ACCY221 Business Finance I

Subject Program
Autumn Session 1999

**Lectures:**
Wednesday 2.30 – 3.30 Hope Theatre
5.30 – 6.30 20.3 (Repeat)
Thursday 2.30 – 3.30 Hope Theatre
5.30 – 6.30 67.104 (Repeat)

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**Lecturers:**
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**Subject Description**

Management needs to be informed in order to make effective decisions, this is as true for the finance function as for other areas of business activity. The aim of this course is to explore the alternatives available to managers as they seek to make corporate financial decisions to finance their business activities, as well as, to provide analytical tools to evaluate investments. The main focus throughout the course is on financial decision making. Major business finance decisions are considered in terms of investment risk and return.

**Objectives:**

Upon completion of this subject students will be able to:

- value projected cash flow streams such as loans, debentures, equity investments, leases and other contracts.
- model and solve short-term and long-term capital investment decision problems.
- identify and make allowance for the relationship exhibited by financial markets between risk and return.
• identify and measure the costs to the firm of different forms of debt and equity capital.
• evaluate the dividend and financial leverage policies of individual firms.
• build and operate financial models using computer spreadsheets.
• explain lucidly and succinctly selected concepts and tools of corporate finance.

**Prescribed text**

**Recommended**

**Other useful texts**


**Internet Site**
Our Internet address is:


Check it out!

**Subject Requirements and Assessment**
For the purposes of determining final grades for ACCY 221, student performance will be evaluated on a composite mark, determined as follows:

<table>
<thead>
<tr>
<th>Component</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Essay</td>
<td>10%</td>
</tr>
<tr>
<td>Computer Assignment</td>
<td>10%</td>
</tr>
<tr>
<td>Mid-Term Test</td>
<td>25%</td>
</tr>
<tr>
<td>Final Exam</td>
<td>45%</td>
</tr>
<tr>
<td>Tutorial Problems and Participation</td>
<td>10%</td>
</tr>
</tbody>
</table>

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**Total** 100%

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NB. Marks may be scaled.
NB. To be awarded a Pass or higher grade in this subject, students must achieve at least 45% in the final exam.

When the composite mark is just below the mark required for a particular grade, it will be reviewed in the light of tutorial attendance and all work submitted (including any assignments or other work which has not been counted directly towards the composite mark).

Dates to Remember

<table>
<thead>
<tr>
<th>Event</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computer Assignment</td>
<td>12th Apr</td>
</tr>
<tr>
<td>Mid-Session Test</td>
<td>17th Apr</td>
</tr>
<tr>
<td>Essay</td>
<td>26th May</td>
</tr>
</tbody>
</table>

Tutorial Attendance

Attendance at tutorials is a compulsory requirement of this subject.

A schedule of the questions to be prepared for the tutorials is attached. These questions must be **attempted** before the tutorial. Attempted solutions to tutorial problems are to be submitted to tutors as required. Your tutors will provide further details on what is required.

Tutorials begin in week 2 and finish in week 14.

*Your preparation and participation in weekly tutorial discussions will be taken into account when awarding your mark for tutorial work (see above). Marks are not given for attendance only.*

Students will be able to seek help from tutors during consultation times. Tutors will indicate their availability at the first tutorial and their consultation times will be posted on their doors.

Workshops

Workshops are intended to demonstrate the more practical aspects of the course. Work will be undertaken during the workshop and does not need to be prepared in advance. Workshops are compulsory.

Workshops commence in week 2 and finish in week 14. A schedule of the questions that will be done during the workshops is attached. It is not necessary to do these ahead of time.
**Access to Solutions**

Each Monday copies of the solutions of the previous week’s tutorial and workshop problems will be placed in the Closed Reserve section of the library and in the Faculty Resource Room in Building 40. Students are advised to refer to the solutions provided.

**Public Holidays**

If you have a tutorial or workshop that falls on a public holiday, consult the list of tutorial/workshop times and locations on the Department of Accounting and Finance Notice Board, 3rd floor Building 40 and select an alternative time to attend for that week.

**Mid-Session Test**

Saturday 17 April 1999
Hope Theatre
11:00AM-12:00 NOON

**Computer Assignment**

This assignment is to be completed using a spreadsheet package (either in the faculty computer laboratory or using your own equipment) and placed in the assignment box outside 40.317.

