



# MATH40237 *Fundamental Mathematics for* *University* Term 2 - 2021

Profile information current as at 05/07/2022 04:57 pm

All details in this unit profile for MATH40237 have been officially approved by CQU University and represent a learning partnership between the University and you (our student). The information will not be changed unless absolutely necessary and any change will be clearly indicated by an approved correction included in the profile.

## General Information

### Overview

Fundamental Mathematics for University introduces foundational concepts, rules and methods of elementary mathematics. You will complete regular module reviews and use the feedback to develop a unified body of knowledge in the fundamentals of mathematics. Topics include operations, percentages, introductory algebra, simple equation solving, exponents, linear equations, introductory statistics, and units and conversions. This provides a foundation for further study in mathematics and a broad range of other academic disciplines.

### Details

Career Level: *Non-award*

Credit Points: 6

Student Contribution Band: 7

Fraction of Full-Time Student Load: 0.125

### Pre-requisites or Co-requisites

There are no requisites for this unit.

Important note: Students enrolled in a subsequent unit who failed their pre-requisite unit, should drop the subsequent unit before the census date or within 10 working days of Fail grade notification. Students who do not drop the unit in this timeframe cannot later drop the unit without academic and financial liability. See details in the [Assessment Policy and Procedure \(Higher Education Coursework\)](#).

### Offerings For Term 2 - 2021

- Brisbane
- Bundaberg
- Cairns
- Gladstone
- Mackay
- Online
- Rockhampton
- Townsville

### Attendance Requirements

All on-campus students are expected to attend scheduled classes – in some units, these classes are identified as a mandatory (pass/fail) component and attendance is compulsory. International students, on a student visa, must maintain a full time study load and meet both attendance and academic progress requirements in each study period (satisfactory attendance for International students is defined as maintaining at least an 80% attendance record).

### Website

[This unit has a website, within the Moodle system, which is available two weeks before the start of term. It is important that you visit your Moodle site throughout the term. Please visit Moodle for more information.](#)

## Class and Assessment Overview

### Recommended Student Time Commitment

Each 6-credit Non-award unit at CQUniversity requires an overall time commitment of an average of 12.5 hours of study per week, making a total of 150 hours for the unit.

### Class Timetable

#### [Regional Campuses](#)

Bundaberg, Cairns, Emerald, Gladstone, Mackay, Rockhampton, Townsville

#### [Metropolitan Campuses](#)

Adelaide, Brisbane, Melbourne, Perth, Sydney

### Assessment Overview

#### 1. **Written Assessment**

Weighting: Pass/Fail

#### 2. **Take Home Exam**

Weighting: 40%

#### 3. **Take Home Exam**

Weighting: 60%

### Assessment Grading

This is a graded unit: your overall grade will be calculated from the marks or grades for each assessment task, based on the relative weightings shown in the table above. You must obtain an overall mark for the unit of at least 50%, or an overall grade of 'pass' in order to pass the unit. If any 'pass/fail' tasks are shown in the table above they must also be completed successfully ('pass' grade). You must also meet any minimum mark requirements specified for a particular assessment task, as detailed in the 'assessment task' section (note that in some instances, the minimum mark for a task may be greater than 50%). Consult the [University's Grades and Results Policy](#) for more details of interim results and final grades.

## CQUniversity Policies

**All University policies are available on the [CQUniversity Policy site](#).**

You may wish to view these policies:

- Grades and Results Policy
- Assessment Policy and Procedure (Higher Education Coursework)
- Review of Grade Procedure
- Student Academic Integrity Policy and Procedure
- Monitoring Academic Progress (MAP) Policy and Procedure – Domestic Students
- Monitoring Academic Progress (MAP) Policy and Procedure – International Students
- Student Refund and Credit Balance Policy and Procedure
- Student Feedback – Compliments and Complaints Policy and Procedure
- Information and Communications Technology Acceptable Use Policy and Procedure

This list is not an exhaustive list of all University policies. The full list of University policies are available on the [CQUniversity Policy site](#).

