

Spring 2024

FIN 650-852: Investment Analysis and Portfolio Management

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Course Number: FIN 650-852 (Spring 2024)

Course Title: Investment Analysis and Portfolio Management

Faculty Contact Information

Instructor: Kenneth A. Goodwin Jr.

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Office Hours: 9PM-9:30PM, Thursday and 5pm-6pm Fridays via WebEx

- Scholars' attendance is optional as this is an online course. All courses are recorded and uploaded to the Files section on Canvas for review.

Course Description

This is a course on the theory and practice of investment and portfolio theory. We will study several quantitative techniques for portfolio construction. Mathematical and statistical analysis will be used during this examination. Theories of asset pricing based upon the relationship between risk and return will be included. We will also discuss criteria for selecting specific securities in different asset classes, such as stocks, bonds, and derivatives.

We will also explore how corporations are making financial decisions in investing in digital assets (Bitcoin ETFs and stablecoins) and how these alternative assets are being valued and what types of esoteric models are available to value digital assets.

Topics Covered:

- Portfolio Risk and Performance Analytics
- Markowitz Portfolio Theory
- Black-Litterman and Estimation Techniques
- Mergers and acquisitions (traditional and digital assets: Bitcoin ETF and stablecoins)
- Digital Asset and traditional asset portfolio evaluation and models

Course/Learning Objectives/Outcomes: The main goal of this course is to give students exposure to core ideas in portfolio construction and risk management as well as conduct exercises geared toward the practical implementation of such ideas. Students should be conversant in the topics mentioned in the course description as well as their implementation after completing this course.

Textbook and Materials

Required:

- Textbook materials and case studies will be provided via Canvas in the Files section
- Have a copy of the “Wall Street Journal”. You can follow the link: <https://r.wsj.com/PROFwq4w> to get a digital-only membership for \$4 a month. We will be utilizing The Wall Street Journal

Assessment Tool in class this term. In order to participate, you must first register your account. Please use the following link to register for the WSJ Assessment Tool:

[https://wsjassessment.com/e/i/MjEyOC8xODY3LzIyMjYvMjY2NgLinks to an external site.](https://wsjassessment.com/e/i/MjEyOC8xODY3LzIyMjYvMjY2NgLinks%20to%20an%20external%20site.)==

<https://view.read.forbes.com/?qs=e2fb6899651695e3ed67eb3738b2558947671765bdb24980bd24635824dbe4a04f0afecac64a414ec9356812e2f8cd3ccc14a172674bb987ca9547e7a4cfd00fbf0e3aa44925312e663f07a280f67b90>

- You are also strongly encouraged to read other economic and financial publications such as

Financial Times, Business Week, or the Economist.

Financial Calculator:

A financial calculator is **STRONGLY RECOMMENDED!** I recommend the Texas Instrument BAII Plus financial calculator. If you have another financial calculator that you are comfortable with, you may use it. TI - BA II Plus and HP 12C are the only two calculators permitted on the CFA Exams. *It is your own responsibility to learn how to use your calculator.*

Course Outcomes

1. To introduce the subject of portfolio and investment management (traditional and digital assets).
2. To identify factors that impact financial decision-making, implementation and evaluation
3. To understand mergers and acquisitions (traditional and digital assets)
4. To produce a portfolio investment thesis to be submitted by the end of the course (example is provided)

Learning Goal 1: Analytical & Problem Solving Skill

Learning Outcome 1.1 Demonstrates knowledge of concepts in corporate finance and the ability to apply these concepts to solve financial problems, such as MM theorem • Learning Outcome 1.2 Ability to use quantitative methodologies, such as options pricing, as tools to help understand financial problems

Learning Goal 2: Information & Communication Skills

- Learning Outcome 2.1 (Oral Communication) Ability to deliver effective presentations enhanced by technology
- Learning Outcome 2.2 (Written Communication & Information Literacy) Ability to write clear and concise reports

Learning Goal 3: Reflective Thinking Skills

- Learning Outcome 3.1 Ability to think and understand various concepts clearly

Learning Goal 4: Ethical Understanding & Reasoning Abilities

- Learning Outcome 4.1 Understand the moral implications and ethical schema of individual (financial managers and corporate executives) and corporation decisions and actions

Grading Scale

Grade Percentile Percentage

A 4 90-100%

B+ 3.5 85-89.99%

B 3 80-84.99%

C+ 2.5 70-79.99%

C 2 60-69.99%

F N/A < 60%

Grading Categories

Categories Percentage

Participation and Weekly Financial Assessments of both Public and Private Firms (Examples below)

Assignment 1: Axichain, Agriculture Farmland/Supply Chain-Digital

Assignment 2: ZenBe Health Technologies (Virtual reality/AI) and AIGO.ai

Assignment 3: Tesla 2021-2023 and NVIDIA Financial Statement Analysis

Midterm Exam #1 35% *

Final Exam (Cumulative) 40% *

Participation and Assignments (25%)

Reflects quality and quantity of discussion online. Includes actively contributing to discussion; demonstrated knowledge/understanding of three assigned materials; and leadership and problem-solving.

