ACST603
Principles of Finance
S1 Day 2015
Dept of Applied Finance and Actuarial Studies

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General Information

Unit convenor and teaching staff
Unit Convenor
Timothy Kyng
timothy.kyng@mq.edu.au
Contact via timothy.kyng@mq.edu.au
E4A614
By mutual agreement. Send an email to the Unit Convenor to arrange a time.

Credit points
4

Prerequisites
Admission to MActPrac or MCom or MEc or MIntBus or MAcc(Prof)MCom or MBioTechMCom or MIntBusMIntComm or MIntBusMIntRel

Corequisites

Co-badged status

Unit description
This unit aims to provide students with a knowledge and understanding of the principles and techniques underlying theory and practice in corporate finance. Topics include: - basic financial mathematics: interest rates, present values, future values, annuities, perpetuities; - valuation and analysis of debt and equity securities; - methods for investment evaluation and capital budgeting: NPV, IRR, PP; - financial markets and raising finance by issuing new securities; - risk and return, and the cost of capital; - capital structure and dividend policy; - derivative securities: forward, futures and option contracts, and applications to corporate finance; - corporate liabilities and international finance; and - introduction to risk management.

Important Academic Dates
Information about important academic dates including deadlines for withdrawing from units are available at http://students.mq.edu.au/student_admin/enrolmentguide/academicdates/

Learning Outcomes

1. to be able to demonstrate knowledge and understanding of the principles and techniques underlying theory and practice in Corporate Finance and Capital Markets
2. develop expertise in using excel spreadsheet software to build the financial models and perform the calculations for security valuation and corporate decision making
3. demonstrate awareness of different financial instruments and their valuation and usefulness in a Corporate Finance context

4. be able to explain the concepts covered in the course in a clear and concise manner and be able to communicate it to others effectively

**General Assessment Information**

It is the responsibility of students to view their marks for each within session assessment on iLearn within 20 days of posting. If there are any discrepancies, students must contact the unit convenor immediately. Failure to do so will mean that queries received after the release of final results regarding assessment tasks (not including the final exam mark) will not be addressed.

**Assessment Tasks**

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<thead>
<tr>
<th>Name</th>
<th>Weighting</th>
<th>Due</th>
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<tbody>
<tr>
<td>Assignments</td>
<td>30%</td>
<td>Week 6 &amp; 10</td>
</tr>
<tr>
<td>Assessed coursework</td>
<td>20%</td>
<td>Fridays of weeks 3,5,7,9,11</td>
</tr>
<tr>
<td>Class test</td>
<td>10%</td>
<td>Week 7</td>
</tr>
<tr>
<td>Final exam</td>
<td>40%</td>
<td>University Examination Period</td>
</tr>
</tbody>
</table>

**Assignments**

**Due:** **Week 6 & 10**

**Weighting:** **30%**

Assignment 1: Available Week 3; Due week 6

Assignment 2: Available week 7; Due week 10

The exact dates for release and submission of the assignments will be announced on iLearn during the semester. The release dates and due dates may change from the above. If so we will advise students of the changes.

These are individual assignments, not group work.

**Submission:**

essay type responses to be submitted online via iLearn / turnitin. Excel spreadsheet solutions to be submitted electronically (method to be advised)

**Extension**

No extensions will be granted. Late tasks will be accepted up to 72 hours after the submission deadline. There will be a deduction of 20% of the total available marks made from the total awarded mark for each 24 hour period or part thereof that the submission is late (for example, 25 hours late in submission – 40%
This Assessment Task relates to the following Learning Outcomes:

- to be able to demonstrate knowledge and understanding of the principles and techniques underlying theory and practice in Corporate Finance and Capital Markets
- develop expertise in using excel spreadsheet software to build the financial models and perform the calculations for security valuation and corporate decision making
- demonstrate awareness of different financial instruments and their valuation and usefulness in a Corporate Finance context
- be able to explain the concepts covered in the course in a clear and concise manner and be able to communicate it to others effectively

Assessed coursework

Due: Fridays of weeks 3, 5, 7, 9, 11
Weighting: 20%

Submission

Due on Fridays, submit electronically (method to be advised). Submissions should be typed into word and converted to pdf, or an excel spreadsheet file created, or both. These can be uploaded and submitted electronically. There are 5 tasks, worth 4% each. These are individual, not group assignments. The due dates may change. We will advise students of any such changes to the due dates. The details of how to submit your work and the exact date and time will be announced on iLearn at the time the details of the assignment are made available. Students will have at least one week to complete these tasks.

Extension

No extensions will be granted. Late tasks will be accepted up to 72 hours after the submission deadline. There will be a deduction of 20% of the total available marks made from the total awarded mark for each 24 hour period or part thereof that the submission is late (for example, 25 hours late in submission – 40% penalty). This penalty does not apply for cases in which an application for special consideration is made and approved.