**Due date:** 5.30 pm 12 April

**Question 1:**
Better Mousetraps has developed a new trap. It can go into production for an initial investment in equipment of $6 million. The equipment will be depreciated straight line over 5 years to a value of zero, but in fact it can be sold after 5 years for $500,000. The firm believes that working capital at each date must be maintained at a level of 10% of next year’s forecast sales. The firm estimates production costs equal to $1.50 per trap and believes that the traps can be sold for $4 each. Sales forecasts are given in the following table. The project will come to an end in 5 years, when the trap becomes technologically obsolete. The firm’s tax bracket is 36% and the required return on the project is 11.5%. Inflation is estimated to be minimal in the foreseeable future and may be ignored.

**Sales Forecast:**

<table>
<thead>
<tr>
<th>Year:</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales (# of traps)</td>
<td>0</td>
<td>500,000</td>
<td>600,000</td>
<td>1,000,000</td>
<td>1,000,000</td>
<td>600,000</td>
</tr>
</tbody>
</table>
Required:

a) Using a computer package such as Excel, develop a cash flow budget (in the form of a spreadsheet) for the project, and calculate its NPV. Should the project be accepted?

b) Redo the spreadsheet under the assumption that sales are 10% less than forecast. Is the project still acceptable? (If you have set up your spreadsheet correctly, only one number will need to be changed to do this.)

Question 2

The following two projects of equal risk are being considered for the purchase of new equipment. The firm’s cost of capital is 13%. The cash flows for each project are given in the following table.

<table>
<thead>
<tr>
<th>Year</th>
<th>Net cash inflows Project A</th>
<th>Net cash inflows Project B</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>$15,000</td>
<td>$15,000</td>
</tr>
<tr>
<td>2</td>
<td>20,000</td>
<td>15,000</td>
</tr>
<tr>
<td>3</td>
<td>25,000</td>
<td>15,000</td>
</tr>
<tr>
<td>4</td>
<td>30,000</td>
<td>15,000</td>
</tr>
<tr>
<td>5</td>
<td>35,000</td>
<td>15,000</td>
</tr>
<tr>
<td>Initial investment</td>
<td>$80,000</td>
<td>$50,000</td>
</tr>
</tbody>
</table>

Required

(a) Prepare a spreadsheet using a computer package such as Excel to:

1. Rank the projects in order of desirability according to net present value.
2. Rank the projects in order of desirability according to internal rate of return.

(b) Calculate the net present value of each project using the following rates of return: 0%, 5%, 10%, 15%, 20%, 25%, 30%. Using the graph function of your spreadsheet plot the data on a graph. Place the required rate of return on the horizontal axis and the NPV on the vertical axis. From the graph:

1. Which project will be accepted if the required rate of return is 15%, 18% and 25%?
2. How can the point at which each project’s line cuts the horizontal axis be interpreted?

(c) Prepare a report making recommendations. The report must contain answers to the above questions as well as the reasons for your recommendation. Your report should also answer the following:

1. Why is there a difference in ranking between NPV and IRR?
2. When NPV and IRR give conflicting rankings, which method should be followed? Why?

Marks will be awarded for presentation as well as content.

Also hand in print-outs showing the formula used (in the cells) to prepare your spreadsheets. The spreadsheet is to do the calculations, not you. All spreadsheets have special functions that allow NPV’s, IRR’s and others to be calculated by the computer with minimal effort on your part.
Submission by Facsimile

Note the University policy covering submission of assignments by fax on page 7 of the 1998 Undergraduate Calendar. Generally assignments will NOT be accepted or marked if submitted by fax.

Exams

These will include subject matter covered in lectures and/or tutorials and/or workshops. You should study from your notes and tutorial/workshop work, supplementing this material with explanations and further example problems from the textbook. The objective is to test your understanding of the material rather than mere memory.

Essay

You may select any one of the three essay topics below.

Length: 1,500 words
Due Date: Place your essay in the box outside 40.317 by 5.30 pm on 26 May.

Topic A Is the application of the principle of shareholder wealth maximization ever in conflict with the principles of ethics? Explain your response with reference to actual events in the market.

Topic B Capital rationing involves a modification to the way investment decisions are made. Under what circumstances do corporations apply capital rationing? Is capital rationing justified in an efficient market?

Topic C Discuss how markets allow for firm specific/market wide risk in pricing investments. Illustrate with real world examples.