## Previous Student Feedback

### Feedback, Recommendations and Responses

Every unit is reviewed for enhancement each year. At the most recent review, the following staff and student feedback items were identified and recommendations were made.

#### Feedback from Unit Evaluation

##### Feedback

Positive student comments regarding the content and structure of the Moodle site and the ease with which this site can be navigated.

##### Recommendation

The Moodle site has been changed to a "Tiles" view with the layout of the weekly blocks changing to a tabulated format in line with university policy. This has improved readability and decreased scrolling for students.

#### Feedback from Unit Evaluation

##### Feedback

Students highly value the variety of resources available to them on the Moodle site, especially the instructional videos either via Youtube or ECHO.

##### Recommendation

The FMU instructional video resources and the textbook will continued to be upgraded as required.

#### Feedback from Unit Evaluation

##### Feedback

Comments from students who cannot attend the Zoom lectures due to other commitments.

##### Recommendation

Zoom lectures will be recorded and made available to students via the Moodle site.

## Unit Learning Outcomes

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

1. Recall fundamental mathematical concepts and techniques such as operations, percentages, introductory algebra, simple equation solving, exponents, linear equations, introductory statistics and units and conversions.
2. Apply appropriate mathematical techniques
3. Develop solutions to applied mathematical problems
4. Reflect on assessment to improve mathematical comprehension
5. Analyse information using mathematical techniques
6. Communicate mathematical solutions.

## Alignment of Learning Outcomes, Assessment and Graduate Attributes

 N/A Level   Introductory Level   Intermediate Level   Graduate Level   Professional Level   Advanced Level

### Alignment of Assessment Tasks to Learning Outcomes

Assessment Tasks	Learning Outcomes					
	1	2	3	4	5	6
1 - Written Assessment - 0%	•	•	•	•	•	•
2 - Take Home Exam - 40%		•	•		•	•

Assessment Tasks	Learning Outcomes					
	1	2	3	4	5	6
<b>3 - Take Home Exam - 60%</b>	•	•	•		•	•

### Alignment of Graduate Attributes to Learning Outcomes

Graduate Attributes	Learning Outcomes					
	1	2	3	4	5	6
<b>1 - Self Management</b>	—			—	—	
<b>2 - Communication</b>		—	—			—
<b>3 - Information Literacy</b>						
<b>4 - Information Technology Competence</b>						
<b>5 - Problem Solving</b>	—	—	—	—	—	
<b>6 - Critical Thinking</b>		—	—		—	
<b>7 - Cross-Cultural Competence</b>						
<b>8 - Ethical Practice</b>						—
<b>9 - Aboriginal and Torres Strait Islander Cultures</b>						

### Alignment of Assessment Tasks to Graduate Attributes

Assessment Tasks	Graduate Attributes								
	1	2	3	4	5	6	7	8	9
<b>1 - Written Assessment - 0%</b>	—	—			—	—		—	
<b>2 - Take Home Exam - 40%</b>		—			—	—		—	

## Textbooks and Resources

### Textbooks

MATH40237

#### Prescribed

#### Fundamental Mathematics for University

Edition: 9 (2021)

Authors: Sharon Cohalan

CQUniversity Australia

Rockhampton , Queensland , Australia

Binding: Spiral

#### Additional Textbook Information

The textbook is available from the MATH40237 Moodle site. The textbook cannot be purchased from the CQUniversity Bookshop. We strongly advise you to print the textbook. You can either print the textbook using a computer/printer or source a commercial store/company. Your Access Coordinator will provide advice on printing options.

### IT Resources

#### You will need access to the following IT resources:

- CQUniversity Student Email
- Internet
- Unit Website (Moodle)
- Microsoft Office or similar
- Computer- ability to access study materials, including instructional videos & upload assessment. Printer for printing assessment. Scanner or equivalent for uploading assessment.

## Referencing Style

No referencing style set.