This Assessment Task relates to the following Learning Outcomes:

- develop expertise in using excel spreadsheet software to build the financial models and perform the calculations for security valuation and corporate decision making
- demonstrate awareness of different financial instruments and their valuation and usefulness in a Corporate Finance context
Class test
Due: Week 7
Weighting: 10%

The test will be conducted during week 7 during the scheduled lecture time. Further details and any changes will be announced on iLearn.

Extension
No extensions will be granted. Students who have not sat the exam / test will be awarded a mark of 0 for the task, except for cases in which an application for special consideration is made and approved.

This Assessment Task relates to the following Learning Outcomes:
• to be able to demonstrate knowledge and understanding of the principles and techniques underlying theory and practice in Corporate Finance and Capital Markets
• demonstrate awareness of different financial instruments and their valuation and usefulness in a Corporate Finance context
• be able to explain the concepts covered in the course in a clear and concise manner and be able to communicate it to others effectively

Final exam
Due: University Examination Period
Weighting: 40%

This will be a 3 hour invigilated open book online exam conducted on campus. The date, time and location of the exam will be advised on iLearn.

Extension
No extensions will be granted. Students who have not sat the exam / test will be awarded a mark of 0 for the task, except for cases in which an application for special consideration is made and approved.

This Assessment Task relates to the following Learning Outcomes:
• to be able to demonstrate knowledge and understanding of the principles and techniques underlying theory and practice in Corporate Finance and Capital Markets
• demonstrate awareness of different financial instruments and their valuation and usefulness in a Corporate Finance context
• be able to explain the concepts covered in the course in a clear and concise manner and be able to communicate it to others effectively
Delivery and Resources

Classes

For campus students:

A 3-hour combined lecture / tutorial / computer lab session will be held each week. Normally the lecture part takes up the first 1.5 - 2.0 hours and the tutorial / lab session the last 1.0 - 1.5 hours.

All lecture content and tutorial exercises and solutions will be available on iLearn.

For distance students:

All lecture content and tutorial exercises and solutions will be available on iLearn. This will be available in pdf form and mp4 files. The timetable for classes can be found on the University website at: http://www.timetables.mq.edu.au/

There are no prizes for this unit.

Required and Recommended Texts and/or Materials

Textbooks:

The textbook for this unit is "Fundamentals of Corporate Finance" by Parrino et al (ISBN 9781118378076). An electronic version of the book is available and may be cheaper than the paper version. This book covers most but not all of the topics in the unit. The lecture notes will also cover what you need to know. Additional readings may be assigned for the various topics each week. This will either be journal articles, or other materials available on the web or available electronically e.g. via the Macquarie University Library.

Reference Books:


Beninga Principles of Finance with Excel, Oxford (ISBN 978 0 19 975547 9) This book may be used to by students to learn about using excel for the various financial calculations involved in the course, during the tutorial / computer lab sessions.


Hull, Options, Futures and Other Derivatives 8th Edition, Prentice Hall

Technology Used and Required

Students will require access to the internet to download lecture slides and tutorial solutions.
Unit guide ACST603 Principles of Finance

The assignment and most tutorial exercises will require the use of word processing and/or spreadsheet programs.

In most weeks we will be using excel spreadsheets for the various financial calculations needed. Our classes are held in a computer laboratory and all students will have access to a computer with the required software installed on it.

Students will be instructed in how to use excel for the purposes of the unit.

Students may wish to bring a headset to class so they can view and listen to the mp4 video files of lectures / tutorials / excel demonstrations.

Unit Web Page

Course material is available on the learning management system (iLearn)

Unit Schedule

Important information:

1) Timetable for lectures is available at: https://timetables.mq.edu.au/2015/

2) Semester dates: http://students.mq.edu.au/student_admin/enrolmentguide/academicdates/


