AFIN 818
Investments

Semester 2, 2012

Department of Applied Finance and Actuarial Studies
UNIT OUTLINE AFIN 818 Investments

Year and Semester: 2012, Semester 2
Unit convenor: Dr Ryle Perera
Credit points: 04

Students in this unit should read this unit outline carefully at the start and during the semester. It contains important information about the unit. If anything in it is unclear, please consult one of the teaching staff in the unit.

ABOUT THIS UNIT

- This unit provides an introduction to the analysis of equities, bonds and derivative securities. We consider the economic determinants of value (time value of money, risk and the law of one price), popular theoretical models of valuation as well as the techniques applied by analysts using financial and macroeconomic data.
- We consider the strengths and weaknesses of models and techniques with reference to the results of recent research. Students' are encouraged to learn by doing a major assignment involving judicious application of models and techniques to real data.
- The unit is designed to prepare students for career opportunities in the finance industry, not necessarily limited to the investment discipline. This unit will benefit students preparing for professional examinations (CFA and similar). It also provides a pathway to further study (particularly AFIN839 Portfolio Management) and academic

TEACHING STAFF

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Lecturer : Alan Rai
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CONSULTATION TIMES

Staff-student consultation timetable will be advised in lectures & posted on the iLearn web page.

You are encouraged to seek help from a staff member teaching this unit during their regular consultation hours. In special circumstances, an appointment may be made outside regular consultation hours. Staff will not conduct any consultations by email. You may however phone staff during their consultation hours.

In order to gain access to staff located at levels 1, 2 and 3 of building E4A during their consultation hours please ring the staff member from the phones available in the lobby.

Students experiencing significant difficulties with any topic in the unit must seek assistance immediately.

CLASSES

The weekly classes are 3-hour seminars held at:
- 3-6PM on Tuesdays in C5A 226
- 6-9 PM on Thursdays in E5A 160
- 1-4 PM on Thursday in W6B 325

Please ensure that you attend your class of enrolment.

REQUIRED AND RECOMMENDED TEXTS AND/OR MATERIALS

The text recommended for purchase is:


We will supplement the text with readings from journals and other textbooks as required.

Refer to the unit web page for other useful references and resources.

TECHNOLOGY USED AND REQUIRED

Necessary technology: scientific or business calculator without alphanumeric capabilities, internet access, computer with MS Excel.

UNIT WEB PAGE

- The web page for this unit can be found at: http://ilearn.mq.edu.au
LEARNING OUTCOMES

The specific learning outcomes of this unit can be summarised in terms of the following capabilities.

Upon successful completion of this unit you will:

1. Have gained an understanding of the risks and rewards associated with equities, bonds and basic derivative instruments;

2. Understand how the time value of money, the notion of diversification and the principle of no-arbitrage apply to different classes of investments;

3. Understand the economic principles of valuation based on popular equilibrium pricing models;

4. Have learned to make use of macroeconomic and financial statement information in analysing and valuing investments;

5. Have developed an awareness of the need to consider investment techniques in light of systematic empirical study.

Please note that “understand” implies that you are able to do more than simply define a concept. If you can explain it accurately in your own words with minimal reliance on the exact technical definition, then you are well on the way. If you can provide examples of its valid application, and examples where its application may be suspect or improper then you have understood the concept.

GRADUATE CAPABILITIES

In addition to the discipline-based learning objectives, all academic programs at Macquarie seek to develop the capabilities the University's graduates will need to develop to address the challenges, and to be effective, engaged participants in their world.

This unit contributes to this by developing the following graduate capabilities:

1. Discipline Specific Knowledge and Skills (See “Learning Outcomes”)
2. Critical, Analytical and Integrative Thinking
3. Problem Solving and Research Capability
4. Effective Communication
5. Commitment to Continuous Learning

TEACHING AND LEARNING STRATEGY

The first two hours of each class will be a lecture-style presentation, the third hour an interactive tutorial.
1. You are strongly advised to attempt all assigned tutorial questions before the weekly tutorial class, and before consulting the solutions.