Mandatory essay presentation standards are as follows:

1. The essay is to be typed, double spaced, on one side of the paper only, using a computer word processing package.
2. A duplicate of the essay is not required. You must ensure, however, that you have the capacity to provide a duplicate, should this be requested. Problems with computers, software, lost disks etc will not be accepted as excuses for late submissions.
3. The pages should be numbered consecutively.
4. At the front of the essay there must be a title page showing your name, ID number, your tutorial class, the date the essay is due and the topic as given.
5. A synopsis of no more than 150 words is to preface the essay.
6. There must be a margin of about 40mm to allow for written comments.
7. All essays should include a list of references in academic form. All sourced material, including direct quotations, should be appropriately acknowledged.

The essay will be penalized for failure to meet any of these requirements.
Any essays submitted after the due date will incur a penalty (one mark per day) which may reduce the mark to zero, unless special exemption has been granted.

_Students not submitting the essay by the last day of classes, in the absence of accepted documented reasons, will fail the subject._

Essays will be returned during tutorial classes.

**Assignment Cover Sheet**

A cover sheet should be attached to the essay and assignments containing the following:

- Your name and Student Number.
- Your tutor and tutorial group.
- The topic.
- A signed declaration using the following wording:

  I have read and adopted the University of Wollongong Acknowledgement Practice Code as set out in the 1998 Undergraduate Calendar, pages 75 to 76.

  Signed .............................................    Date .....................

**Supplementary Final Examinations**

See the statement of Departmental policy, copies of which are available in the Faculty of Commerce Resource Room in Building 40.

**Cheating and Plagiarism**

Cases of cheating or plagiarism will be severely penalized and reported to the Head of Department. The following paragraph from the University statement on final examinations indicates the seriousness of such offences:

**Academic Misconduct**

Students are reminded that the University regards academic misconduct as a very serious matter.

Students found guilty of academic misconduct may be excluded from the University. Because of the circumstances in individual cases the exclusion can range from one session to permanent exclusion from the University.

The following are some of the actions which have resulted in students being found guilty of academic misconduct in recent years.

- use of unauthorized aids in an examination;
submitting work for assessment knowing it to be the work of another person;
- improperly obtaining prior knowledge of an examination paper and using that knowledge in the examination;
- failing to acknowledge the source of material in an assignment.

**SUBJECT REQUIREMENTS, ILLNESS AND MISADVENTURE**

Section 10 of the Bachelor Degree regulations covers subject requirements and assessment. Note in particular 10(7) which says:

*Should performance in a subject be affected by illness or other cause beyond the control of a candidate, the circumstances should be reported to the Vice-Principal (Administration) in writing, supported by evidence, normally no later than seven days following the illness or other cause. The circumstances shall be referred to the Head and may be taken into account when assessment of the candidate in that subject is made.*

Students who are in the unfortunate position referred to in the above paragraph should note the following:

(i) The formal letter requesting special consideration must be submitted to the University administration and not to the Department.

(ii) As a matter of courtesy and to facilitate prompt action, the relevant staff member should be advised and you should ensure that she/he is supplied with an up-to-date address and, where possible, a contact telephone number.

(iv) Students do not have a right to a supplementary examination and should refer to the Departmental policy.

**Disability**

If a student with a disability requires reasonable accommodation in this subject, they are strongly advised to discuss the issues early in the session with one of the following people: the Disability Liaison Officer, Faculty Disability Advisor and/or the subject co-ordinator.
## Subject Schedule

<table>
<thead>
<tr>
<th>Week</th>
<th>Date</th>
<th>Topic</th>
<th>Reading (Ross et al)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>March 1</td>
<td>Introduction</td>
<td>Chpt 1 &amp; 2</td>
</tr>
<tr>
<td>2</td>
<td>March 8</td>
<td>Time value of money/Valuation</td>
<td>Chpt 5 &amp; 6</td>
</tr>
<tr>
<td>3</td>
<td>March 15</td>
<td>Capital Budgeting</td>
<td>Chpt 7&amp;8</td>
</tr>
<tr>
<td>4</td>
<td>March 22</td>
<td>More on Capital Budgeting</td>
<td>Chpt 9 &amp; 10</td>
</tr>
<tr>
<td>5</td>
<td>March 29</td>
<td>Risk and Return completed</td>
<td>Chpt 11</td>
</tr>
<tr>
<td>6</td>
<td>April 12</td>
<td>Working Capital Management</td>
<td>Chpt 12 &amp; 13</td>
</tr>
<tr>
<td>7</td>
<td>April 19</td>
<td>Working Capital Management continued</td>
<td>Chpt 14</td>
</tr>
<tr>
<td>8</td>
<td>April 26</td>
<td>Australian Financial Markets: Short and long term debt</td>
<td>Chpt 15 &amp; 16</td>
</tr>
<tr>
<td>9</td>
<td>May 3</td>
<td>Aust. Financial Markets: Equity</td>
<td>Chpt 17</td>
</tr>
<tr>
<td>10</td>
<td>May 10</td>
<td>Cost of Capital</td>
<td>Chpt 18</td>
</tr>
<tr>
<td>11</td>
<td>May 17</td>
<td>Dividends and Dividend Policy</td>
<td>Chpt 19</td>
</tr>
<tr>
<td>12</td>
<td>May 24</td>
<td>Capital Structure</td>
<td>Chpt 20</td>
</tr>
<tr>
<td>13</td>
<td>May 31</td>
<td>Derivatives and risk management</td>
<td>Chpt 21 Plus provided readings</td>
</tr>
<tr>
<td>14</td>
<td>June 7</td>
<td>Revision</td>
<td></td>
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</table>
### Tutorial and Workshop Schedule

