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# TEAC 7065 LEADING MATHEMATICS IN THE PRIMARY SCHOOL

### Credit Points 10

Legacy Code 102323

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

**Description** This unit provides an in-depth exploration of the required mathematics knowledge for primary teaching and for leading other teachers in their professional learning. Students will explore and further develop their pedagogical content knowledge, applying it to the primary mathematics curriculum. They will develop a deep understanding of specific mathematical content, the ways in which children learn that content and appropriate, research based pedagogies.

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 1830 Graduate Certificate in Primary Mathematics Education; 1847 Master of Teaching (Secondary) STEM or 1911 Master of Education.

### Assumed Knowledge

Students must have either completed all core mathematics subjects of the MTeach (Primary) program at Western Sydney University, or be a fully qualified primary teacher.

# **Learning Outcomes**

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

- 1. Explain the essential components of pedagogical content knowledge as it relates to the teaching of primary mathematics
- 2. Examine learning theory relating to primary mathematics
- 3. Apply mathematical ideas to the Pedagogical Content Knowledge domains map for mathematical knowledge for teaching
- Demonstrate pedagogical content knowledge across the primary mathematics curriculum by aligning specific mathematical concepts to curriculum, content and pedagogical practices
- 5. Formulate a whole-school approach to teaching mathematics
- 6. Design professional learning resources based on specific mathematical concepts or ideas

# Subject Content

- 1. Knowledge for mathematics education leadership
- 2. Pedagogical Content Knowledge domains for primary mathematics teachers
- 3. Effective pedagogy in mathematics
- 4. Programming and planning across the primary school
- 5. Understanding and addressing mathematics anxiety

- 6. Beliefs and identity in mathematics
- 7. Leading change in mathematic pedagogy

8. Effective strategies for in situ professional development and mathematics

# 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.

ltem	Length	Percent	Threshold	Individual/ Group Task
Essay	3,000 words	50	Ν	Individual
Presentation	Presentation (20 minute) with accompanyin resource	50 ç	Ν	Individual

Prescribed Texts

 Donaldson, G., Field, J. Harries, D., Tope, C., & Taylor, H. (2012). Becoming a primary mathematics specialist teacher. Abingdon, London: Routledge

**Teaching Periods** 

# Autumn

### Online

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

View timetable (https://classregistration.westernsydney.edu.au/even/ timetable/?subject\_code=TEAC7065\_22-AUT\_ON\_O#subjects)