2. Each week you are required to submit your attempt at the questions marked with a star (*). Submit the starred questions only. These mini-assignments must be submitted on time. Your assignment submission record will serve as a record of your attendance. Four of the submitted assignments, randomly selected, will be assigned a mark. Assignments will be marked out of 3 on the basis of both effort and outcome. Grading scale is given below:

   • 3/3 is awarded for a complete, well-presented attempt. Answers should be substantially correct but need not be error free.
   • 2/3 is awarded for a complete, satisfactory attempt. Less than full marks are awarded due to a shortfall in the substance or presentation of the submitted work.
   • 1/3 is awarded for an incomplete or incoherent attempt. This mark may also be awarded if your answers are completely wrong or unsubstantiated.
   • 0/3 is awarded if you do not submit the questions on time in your assigned tutorial, or, if what you submit does not merit a mark.

3. Tutorial work carries a 5% assessment weight.

4. Solutions to tutorial questions will be provided at the end of the week.

TESTS

Over the course of the semester you will be required to do three tests of varying length and coverage. The format of the tests is as follows:

Class Test 1 (Early Diagnostic, Week 3)
   a. Duration: 15 mins at start of seminar
   b. Coverage: material covered in weeks 1 and 2
   c. Question mix: short answers, some calculations
   d. Assessment weight: 5%

The primary purpose of this test is to provide you with an early indication of your progress in the subject – particularly if you have had to catch up on background material. If you do not do well in the early diagnostic test then you need to understand why and rectify the problem(s). Seek remedial help if necessary.

Class Test 2 (Mid-semester, Week 6)
   a. Duration: 60 mins, commences at the start of your assigned class (5mins past the hour)
   b. Coverage: All material covered lectures 1-4 (inclusive)
   c. Question mix: short answers, some calculations
   d. Assessment weight: 20%
Class Test 3 (Final, Week 13)

a. Duration: 120 mins, commences at the start of your assigned class (5mins past the hour)
b. Coverage: All material covered lectures 1-12 (inclusive)
c. Assessment weight: 50%

Please note the following general rules:

1. Non-programmable calculators may be used in all tests, but dictionaries are NOT permitted.

2. As per the statement on plagiarism at the end of this document, anyone caught colluding or otherwise cheating in any of the tests will receive zero marks. Further, the matter will be pursued at University level.

MAJOR ASSIGNMENT (GROUPWORK)

The major assignment is a group project requiring you to do work applying the concepts and techniques we study to an applied problem. Details of the topic(s) and requirements will be provided in Week 4, but some general information follows.

1. You can start thinking about your groups during the early weeks of semester, bearing in mind that groups will be restricted to four students (no more, no less – unless the final number of students in the unit requires a departure from this rule).

2. Please let us know if you would like us to assign you to a group. All group allocations will need to be approved and registered by the unit convener.

3. The assignment will involve: calculations, report writing and oral presentations.

4. The final written report is due at the commencement of the Week 12 lecture.

5. All group members will be required to supply a signed statement of contribution to the work submitted for assessment.
• Lecture Schedule