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<tr>
<th>Date</th>
<th>Topic</th>
<th>Readings</th>
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<tbody>
<tr>
<td>Week 1</td>
<td>Introduction to Finance, Different forms of business organisation Measurement of Financial Condition and Profit - Financial Statements and Analysis. Taxation Depreciation Introduction to using spreadsheets</td>
<td>lecture notes &amp; text Ch 1 (1.1, 1.2); Ch 3, Ch4</td>
</tr>
</tbody>
</table>
| Week 2 | The time value of money and interest rates.  
|        | Introduction to financial mathematics.  
|        | Simple and compound interest  
|        | Various types of interest rate  
|        | Valuation of single payment cashflows  
|        | Spreadsheet implementation of financial calculations.  |
| Week 3 | Valuation of multi-payment cashflows  
|        | annuities & perpetuities  
|        | Present value and future value  
|        | Sinking funds  
|        | Loans, leases, amortizing loans  
|        | Nominal and effective interest rates  
|        | Spreadsheet implementation of financial calculations  |
| Week 4 | Valuation of shares and fixed income bonds  
|        | Bond terminology, Yield to maturity  
|        | RBA bond valuation formula  
|        | Solving for the bonds price, coupon rate, or yield  
|        | Dividend discount model for share valuation  
|        | Gordon growth model  
|        | Share valuation using multiples  
|        | Net Asset Valuation  
<p>|        | Spreadsheet implementation of financial calculations  |</p>
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<th>Week 5</th>
<th>Capital Budgeting – project evaluation methods</th>
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<td></td>
<td>Weighted Average Cost of Capital</td>
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<td>Internal rate of return,</td>
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<td>net present value,</td>
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<td></td>
<td>payback period</td>
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<td></td>
<td>Definition and measurement of cashflow</td>
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<td></td>
<td>Sensitivity analysis and breakeven analysis</td>
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<td>Excel implementation of calculations</td>
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<thead>
<tr>
<th>Week 6</th>
<th>The term structure of interest rates and corporate bond valuation</th>
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<tr>
<td></td>
<td>Zero Coupon Bonds</td>
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<tr>
<td></td>
<td>The relationship between zero coupon bonds and normal coupon bearing bonds &amp; the law of one price</td>
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<td>The bootstrap method</td>
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<td>Spot and forward yield curves</td>
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<td>Applications of zero coupon bond pricing</td>
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<td>Corporate Debt Finance</td>
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<td>Valuing corporate bonds</td>
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<tr>
<th>Week 7</th>
<th>Raising new capital – Debt &amp; Equity</th>
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<td>IPO</td>
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<td>Placement</td>
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<td>Rights Issue</td>
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<td>Dividend Reinvestment Plan</td>
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<td>Issuance Costs</td>
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<td>Mid semester test</td>
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<td>Week</td>
<td>Topic</td>
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<td>8</td>
<td>Randomness, probability and statistical concepts:</td>
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<tr>
<td></td>
<td>What is randomness</td>
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<td>The structure of randomness - probability distributions:</td>
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<td>Bernoulli, binomial, uniform and normal distributions</td>
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<td>Expected value, variance, standard deviation,</td>
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<td></td>
<td>Correlation, covariance, linear regression and forecasting</td>
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<td></td>
<td>Measurement of risk</td>
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<td>Results for portfolios</td>
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<td>spreadsheet implementation</td>
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<td>9</td>
<td>Tradeoff between risk and return</td>
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<td>Random walks, market efficiency</td>
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<td>law of one price,</td>
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<td>implications for investment and finance</td>
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<td>measurement of risk and return,</td>
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<td></td>
<td>estimation of risk and return.</td>
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<td></td>
<td>Risk and return for portfolios</td>
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<td></td>
<td>the capital asset pricing model and the security market line</td>
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<td>Spreadsheet implementation of methods used.</td>
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<td>10</td>
<td>Capital Structure &amp; Payout Policy</td>
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<td>Debt vs equity vs hybrid securities</td>
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<td>Features of debt and equity</td>
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<td>Impact on stakeholders</td>
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<td>dividend policy</td>
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<td>Optimal capital structure</td>
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<td>Different forms of payout</td>
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<td>Interaction between payout policy and capital structure</td>
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<td>Pecking order hypothesis</td>
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### Learning and Teaching Activities

#### Lectures and Tutorials

The unit is taught via lectures, tutorial exercises and the use of spreadsheet software for implementing models and calculations for the purpose of financial decision making. Each lecture is self-contained and structured according to the summary provided in the “weekly curriculum” section below. Students are expected to read the relevant chapters prior to the lecture, so that they are familiar with the material to be covered. This will greatly enhance your learning experience. Dealing with advanced material in our subject area requires a range of generic skills. This unit aims at developing such skills. The lectures and in particular the assignments and tutorial exercises are tailored to enhance critical analysis, problem-solving and creative thinking, comprehension, computing and writing skills. You should take the time to work on the problem sets, since they will tend to be similar in nature to the problems you see on the test and exam. Solutions will be provided for the assigned selected questions. We cover many examples of financial valuation and decision making problems and how to solve these using spreadsheets. Our approach is one of learning by example and by practicing using excel to solve financial decision making problems.

