Foundations of Finance

Course Description
Foundations of Finance is designed to familiarise students with the components of the financial system and to introduce them to the three basic ideas underpinning finance: time value of money; diversification; and, arbitrage. The aim of the course is to provide students with an introductory exposure to financial transactions, institutions and markets, including money markets, stock markets, foreign exchange, derivative markets and risk management contracts. It provides students with a solid foundation for further studies in the field of finance.

<table>
<thead>
<tr>
<th>Semester and Year</th>
<th>S2 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mode of Delivery</td>
<td>On campus</td>
</tr>
<tr>
<td>Prerequisites</td>
<td>To enrol in this course you must have completed or be currently enrolled in STAT1008 Quantitative Research Methods or STAT1003 Statistical Techniques</td>
</tr>
<tr>
<td>Incompatible Courses</td>
<td>N/A</td>
</tr>
<tr>
<td>Course Convener</td>
<td>Dr Jo Drienko</td>
</tr>
<tr>
<td>Office Location:</td>
<td>Room 4.05, CBE Building 26C</td>
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<td>Phone:</td>
<td>(02) 6125 7298</td>
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<td>Email:</td>
<td><a href="mailto:jo.drienko@anu.edu.au">jo.drienko@anu.edu.au</a></td>
</tr>
<tr>
<td>Consultation hours:</td>
<td>Monday, 10am – 12pm, Room 4.05</td>
</tr>
<tr>
<td>Research interests</td>
<td>Analyst forecasting, asset pricing, market efficiency</td>
</tr>
<tr>
<td>Student Administrators</td>
<td>School (RSFAS) Administration Office Level 4, ANU CBE Building 26C <a href="mailto:enquiries.rsfas@anu.edu.au">enquiries.rsfas@anu.edu.au</a></td>
</tr>
</tbody>
</table>
COURSE OVERVIEW

Learning Outcomes
On satisfying the requirements for this course, students will have the knowledge and skills to:

- Understand financial transactions, institutions and markets, including money markets, stock markets, foreign exchange, derivatives markets and contracts.
- Understand the ideas behind the time value of money and be able to calculate the value of cash flows relating to a number of financial instruments.
- Understand the concept of diversification, including the risk and return relationship and have the ability to calculate optimal weights for a portfolio comprising of two financial assets.
- Understand concepts of arbitrage and utilise derivatives for risk management purposes.

Assessment Summary

<table>
<thead>
<tr>
<th>Item</th>
<th>Title</th>
<th>Value</th>
<th>Due Date</th>
<th>Return of Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>In-Tutorial Quizzes</td>
<td>15%</td>
<td>See Weekly Schedule</td>
<td>The following tutorial</td>
</tr>
<tr>
<td>2</td>
<td>Mid-Semester Examination</td>
<td>25% (or 0% if not attempted/redeemed)</td>
<td>TBA</td>
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</tr>
<tr>
<td>3</td>
<td>Final Examination</td>
<td>60% (or 85% if Mid-Semester not attempted/redeemed)</td>
<td>TBA</td>
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</table>

Research-Led Teaching
Students undertaking this course will be taught fundamental skills in Finance that will be applied to real life applications. Students will also be shown how these techniques are applied to research today.

Feedback
Staff Feedback
Students will be given feedback in the following forms in this course:

- Written comments
- Verbal comments
- Feedback to the whole class
- Feedback to groups

Student Feedback
ANU is committed to the demonstration of educational excellence and regularly seeks feedback from students. One of the key formal ways students have to provide feedback is through Student Experience of Learning Support (SELS) surveys. The feedback given in these surveys is anonymous and provides the Colleges, University Education Committee and Academic Board with opportunities to recognise excellent teaching, and opportunities for improvement.

Continuous Improvement
We use feedback from students, professional bodies and staff to make regular improvements to the course. In response to this feedback, design improvements from previous versions of the course include:

- **Item 1:** Adding weekly workshops to go through additional problem sets. This enables more difficult problems to be worked through in a group environment.
- **Item 2:** Spreading the final arbitrage topic over four, as opposed to three weeks (specifically, the topics on Futures/Forwards and Options have been spread over three weeks, whereas they were previously covered in two). This is a result of feedback from students requesting that more time be spent on these concepts.

Policies
ANU has educational policies, procedures and guidelines, which are designed to ensure that staff and students are aware of the University’s academic standards, and implement them. You can find the University’s education policies and an explanatory glossary at:
http://policies.anu.edu.au/

Students are expected to have read the Academic Misconduct Rules before the commencement of their course.

