

TEAC 7002 ADDRESSING DIVERSITY IN MATHEMATICS TEACHING AND LEARNING

Credit Points 10

Legacy Code 102322

Coordinator Peter McDonald ([https://directory.westernsydney.edu.au/search/name/Peter McDonald/](https://directory.westernsydney.edu.au/search/name/Peter%20McDonald/))

Description In this unit students will apply their knowledge of curriculum and pedagogy to address diversity within the primary mathematics classroom. Students will explore strategies to address a broad range of learning needs incorporating gifted and talented students, students from diverse cultural backgrounds including Aboriginal students and students with additional needs including dyscalculia. Other issues such as gender and mathematics for English as an Additional Language Learners (EALD) will be investigated.

School Education

Discipline Teacher Education: Primary

Student Contribution Band HECS Band 1 10cp

Check your HECS Band contribution amount 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, 1830 Graduate Certificate in Primary Mathematics Education or 1720 Master of Inclusive 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, or enrolled in the Master of Inclusive Education.

Learning Outcomes

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

1. Explain how concepts located within the primary mathematics curriculum are inter-connected
2. Apply contemporary research relating to students considered mathematically gifted and talented to primary mathematics pedagogy
3. Summarise issues relating to Aboriginal children and the teaching and learning of mathematics
4. Demonstrate an understanding of pedagogies that promote differentiation in the primary mathematics classroom
5. Identify the implications of specific issues relating to diversity for primary mathematics teaching and learning
6. Design a range of inclusive mathematical tasks/activities

Subject Content

1. Identifying the big ideas within the primary mathematics curriculum
2. Teaching mathematics to children who are gifted and talented

3. Teaching mathematics to a variety of cultures including Aboriginal students
4. Gender issues in primary mathematics education
5. Primary mathematics and English language learners (ELL)
6. Differentiation in mathematics
7. Problem solving for differentiation
8. Programming and planning for students with additional needs in relation to mathematics and numeracy

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.

| Item | Length | Percent | Threshold | Individual/Group Task |
|-------------------|--------|---------|-----------|-----------------------|
| Essay | 2500 | 50 | N | Individual |
| Professional Task | 2500 | 50 | N | Individual |

Prescribed Texts

- Sousa, D. (2015). How the brain learns mathematics (2nd ed.). Thousand Oaks, CA: Corwin Press.

Teaching Periods

Spring Online

Online

Subject Contact Peter McDonald ([https://directory.westernsydney.edu.au/search/name/Peter McDonald/](https://directory.westernsydney.edu.au/search/name/Peter%20McDonald/))

View timetable (https://classregistration.westernsydney.edu.au/even/timetable/?subject_code=TEAC7002_22-SPR_ON_O#subjects)