<table>
<thead>
<tr>
<th>Week</th>
<th>Topic</th>
<th>Notes</th>
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<tbody>
<tr>
<td>11</td>
<td>Financial Derivative securities</td>
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<td>Futures &amp; forward contracts &amp; Option Contracts</td>
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<td>Black Scholes Valuation formulae</td>
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<td>Applications to Corporate Finance.</td>
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<td></td>
<td>spreadsheet implementation</td>
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<td>12</td>
<td>Risk Management &amp; International Corporate Finance,</td>
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<td>Applications of options and derivative securities</td>
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<td>hybrid securities</td>
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<td></td>
<td>Spreadsheet implementation</td>
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<td>13</td>
<td>Revision</td>
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### Unit guide

<table>
<thead>
<tr>
<th>Unit guide</th>
<th>ACST603 Principles of Finance</th>
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<td></td>
<td><a href="http://unitguides.mq.edu.au/unit_offerings/51596/unit_guide/print">http://unitguides.mq.edu.au/unit_offerings/51596/unit_guide/print</a></td>
</tr>
</tbody>
</table>
Policies and Procedures

Macquarie University policies and procedures are accessible from Policy Central. Students should be aware of the following policies in particular with regard to Learning and Teaching:


The Disruption to Studies Policy is effective from March 3, 2014 and replaces the Special Consideration Policy.

In addition, a number of other policies can be found in the Learning and Teaching Category of Policy Central.

Student Code of Conduct

Macquarie University students have a responsibility to be familiar with the Student Code of Conduct: [https://students.mq.edu.au/support/student_conduct/](https://students.mq.edu.au/support/student_conduct/)

Results

Results shown in iLearn, or released directly by your Unit Convenor, are not confirmed as they are subject to final approval by the University. Once approved, final results will be sent to your student email address and will be made available in eStudent. For more information visit [ask.mq.edu.au](http://ask.mq.edu.au).

Supplementary Exams

Further information regarding supplementary exams, including dates, is available here [http://www.businessandeconomics.mq.edu.au/current_students/undergraduate/how_do_i/special_consideration](http://www.businessandeconomics.mq.edu.au/current_students/undergraduate/how_do_i/special_consideration)

Student Support

Macquarie University provides a range of support services for students. For details, visit [http://students.mq.edu.au/support/](http://students.mq.edu.au/support/)

Learning Skills

Learning Skills ([mq.edu.au/learningskills](http://mq.edu.au/learningskills)) provides academic writing resources and study strategies to improve your marks and take control of your study.

- Workshops
We want to develop in our students the ability to communicate and convey their views in forms effective with different audiences. We want our graduates to take with them the capability to read, listen, question, gather and evaluate information resources in a variety of formats, assess, write clearly, speak effectively, and to use visual communication and communication technologies as appropriate.

This graduate capability is supported by:

**Learning outcomes**

- to be able to demonstrate knowledge and understanding of the principles and techniques underlying theory and practice in Corporate Finance and Capital Markets
- develop expertise in using excel spreadsheet software to build the financial models and perform the calculations for security valuation and corporate decision making
- demonstrate awareness of different financial instruments and their valuation and usefulness in a Corporate Finance context
- be able to explain the concepts covered in the course in a clear and concise manner and be able to communicate it to others effectively

**Assessment tasks**

- Assignments
- Assessed coursework
Discipline Specific Knowledge and Skills

Our graduates will take with them the intellectual development, depth and breadth of knowledge, scholarly understanding, and specific subject content in their chosen fields to make them competent and confident in their subject or profession. They will be able to demonstrate, where relevant, professional technical competence and meet professional standards. They will be able to articulate the structure of knowledge of their discipline, be able to adapt discipline-specific knowledge to novel situations, and be able to contribute from their discipline to inter-disciplinary solutions to problems.

This graduate capability is supported by:

**Learning outcomes**

- to be able to demonstrate knowledge and understanding of the principles and techniques underlying theory and practice in Corporate Finance and Capital Markets
- develop expertise in using excel spreadsheet software to build the financial models and perform the calculations for security valuation and corporate decision making
- demonstrate awareness of different financial instruments and their valuation and usefulness in a Corporate Finance context
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**Assessment tasks**

- Assignments
- Assessed coursework
- Class test
- Final exam

Critical, Analytical and Integrative Thinking

We want our graduates to be capable of reasoning, questioning and analysing, and to integrate and synthesise learning and knowledge from a range of sources and environments; to be able to critique constraints, assumptions and limitations; to be able to think independently and systemically in relation to scholarly activity, in the workplace, and in the world. We want them to have a level of scientific and information technology literacy.

This graduate capability is supported by:

**Learning outcomes**

- to be able to demonstrate knowledge and understanding of the principles and techniques underlying theory and practice in Corporate Finance and Capital Markets
Unit guide ACST603 Principles of Finance

- develop expertise in using excel spreadsheet software to build the financial models and perform the calculations for security valuation and corporate decision making
- demonstrate awareness of different financial instruments and their valuation and usefulness in a Corporate Finance context
- be able to explain the concepts covered in the course in a clear and concise manner and be able to communicate it to others effectively

Assessment tasks

- Assignments
- Assessed coursework
- Class test
- Final exam

Research and Practice

This unit gives you practice in applying research findings in your assignments

This unit gives you opportunities to conduct your own research