## Teaching Contacts

**Antony Dekkers** Unit Coordinator

[a.dekkers@cqu.edu.au](mailto:a.dekkers@cqu.edu.au)

**Jinx Atherton** Unit Coordinator

[j.atherton@cqu.edu.au](mailto:j.atherton@cqu.edu.au)

## Schedule

### Week 1 - 12 Jul 2021

Module/Topic	Chapter	Events and Submissions/Topic
<b>STMA</b> - The Study of Mathematics		
<b>OPER</b> - Basic Operations with Numbers		

### Week 2 - 19 Jul 2021

Module/Topic	Chapter	Events and Submissions/Topic
<b>OPER</b> - Basic Operations with Numbers (continued)		<b>STMA Module Review:</b> due Monday 19 July at 9am.

### Week 3 - 26 Jul 2021

Module/Topic	Chapter	Events and Submissions/Topic
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**PERC** - Percentages

**OPER Module Review:** due Monday 26 July OPER at 9am.

**Week 4 - 02 Aug 2021**

**Module/Topic**

**Chapter**

**Events and Submissions/Topic**

**ALG1** - Introduction to Algebra

**PERC Module Review:** due Monday 2 August at 9am.

**Week 5 - 09 Aug 2021**

**Module/Topic**

**Chapter**

**Events and Submissions/Topic**

**ALG1** - Introduction to Algebra

**EQN1** - Solving Algebraic Equations

**Vacation Week - 16 Aug 2021**

**Module/Topic**

**Chapter**

**Events and Submissions/Topic**

**ALG1 Module Review:** due Monday 16 August at 9am.  
University break week.

**Week 6 - 23 Aug 2021**

**Module/Topic**

**Chapter**

**Events and Submissions/Topic**

**EQN1** - Solving Algebraic Equations

**Assessment Test A:** due Tuesday 24 August at 9.00am.

**Week 7 - 30 Aug 2021**

**Module/Topic**

**Chapter**

**Events and Submissions/Topic**

**LINE** - Graphs and Linear Equations

**EQN1 Module Review:** due Monday 30 August at 9.00am.

**Week 8 - 06 Sep 2021**

**Module/Topic**

**Chapter**

**Events and Submissions/Topic**

**LINE** - Graphs and Linear Equations

**STAT** - Introduction to Statistics

**Week 9 - 13 Sep 2021**

**Module/Topic**

**Chapter**

**Events and Submissions/Topic**

**STAT** - Introduction to Statistics

**EXPO** - Exponents

**LINE Module Review:** due Monday 13 September at 9.00am

**Week 10 - 20 Sep 2021**

**Module/Topic**

**Chapter**

**Events and Submissions/Topic**

**EXPO** - Exponents

**STAT Module Review:** due Monday 20 September at 9.00am

**Week 11 - 27 Sep 2021**

**Module/Topic**

**Chapter**

**Events and Submissions/Topic**

**UNCN** - Units and Conversion

**EXPO Module Review:** due Monday 27 September at 9.00am

**Week 12 - 04 Oct 2021**

**Module/Topic**

**Chapter**

**Events and Submissions/Topic**

**REVIEW**

**UNCN Module Review:** due Tuesday 5 October at 9.00am.

**Review/Exam Week - 11 Oct 2021**

**Module/Topic**

**Chapter**

**Events and Submissions/Topic**

**Assessment Test B:** due Thursday 14 October at 9.00am.

## Term Specific Information

Unit Coordinator: Antony Dekkers

email: a.dekkers@cqu.edu.au

Telephone (Office): 0749309355

Office: Rockhampton, North, CQUniversity, Building 32, Ground Floor, Room G38.

If you have any individual queries, please do not hesitate to email me and I will get back to you within two working days.

## Assessment Tasks

### 1 Module Reviews

**Assessment Type**

Written Assessment

**Task Description**

You will complete nine modules in MATH40237 (from the Fundamental Mathematics for University Textbook).

At the conclusion of each module you must complete the corresponding Module Review. These are available on the MATH40237 Moodle site, along with the due date for each.