<table>
<thead>
<tr>
<th>Lecture Week (beginning with)</th>
<th>Lecture Topic</th>
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<tbody>
<tr>
<td>1 - (30 Jul)</td>
<td>Introduction &amp; Overview; Risk and Returns. BKM Chapter 5</td>
</tr>
<tr>
<td>2 - (06 Aug)</td>
<td>Risk Aversion and Mean-Variance Efficiency. BKM Chapters 6 &amp; 7</td>
</tr>
<tr>
<td>3 - (13 Aug)</td>
<td>Capital Asset Pricing Model. BKM Chapter 9</td>
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<tr>
<td>4 - (20 Aug)</td>
<td>Class Test 1</td>
</tr>
<tr>
<td>5 - (27 Aug)</td>
<td>Arbitrage Pricing Theory. BKM Chapter 10</td>
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<tr>
<td>6 - (03 Sep)</td>
<td>Market Efficiency BKM Chapter 11</td>
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<tr>
<td>7 - (10 Sep)</td>
<td>Empirical Evidence of Efficiency. BKM Chapter 13</td>
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<tr>
<td>17 September – 28 September</td>
<td>Class Test 2</td>
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<tr>
<td>8 - (01 Oct)</td>
<td>Bond Pricing and Yields. BKM Chapter 14</td>
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<tr>
<td>9 - (08 Oct)</td>
<td>Term Structure, Duration and Convexity. BKM Chapters 15 &amp; 16 (up to and including Section 16.2)</td>
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<td>10 – (15 Oct)</td>
<td>Options. BKM Chapters 20 &amp; 21</td>
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<td>11- (22 Oct)</td>
<td>Forwards and Futures. BKM Chapter 22</td>
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<td>12- (29 Oct)</td>
<td>Review</td>
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<tr>
<td>13- (05 Nov)</td>
<td>Class Test 3</td>
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**LECTURE MATERIAL:** will be available on the web, prior to the lecture - usually the week before the lecture. Log in to the unit web page from: https://ilearn.mq.edu.au and check the page regularly for updates.

The lecture materials define the unit content. As a general rule, if a textbook or journal reading covers a topic that is not mentioned in the lectures, it will only be examinable if it is covered in one of the assigned tutorial questions.

**ABOUT READINGS AND HOMEWORK:** Always check the lecture materials for reading and tutorial questions.

We provide a definitive set of readings and tutorial questions at the end of each set of lecture slides, and we will provide supplementary reading materials on the unit web page.
**RESEARCH AND PRACTICE**

- This unit uses research from external sources (Most Weeks)
- This unit gives you practice in applying research findings in your assignments.

**RELATIONSHIP BETWEEN ASSESSMENT AND LEARNING OUTCOMES**

**ASSESSMENT WEIGHTINGS FOR FINAL GRADING**

Students will be awarded an overall grade and a Standardised Numerical Grade (SNG) in accordance with their performance in all assessment components, weighted as follows:

<table>
<thead>
<tr>
<th>Assessment Component</th>
<th>Weighting</th>
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<tbody>
<tr>
<td>Class Test 1 (ED)</td>
<td>5%</td>
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<tr>
<td>Tutorial Assignments</td>
<td>5%</td>
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<tr>
<td>Class Test 2 (MS)</td>
<td>20%</td>
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<tr>
<td>Major Assignment</td>
<td>20%</td>
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<tr>
<td>Class Test 3 (Final)</td>
<td>50%</td>
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</tbody>
</table>

To be awarded a passing grade in this unit (SNG of 50% or higher) a student must obtain a passing score on the combined mark on the three class tests obtained by summing the scores: that is, a combined mark of 37.5/75 or higher. All assessment components contribute to the final SNG, but you must pass the tests in aggregate to pass the unit.

The assessment is designed to help you fulfil, and for us to evaluate your attainment of the learning objectives. Whilst all the assessment tasks are designed with the learning objectives in mind, the primary emphasis of each can be summarised as follows:

- Tutorial assignments include a mix of questions designed to highlight everything from important definitions and basic calculations, to problems that require creative application of the basic principles. That is, applications that extend somewhat beyond the examples provided in textbooks. As such, doing the problem type questions (many of which are to be submitted) will help you attain learning objectives (1)-(5). Tutorial assignment questions based on extra readings from journals and magazines focus specifically on learning objective (6).

- The early diagnostic test, mid-semester test and end-of-semester test are designed to assess your meeting of learning objectives (1)-(5).

