



# AFIN3028

## Financial Risk Management

Session 1, In person/Online-scheduled-weekday, North Ryde 2022

*Department of Applied Finance*

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## General Information

Unit convenor and teaching staff

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Credit points

10

Prerequisites

(AFIN252 or AFIN2052 or AFIN250 or AFIN2050) and (AFIN270 or AFIN2070 or STAT272 or STAT2372)

Corequisites

Co-badged status

Unit description

This unit examines optimal investments strategies with respect to risk and return; the role and characteristics of international financial markets and institutions; the pricing of various financial products and how they can be used for hedging. It builds econometric models based on financial variables and how these are utilised in managing market, credit and operational risks. Students are also introduced to advanced techniques in financial markets and risk management practices.

## Important Academic Dates

Information about important academic dates including deadlines for withdrawing from units are available at <https://www.mq.edu.au/study/calendar-of-dates>

## Learning Outcomes

On successful completion of this unit, you will be able to:

**ULO1:** Illustrate coherent theoretical and technical knowledge in the discipline and practice of financial risk management.

**ULO2:** Analyse, generate and transmit solutions to risk problems in financial institutions.

**ULO3:** Formulate well-developed judgement of knowledge and responsibility to provide specialist advice in situations of financial risk.

**ULO4:** Evaluate econometric models for financial variables.

## General Assessment Information

### Late submissions of assessments

Unless a Special Consideration request has been submitted and approved, no extensions will be granted. There will be a deduction of 10% of the total available assessment-task marks made from the total awarded mark for each 24-hour period or part thereof that the submission is late. Late submissions will only be accepted up to 96 hours after the due date and time.

No late submissions will be accepted for timed assessments – e.g., quizzes, online tests.

**Table 1: Penalty calculation based on submission time**

Submission time after the due date (including weekends)	Penalty (% of available assessment task mark)	Example: for a non-timed assessment task marked out of 30
< 24 hours	10%	10% x 30 marks = 3-mark deduction
24-48 hours	20%	20% x 30 marks = 6-mark deduction
48-72 hours	30%	30% x 30 marks = 9-mark deduction
72-96 hours	40%	40% x 30 marks = 12-mark deduction
> 96 hours	100%	Assignment won't be accepted

Other assessment criteria for assessment tasks will be provided on the unit iLearn site.

## Assessment Tasks

Name	Weighting	Hurdle	Due
<u>Online Quiz</u>	0%	No	Week 4
<u>Mid Session Test</u>	20%	No	Week 8
<u>Assignment</u>	20%	No	Week 10
<u>Final Examination</u>	60%	No	University Examination Period

### Online Quiz

Assessment Type <sup>1</sup>: Quiz/Test

Indicative Time on Task <sup>2</sup>: 1 hours

Due: **Week 4**

Weighting: **0%**

The online quiz will consist of 5 to 10 questions and will be available on iLearn. Please use the quiz result as an indicator of whether you are progressing satisfactorily in the unit.

On successful completion you will be able to:

- Illustrate coherent theoretical and technical knowledge in the discipline and practice of financial risk management.

## Mid Session Test

Assessment Type <sup>1</sup>: Quiz/Test

Indicative Time on Task <sup>2</sup>: 10 hours

Due: **Week 8**

Weighting: **20%**

The mid session test of 90 minutes will be held to give students practice on a summative task and to provide feedback on their progress midway through the session.

On successful completion you will be able to:

- Illustrate coherent theoretical and technical knowledge in the discipline and practice of financial risk management.
- Analyse, generate and transmit solutions to risk problems in financial institutions.
- Formulate well-developed judgement of knowledge and responsibility to provide specialist advice in situations of financial risk.

## Assignment

Assessment Type <sup>1</sup>: Quantitative analysis task

Indicative Time on Task <sup>2</sup>: 20 hours

Due: **Week 10**

Weighting: **20%**

The assignment will cover quantitative analysis of a financial scenario or problem.

On successful completion you will be able to:

- Illustrate coherent theoretical and technical knowledge in the discipline and practice of financial risk management.
- Analyse, generate and transmit solutions to risk problems in financial institutions.
- Formulate well-developed judgement of knowledge and responsibility to provide specialist advice in situations of financial risk.
- Evaluate econometric models for financial variables.

## Final Examination

Assessment Type <sup>1</sup>: Examination

Indicative Time on Task <sup>2</sup>: 20 hours

Due: **University Examination Period**

Weighting: **60%**

A final exam of two hours will be held during the University Examination Period.

On successful completion you will be able to:

- Illustrate coherent theoretical and technical knowledge in the discipline and practice of financial risk management.
- Analyse, generate and transmit solutions to risk problems in financial institutions.
- Formulate well-developed judgement of knowledge and responsibility to provide specialist advice in situations of financial risk.
- Evaluate econometric models for financial variables.

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<sup>1</sup> If you need help with your assignment, please contact:

- the academic teaching staff in your unit for guidance in understanding or completing this type of assessment
- the [Writing Centre](#) for academic skills support.

