



The University of Southern Queensland

## Course specification

### Description: Mathematics Honours Project B

Subject	Cat-nbr	Class	Term	Mode	Units	Campus
MAT	4101	34336	2, 2004	ONC	2.00	TWMBA

<b>Academic group:</b>	FOSCI
<b>Academic org:</b>	FOS003
<b>Student contribution band:</b>	2
<b>ASCED code:</b>	010101

### STAFFING

Examiner: Tony Roberts

Moderator: Dmitry Strunin

### REQUISITES

Pre-requisite: MAT4100

### RATIONALE

An in-depth project and dissertation are necessary to prepare graduates for further research and responsible jobs in mathematics and its applications. This course in conjunction with MAT4100, Mathematics Honours Project A, enables students to develop research capability and an advanced level of mathematical skills for that purpose.

### SYNOPSIS

This course forms the second half of the research training component of the Mathematics Honours program. A selected project in applied mathematics or statistics will be completed with supervision by appropriate staff from the Department of Mathematics and Computing. The project will consist of review and research into a well defined area of mathematics and its application. Information and ideas will be gathered, organised, analysed and discussed in a critical and evaluative manner. The topic of the project and report will be selected in consultation with the staff of the Department.

### OBJECTIVES

On successful completion of this course students will be able to:

1. demonstrate the ability to develop higher level mathematical or statistical skills which include the analysis, synthesis and evaluation of factors involved in the project;

2. demonstrate the ability to complete an extensive research based project and evaluate the results;
3. effectively document and communicate the results of the project and the methods used.

## TOPICS

Description	Weighting (%)
1. Candidates will complete a supervised research project in consultation with appropriate Mathematics staff.	100.00

## TEXT and MATERIALS required to be PURCHASED or ACCESSED:

ALL textbooks and materials are available for purchase from USQ BOOKSHOP (unless otherwise stated). Orders may be placed via secure internet, free fax 1800642453, phone 07 46312742 (within Australia), or mail. Overseas students should fax +61 7 46311743, or phone +61 7 46312742. For costs, further details, and internet ordering, use the 'Textbook Search' facility at <http://bookshop.usq.edu.au> click 'Semester', then enter your 'Course Code' (no spaces).

To be advised depending on the research project.

## REFERENCE MATERIALS:

Reference materials are materials that, if accessed by students, may improve their knowledge and understanding of the material in the course and enrich their learning experience.

Appropriate material from: - books, monographs - journals and conference proceedings - computer software and material from electronic sources.

## STUDENT WORKLOAD REQUIREMENTS:

ACTIVITY	HOURS
Project Work	310.00
Supervisor Consultation	30.00

## ASSESSMENT DETAILS

Description	Marks out of	Wtg(%)	Due date
SEMINAR	5.00	5.00	20 Jul 2004 (see note 1)
DISSERTATION	95.00	95.00	20 Jul 2004 (see note 2)
LITERATURE & RESOURCE SURVEY	1.00	0.00	20 Jul 2004 (see note 3)

### NOTES:

1. Refer to Examiner for information about project due dates.
2. Refer to Examiner for information about project due dates.
3. Refer to Examiner for information about project due dates.

## IMPORTANT ASSESSMENT INFORMATION

- 1 Attendance requirements:  
It is the student's responsibility to maintain regular contact with their supervisor.
- 2 Requirements for students to complete each assessment item satisfactorily:  
To complete each of the assessment items satisfactorily, students must obtain at least 50% of the marks available for each assessment item.
- 3 Penalties for late submission of required work:  
Submission of the assessment items later than the due dates, or extended due dates, set by the Examiner may lead to a Fail grade for the course.
- 4 Requirements for student to be awarded a passing grade in the course:  
To be awarded a passing grade in the course, students must complete all assessment items satisfactorily.
- 5 Method used to combine assessment results to attain final grade:  
The final grades for students will be assigned on the basis of the aggregate of the weighted marks obtained for each of the summative assessment items in the course.
- 6 Examination information:  
There is no examination in this course.
- 7 Examination period when Deferred/Supplementary examinations will be held:  
There will be no Deferred or Supplementary examinations in this course.
- 8 University Regulations:  
Students should read USQ Regulations 5.1 Definitions, 5.6. Assessment, and 5.10 Academic Misconduct for further information and to avoid actions which might contravene University Regulations. These regulations can be found at the URL <http://www.usq.edu.au/corporateservices/calendar/part5.htm> or in the current USQ Handbook.

## OTHER REQUIREMENTS

- 1 Final grades for students will be determined by a meeting of two Examiners and the Supervisor.

- 2 The Examiners and Supervisor may award an incomplete grade, in which case they will nominate a future date by which the dissertation must be resubmitted. A dissertation which has been resubmitted cannot be awarded an incomplete grade (resubmission can occur at most once).
  - 3 Submission of the Dissertation: The due date for submission of the dissertation is the date by which a student must despatch the dissertation to the USQ. The onus is on the student to provide proof of the despatch date, if requested by the Examiner. Students must retain a copy of their dissertation. This must be produced within 24 hours of receipt of a request being made by the Examiner.
  - 4 The Dissertation will be assessed on the demonstrated quality of: incorporation of established knowledge; assimilation of research literature; scientific techniques; innovation; and technical writing.
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