UNSW Course Outline

FINS5517 Applied Portfolio Management and Modelling - 2024

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General Course Information

Course Code : FINS5517
Year : 2024
Term : Term 2
Teaching Period : T2
Is a multi-term course? : No
Faculty : UNSW Business School
Academic Unit : School of Banking and Finance
Delivery Mode : In Person
Delivery Format : Standard
Delivery Location : Kensington
Campus : Sydney
Study Level : Postgraduate
Units of Credit : 6

Useful Links

Handbook Class Timetable

Course Details & Outcomes

Course Description

Provides a foundation for analysis of portfolios: the dynamic selection of securities and management of funds. The course covers a wide range of financial models in the areas of investment analysis, portfolio theory, portfolio risk management, and investment style analysis.

Course Aims

This course aims to help students understand various considerations when constructing portfolios of equity securities using established investment theories. It covers the essential analytical and quantitative tools that are necessary for funds management. It shows how to carry out the computations and simulations needed to implement commonly used models in funds management. The course covers a wide range of financial models in the areas of investment analysis, portfolio theory, and investment style analysis. The student should also be able to critically analyse the limitations of these approaches and the constructed portfolios.

Portfolio Theory and Portfolio Management, by necessity, are very mathematical. A solid mathematics background, including basic econometric methods, is very desirable. The co-requisite subject is FINS5513. It is assumed that students can use either standard spreadsheet packages (e.g. Word and Excel) or some advanced statistics software (e.g. MATLAB or SAS).

Students with a non-finance background should undertake this course after FINS5513 or an equivalent investments course. It is the basis for and should be undertaken prior to undertaking more advanced Funds Management courses.

Course Learning Outcomes

Course Learning Outcomes	Program learning outcomes
CLO1 : Explain the assumptions of standard models of portfolio management.	• PLO1 : Business Knowledge • PLO2 : Problem Solving
CLO2 : Build and analyse investment portfolios.	• PLO1 : Business Knowledge • PLO2 : Problem Solving
CLO3 : Gain an understanding of the effects of different portfolio management strategies over time.	• PLO1 : Business Knowledge • PLO2 : Problem Solving
CLO4 : Use the standard models of finance theory to interpret and analyse real problems in portfolio management.	• PLO1 : Business Knowledge • PLO2 : Problem Solving
CLO5 : Implement dynamic portfolio insurance trading strategies.	• PLO1 : Business Knowledge • PLO2 : Problem Solving • PLO3 : Business Communication
CLO6 : Construct written work that is logically and professionally presented.	• PLO1 : Research Excellence • PLO1 : Business Knowledge • PLO3 : Business Communication
CLO7 : Work collaboratively to complete a task.	• PLO2 : Problem Solving • PLO4 : Teamwork • PLO7 : Leadership Development

Course Learning Outcomes	Assessment Item
CLO1 : Explain the assumptions of standard models of portfolio management.	• Continous Assessment • Group Assignment • Final Examination
CLO2 : Build and analyse investment portfolios.	• Continous Assessment • Group Assignment • Final Examination
CLO3 : Gain an understanding of the effects of different portfolio management strategies over time.	• Continous Assessment • Group Assignment • Final Examination
CLO4 : Use the standard models of finance theory to interpret and analyse real problems in portfolio management.	• Continous Assessment • Group Assignment • Final Examination
CLO5 : Implement dynamic portfolio insurance trading strategies.	• Continous Assessment • Group Assignment • Final Examination
CLO6 : Construct written work that is logically and professionally presented.	• Group Assignment
CLO7 : Work collaboratively to complete a task.	• Group Assignment

Learning and Teaching Technologies

Moodle - Learning Management System

Assessments

Assessment Structure

Assessment Item	Weight	Relevant Dates	Program learning outcomes
Continous Assessment Assessment Format: Individual Short Extension: Yes (3 days)	30%	Start Date: See Detailed assessment description Due Date: See Detailed assessment description	• PLO1 : Business Knowledge • PLO3 : Business Communication • PLO2 : Problem Solving
Group Assignment Assessment Format: Group Short Extension: Yes (3 days)	30%	Start Date: See Detailed assessment description Due Date: See Detailed assessment description	• PLO1 : Business Knowledge • PLO2 : Problem Solving • PLO4 : Teamwork • PLO1 : Research Excellence • PLO3 : Leadership
Final Examination Assessment Format: Individual	40%	Start Date: See Detailed assessment description Due Date: See Detailed assessment description	• PLO1 : Business Knowledge • PLO3 : Business Communication • PLO2 : Problem Solving • PLO2 : Academic Excellence

Assessment Details

Continous Assessment

Assessment Overview

Continuous assessment mark will consider lecture attendance, participation in discussion within classes and on the Moodle forum, and quizzes. More details will be announced on the course website and in class.

