

THE UNIVERSITY OF NEW SOUTH WALES
SCHOOL OF BANKING & FINANCE

FINS5541 ADVANCED INVESTMENT AND FUNDS MANAGEMENT

Subject Outline for Session 2, 2003

OBJECTIVE

This course provides students with a solid understanding of the environment and decision processes in which investment analysis and portfolio management occurs. The focus is on the ability to understand and apply (in problem context) sophisticated investment techniques used in the industry. Topics include: asset allocation decisions, domestic versus international fund components, integration of equity, bond and cash management, constructing discrete time interest rate lattice, managing interest rate risks; It also covers the essential aspects of foreign exchange rate risk, issues of pension funds management, investing in real assets and hedge funds.

This subject is both theoretical and practical; the emphasis will be on **problem solving**.

LECTURES

Monday	18:00 – 21:00	MACAULEY THT
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INSTRUCTORS

	Office	Telephone	E-mail
Ramaprasad Bhar	QUAD 3056A	9385-4930	R.Bhar@unsw.edu.au

Consultation hours to be announced. **E-mail is the preferred method of communication.**

COURSE WEB PAGE

For enrolled students only - link to your course material:

<http://banking.web.unsw.edu.au/curr/index.shtml>

ASSESSMENT

There are two parts of the assessment process.

Mid-session examination (Week 7)	40%
Final examination	60%

The mid-session examination will cover the materials in the first five lectures and the final examination will cover all the lectures.

The mid-session exam will be held in Week 7 during normal lecture hours. If applicable, students should notify their employers of the requirement to attend examination. Failure to show up at the mid-session examination does not automatically lead to reassessment.

The final examination will be held during the formal examination period. Both the mid-session and the final examination will be closed book.

BOOKS AND REFERENCES

There is no fixed textbook for this course. However, much of the course relies on materials from the books by Luenberger and Arditti. The relevant lecture notes and related materials will be available from the course web page. Several journal articles will be required as indicated later. **Copies of these articles may be obtained from the hard copy journals in the library or from the electronic sources provided by the library.**

Arditti, F. D. (1996), Derivatives, Harvard Business School Press. (AD)

Luenberger, D. G. (1997), Investment Science, Oxford University Press. (DL)

Additional notes, exercises and other relevant material may be distributed in the class or made available via the course web page for enrolled students.

TEACHING METHOD

The primary sources for teaching in this subject are the lecture notes and the journal articles. The instructors will explain the relevant concepts in the class and where appropriate will use exercises/problems to illustrate the points. The copies of lecture notes will be available through the course web page for enrolled students. Depending on the topic being covered any relevant current issues may also be discussed in the class.

Students are strongly encouraged to read ahead the topics before attending the lectures. This will help derive the maximum benefit from the lectures. This subject is very analytical and there are many new concepts to be understood. It will be difficult to grasp all the underlying principles without preparation before attending the class.

The first half of this course, in particular, requires use of calculus. Instructors will assume that the students have such knowledge. If any student(s) feel that they should revise these concepts, then they should do so prior to attending the lectures to get the most out the lectures.

Some computer laboratory classes have also been included in the program that will reinforce some of the modeling techniques discussed in this course. The students will derive practical benefit from this approach.

Finally, it should be realized that attendance in class lectures is extremely important. If you miss a lecture, it is your responsibility to prepare the topic yourself. You cannot use the consultation time to have a “private tuition” for the missed lecture.

We would like to draw students’ attention to the following statement by Leland Stanford (1891), the founder of Stanford University:

“Students, all that we can do for you is to place the opportunities within your reach; it rests with you to grasp and improve them.”

TEST/EXAMINATION FORMAT

The mid-session test will focus on problem solving skill as well as analysis of relevant issues covered during the lectures. Such problems will be similar in nature to those discussed in the class. The final examination will focus, in addition to the problem solving skill, on analysis of issues discussed in later part of the lecture schedule. The instructor is not in a position to hand out past test/examination papers.

COMMUNICATING WITH THE INSTRUCTOR (S)

The preferred communication method with the instructor is via the e-mail. This is the quickest way of getting short queries answered. However, this should not be taken as a 24-hour answering service. The instructor will definitely reply to emails once a week and endeavor to respond twice a week.

E-mails must not be thought of as a substitute of class lectures. In an analytical subject like this one it is extremely difficult to convey mathematical notations and formulas via standard e-mails.