Other key policies include:

- Student Assessment (Coursework)
- Student Surveys and Evaluations

Examination Material or Equipment
The only permitted materials in the examinations are a calculator (scientific, non-programmable and not a financial calculator), dictionary (which will be checked at the examination), pen and ruler

Employed Technology
Microsoft Excel

Required Resources
Students are required to source the following resources for the duration of the course:

- A non-programmable calculator (required for all examinations as well)
## COURSE SCHEDULE

<table>
<thead>
<tr>
<th>Week</th>
<th>Summary of Activities</th>
<th>Notes</th>
</tr>
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</table>
| 1    | Topic: Course Overview and an Introduction to Financial Markets  
Activity: Lecture  
Reading: Lecture Notes 1; CFA Code of Ethics, CFA Standards of Professional Conduct, Sections I and VII; Textbook (see p.6) |       |
| 2    | Topic: Time Value of Money – An Intro to Financial Mathematics  
Activity: Lecture/Workshop/Tutorial (Tutorial 1 Questions)  
Reading: Lecture Notes 2; Textbook (see p.6 of outline) |       |
| 3    | Topic: Time Value of Money – Valuing Shares and Debt  
Activity: Lecture/Workshop/Tutorial (Tutorial 2 Questions)  
Reading: Lecture Notes 3; Textbook (see p.6 of outline) | Quiz 1 |
| 4    | Topic: Time Value of Money – Making Investment Decisions  
Activity: Lecture/Workshop/Tutorial (Tutorial 3 Questions)  
Reading: Lecture Notes 4; Textbook (see p.6 of outline) | Quiz 2 |
| 5    | Topic: Diversification – Defining Risk and Understanding its Relationship with Return  
Activity: Lecture/Tutorial (Tutorial 4 Questions)  
Reading: Lecture Notes 5; Textbook (see p.6 of outline) |       |
| 6    | Topic: Diversification – Portfolio Theory  
Activity: Lecture/Tutorial (Tutorial 5 Questions)  
Reading: Lecture Notes 6; Textbook (see p.6 of outline) | Mid-Sem Exam¹ |
| 7    | Topic: Diversification – The Capital Asset Pricing Model (CAPM), the Required Rate of Return for Risk and the Cost of Capital  
Activity: Lecture/Workshop/Tutorial (Tutorial 6 Questions)  
Reading: Lecture Notes 7; Textbook (see p.6 of outline) | Quiz 3 |
| 8    | Topic: Arbitrage – Futures Contracts Part (A)  
Activity: Lecture/Workshop/Tutorial (Tutorial 7 Questions)  
Reading: Lecture Notes 8; Textbook (see p.6 of outline) | Quiz 4 |
| 9    | Topic: Arbitrage – Futures Contracts Part (B) and Options Contracts Part (A)  
Activity: Lecture/Workshop/Tutorial (Tutorial 8 Questions)  
Reading: Lecture Notes 9; Textbook (see p.6 of outline) | Quiz 5 |
| 10   | Topic: Arbitrage – Options Contracts Part (B)  
Activity: Lecture/Workshop/Tutorial (Tutorial 9 Questions)  
Reading: Lecture Notes 10; Textbook (see p.6 of outline) |       |
| 11   | Topic: Arbitrage – Forwards, Futures and Options Contracts as Tools for Risk Management  
Activity: Lecture/Workshop/Tutorial (Tutorial 10 Questions)  
Reading: Lecture Notes 11; Textbook (see p.6 of outline) |       |
| 12   | Topic: Review Lecture  
Activity: Lecture/Tutorial (Tutorial 11 Questions)  
Reading: Lecture Notes 12 |       |

¹ The timing of the mid-semester examination is determined by the examinations section. This information will be given to students as soon as the lecturer receives it. Please be aware that the exam may not be in this week if instructed by the examinations section.
COURSE ASSESSMENT

Assessment Summary

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<th>Item</th>
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<td>3</td>
<td>Final Examination</td>
<td>60% (or 85% if Mid-Semester not attempted/redeemed)</td>
<td>TBA</td>
</tr>
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</table>

Assessment Task 1: In-Tutorial Quizzes

Details of task:
- Students will be required to sit 5 in-tutorial quizzes throughout the semester.
- These quizzes will be run according to the schedule on page 4 of this outline (unless otherwise stated by the lecturer).
- The quizzes will be 10 – 15 minutes in duration and held at the end of the tutorial.
- Students MUST sit the quiz in the tutorial they are enrolled in, otherwise the quiz will not count.
- The content for the quizzes will be limited to the required material for the topic on which the tutorial is held (previous week’s lecture material).
- Students’ best 4 marks will count towards 15% of their overall course grade.
- Students will receive their marked quizzes back in the tutorial the following week.
- This assessment task needs to be completed in pen (NOT PENCIL).

Note: Students are required to prepare worked solutions to tutorial questions, bring these solutions to tutorials, and be prepared to participate in tutorial discussions. This is an important step in preparing for the tutorial quizzes.

Assessment Task 2: Mid-Semester Exam

Details of task:
- This exam is optional and redeemable for students.
- It is a closed book exam, with no formula sheet provided.
- The questions will be a mixture of theory and practical questions.
- Students will need to review and revise all material covered in lectures 1 to 4, inclusive, and corresponding workshops and tutorials.
- The mid-semester exam will count towards either 0% or 25% of a student’s overall course grade.
- More details regarding the exam will be provided as the exam approaches.
- This assessment task needs to be completed in pen (NOT PENCIL).