PLO1 PLO2

Course Learning Outcomes

- CLO1 : Explain the assumptions of standard models of portfolio management.
- CLO2 : Build and analyse investment portfolios.
- CLO3 : Gain an understanding of the effects of different portfolio management strategies over time.
- CLO4 : Use the standard models of finance theory to interpret and analyse real problems in portfolio management.
- CLO5 : Implement dynamic portfolio insurance trading strategies.

Detailed Assessment Description

Detailed Assessment Description

Weight	Assessment Name	Assessment Due Date / Timing
15%	Class Participation	Ongoing, Weeks 1-10
15%	Quizzes	Weeks 4, 7 and 10

Class Participation 15%

More details will be announced on the course website and in class.

Quizzes 15%

Quizzes test materials covered in the textbook, lecture notes, lectures, problem sets and other assigned readings. These are take-home online tests. More details will be announced on the course website and in class.

Submission notes

See Detailed assessment description

Assignment submission Turnitin type

Not Applicable

Submission notes

See Detailed assessment description

Assignment submission Turnitin type

Not Applicable

Group Assignment

Assessment Overview

The goal of the group assignment is to allow students to apply what they have learned in the course in a practical setting. More details will be announced on the course website and in class.

PLO1 PLO2 PLO3 PLO4

Course Learning Outcomes

- CLO1 : Explain the assumptions of standard models of portfolio management.
- CLO2 : Build and analyse investment portfolios.
- CLO3 : Gain an understanding of the effects of different portfolio management strategies over time.
- CLO4 : Use the standard models of finance theory to interpret and analyse real problems in portfolio management.
- CLO5 : Implement dynamic portfolio insurance trading strategies.
- CLO6 : Construct written work that is logically and professionally presented.
- CLO7 : Work collaboratively to complete a task.

Detailed Assessment Description

Course Learning Outcomes

- CLO1 : Explain the assumptions of standard models of portfolio management.
- CLO2 : Build and analyse investment portfolios.
- CLO3 : Gain an understanding of the effects of different portfolio management strategies over time.
- CLO4 : Use the standard models of finance theory to interpret and analyse real problems in portfolio management.
- CLO5 : Implement dynamic portfolio insurance trading strategies.
- CLO6 : Construct written work that is logically and professionally presented.
- CLO7 : Work collaboratively to complete a task.

Detailed Assessment Description

Weight	Assessment Name	Assessment Due Date / Timing
30%	Group Assignment	Week 10

Group Assignment 30%

The goal of the group assignment is to allow students to apply what they have learned in the course in a practical setting. More details will be announced on the course website and in class.

Submission notes

See Detailed assessment description

Assignment submission Turnitin type

This assignment is submitted on Moodle through Turnitin and students can see Turnitin similarity reports.

Submission notes

See Detailed assessment description

Assignment submission Turnitin type

This is not a Turnitin assignment

Final Examination

Assessment Overview

The final examination tests material covered in the textbook, lecture notes, lectures, problem sets and other assigned readings during weeks 1-10. This is an off-campus open-book online test. More details will be announced on the course website and in class.

PLO1 PLO2

Course Learning Outcomes

- CLO1 : Explain the assumptions of standard models of portfolio management.
- CLO2 : Build and analyse investment portfolios.
- CLO3 : Gain an understanding of the effects of different portfolio management strategies over time.
- CLO4 : Use the standard models of finance theory to interpret and analyse real problems in portfolio management.
- CLO5 : Implement dynamic portfolio insurance trading strategies.

Detailed Assessment Description

Course Learning Outcomes

- CLO1 : Explain the assumptions of standard models of portfolio management.
- CLO2 : Build and analyse investment portfolios.
- CLO3 : Gain an understanding of the effects of different portfolio management strategies over time.
- CLO4 : Use the standard models of finance theory to interpret and analyse real problems in portfolio management.
- CLO5 : Implement dynamic portfolio insurance trading strategies.

Detailed Assessment Description

Weight	Assessment Name	Assessment Due Date / Timing
40%	Final Examination	University Exam Period

Please note: No short extensions for the Final Exam are permitted. Please refer to the special

considerations policy for more informaiton.

Submission notes

See Detailed assessment description

Assignment submission Turnitin type

Not Applicable

General Assessment Information

As a student at UNSW you are expected to display academic integrity in your work and interactions. Where a student breaches the UNSW Student Code with respect to academic integrity, the University may take disciplinary action under the Student Misconduct Procedure. To assure academic integrity, you may be required to demonstrate reasoning, research and the process of constructing work submitted for assessment.

To assist you in understanding what academic integrity means, and how to ensure that you do comply with the UNSW Student Code, it is strongly recommended that you complete the Working with Academic Integrity module before submitting your first assessment task. It is a free, online self-paced Moodle module that should take about one hour to complete.