There is another important item in this regard. All e-mails must identify the student with full name and student number. Without this the instructor may refuse to reply to the email, however, urgent it is. It is not the instructor's role to decipher the funny names normally used in e-mail accounts with Yahoo, or Hotmail etc.

Finally, e-mail enquiry should not be sent to the instructor for trivial matters. Most information of general nature is available on the extensive web sites maintained by the faculty.

SOURCE OF OTHER RELEVANT INFORMATION

Essential Information for current students regarding special consideration, academic misconduct, examination results etc. are available via:

http://www.fce.unsw.edu.au/current_students/index.shtml

TEACHING WEEKS AND CALENDAR DATES

Week No.	1	2	3	4	5	6	7
Start Date	28 Jul	4 Aug	11 Aug	18 Aug	25 Aug	1 Sep	8 Sep

Week No.	8	9	10	11	12	13	14
Start Date	15 Sep	22 Sep	6 Oct*	13 Oct	20 Oct	27 Oct	3 Nov

* Possible public holiday

LECTURE PROGRAM

Week 1: Introduction

Process of optimization; utility theory; tracking error.

Article(s):

1. Clarke, R. G., Krase, S. and Statman, M. (1994), Tracking Errors, Regret, and Tactical Asset Allocation, *The Journal of Portfolio Management*, Spring, 16-24.

Week 2: Methodological Issues in Emerging Market and Real Estate Investing

Mean-variance portfolio theory, mean-variance spanning, downside risk.

Article(s):

2. Bekaert, G. and Urias, M. S. (1999), Is There a Free Lunch in Emerging Market Equities? *The Journal of Portfolio Management*, Spring, 83-95.
3. Sivitanides, P. S. (1998), A Downside-Risk Approach to Real Estate Portfolio Structuring, *Journal of Real Estate Portfolio Management*, Vol. 4 (2), 159-168.
4. Stevenson, S. (2001), Emerging Markets, Downside Risk and the Asset Allocation Decision, *Emerging Markets Review*, Vol. 2, 50-66.

Week 3: Fixed Income 1

Basic theory of interest; fixed income securities; term structure of interest rates; duration; immunisation.

Week 4: Fixed Income 2

Liability funding strategies; discrete time model of interest rate and valuing interest rate sensitive securities.

Week 5, 6: Fixed Income 3

Discrete time model of interest rate (continued); Mortgage derivatives; Prepayment rates and models; CMOs, STRIPs.

Article(s):

5. Hayre, L. S. (1997), Random Error in Prepayment Projections, *The Journal of Fixed Income*, September, 77-84.

Week 7: Mid-session test

Week 8: Real Options and Analysis of Real Investment Opportunities

Introduction to the field of real options and its application to evaluate mining lease.

Week 9: Time Diversification and the Risk of Stock Portfolio in the Long Run

Analysis based on utility and different return generating processes; application of option pricing theory.

Article(s):

6. Kritzman, M. and Rich, D. (1998), Beware of Dogma, The Truth about Time Diversification, *Journal of Portfolio Management*, Summer, 66-77.
7. Bodie, Z. (1995), On the Risk of Stocks in the Long Run, *Financial Analysts Journal*, May-June, 18-22.

Week 10: International Diversification and Exchange Rate Risk

How important is currency risk in internationally diversified equity portfolios, optimal currency hedge versus regret, currency risk in international bond portfolios.

Article(s):

8. Gardner, G. W. and Wuilloud, T. (1995), Currency Risk in International Portfolios: How Satisfying is Optimal Hedging? *The Journal of Portfolio Management*, Spring, 59-67.
9. Solnik, B. (1998), Global Asset Management: To Hedge or Not to Hedge – a Question That Cannot be Ignored, *The Journal of Portfolio Management*, Summer, 43-51.

Week 11: Hedge Funds and Currency Crisis

Hedge Funds, CTAs; Style regression in analysing hedge fund exposures and currency crisis.

Article(s):

10. Brown, S. J., Goetzmann, W. N. and Park, J. M. (2000), Hedge Funds and the Asian Financial Crisis, *The Journal of Portfolio Management*, Summer, 95-101.
11. Fung, W. and Hsieh, D. A. (1997), Empirical characteristics of Dynamic Trading Strategies: The Case of Hedge Funds, *Review of Financial Studies*, Vol. 10, No. 2, 275-302.

Week 12, 13: Computer Laboratory Work

Details of the tasks to be performed will be available at a later date. This will be based on the concepts developed in weeks 4, 5 and 6.

Week 14: Review Discussions