Wagner College

Portfolio Theory & Investments, FI 605 Fall 2025

Thu 6:00PM-8:00PM

Instructor: Dr. Zhexu (Edward) Ai E-mail: <u>zhexu.ai@wagner.edu</u>

Office Hours: By appointment

Scope, Objectives & Teaching Methodology

This course is based on modern portfolio analysis techniques. It utilizes mean-variance analysis to determine efficient portfolios and presents techniques for calculating efficient frontiers. It also utilizes single and multi-index models to calculate the correlation structure of security returns and simplify the portfolio selection process. It further examines models of equilibrium in capital markets, international diversification and other portfolio selection models, such as safety-first. The course will utilize the computer to demonstrate and explore the various implications of portfolio analysis.

The most efficient way to learn is to pay attention during classes. Make sure you solve all your questions during class or immediately after class. Students are also expected to follow financial news (i.e. The Wall Street Journal) as it relates to investment activities.

This course requires students to have basic knowledge of finance, economics, and statistics.

Textbook and Other Materials – Not Required

Elton, Gruber, Brown, and Goetzmann. Modern Portfolio Theory and Investment Analysis, 9th Edition, Wiley, ISBN: 9781118805800 (EGBG)

Bodie, Zvi, Alex Kane and Alan J. Marcus. Essential of Investments, 12th Edition, McGraw-Hill, ISBN-13: 9781260772166 ISBN-10: 1260772160

Grading

| Homework Assignments (individual and group) | 25% |
|---|------|
| Mid-term Exam | 25% |
| Final Exam (non-cumulative) | 30% |
| Quizzes | 20% |
| Total | 100% |

DIVERSITY AND INCLUSION

The instructor of this course values equality of opportunity, human dignity, and racial/ethnic and cultural diversity. Accordingly, the instructor prohibits and will not engage in any discrimination or harassment on the basis of race, color, religion, national origin, ancestry, sex, age, marital status, familial status, sexual orientation, or disability. The instructor is committed to provide all students with an excellent course experience within an atmosphere of mutual respect and trust and expects that all students abide by the policies of Wagner College concerning academic integrity, antiharassment and anti-discrimination as described in the Student Handbook and on the website of the college.

ACADEMIC HONESTY

The Wagner College faculty and student body take seriously the academic integrity of this institution. The Academic Honesty Committee (AHC), comprised of both faculty and student representatives, hears cases of academic dishonesty. If a professor is concerned that a student has acted dishonestly with regard to his or her academic work, the professor can turn the case over to the AHC for investigation. The Student Government Association (SGA) also wrote an approved student honor code in 2007 that reflects the commitment of the student body to academic integrity. You can find a copy of the student honor code and the policies of the AHC at this website: https://wagner.edu/academics/provost/committees/. All students are expected to be aware of and abide by Wagner's guidelines for academic integrity. If you have questions about these guidelines, it is your responsibility to ask.

GUIDELINES FOR ACCOMMODATIONS FOR STUDENTS WITH DISABILITIES

Wagner College values accessibility as part of its commitment to diversity, equity, and inclusion and has a continuing commitment to providing reasonable accommodations for students with disabilities. Students with disabilities and/or learning differences who may need some accommodation to fully participate and succeed in this class are encouraged to contact your professors and Danae Choquette in Academic Advising and Accessibility (718-390-3278; danae.choquette@wagner.edu) so that the necessary accommodations can be made ahead of time. For more information about accessibility services and the available accommodations, visit Wagner Academic College's Office of Advising Accessibility homepage: and https://wagner.edu/aaa/accessibility-services/.

WRITING CENTER

The Writing Center is a free of charge resource on campus that offers students one-to-one and group feedback on their writing and presentations. Writing Intensive Tutors (WITs) can provide feedback on any type of writing assignment, at any stage of the composing process from brainstorming and outlining to drafting and revising. Make an appointment or walk-in during the

operating hours. Online appointments are also available. The Writing Center is located on the first floor of the Horrmann Library. Look for the glass-walled meeting space, directly to the right of the library entrance.

For more information and to make an appointment, please use the following link:

https://wagner.edu/aaa/academic-support/writing-center/

Class Participation & Homework Assignments - Class participation means that you have answered questions and participated in discussions in class; it is not class attendance. Respectful participation means giving your classmates a chance to speak and express their ideas, adding comments only to improve the quality of the class or add to the value of the discussion. Examples of quality class contribution include asking insightful questions that deal with a deeper treatment of a subject, adding your experiences that either prove or disprove a concept or adding current event material that elaborates on a subject.

<u>Definition of Late Assignment Submissions:</u> Assignments submitted after the deadline without me granting extensions prior to the deadline to specific students are late submissions.

Note: A late assignment submission will get a **20% grade deduction** if you are within 1 week late, or **50% deduction** if you are more than 1 week late.

Exams – Midterm exam and final exam will be held in class. You must take the exam as scheduled unless you obtain instructor approval or encounter an emergency (see "missed exams"). The final exam will cover chapters after the midterm exam.

Missed Exams – It is your responsibility to make every effort to ensure you are present for the examinations. Unexcused absences will result in a grade of 0%. I will report missed exams or long-term absence to the school or college if necessary. If you have a conflict, please discuss it with me as far in advance as possible. In general, make-up exams are only offered in the event of extenuating. And there is no credit deduction for makeup exams. Note that the final exam may be scheduled on any day during finals week, and you are responsible for taking the exam during the scheduled time. I strongly recommend you not to wait too long to take the make-up exam.

Grade Determination:

| Letter Grade | Numerical Grade |
|--------------|-----------------|
| A | >=93 |
| A- | 90-92.99 |
| B+ | 87-89.99 |
| В | 83-86.99 |
| B- | 80-82.99 |
| C+ | 77-79.99 |

| C | 73-76.99 |
|----|----------|
| C- | 70-72.99 |
| F | < 70 |

Contents of the Course

- 1. Market Efficiency Hypothesis (EMH) and Behavioral Finance (EGBG CH17, and CH20)
- 2. Mean Variance Portfolio Theory (EGBG CH4, CH5, CH6, and CH9)
 - Introduction to Portfolio Theory
 - Efficient Portfolios
 - Efficient Frontier
- 3. Risk Aversion and Utility Functions (EGBG CH11)
- 4. The Capital Asset Pricing Model (CAPM) (EGBG CH13)
- 5. Multi-factor Pricing Models (EGBG CH16)
- 6. Evaluation of Portfolio Performance (EGBG CH26)