THE UNIVERSITY OF AUCKLAND
Te Whare Wānanga o Tāmaki Makaurau
NEW ZEALAND

BUSINESS SCHOOL

Course Outline 2017
FINANCE 361: MODERN INVESTMENT THEORY AND MANAGEMENT (15 POINTS)

Semester 2 (1175)

Course Prescription

Portfolio and asset pricing theory, behavioural finance, limits to arbitrage, pricing and valuation of fixed income and equity securities.

Programme and Course Advice

Prerequisites: FINANCE 261 and MATHS 208 or 250

IMPORTANT: The way in which the course is delivered differs between the first semester and the second semester. Please read the "Learning and Teaching" section on page 3 carefully.

Goals of the Course

To provide you with an advanced understanding of how financial markets function and how assets are priced and traded. This paper covers fundamental concepts related to the portfolio decisions of individual and institutional investors. Using the concept of risk-return trade-off as a unifying theme, it discusses the techniques and implications of efficient portfolio diversification and the allocation of assets among different securities. The valuation of equity and fixed income securities are covered in some depth.

Learning Outcomes

By the end of this course it is expected that the student will be able to:

1. Implement the mean-variance mathematics of portfolio optimization.
2. Understand and distinguish between concepts of risk underlying different models of asset returns such as CAPM, APT, benchmark factor models etc.
3. Understand the impact of behavioural biases and limits to arbitrage on market efficiency.
4. Value equity and fixed income securities using both fundamental and relative valuation approaches.
5. Be able to deal with real world data in order to solve practical investment problems.

Course Outline (*Note: This course outline is tentative and is subject to change.)*

Date	Time	Location	Topic	Description
Mon, 24 Jul 2017	1pm-3pm	MLT2	1	Introduction
			2	Investors, assets and markets
Fri, 28 Jul 2017	1pm-3pm	MLT2		Workshop introduction
Mon, 31 Jul 2017	1pm-3pm	MLT2	3	Real-world frictions, investment styles
			4	Risk and return, expectations, pricing
Fri, 4 Aug 2017	1pm-3pm	MLT2		Topic 3 and 4 workshop
Mon, 7 Aug 2017	1pm-3pm	MLT2	5	Markowitz mean-variance analysis
			6	Black-Litterman
Fri, 11 Aug 2017	1pm-3pm	MLT2		Topic 5 and 6 workshop
Mon, 14 Aug 2017	1pm-3pm	MLT2	7	OLS
			8	CAPM, APT and factor models
Fri, 18 Aug 2017	1pm-3pm	MLT2		Topic 7 and 8 workshop
Mon, 21 Aug 2017	1pm-3pm	MLT2	9	Return predictability
			10	Behavioural finance and limits to arbitrage
Fri, 25 Aug 2017	1pm-3pm	MLT2		Topic 9 and 10 workshop
Mon, 28 Aug 2017	1pm-3pm	MLT2		Mid term review
Fri, 1 Sep 2017	1pm-3pm	**[TBC]**		**MID TERM TEST** (No workshop)
				MID TERM BREAK
Mon, 18 Sep 2017	1pm-3pm	MLT2	11	Introduction, risk free rate, market risk premium
			12	Cost of capital (Equity, Debt and WACC)
Fri, 22 Sep 2017	1pm-3pm	MLT2		Topic 11 and 12 workshop
Mon, 25 Sep 2017	1pm-3pm	MLT2	13	Cash flow, growth, terminal value and dividend models
			14	FCFE and FCFF valuation
Fri, 29 Sep 2017	1pm-3pm	MLT2		Topic 13 and 14 workshop
Mon, 2 Oct 2017	1pm-3pm	MLT2	15	Review of bond prices and yields
			16	Term structure of interest rates.
Fri, 6 Oct 2017	1pm-3pm	MLT2		Topic 15 and 16 workshop
Mon, 9 Oct 2017	1pm-3pm	MLT2	17	Bond portfolios and risk management
			18	Structured products and Securitisation
Fri, 13 Oct 2017	1pm-3pm	MLT2		Topic 17 and 18 workshop
Mon, 16 Oct 2017	1pm-3pm	MLT2	19	The Financial Crisis (NOT EXAMINABLE)
			20	Exam review
Fri, 20 Oct 2017	1pm-3pm	MLT2		(No workshop)
Mon, 23 Oct 2017	1pm-3pm	[n/a]		[Labour day]
Fri, 27 Oct 2017	1pm-3pm	[n/a]		[Contingency]

Learning and Teaching

IMPORTANT: The way in which the course is delivered differs between the first semester and the second semester. You should read the following carefully and then decide whether you would like to take this course in the first semester or the second semester.

Semester 1 course delivery approach:

Teaching consists of weekly lectures (covering 2 topics each), delivered in class by the lecturer. Lectures will be recorded and will be made available on-line (although do be aware that the recording technology may occasionally fail). This is augmented by weekly workshops in which students attempt questions in class, along with explanations by the tutor. Workshops are recorded and will be made available on-line.

