Website: [Goldman Center for Student Accessibility](http://accessibility.tulane.edu/)

## **Academic Support**

There are numerous support services to help you achieve your educational goals. A great place to visit often is the **OMBA Commons in Canvas**. There, you will find resources related to academics, time management, wellness, networking, and much more. It’s also a place to engage in the campus community through social media, online events, and videos of speakers. In addition, the following services are available to you:

* If you need help with **research, citations, writing software, or citation apps**, the Howard-Tilton Memorial Library has a research help desk and subject area librarians to help you. You can access the library’s resources and contact a research librarian on the library’s [Services](https://library.tulane.edu/services) page.
* You also have access to **on-demand tutoring** 24 hours a day through Tutor.com. You can access this service from your Canvas course.
* **Career** **support and resources**, including job searching, networking, and connecting to Tulane’s vast alumni community, are available through the [Career Management Center](https://freeman.tulane.edu/careers).

## **Mental Health Support**

Graduate school can be stressful, and we all need a support system. The **Counseling Center** works with students to improve their mental health and overall well-being. Counseling Center services are available in person or online, depending on student preference. [Virtual self-help tools](https://campushealth.tulane.edu/departments/counseling-center/virtual-self-help-tools) are also available.

Counseling Center contact information:

* Phone: (504) 314-2277
* After-Hours Crisis Support (The Line): (504) 264-6074
* Website: [Campus Health - Counseling Center](https://campushealth.tulane.edu/departments/counseling-center)

# **Land Acknowledgement**

Please pause to reflect on the following history of New Orleans. The Freeman School of Business acknowledges and pays tribute to the original inhabitants of this land. The city of New Orleans is a continuation of an Indigenous trade hub on the Mississippi River, known for thousands of years as Bulbancha. Native peoples have lived on this land since time immemorial, and the resilient voices of Native Americans remain an inseparable part of our local culture. With gratitude and honor, we acknowledge the Indigenous nations that have lived and continue to thrive here.

# **Course at a Glance**

This schedule may change as the semester progresses.

| **Week** | **Module** | **Learning Materials** | **Roundtable** | **Assignments** | **Project** |
| --- | --- | --- | --- | --- | --- |
| **1** | Risk and Risk Aversion | Textbook, Class Notes, Spreadsheets, and Videos | Introduction to Course  8/27 | Am I Diversified?  Due 8/31 |  |
| **2** | Optional Risky Portfolios | Textbook, Class Notes, Spreadsheets, and Videos |  | Efficient Frontier  Due 9/7 |  |
| **3** | Developing the CAPM | Textbook, Class Notes, Spreadsheets, and Videos |  |  |  |
| **4** | Using the CAPM | Textbook, Class Notes, Spreadsheets, and Videos | CAPM Groupwork  9/17 |  |  |
| **5** | Multifactor Models | Textbook, Class Notes, Spreadsheets, and Videos |  | CAPM and FF3 Expected Returns  Due 9/28 |  |
| **6** | Mutual Funds, ETFs, and Hedge Funds | Textbook, Class Notes, Spreadsheets, and Videos | FF3 Groupwork  10/1 | Mutual Funds and ETFs  Due 10/5 |  |
| **7** | Stock Market Indexes | Textbook, Class Notes, Spreadsheets, and Videos | Portfolio Optimization Groupwork  10/8 |  |  |
|  | Part 1 |  |  | Exam 1: Por Thry  10/10-10/11 |  |
| **8** | Bond Basics | Textbook, Class Notes, Spreadsheets, and Videos |  |  |  |
| **9** | Bond Invoice Prices and T-Bill Quotes | Textbook, Class Notes, Spreadsheets, and Videos |  |  |  |
| **10** | Treasury Strips, TIPS, and Repos | Textbook, Class Notes, Spreadsheets, and Videos | Assignment Preview  10/29 | Bond Problems  Due 11/9 |  |
| **11** | Treasury Process and Yield Curve Analysis | Textbook, Class Notes, Spreadsheets, and Videos | Review Bond Problems and Assignment Preview  11/5 | Repo Problems  Due 11/16 |  |
| **12** | Duration, Modified Duration, and Convexity | Textbook, Class Notes, Spreadsheets, and Videos |  |  |  |
| **13** | Hedging Interest Rate Risk | Textbook, Class Notes, Spreadsheets, and Videos | Review Repo Problems and Assignment Preview  11/19 | Hedging and Immunizing with Duration  Due 11/30 |  |
| **14** | Market Efficiency and Behavioral Finance | Textbook, Class Notes, Spreadsheets, and Videos | Review Hedging Immunizing with Duration  12/3 |  |  |
|  | Part 2 |  |  | Exam 2: Fixed Income  12/5-12/6 |  |