Grading Basis

Standard

Requirements to pass course

In order to pass this course students must:

- Achieve a composite mark of at least 50 out of 100
- Engage actively in course learning activities and attempt all assessment requirements
- Meet any additional requirements specified in the assessment details

Course Schedule

Teaching Week/Module	Activity Type	Content
Week 1 : 27 May - 2 June	Lecture	The Asset Management Industry • MySuper • Asset classes and Benchmarks • Types of Funds • Fund Performance Objectives
Week 2 : 3 June - 9 June	Lecture	Active Management • Empirical failures of the CAPM • Alpha, systematic risk, and residual risk • Active share of a fund
Week 3 : 10 June - 16 June	Lecture	Active Management • Optimal Active Portfolio • Information ratio optimization in excel • Active share of a fund
Week 4 : 17 June - 23 June	Lecture	Passive index investing • Market portfolio and value-weighted portfolio • The Capital Asset Pricing Model • Consensus expected returns
	Assessment	Quiz 1 due. Refer to Moodle for details
Week 5 : 24 June - 30 June	Lecture	Quantitative and Systematic investing • Factor based investing • Arbitrage Pricing Theory
Week 6 : 1 July - 7 July	Lecture	Strategic Asset Allocation • Consensus Expected Returns and Active Views • Risk, Variance, and Covariances • Combining multiple risky assets
Week 7 : 8 July - 14 July	Lecture	Tactical portfolio management strategies using futures • Forecasting returns and risk • Market timing • Factor timing • Macro and Country rotation
	Assessment	Quiz 2 due. Refer to Moodle for details
Week 8 : 15 July - 21 July	Lecture	Downside Risk Protection and Portfolio Insurance • Dynamic Asset Allocation strategies • Constructing a synthetic put on portfolio
Week 9 : 22 July - 28 July	Lecture	Challenges in Practical Portfolio Choice • Out-of-sample forecasting • Trading costs • Capacity • Client constraints
Week 10 : 29 July - 4 August	Lecture	Course Review • Core concepts • Industry applications • Final exam preparation suggestions
	Assessment	Group Assignment Due. Refer to Moodle for submission details.
	Assessment	Quiz 3 due. Refer to Moodle for details

Attendance Requirements

Students are strongly encouraged to attend all classes and review lecture recordings.

Course Resources

Prescribed Resources

Subscribed textbook:

- Bodie, Z., A. Kane and A. Marcus, Investments, 12th edition, Irwin McGraw-Hill

The website for this course is on Moodle at:

http://moodle.telt.unsw.edu.au

Students are expected to log in to the course website regularly to download course materials, read course announcements, and participate in the discussion board.

Course Evaluation and Development

Feedback is regularly sought from students and continual improvements are made based on this feedback. At the end of this course, you will be asked to complete the myExperience survey, which provides a key source of student evaluative feedback. Your input into this quality enhancement process is extremely valuable in assisting us to meet the needs of our students and provide an effective and enriching learning experience. The results of all surveys are carefully considered and do lead to action towards enhancing educational quality.

Staff Details

Position	Name	Email	Location	Phone	Availability	Equitable Learning Services Contact	Primary Contact
Convenor	Christoph Meier					No	Yes

Other Useful Information

Academic Information

COURSE POLICIES AND SUPPORT

The Business School expects that you are familiar with the contents of this course outline and the UNSW and Business School learning expectations, rules, policies and support services as listed below:

- Program Learning Outcomes
- Academic Integrity and Plagiarism
- Student Responsibilities and Conduct
- Special Consideration
- Protocol for Viewing Final Exam Scripts
- Student Learning Support Services

Further information is provided on the key policies and support page.

Students may not circulate or post online any course materials such as handouts, exams, syllabi or similar resources from their courses without the written permission of their instructor.

STUDENT LEARNING OUTCOMES

The Course Learning Outcomes (CLOs) – under the Outcomes tab – are what you should be able to demonstrate by the end of this course, if you participate fully in learning activities and successfully complete the assessment items.

CLOs also contribute to your achievement of the Program Learning Outcomes (PLOs), which are developed across the duration of a program. PLOs are, in turn, directly linked to UNSW graduate capabilities. More information on Coursework PLOs is available on the key policies and support page. For PG Research PLOs, including MPDBS, please refer to the UNSW HDR Learning Outcomes.

Academic Honesty and Plagarism

As a student at UNSW you are expected to display academic integrity in your work and interactions. Where a student breaches the UNSW Student Code with respect to academic integrity, the University may take disciplinary action under the Student Misconduct Procedure. To assure academic integrity, you may be required to demonstrate reasoning, research and the process of constructing work submitted for assessment.

To assist you in understanding what academic integrity means, and how to ensure that you do comply with the UNSW Student Code, it is strongly recommended that you complete the Working with Academic Integrity module before submitting your first assessment task. It is a free, online self-paced Moodle module that should take about one hour to complete.