Note: Mid-semester exams will be offered in weeks 6 or 7. Deferred exams for mid-semester exams will also be offered. Like final exams, applications for deferred mid-semester exams will be handled centrally. Deferred mid-semester exams are likely to be held towards week 10 or so.

Assessment Task 3: Final Examination

The final examination will be closed-book and based on all the work covered throughout the duration of the semester. The final examination is worth 60% (or 85% if the mid-semester exam is redeemed) of the overall course grade. The exam will include a mixture of theoretical and numerical questions. Students will be provided with further details regarding the exam as it approaches. This assessment task needs to be completed in pen (NOT PENCIL).
## READING LISTS

### Recommended Textbook


If using the recommended textbook, refer to the following textbook readings for each week:

<table>
<thead>
<tr>
<th>Week</th>
<th>Topic</th>
<th>Textbook Readings</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Course Overview and an Introduction to Financial Markets</td>
<td>Titman et al: Ch.1 &amp; 2 &amp; 5, pp. 610-613</td>
</tr>
<tr>
<td>2</td>
<td>Time Value of Money – An Intro to Financial Mathematics</td>
<td>Titman et al: Ch.5 &amp; 6</td>
</tr>
<tr>
<td>3</td>
<td>Time Value of Money – Valuing Shares and Debt</td>
<td>Titman et al: Ch.9 (up to p. 281) &amp; Ch.10 (pp. 301-308 &amp; from p. 315 to the end of the chapter)</td>
</tr>
<tr>
<td>5</td>
<td>Diversification – Defining Risk and Understanding its Relationship with Return</td>
<td>Titman et al: Ch.7</td>
</tr>
<tr>
<td>6</td>
<td>Diversification – Portfolio Theory</td>
<td>Titman et al: Ch.8 (up to p. 238)</td>
</tr>
<tr>
<td>7</td>
<td>Diversification – The Capital Asset Pricing Model (CAPM) and the Required Rate of Return for Risk</td>
<td>Titman et al: Ch.8 &amp; 14 (up to p. 469)</td>
</tr>
<tr>
<td>8</td>
<td>Arbitrage – Futures Contracts Part (A)</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Arbitrage – Futures Contracts Part (B) and Options Contracts Part (A)</td>
<td>Titman et al: Ch.20</td>
</tr>
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<td>10</td>
<td>Arbitrage – Options Contracts Part (B)</td>
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<td></td>
</tr>
<tr>
<td>12</td>
<td>Review Lecture</td>
<td>N/A</td>
</tr>
</tbody>
</table>
Referencing Requirements
Referencing is essential to demonstrate that you have read thoroughly and acknowledges the ideas and materials of other authors in your work.

Refer to the College referencing guide for further details (http://cbe.anu.edu.au/students/student-information/examinations-assessment/).

Scaling
Your final mark for the course will be based on the raw marks allocated for each of your assessment items. However, your final mark may not be the same number as produced by that formula, as marks may be scaled. Any scaling applied will preserve the rank order of raw marks (i.e. if your raw mark exceeds that of another student, then your scaled mark will exceed the scaled mark of that student) and may be applied either up or down.

Privacy Notice
The ANU has made a number of third party, online, databases available for students to use. Use of each online database is conditional on student end users first agreeing to the database licensor’s terms of service and/or privacy policy. Students should read these carefully.

In some cases, student end users will be required to register an account with the database licensor and submit personal information, including their: first name; last name; ANU email address; and other information.

In cases where student end users are asked to submit ‘content’ to a database, such as an assignment or short answers, the database licensor may only use the student’s ‘content’ in accordance with the terms of service – including any (copyright) licence the student grants to the database licensor.

Any personal information or content a student submits may be stored by the licensor, potentially offshore, and will be used to process the database service in accordance with the licensors terms of service and/or privacy policy.

If any student chooses not to agree to the database licensor’s terms of service or privacy policy, the student will not be able to access and use the database. In these circumstances students should contact their lecturer to enquire about alternative arrangements that are available.

Tutorial Seminar Registration
Tutorial signup for this course will be done via Wattle. Detailed information about signup times will be provided on Wattle or during your first lecture. When tutorials are available for enrolment, follow these steps:

1. Log on to Wattle, and go to the course site
2. Click on the link “Tutorial enrolment”
3. On the right of the screen, click on the tab “Become Member of.....” for the tutorial class you wish to enter
4. Confirm your choice

If you need to change your enrolment, you will be able to do so by clicking on the tab “Leave group.....” and then re-enrol in another group. You will not be able to enrol in groups that have reached their maximum number. Please note that enrolment in ISIS must be finalised for you to have access to Wattle.

SUPPORT FOR STUDENTS
The University offers a number of support services for students. Information on these is available online from http://students.anu.edu.au/studentlife/