Semester 2 course delivery approach:

Weekly lectures and workshops, as recorded during the first semester, will be made available to students on-line at the start of the course. Class time will be structured as informal question-and-answers sessions. The first weekly session will be hosted by the lecturer and will focus on conceptual questions related to the material covered in the course. The second weekly session will be hosted by the tutor and will focus on issues encountered in solving workshop problems.

	Semester 1	**Semester 2**
Lectures presented by lecturer in class	Yes	No
Workshops presented by tutor in class	Yes	No
Recorded lectures available online	Yes	Yes
Recorded workshops available online	Yes	Yes
Lecture question and answer sessions in class*	No	Yes
Workshop question and answer sessions in class*	No	Yes
Lecture notes available on-line	Yes	Yes
Workshop questions available on-line	Yes	Yes
* Question and answer sessions are *not* recorded.		

The course content and assessment remains the same for both semesters. In both semesters attendance at class is optional. However, carefully reading the lecture notes and required readings are mandatory. Listening to lectures (either in class or online) and working though problem sets yourself are also mandatory. (Mandatory means it is part of the course and you should do it. But we won't police it.)

Bottom-line: Choose semester 1 if you prefer a traditional class-room based experience where the lecturer and tutor do the talking. Choose semester 2 if you like the freedom to structure your time and learning as it suits you and if you would like to have the occasional chat with the lecturer and/or tutor.

Class times and locations:

First class (Lectures): **1pm to 3pm on Mondays in MLT 2**
Second class (Workshops): **1pm to 3pm on Fridays in MLT 2**

Teaching Staff

Lecturer: Dr Paul Geertsema

Office hours: 11am to 1pm on Mondays *(appointment needed)*
Office: OGGB 575
Email: p.geertsema@auckland.ac.nz

Tutor: Diamond Wang

Help Desk: Location TBC
Help Desk Hours: TBC *(appointment needed)*
Email: diamond.wang@auckland.ac.nz

Learning Resources

The **required textbook** for this paper is:

Investments, by Bodie, Kane and Marcus, 10th edition, Prentice Hall, Inc.

You must have a textbook. It is acceptable to use the 9th, 8th, 7th, or even the 6th edition.

Also highly recommended is:

Investment Valuation: Tools and techniques for determining the value of any asset, by Aswath Damodaran, 3rd edition, John Wiley & Sons Inc.

We will use this text for the equity valuation part of the course.

In addition to the material in the textbooks, I will also make available additional readings on on-line. *All additional reading material is examinable unless explicitly indicated otherwise.*

Assessment

The assignments, the mid-term test and the final exam assess your ability to demonstrate your understanding of the learning outcomes. Your final grade is composed of the following weightings:

Assignment 1	5%
Assignment 2	15%
Mid-term Test	20%
Final Exam	60%

"Plussage" applies to the mid-term test. If your grade in the final exam is higher than your grade in the mid-term test, your final exam grade will replace your mid-term test grade.

Overall_course_grade = (MAX(Midterm_test, Final_exam) * 20%) +
(Final_exam * 60%) + (Assignment_1 * 5%) + (Assignment _2 * 15%)

This also means the mid-term test is optional (but highly recommended). If you do not sit the mid-term test, your final exam grade will automatically become your mid-term grade. There won't be a make-up mid-term test in case you cannot sit the mid-term test.

Both the mid-term test and the final exam will be <u>OPEN BOOK</u>. This means you can bring any written material to the test and the exam, including text books and lecture notes.

Both the mid-term test and the final exam are <u>RESTRICTED CALCULATOR</u>. You may only use a standard scientific calculator. An example of a complying calculator is the CASIO FX-82 (or similar).

Students must normally obtain a passing grade in the final exam in order to pass the course.

Learning Outcome	Assignment 1	Assignment 2	Mid Term Test	Final Exam
1	x		x	x
2			x	x
3			x	x
4		x	x	x
5	x	x		

Assignments should be submitted in the manner detailed in the assignment; it is anticipated that we will use an on-line submission method. It is your responsibility to ensure that you submit assignments on time.

Inclusive Learning

Students are urged to discuss privately any impairment-related requirements face- to-face and/or in written form with the course convenor/lecturer and/or tutor.

Student Feedback

Students may be asked to complete evaluations (course, teaching, tutoring) at the end of the course.

But why wait? If you have a concern, feel free to discuss it with the lecturer, tutor or class representative. We can only do something about a problem if we know about it!

Plagiarism/Cheating

You should only hand in your own work in assignments. Where you use material sourced from elsewhere (even if "re-worded"), you should cite it using the APA convention. Do ensure that you are familiar with the Student Academic Conduct Statute. (See https://cdn.auckland.ac.nz/assets/central/about/the-university/how-the-university-works/policy-and-administration/Supervision/student-academic-conduct-statute.pdf). Note that we obliged to follow the process set out in the statute in each and every case of academic misconduct we encounter. Since this is a very cumbersome and bureaucratic process, we would prefer it we did not have the occasion to follow it. Hopefully you feel the same way. If in doubt – ask! You can start here: https://www.auckland.ac.nz/en/about/learning-and-teaching/policies-guidelines-and-procedures/academic-integrity-info-for-students/about-academic-integrity.html.