The Module Reviews are completed as assignments with no supervision necessary.

The purpose of these reviews is to monitor your progress throughout the term, allowing you to identify any concepts that require further review. The reviews also provide a basis for communication between you and your Lecturer/Unit Coordinator.

You must achieve an overall average of 50% across the nine Module Reviews in order to be awarded a PASS for Assessment Task 1.

You must pass Assessment Task 1 in order to be eligible to pass MATH40237 provided all other conditions are met.

**Assessment Due Date**

Module Reviews are due on the Monday of the week specified in the Unit Profile Schedule. A more detailed version of this schedule can be found on the FMU Moodle site.

**Return Date to Students**

Module Reviews will be marked and returned within 7 days of the due date or submission date, whichever is the latest. These reviews will be returned via the FMU Moodle site for all students.

**Weighting**

Pass/Fail

**Minimum mark or grade**

You must achieve an overall average of 50% across the nine Module Reviews in order to be awarded a PASS for Assessment Task 1.

**Assessment Criteria**

Marks for each question in the Module Reviews will be allocated for the following:

- using appropriate setting out
- following correct mathematical protocols
- showing all correct steps in the solution
- answering the questions asked, where appropriate
- finding the correct answer.

**Submission**

Online

**Submission Instructions**

Students are required to submit each Module Review online at the FMU Moodle site via the ASSESSMENT link. Detailed

instructions on how to complete and upload these Module Reviews can be found on the FMU Moodle site.

### **Learning Outcomes Assessed**

- Recall fundamental mathematical concepts and techniques such as operations, percentages, introductory algebra, simple equation solving, exponents, linear equations, introductory statistics and units and conversions.
- Apply appropriate mathematical techniques
- Develop solutions to applied mathematical problems
- Reflect on assessment to improve mathematical comprehension
- Analyse information using mathematical techniques
- Communicate mathematical solutions.

### **Graduate Attributes**

- Self Management
- Communication
- Problem Solving
- Critical Thinking
- Ethical Practice

## **2 ASSESSMENT TEST A**

### **Assessment Type**

Take Home Exam

### **Task Description**

Assessment Test A (ATA) is in the form of a take home exam and will be made available via the FMU Moodle site on Friday 20 August at 9am. Assessment Test A should take you three (3) hours to complete.

You will be given a 4 day time-frame to access and download the test from the FMU Moodle site, complete it and upload it back.

Assessment Test A covers material from the STMA, OPER, PERC and ALG1 modules.

You are expected to successfully complete the relevant Module Reviews for these modules before attempting Assessment Test A.

This take home exam is not a supervised assessment item and you are required to do your own work, maintaining academic integrity and honesty at all times.

### **Assessment Due Date**

Assessment Test A is due to be completed and uploaded into Moodle by Tuesday 24 August at 9.00am. Assessment Test A must be submitted as one (1) pdf file via the ASSESSMENT link on the FMU Moodle site.

### **Return Date to Students**

Assessment Test A (mark only) will be returned via the unit's Moodle site two (2) weeks from the due date or submission date, whichever is the later.

### **Weighting**

40%

### **Assessment Criteria**

Assessment Criteria

Marks for each question will be allocated for the following:

- using appropriate setting out
- following correct mathematical protocols
- showing all correct steps in the solution
- answering the question, where appropriate
- finding the correct answer.

### **Submission**

Online

### **Submission Instructions**

Assessment Test A must be uploaded as one (1) pdf file through the ASSESSMENT link on the FMU Moodle site.

### **Learning Outcomes Assessed**

- Apply appropriate mathematical techniques
- Develop solutions to applied mathematical problems
- Analyse information using mathematical techniques



- Communicate mathematical solutions.

### **Graduate Attributes**

- Communication
- Problem Solving
- Critical Thinking
- Ethical Practice

## **3 ASSESSMENT TEST B**

### **Assessment Type**

Take Home Exam

### **Task Description**

Assessment Test B (ATB) is in the form of a take home exam and will be made available via the FMU Moodle site on Wednesday 13 October at 9am. This test should take you three (3) hours to complete.

