TEAC 7093 PRIMARY MATHEMATICS AND NUMERACY 1

Credit Points 10

Legacy Code 101580

Coordinator Kate Mulkern (https://directory.westernsydney.edu.au/search/name/Kate Mulkern/)

Description The subject will develop students' understandings of children's construction of mathematical and numeracy concepts during the years from Kindergarten to Year 2. The subject will model explicit numeracy instruction and scaffolding of numerical, spatial, graphical, statistical, and algebraic domains. Students will develop their ability to assess young children's mathematical understandings and numeracy development. The subject will explore how to create learning experiences for diverse learners, incorporating investigations and digital technologies to enhance the growth of children's mathematical thinking. Students will interrogate the NSW Mathematics K-10 Syllabus, with a focus on Kindergarten to Year 2, and with a particular emphasis on the Working Mathematically strand. This subject is included in the Development Phase of the Master of Teaching program.

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 1781 Master of Teaching (Primary)

Learning Outcomes

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

1. Understand ways the beliefs, attitudes, and values held by themselves and their students affect their mathematical learning and teaching.
2. Apply knowledge and understanding of the development of those concepts, skills and processes of mathematics related to the teaching of number and algebra, measurement and space, statistics and probability for Kindergarten to Year 2 in accordance with relevant syllabus and curriculum documents.
3. Apply knowledge and understanding of a range of pedagogies that demonstrate explicit teaching, modelling and scaffolding practices for teaching and learning mathematics, including problem solving and investigation-based approaches.
4. Explain the importance of Working Mathematically for primary school mathematics learners and teachers.
5. Identify appropriate assessment strategies to inform the planning of teaching/learning activities that cater for the diverse needs of individual students with an emphasis on evidence-based programs.
6. Apply understandings of the role of mathematics within the broader school curriculum, including the relationship between mathematics, numeracy and literacy.

Subject Content

- The development and construction of mathematical ideas during the early years of schooling;
- Recognition of early mathematical thinking that children can bring to school;
- Early understanding of whole number relationships;
- Numerical thinking strategies;
- Early spatial thinking;
- The development of measurement concepts;
- Use of problem solving and investigation as an effective pedagogy in the mathematics classroom;
- Programming and planning for mathematics in the early years based on the relevant NSW K-10 Syllabus;
- Assessment strategies for the mathematics classroom;
- Pedagogies that address diversity within the mathematic classroom;
- Integration of mathematics with other Key Learning Areas;
- Using programs such as Count Me In Too, TENS, and the ACARA Numeracy Progressions for numeracy teaching and learning; and
- Children's literature, concrete manipulatives, and digital tools for teaching 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.

Type	Length	Percent	Threshold	Individual/ Group Task
Report	2,000 words	50	N	Individual
Professional Task	2,500 words	50	N	Individual

Prescribed Texts

- Booker, G., Bond, D., Seah, R. (2021). Teaching Primary Mathematics (6th ed.). Pearson Australia.
- NSW Education Standards Authority (NESA). (2021) Mathematics K–2 Syllabus NSW Education Standards Authority, 2021

Teaching Periods

Spring (2023)

Bankstown City

On-site

Subject Contact Kate Mulkern (https://directory.westernsydney.edu.au/search/name/Kate Mulkern/)

View timetable (https://classregistration.westernsydney.edu.au/odd/timetable/?subject_code=TEAC7093_23-SPR_BK_1#subjects)

WSU Online TRI-3 (2023)

Wsu Online

Online

Subject Contact Kate Mulkern (https://directory.westernsydney.edu.au/search/name/Kate Mulkern/)

View timetable (https://classregistration.westernsydney.edu.au/odd/timetable/?subject_code=TEAC7093_23-OT3_OW_2#subjects)

WSU Online TRI-1 (2024)

Wsu Online

Online

Subject Contact Kate Mulkern (https://directory.westernsydney.edu.au/search/name/Kate Mulkern/)

View timetable (https://classregistration.westernsydney.edu.au/even/timetable/?subject_code=TEAC7093_24-OT1_OW_2#subjects)

Autumn (2024)

Bankstown City

On-site

Subject Contact Kate Mulkern (https://directory.westernsydney.edu.au/search/name/Kate Mulkern/)

View timetable (https://classregistration.westernsydney.edu.au/even/timetable/?subject_code=TEAC7093_24-AUT_BK_1#subjects)

Spring (2024)

Bankstown City

On-site

Subject Contact Kate Mulkern (https://directory.westernsydney.edu.au/search/name/Kate Mulkern/)

View timetable (https://classregistration.westernsydney.edu.au/even/timetable/?subject_code=TEAC7093_24-SPR_BK_1#subjects)