

In Progress

Please note that this Unit Profile is still in progress. The content below is subject to change.



EDCU12038 *Teaching for Mathematical Proficiency*

Term 2 - 2024

Profile information current as at 16/05/2024 08:31 am

All details in this unit profile for EDCU12038 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

Teaching for Mathematical Proficiency focuses on the development of professional knowledge that supports the teaching of Mathematics in primary schools in this unit. You will explore Mathematics content and experiment with pedagogical approaches for teaching mathematical reasoning and understanding. You will be introduced to mathematics content that recognises your own disposition towards mathematics and how your students may find learning mathematics difficult. You will evaluate ICTs and other resources, learning processes and teaching strategies on the development of mathematical proficiency. You will be introduced to the rationale, organisation and content of the Australian Curriculum: Mathematics and design plans for learning and teaching mathematical concepts and skills appropriate for specific year levels in the primary school. You will explain and justify approaches to promoting numeracy development through reference to authoritative sources and identify strategies for informing and involving parents and carers in the educative process. You will demonstrate effective pedagogy in Mathematics through role play of examples of classroom practice including the use of ICTs to support mathematical understanding. You will be introduced to the socioconstructivist approach to teaching mathematics through problem solving and inquiry based learning. you will be encouraged to facilitate your students' mathematical thinking.

Details

Career Level: *Undergraduate*

Unit Level: *Level 2*

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 - 2024

- Bundaberg
- Mackay
- Online
- Rockhampton

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 Undergraduate 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

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 SUTE

Feedback

Support campus students

Recommendation

UC to make contact with campus students through drop in on campus tutorials.

Feedback from Unit evaluation data

Feedback

Clear unit guidelines

Recommendation

Review unit Course Outline clearly identify goals, restate these in first week of term. Identify requirements of the assessments.

Feedback from SUTE

Feedback

Learning Community Groups

Recommendation

Emphasise the significance of peer collaboration from a social and professional perspective. Encourage continual and ongoing support for all LCG members.

Unit Learning Outcomes

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

1. Reflect critically on approaches to teaching Mathematics to improve professional knowledge and practice
2. Apply research on effective practice to justify pedagogy that improves students' mathematical proficiency and understanding of core concepts
3. Recommend strategies, resources and learning activities that aid the transfer of mathematical understanding to real world contexts
4. Evaluate the content, skills and teaching strategies of the learning area to identify ICTs and other resources that enhance understanding, fluency, reasoning and problem solving in Mathematics
5. Design well-structured lessons that engage learners in actively applying key mathematical skills to understand the content
6. Use strategies that contribute to effective partnerships with parents/ carers in supporting students' numeracy development
7. Engage in opportunities for sharing and enhancing professional knowledge and practice through reflection and collaboration.

Successful completion of this unit provides opportunities for students to engage with the Australian Professional Standards for Teachers (Graduate Career Stage) focus areas of:

- 1.2 Understand how students learn
- 2.1 Content and teaching strategies of the teaching area
- 2.5 Literacy and numeracy strategies
- 2.6 Information and Communication Technology (ICT)
- 3.3 Use teaching strategies
- 3.4 Select and use resources
- 3.6 Evaluate and improve teaching programs
- 3.7 Engage parents/carers in the educative process
- 6.2 Engage in professional learning and improve practice
- 7.3 Engage with the parents/carers

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	7
1 - Written Assessment - 45%	•	•	•	•	•	•	
2 - Reflective Practice Assignment - 45%	•	•	•	•	•		•
3 - Peer assessment - 10%	•		•		•		•

Alignment of Graduate Attributes to Learning Outcomes

Graduate Attributes	Learning Outcomes						
	1	2	3	4	5	6	7
1 - Communication	•	•				•	•
2 - Problem Solving			•	•	•		
3 - Critical Thinking	•	•	•	•	•	•	•
4 - Information Literacy		•		•			
5 - Team Work				•		•	•
6 - Information Technology Competence				•			•
7 - Cross Cultural Competence						•	
8 - Ethical practice							
9 - Social Innovation							
10 - Aboriginal and Torres Strait Islander Cultures							

Textbooks and Resources

Information for Textbooks and Resources has not been released yet.

This information will be available on Monday 17 June 2024

Academic Integrity Statement

Information for Academic Integrity Statement has not been released yet.

This unit profile has not yet been finalised.