



MATH40237 Fundamental Mathematics for University

Term 2 - 2020

Profile information current as at 24/04/2024 05:07 pm

All details in this unit profile for MATH40237 have been officially approved by CQUniversity 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 - 2020

- 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

Continue with the current structure of the unit content on the Moodle site.

Feedback from Unit Evaluation

Feedback

Students highly value the variety of resources available to them on the Moodle site, especially the instructional videos.

Recommendation

Continue to upgrade the FMU instructional video resources as required.

Feedback from Teaching Staff feedback

Feedback

The change to a take-home exam for Assessment Test B has inflated the overall results for this unit.

Recommendation

Return to this becoming a supervised test.

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



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%		•	•		•	•
3 - Take Home Exam - 60%	•	•	•		•	•

Alignment of Graduate Attributes to Learning Outcomes

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

Alignment of Assessment Tasks to Graduate Attributes

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

Textbooks and Resources

Textbooks

MATH40237

Prescribed

Fundamental Mathematics for University

Edition: 8 (2019)

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 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)
- Computer - ability to access study materials, including instructional videos and scan and upload assessment.
- Microsoft Office or similar

Referencing Style

All submissions for this unit must use the referencing style: [Harvard \(author-date\)](#)

For further information, see the Assessment Tasks.

Teaching Contacts

Antony Dekkers Unit Coordinator

a.dekkers@cqu.edu.au

Schedule

Week 1 - 13 Jul 2020

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

Week 2 - 20 Jul 2020

Module/Topic	Chapter	Events and Submissions/Topic
OPER - Basic Operations with Numbers (continued)		

Week 3 - 27 Jul 2020

Module/Topic	Chapter	Events and Submissions/Topic
PERC - Percentages		STMA/OPER Module Review - due Monday 27 July at 9:00am.

Week 4 - 03 Aug 2020		
Module/Topic	Chapter	Events and Submissions/Topic
ALG1 - Introduction to Algebra		PERC Module Review - due Monday 3 August at 9.00am.
Week 5 - 10 Aug 2020		
Module/Topic	Chapter	Events and Submissions/Topic
ALG1 - Introduction to Algebra (continued) EQN1 - Solving Algebraic Equations		
Vacation Week - 17 Aug 2020		
Module/Topic	Chapter	Events and Submissions/Topic
		ALG1 Module Review - due Monday 17 August at 9.00am.
Week 6 - 24 Aug 2020		
Module/Topic	Chapter	Events and Submissions/Topic
EQN1 - Solving Algebraic Equations (continued)		ASSESSMENT TEST A Due: Week 6 Monday (24 Aug 2020) 9:00 am AEST
Week 7 - 31 Aug 2020		
Module/Topic	Chapter	Events and Submissions/Topic
LINE - Graphs and Linear Equations		EQN1 Module Review - due Monday 31 August at 9.00am.
Week 8 - 07 Sep 2020		
Module/Topic	Chapter	Events and Submissions/Topic
LINE - Graphs and Linear Equations(continue) STAT - Introduction to Statistics		
Week 9 - 14 Sep 2020		
Module/Topic	Chapter	Events and Submissions/Topic
STAT - Introduction to Statistics (continued) EXPO - Exponents		LINE Module Review - due Monday 14 September at 9.00am.
Week 10 - 21 Sep 2020		
Module/Topic	Chapter	Events and Submissions/Topic
EXPO - Exponents (continued)		STAT Module Review - due Monday 21 September at 9.00am.
Week 11 - 28 Sep 2020		
Module/Topic	Chapter	Events and Submissions/Topic
UNCN - Units and Conversion		EXPO Module Review - due Monday 28 September at 9.00am.
Week 12 - 05 Oct 2020		
Module/Topic	Chapter	Events and Submissions/Topic
REVIEW		UNCN Module Review - due Tuesday 6 October at 9.00am.
Review/Exam Week - 12 Oct 2020		
Module/Topic	Chapter	Events and Submissions/Topic
		Assessment Test B The date and time of the Assessment Test B will be made available through the unit's Moodle site approximately six weeks before the Take Home Examination period.

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).

There are eight module reviews and these reviews are available on the MATH40237 Moodle site. The combined STMA/OPER module review will be marked out of 30 and the remaining seven module reviews will be marked out of 20. 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 eight module reviews in order to be awarded a PASS for Assessment Task 1. This means that the minimum mark that you must achieve overall for these module reviews is 85 out of the allocated 170 marks.

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 in the Unit Guide located on the unit's Moodle site.

Return Date to Students

Module reviews will be marked and returned within 7 days of the review due date or submission date, whichever is the latest. These reviews will be returned to all students via the unit's Moodle site.

Weighting

Pass/Fail

Minimum mark or grade

The minimum grade for Module Reviews is 50%.

Assessment Criteria

Marks for each question in the Module Tests 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; and
- finding the correct answer.

Referencing Style

- [Harvard \(author-date\)](#)

Submission

Online

Submission Instructions

Students are required to submit each module review online at the unit's Moodle site via the Assessment link. Detailed instructions on how to complete and upload these module reviews can be found on the unit's 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 is in the form of a take home exam and will be made available via the unit's Moodle site on Wednesday August 12 at 7:00 am.

The take home exam 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 the exam.

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

Assessment Due Date

Week 6 Monday (24 Aug 2020) 9:00 am AEST

Assessment Test A is due to be completed and uploaded into Moodle by Tuesday 25 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 will be returned via the unit's Moodle site two (2) weeks from the due date or submission date, whichever is the latest.

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; and
- finding the correct answer.

Referencing Style

- [Harvard \(author-date\)](#)

Submission

Online

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 is in the form of a take home exam and will be made available via Moodle.

The take home exam 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 unit's Moodle website, complete it and upload it back. Assessment Test B covers material from the EQN1, STAT, EXPO, LINE and UNCN modules. You are expected to successfully complete the relevant Module Reviews for these modules before attempting the take home exam.

Assessment Test B is not a supervised assessment item and you are required to do your own work, maintaining academic integrity with all honesty.

Assessment Due Date

The date and time of the Take Home Exam will be made available through the unit's Moodle site approximately six weeks before the Take Home Examination period.

Return Date to Students

Assessment Test B mark will be returned via the unit's Moodle site on 6 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; and
- finding the correct answer.

Referencing Style

- [Harvard \(author-date\)](#)

Submission

Online

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