FIN4761C Seminars in Finance:

Applied Portfolio Management Techniques

AY2026/27 Semester 1

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Consultation: By appointment only

Recommended Textbooks:
(1) Benninga, Simon and Tal Mofkadi, 2021, *Financial Modeling* (5th Edition), MIT Press **(FM5)**.
(2) CFA Institute, 2021, *Portfolio Management in Practice (Volume 1) – Investment Management*, John Wiley & Sons.
(3) Elton, Edwin, Martin Gruber and Stephen Brown, Modern Portfolio Theory and Investment Analysis (9th Edition), John Wiley & Sons

The textbooks will be supplemented by academic papers and industry research articles in portfolio management.

It is strongly recommended that course participants with little functional expertise in using Excel for financial modeling, particularly the use of array and matrix functions, acquire FM5. Note that students who already have the 4th edition of the Financial Modeling reference book can continue to use it as the scope is largely the same as that of the 5th edition.

Course Synopsis: This advanced Seminar in Finance module will serve as a comprehensive real-world examination of the quantitative techniques available and how these might be applied to portfolio management in the investment management industry. Major topics covered include exploring various quantitative tools and models for

- estimating expected returns,
- modeling risks,
- portfolio construction & management,
- style analysis & benchmarking, and
- strategic & tactical asset allocation.

This course is suitable for students interested in a career in security analysis or portfolio management.

Pre-requisite: FIN3102 Investment Analysis and Portfolio Management

Class Attendance: It is important that students endeavour to attend every class, especially the first three sessions when the foundational “building blocks” are reviewed. Based on experience, students who miss two or more of the early class sessions find it very difficult to catch up subsequently.

Assessment:

Class Participation	**10%**
Mid-term Test	**20%**
Final Test	**20%**
Assignments	**20%**
Project	**30%**
Total	**100%**

The Mid-Term Test and Final Test are scheduled during class hours on **28 September 2026** and **2 November 2026** respectively. Group Project Presentations are scheduled on **14 November 2026 (Saturday) at a time to be determined**. Students should not register for this course if they are unable to be present for these important course assessments.

Schedule and Outline:

Week	Date	Topic
1	10-Aug	Portfolio Management - Overview
2	17-Aug	Mean-Variance Portfolio Theory
3	24-Aug	Efficient Portfolios and the Efficient Frontier
4	31-Aug	Calculating the Variance-Covariance Matrix
5	7-Sep	The Black-Litterman Approach to Portfolio Optimization
6	14-Sep	**Assignment Presentations**
	21-Sep	***Recess***
7	28-Sep	**Mid-Term Test**
8	5-Oct	Private Wealth Management
9	12-Oct	Equity Portfolio Management
10	19-Oct	Passive & Active Investing
11	26-Oct	Performance Evaluation
12	2-Nov	**Final Test**
13	**14 Nov (Sat)**	**Project Presentations**

Academic Honesty & Plagiarism

Academic integrity and honesty is essential for the pursuit and acquisition of knowledge. The University and School expect every student to uphold academic integrity & honesty at all times. Academic dishonesty is any misrepresentation with the intent to deceive, or failure to acknowledge the source, or falsification of information, or inaccuracy of statements, or cheating at examinations/tests, or inappropriate use of resources.

Plagiarism is 'the practice of taking someone else's work or ideas and passing them off as one's own' (The New Oxford Dictionary of English). The University and School will not condone plagiarism. Students should adopt this rule - You have the obligation to make clear to the assessor which is your own work, and which is the work of others. Otherwise, your assessor is entitled to assume that everything being presented for assessment is being presented as entirely your own work. This is a minimum standard. **In case of any doubts, you should consult your instructor.**

Additional guidance is available at:
http://www.nus.edu.sg/registrar/adminpolicy/acceptance.html#NUSCodeofStudentConduct

Online Module on Plagiarism:
http://emodule.nus.edu.sg/ac/