You will be given a 24 hour time-frame to access and download the test from the FMU Moodle site, complete it and upload it back.

Assessment Test B covers material from the EQN1, LINE, STAT, EXPO and UNCN modules.

You are expected to successfully complete the relevant Module Reviews for these modules before attempting Assessment Test B.

This take home exam is not a supervised assessment item and you are required to do your own work, maintaining academic integrity and honesty at all times.

### **Assessment Due Date**

Assessment Test B is due to be completed and uploaded into Moodle by Thursday 14 October at 9.00am. Assessment Test B must be submitted as one (1) pdf file via the ASSESSMENT link on the FMU Moodle site.

### **Return Date to Students**

Assessment Test B (mark only) will be returned via the unit's Moodle site on 5 November (Certification of Grades).

### **Weighting**

60%

### **Minimum mark or grade**

The minimum grade for Assessment Test B is 40%.

### **Assessment Criteria**

Marks for each question will be allocated for the following:

- using appropriate setting out
- following correct mathematical protocols
- showing all correct steps in the solution
- answering the question, where appropriate
- finding the correct answer.

### **Submission**

Online

### **Submission Instructions**

Assessment Test B must be uploaded as one (1) pdf file through the ASSESSMENT link on the FMU Moodle site.

### **Learning Outcomes Assessed**

- Recall fundamental mathematical concepts and techniques such as operations, percentages, introductory algebra, simple equation solving, exponents, linear equations, introductory statistics and units and conversions.
- Recall fundamental mathematical concepts and techniques such as operations, percentages, introductory algebra, simple equation solving, exponents, linear equations, introductory statistics and units and conversions.
- Apply appropriate mathematical techniques
- Develop solutions to applied mathematical problems
- Analyse information using mathematical techniques
- Communicate mathematical solutions.

## Academic Integrity Statement

As a CQUniversity student you are expected to act honestly in all aspects of your academic work.

Any assessable work undertaken or submitted for review or assessment must be your own work. Assessable work is any type of work you do to meet the assessment requirements in the unit, including draft work submitted for review and feedback and final work to be assessed.

When you use the ideas, words or data of others in your assessment, you must thoroughly and clearly acknowledge the source of this information by using the correct referencing style for your unit. Using others' work without proper acknowledgement may be considered a form of intellectual dishonesty.

Participating honestly, respectfully, responsibly, and fairly in your university study ensures the CQUniversity qualification you earn will be valued as a true indication of your individual academic achievement and will continue to receive the respect and recognition it deserves.

As a student, you are responsible for reading and following CQUniversity's policies, including the [Student Academic Integrity Policy and Procedure](#). This policy sets out CQUniversity's expectations of you to act with integrity, examples of academic integrity breaches to avoid, the processes used to address alleged breaches of academic integrity, and potential penalties.

### What is a breach of academic integrity?

A breach of academic integrity includes but is not limited to plagiarism, self-plagiarism, collusion, cheating, contract cheating, and academic misconduct. The Student Academic Integrity Policy and Procedure defines what these terms mean and gives examples.

### Why is academic integrity important?

A breach of academic integrity may result in one or more penalties, including suspension or even expulsion from the University. It can also have negative implications for student visas and future enrolment at CQUniversity or elsewhere. Students who engage in contract cheating also risk being blackmailed by contract cheating services.

### Where can I get assistance?

For academic advice and guidance, the [Academic Learning Centre \(ALC\)](#) can support you in becoming confident in completing assessments with integrity and of high standard.

### What can you do to act with integrity?



#### Be Honest

If your assessment task is done by someone else, it would be dishonest of you to claim it as your own



#### Seek Help

If you are not sure about how to cite or reference in essays, reports etc, then seek help from your lecturer, the library or the Academic Learning Centre (ALC)



#### Produce Original Work

Originality comes from your ability to read widely, think critically, and apply your gained knowledge to address a question or problem