TEAC 7074 MATHEMATICS FOR CONTEMPORARY LEARNERS

Credit Points 10

Legacy Code 102321

Coordinator Peter Mcdonald (https://directory.westernsydney.edu.au/search/name/Peter Mcdonald/)

Description In this subject students will explore issues relating to the teaching and learning of mathematics in the contemporary primary classroom. These issues will include promoting positive dispositions of learners, engaging pedagogies and developing creative and critical thinking for critical numeracy. Students will explore theory relating to the integration of information and communication technologies in the mathematics classroom including the development of teachers' Technological Pedagogical Content Knowledge (TPACK).

School Education

Discipline Teacher Education: Primary

Student Contribution Band HECS Band 1 10cp

Check your fees via the Fees (https://www.westernsydney.edu.au/currentstudents/current_students/fees/) page.

Level Postgraduate Coursework Level 7 subject

Restrictions

Students must be enrolled in 1809 Graduate Certificate in Primary Mathematics or 1830 Graduate Certificate in Primary Mathematics Education or 1911 Master of Education

Assumed Knowledge

Students must have either completed all core mathematics subjects of the 1781 Master of Teaching (Primary) program at Western Sydney University, or be an accredited primary teacher.

Learning Outcomes

On successful completion of this subject, students should be able to:

1. Examine the importance of promoting positive dispositions towards mathematics amongst teachers and students
2. Locate a range of mathematical pedagogical practices to engage primary students with mathematics
3. Demonstrate how the use of rich tasks can promote critical and creative thinking in the primary mathematics classroom
4. Apply the Substitution, Augmentation, Modification and Redefinition (SAMR) model of technology integration to a range of technology-based mathematics activities
5. Analyse a range of digital resources in relation to their ability to enhance the understanding of mathematical concepts
6. Assess a range of digital resources in relation to their alignment with the NSW K-10 Mathematics Syllabus

Subject Content

1. Issues relating to disposition towards mathematics
2. Engaging teachers and students with mathematics
3. Critical and creative thinking in the mathematics classroom
4. Developing students?f critical numeracy
5. Exploring the Technological Pedagogical Content Knowledge (TPACK) framework
6. Supporting the integration of technology into primary mathematics teaching and learning

Assessment

The following table summarises the standard assessment tasks for this subject. Please note this is a guide only. Assessment tasks are regularly updated, where there is a difference your Learning Guide takes precedence.

Type	Length	Percent	Threshold	Individual/ Group Task
Professional Task	2500 words	50	N	Individual
Essay	2000 words	50	N	Individual

Prescribed Texts

- Donaldson, G., Field, J., Harries, D., Tope, C., & Taylor, H. (2012). Becoming a primary mathematics specialist teacher. Retrieved from http://uwsau.eblib.com.au/

Teaching Periods

Spring (2023)

Online

Online

Subject Contact Peter Mcdonald (https://directory.westernsydney.edu.au/search/name/Peter Mcdonald/)

View timetable (https://classregistration.westernsydney.edu.au/odd/timetable/?subject_code=TEAC7074_23-SPR_ON_2#subjects)

Spring (2024)

Online

Online

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View timetable (https://classregistration.westernsydney.edu.au/even/timetable/?subject_code=TEAC7074_24-SPR_ON_2#subjects)