Submission of Assessment Tasks

SPECIAL CONSIDERATION

You can apply for special consideration when illness or other circumstances beyond your control interfere with your performance in a specific assessment task or tasks, including online exams. Students studying remotely who have exams scheduled between 10pm and 7am local time, are also able to apply for special consideration to sit a supplementary exam at a time outside of these hours.

Special consideration is primarily intended to provide you with an extra opportunity to demonstrate the level of performance of which you are capable. To apply, and for further information, see Special Consideration on the UNSW Current Students page.

Special consideration applications will be assessed centrally by the Case Review Team, who will update the online application with the outcome and add any relevant comments. The change to the status of the application immediately sends an email to the student and to the assessor with the outcome of the application.

Please note the following:

1. Applications can only be made through Online Services in myUNSW (see the UNSW Current Students page). Applications will not be accepted by teaching staff. The lecturer-in-charge/ course coordinator will be automatically notified when your application is processed.
2. Applying for special consideration does not automatically mean that you will be granted a supplementary exam or other concession.
3. If you experience illness or misadventure in the lead up to an exam or assessment, you must submit an application for special consideration, either prior to the examination taking place, or prior to the assessment submission deadline, except where illness or misadventure prevent you from doing so.
4. If your circumstances stop you from applying before your exam or assessment due date, you must apply within 3 working days of the assessment or the period covered by your supporting documentation.
5. Under the UNSW Fit To Sit/Submit rule, if you sit the exam/submit an assignment, you are declaring yourself well enough to do so and are cannot subsequently apply for special consideration.
6. If you become unwell on the day of – or during – an exam, you must stop working on your exam, advise your course coordinator or tutor and provide a medical certificate dated within 24 hours of the exam, with your special consideration application. For online exams, you must contact your course coordinator or tutor immediately via email, Moodle or chat and advise them you are unwell and submit screenshots of your conversation along with your medical certificate and application.
7. Special consideration requests do not allow the awarding of additional marks to students.

Further information on Business School policy and procedure can be found under “Special Consideration” on the key policies and support page.

LATE SUBMISSION PENALTIES

For assessments other than examinations, late submission will incur a penalty of 5% per day or part thereof (including weekends) from the due date and time. An assessment will not be accepted after 5 days (120 hours) of the original deadline unless special consideration has been approved. An assignment is considered late if the requested format, such as hard copy or electronic copy, has not been submitted on time or where the ‘wrong’ assignment has been submitted.

For assessments which account for 10% or less of the overall course grade, and where answers are immediately discussed or debriefed, the LIC may stipulate a different penalty. Details of such late penalties will be available on the course Moodle page.

FEEDBACK ON YOUR ASSESSMENT TASK PERFORMANCE

Feedback on student performance from formative and summative assessment tasks will be provided to students in a timely manner. Assessment tasks completed within the teaching period of a course, other than a final assessment, will be assessed and students provided with feedback, with or without a provisional result, within 10 working days of submission, under normal circumstances. Feedback on continuous assessment tasks (e.g. laboratory and studio-based, workplace-based, weekly quizzes) will be provided prior to the midpoint of the course.

Faculty-specific Information

PROTOCOL FOR VIEWING FINAL EXAM SCRIPTS

UNSW students have the right to view their final exam scripts, subject to a small number of very specific exemptions. The UNSW Business School has set a protocol under which students may view their final exam script. Individual schools within the Faculty may also set up additional local processes for viewing final exam scripts, so it is important that you check with your School.

If you are completing courses from the following schools, please note the additional school-specific information:

- Students in the **School of Accounting, Auditing & Taxation** who wish to view their final examination script should also refer to this page.

- Students in the **School of Banking & Finance** should also refer to this page.
- Students in the **School of Information Systems & Technology Management** should also refer to this page.

COURSE EVALUATION AND DEVELOPMENT

Feedback is regularly sought from students and continual improvements are made based on this feedback. At the end of this course, you will be asked to complete the myExperience survey, which provides a key source of student evaluative feedback. Your input into this quality enhancement process is extremely valuable in assisting us to meet the needs of our students and provide an effective and enriching learning experience. The results of all surveys are carefully considered and do lead to action towards enhancing educational quality.

QUALITY ASSURANCE

The Business School is actively monitoring student learning and quality of the student experience in all its programs. A random selection of completed assessment tasks may be used for quality assurance, such as to determine the extent to which program learning goals are being achieved. The information is required for accreditation purposes, and aggregated findings will be used to inform changes aimed at improving the quality of Business School programs. All material used for such processes will be treated as confidential.

TEACHING TIMES AND LOCATIONS

Please note that teaching times and locations are subject to change. Students are strongly advised to refer to the Class Timetable website for the most up-to-date teaching times and locations.