- The major assignment is designed to help you attain learning objectives (1)-(6) in the context of a stylised application, as well as graduate capabilities that are critical to working independently and communicating the rationale and results of your work to others. Doing a realistic task using real data is a great way to build your understanding and confidence.
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<thead>
<tr>
<th></th>
<th>Tutorial Assignments</th>
<th>Class Test 1 (ED)</th>
<th>Class Test 2 (Mid. Sem.)</th>
<th>Major Assignment</th>
<th>Class Test 3 (Final)</th>
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<tr>
<td><strong>Due date</strong></td>
<td>Weekly</td>
<td>Week 3</td>
<td>Week 6</td>
<td>Week 12</td>
<td>Week 13</td>
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<td><strong>% Weighting</strong></td>
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<td><strong>Grading method - marking criteria/standards</strong></td>
<td>Detailed on page 4</td>
<td>Task specific - provided upon return of marked work</td>
<td>Task specific - provided upon return of marked work</td>
<td>As per task sheet</td>
<td>Assessed in accordance with marking guide</td>
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<td><strong>Submission method</strong></td>
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<td><strong>Feedback (type, method, date)</strong></td>
<td>Mark awarded in accordance with disclosed standards</td>
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<td>Final Grade</td>
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<td><strong>Estimated student workload (hours)</strong></td>
<td>13 hours weekly (including reading)</td>
<td>15min. in class</td>
<td>1-hour + reading time</td>
<td>20 hours</td>
<td>2-hour + reading time</td>
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**ACADEMIC HONESTY**

The nature of scholarly endeavour, dependent as it is on the work of others, binds all members of the University community to abide by the principles of academic honesty. Its fundamental principle is that all staff and students act with integrity in the creation, development, application and use of ideas and information. This means that:
- all academic work claimed as original is the work of the author making the claim
- all academic collaborations are acknowledged
- academic work is not falsified in any way
- when the ideas of others are used, these ideas are acknowledged appropriately.

Further information on the academic honesty can be found in the Macquarie University Academic Honesty Policy at [http://www.mq.edu.au/policy/docs/academic_honesty/policy.html](http://www.mq.edu.au/policy/docs/academic_honesty/policy.html)

Please be aware that you can expect a zero tolerance approach to plagiarism or any other form of cheating in this unit. If you're caught, you will receive zero marks for your efforts and the matter will be pursued in accordance with University procedures.

**GRADES**

Macquarie University uses the following grades in coursework units of study:

HD - High Distinction  
D - Distinction  
CR - Credit  
P - Pass  
F - Fail

Grade descriptors and other information concerning grading are contained in the Macquarie University Grading Policy which is available at: [http://www.mq.edu.au/policy/docs/grading/policy.html](http://www.mq.edu.au/policy/docs/grading/policy.html)

**GRADING APPEALS AND FINAL EXAMINATION SCRIPT VIEWING**

If, at the conclusion of the unit, you have performed below expectations, and are considering lodging an appeal of grade and/or viewing your final exam script please refer to the following website which provides information about these processes and the cut off dates in the first instance. Please read the instructions provided concerning what constitutes a valid grounds for appeal before appealing your grade.


**SPECIAL CONSIDERATION**

The University is committed to equity and fairness in all aspects of its learning and teaching. In stating this commitment, the University recognises that there may be circumstances where a student is prevented by unavoidable disruption from performing in accordance with their ability. A special consideration policy exists to support students who experience serious and unavoidable disruption such that they do not reach their usual demonstrated performance level. The policy is available at: [http://www.mq.edu.au/policy/docs/special_consideration/procedure.html](http://www.mq.edu.au/policy/docs/special_consideration/procedure.html)
STUDENT SUPPORT SERVICES

Macquarie University provides a range of Academic Student Support Services. Details of these services can be accessed at http://www.student.mq.edu.au.

IT CONDITIONS OF USE

Access to all student computing facilities within the Faculty of Business and Economics is restricted to authorized coursework for approved units. Student ID cards must be displayed in the locations provided at all times.

Students are expected to act responsibly when utilizing University IT facilities. The following regulations apply to the use of computing facilities and online services:

● Accessing inappropriate web sites or downloading inappropriate material is not permitted. Material that is not related to coursework for approved unit is deemed inappropriate.
● Downloading copyright material without permission from the copyright owner is illegal, and strictly prohibited. Students detected undertaking such activities will face disciplinary action, which may result in criminal proceedings.

Non-compliance with these conditions may result in disciplinary action without further notice.

Students must use their Macquarie University email addresses to communicate with staff as it is University policy that the University issued email account is used for official University communication.