Exams (75%)

There will be two exams.

Time Commitment

This course requires not only much reading, but also requires students to stay on top of current events in reference to the content. Students will be responsible for working with their designated groups at a time and in a manner that works for all team members. Students are also responsible for addressing all deliverables of the course. Review the Course Schedule to see what will be due in the upcoming modules.

Late Work and Make-Up Exams

Late work will not be accepted. If you have issues completing the work in the allotted time, speak to your professor at the start of the course.

Sharing Information

With respect to your answers on the problem sets, midterm exam, and final exam, no common or group answers will be accepted to any question. Further, any material from the text should not be quoted but must be paraphrased in your own words.

Student Conduct

The NJIT University code on academic integrity, found at <http://www5.njit.edu/policies/sites/policies/files/academic-integrity-code.pdf>, will be followed in all courses.

Student with Disabilities Codes

NJIT adheres to section 504 of the Rehabilitation Act (ADA) of 1990. Appropriate accommodations are provided at no cost to the student. If you have any questions or would like additional information, please contact Dr. Phyllis Bolling, Center for Counseling and Psychological Services (C-CAPS), Campbell Hall, (entry level), room 205, (973) 596-3420. For further information, visit the Student Disability Services website.

Technical Support

For assistance with the following items, please contact NJIT IST Helpdesk at: 1-973-596-2900 or <http://ist.njit.edu/support/helpdesk.php>

- UCID
- Library database access
- Webmail by Google email system
- Sessions
- Password assistance*

For assistance with the following items, please contact Technical Support at:

1-888-789-0407 or <https://supportcenter.embanet.com/NJIT>

- Content within this course
- Assignments
- Discussion Forums
- Quizzes
- Exams
- All other items related to the running of this course

*NJIT passwords may be changed using the Global Password Change mechanism. You will need to know your current UCID and UCID password. Questions can be referred to 1-973-596-2900.

Periodic changing of passwords and strategies for managing them are best practice for anyone using a computer. All members of the university community are encouraged to review tips for password management and to change passwords regularly.

Sometimes, you will be required to use word processing and presentation software, such as MS Word and PowerPoint found in Microsoft Office. You will also need to be comfortable with various aspects of using the Internet such as:

- Search engines
- Newsgroups
- E-mail
- Ability to download files

To view certain media elements in this course, you will need to have several browser plug-ins such as Shockwave, Flash, and Adobe Acrobat on your computer. Use the links in the course to download and install the appropriate software application.

Important: With regards to plug-ins, ensure you are using the most recent version of each plug in you require. View the hardware and software requirements for this course.

Browser Check

To test your web browser for compatibility in the Moodle environment, go to the Online Support Center page and select the "Check My Browser" link located on the right side.

Other Support

Tutoring - <https://www5.njit.edu/tlc/>

In addition MTSM provides tutoring for accounting, statistics and finance courses.

The students can book an appointment Book an appointment here:

Support on campus

<https://www.njit.edu/studentsuccess/node/5>

<https://www.njit.edu/counseling/>

Bloomberg Terminal and Resources

The Bloomberg Terminal delivers what you need to examine fundamentals, assess relative value and

understand the corporate strategies in play. Get insight into thousands of companies in more than 130 industries and understand the driving forces behind the movements in major asset classes, credit metrics, economics, and government policy. The Bloomberg Terminal brings together all the data, news and analytics to provide the kind of complete understanding of companies, industries and markets that is the cost of entry these days in the financial job market.

News and research

With an avalanche of news, noise and information how do you cut through it all to get at what's essential? Bloomberg News hones in on what's happening, as it happens. Bloomberg research goes deeper and offers context to make the news make sense. Most importantly, students can then create their own robust research content that integrates their ideas with Bloomberg data to create compelling insights — just as they will need to do to succeed in the world that awaits them.

Market analysis and surveillance

You and your students will be able to monitor markets in real time, as well as the news that's impacting them. Use powerful data visualization tools that surface the information you care about, with as much depth as you want. Our tools allow you to see the full spectrum of critical data, from macro breadth and sentiment indicators to intraday tick charts – and every other chart in between.

Student Managed Investment Funds (SMIFs)

The Bloomberg Terminal is home to the Student Managed Investment Fund (SMIF), idea generation, portfolio monitoring and analysis. Use the Terminal to build portfolios, benchmark fund performance, conduct portfolio attribution analysis, calculate alpha, tracking error, value at risk and more."

(<https://www.bloomberg.com/professional/expertise/the-terminal-on-campus/>)