



ACE Network Subject Information Guide

C*-Algebras

Semester 1, 2022

Administration and contact details

Host department	School of Mathematics and Applied Statistics
Host institution	University of Wollongong
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Subject details

Handbook entry URL	https://courses.uow.edu.au/ and search MTST401
Subject homepage URL	Moodle - TBA
Honours student hand-out URL	Moodle - TBA
Start date:	February 28 2022
End date:	June 3 2022
Contact hours per week:	2
Census date:	31 March 2022
Lecture day(s) and time(s):	TBA
Description of electronic access arrangements for students (for example, WebCT)	Moodle

Subject content

1. Subject content description

We will cover the basics of the theory of C*-algebras, including spectral theory, Gelfand duality and the commutative Gelfand-Naimark theorem, the continuous functional calculus,

Learning Outcome Descriptors at AQF Level 8

Knowledge

K1: coherent and advanced knowledge of the underlying principles and concepts in one or more disciplines

K2: knowledge of research principles and methods

Skills

S1: cognitive skills to review, analyse, consolidate and synthesise knowledge to identify and provide solutions to complex problem with intellectual independence

S2: cognitive and technical skills to demonstrate a broad understanding of a body of knowledge and theoretical concepts with advanced understanding in some areas

S3: cognitive skills to exercise critical thinking and judgement in developing new understanding

S4: technical skills to design and use in a research project

S5: communication skills to present clear and coherent exposition of knowledge and ideas to a variety of audiences

Application of Knowledge and Skills

A1: with initiative and judgement in professional practice and/or scholarship

A2: to adapt knowledge and skills in diverse contexts

A3: with responsibility and accountability for own learning and practice and in collaboration with others within broad parameters

A4: to plan and execute project work and/or a piece of research and scholarship with some independence

5. Learning resources

A set of subject notes and exercises will be provided. No additional learning materials are required.

6. Assessment

Exam/assignment/classwork breakdown					
Exam	60 %	Assignment	40 %	Class work	0 %
Assignment due dates					
	15 April 2022	03 June 2022			
Approximate exam date					
				11-23 June	

Institution honours program details

Weight of subject in total honours assessment at host department	1/8
Thesis/subject split at host department	Thesis worth 50%
Honours grade ranges at host department	
H1	85-100
H2a	75-84
H2b	65-74
H3	50-64



Institution masters program details

Weight of subject in total masters assessment at host department	1/16
Thesis/subject split at host department	Thesis worth 1/8
Masters grade ranges at host department	
H1	85-100
H2a	75-84
H2b	65-74
H3	50-64