<sup>2</sup> Indicative time-on-task is an estimate of the time required for completion of the assessment task and is subject to individual variation

## Delivery and Resources

	<p>The content for each week will comprise of a lecture and a set of tutorial questions (Problem Sets).</p> <p><b><u>Lectures</u></b></p> <p>A lecture will be held each week. Lecture notes will be available on iLearn. Please refer to iLearn announcement for class delivery mode.</p> <p><b><u>Tutorials</u></b></p> <p>Students will need to register for a tutorial. Tutorials are considered compulsory but no marks are allocated. Tutorials will be available for most, but not all weeks of the session. In weeks where there aren't any live (on-campus or online) tutorials, a recording will be provided to cover the relevant material.</p> <p>The tutorial schedule will be made available on iLearn.</p> <p>Tutorial enrolment or change of tutorial can be made through <i>eStudent</i> in the first two weeks of the session. <b><u>No tutorial changes are allowed after Week 2.</u></b> Students should attend their allocated tutorial, but exceptions may occur on a one-off basis. That is, where circumstances prevent you from attending your own tutorial in a given week, you may attend an alternative tutorial if room available.</p> <p>Students are expected to complete the '<i>Tutorial Questions</i>' as a self-directed study activity before attending a tutorial. Additional learning support will be available in tutor consultation times.</p> <p>See timetable for classes on the University web site at: <a href="https://timetables.mq.edu.au/2022/">https://timetables.mq.edu.au/2022/</a></p>
	<p>Hull, J. (2018) <i>Risk management and Financial Institutions</i>, 5th Edition, Wiley</p>
	<ul style="list-style-type: none"> <li>• Internet access</li> <li>• Access to iLearn</li> <li>• Non-programmable financial or scientific calculator</li> <li>• Computer with Microsoft Excel</li> <li>• RMFI software available from textbook author's website</li> </ul>

## Unit Schedule

Week	Textbook chapters	Topic
1	1-6	Introduction
2	7-9	Managing Market and Interest Rate Risk
3	10, 11	Volatility, Correlation and Copulas
4	12, 13	Value-at-Risk, Expected Shortfall and Historical Simulation
5	13, 14	Model-Building Approach to Value-at-Risk and Expected Shortfall
6	15-18	Regulation
7	17, 19	Credit Risk
		<i>Mid Session Break</i>
8		<b>Mid Session Test</b>

Week	Textbook chapters	Topic
9	20, 21	CVA, DVA and Credit VaR
10	22, 23	Scenario Analysis, Stress Testing and Operational Risk
11	24, 25	Liquidity and Model Risk
12	26-29	Economic Capital, Enterprise Risk Management, Financial Innovation and Risk Management Mistakes to Avoid
13		Revision

## Policies and Procedures

Macquarie University policies and procedures are accessible from [Policy Central \(https://policies.mq.edu.au\)](https://policies.mq.edu.au). Students should be aware of the following policies in particular with regard to Learning and Teaching:

- [Academic Appeals Policy](#)
- [Academic Integrity Policy](#)
- [Academic Progression Policy](#)
- [Assessment Policy](#)
- [Fitness to Practice Procedure](#)
- [Assessment Procedure](#)
- [Complaints Resolution Procedure for Students and Members of the Public](#)
- [Special Consideration Policy](#)

Students seeking more policy resources can visit [Student Policies \(https://students.mq.edu.au/support/study/policies\)](https://students.mq.edu.au/support/study/policies). It is your one-stop-shop for the key policies you need to know about throughout your undergraduate student journey.

To find other policies relating to Teaching and Learning, visit [Policy Central \(https://policies.mq.edu.au\)](https://policies.mq.edu.au) and use the [search tool](#).

## Student Code of Conduct

Macquarie University students have a responsibility to be familiar with the Student Code of Conduct: <https://students.mq.edu.au/admin/other-resources/student-conduct>

## Results

Results published on platform other than [eStudent](#), (eg. iLearn, Coursera etc.) 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](https://ask.mq.edu.au) or if you are a Global MBA student contact [globalmba.support@mq.edu.au](mailto:globalmba.support@mq.edu.au)

## Academic Integrity

At Macquarie, we believe [academic integrity](#) – honesty, respect, trust, responsibility, fairness and courage – is at the core of learning, teaching and research. We recognise that meeting the expectations required to complete your assessments can be challenging. So, we offer you a range of resources and services to help you reach your potential, including free [online writing and maths support](#), [academic skills development](#) and [wellbeing consultations](#).

## Student Support

Macquarie University provides a range of support services for students. For details, visit <http://students.mq.edu.au/support/>

## The Writing Centre

[The Writing Centre](#) provides resources to develop your English language proficiency, academic writing, and communication skills.

- [Workshops](#)
- [Chat with a WriteWISE peer writing leader](#)
- [Access StudyWISE](#)
- [Upload an assignment to Studiosity](#)
- [Complete the Academic Integrity Module](#)

The Library provides online and face to face support to help you find and use relevant information resources.

- [Subject and Research Guides](#)
- [Ask a Librarian](#)

## Student Services and Support

Macquarie University offers a range of [Student Support Services](#) including:

- [IT Support](#)
- [Accessibility and disability support](#) with study
- Mental health [support](#)
- [Safety support](#) to respond to bullying, harassment, sexual harassment and sexual assault
- [Social support including information about finances, tenancy and legal issues](#)

## Student Enquiries

Got a question? Ask us via [AskMQ](#), or contact [Service Connect](#).

## IT Help

For help with University computer systems and technology, visit [http://www.mq.edu.au/about\\_us/offices\\_and\\_units/information\\_technology/help/](http://www.mq.edu.au/about_us/offices_and_units/information_technology/help/).

When using the University's IT, you must adhere to the [Acceptable Use of IT Resources Policy](#). The policy applies to all who connect to the MQ network including students.