<table>
<thead>
<tr>
<th>Week</th>
<th>Tutorials</th>
<th>Workshops</th>
</tr>
</thead>
<tbody>
<tr>
<td>Week 2</td>
<td>chpt 1: # 1, 3, 10</td>
<td>chpt 1: #7</td>
</tr>
<tr>
<td></td>
<td>chpt 2: # 6,7,15,16</td>
<td>chpt 2: #2 &amp;3</td>
</tr>
<tr>
<td>Week 3</td>
<td>chpt 5: # 10, 14, 22, 36, 47</td>
<td>chpt 5: #7</td>
</tr>
<tr>
<td></td>
<td>chpt 6: # 6, 10, 18, 21, 30</td>
<td>chpt 6: #3, 13</td>
</tr>
<tr>
<td>Week 4</td>
<td>chpt 7: # 16, 17, 19</td>
<td>chpt 7: #2, 3</td>
</tr>
<tr>
<td></td>
<td>chpt 8: # 9, 10, 12, 14</td>
<td>chpt 8: #6, 7</td>
</tr>
<tr>
<td>Week 5</td>
<td>chpt 9: # 13, 17, 19 and What is capital rationing?</td>
<td>chpt 9: # 3</td>
</tr>
<tr>
<td></td>
<td>In theory, should capital rationing exist?</td>
<td>chpt 10: 1, 2, 6</td>
</tr>
<tr>
<td></td>
<td>Why does it frequently occur in practice?</td>
<td>chpt 10: #14, 16, 17</td>
</tr>
<tr>
<td>Week 6</td>
<td>chpt 11: # 10, 13, 14, 15, 19, 24</td>
<td>chpt 11: # 5, 8</td>
</tr>
<tr>
<td>Week 7</td>
<td>chpt 12: # 3, 5, 14, 15</td>
<td>chpt 12: # 12</td>
</tr>
<tr>
<td></td>
<td>chpt 13: # 1, 4, 7</td>
<td>chpt 13: # 3</td>
</tr>
<tr>
<td>Week 8</td>
<td>chpt 13: #14, 18, 19</td>
<td>chpt 13: # 9</td>
</tr>
<tr>
<td></td>
<td>chpt 14: # 5, 8, 13, 16, 23</td>
<td>chpt 14: # 15</td>
</tr>
<tr>
<td>Week 9</td>
<td>chpt 15: # 2, 9, 13, Chpt 16: # 3, 6, 8, 9, 11</td>
<td>chpt 15: # 6</td>
</tr>
<tr>
<td></td>
<td></td>
<td>chpt 16: # 12</td>
</tr>
<tr>
<td>Week 10</td>
<td>chpt 17: # 4, 5, 10, 11, 12, 13, 14</td>
<td>chpt 17: # 2, 9, 10</td>
</tr>
<tr>
<td>Week 11</td>
<td>chpt 18: #6, 7, 9, 11, 13, 18, 20</td>
<td>chpt 18: # 1, 2, 3</td>
</tr>
<tr>
<td>Week 12</td>
<td>chpt 19: # 2, 8, 13, 17, 19, 20</td>
<td>chpt 19: # 9, 11</td>
</tr>
<tr>
<td>Week 13</td>
<td>chpt 20: # 4, 6, 7, 14, 15, 18</td>
<td>chpt 20: # 2, 3, 9</td>
</tr>
<tr>
<td>Week 14</td>
<td>to be announced</td>
<td>to be announced</td>
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</tbody>
</table>