

TEAC 2043 NUMERACY AND MATHEMATICS IN THE EARLY YEARS

Credit Points 10

Legacy Code 102641

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

Description The subject will develop students' understandings of children's construction of mathematical and numeracy concepts during the years from Kindergarten to Year 3. Students will develop their ability to assess young children's mathematical understandings and numeracy development, and to provide learning experiences for a diversity of learners, including investigation and the use of digital technologies, to enhance the growth of children's mathematical thinking. The subject will study the NSW K-10 Syllabus in all of its strands, with a particular emphasis on the Working Mathematically strand. This subject is included in the Development Phase of the Bachelor of Education.

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 Undergraduate Level 2 subject

Restrictions

Students must be enrolled in the 1876 Bachelor of Education (Primary) or 1717 Bachelor of Education (Primary) Aboriginal and Torres Strait Islander Education.

Learning Outcomes

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

1. Examine ways the beliefs, attitudes, and values held by themselves and their students affect their mathematical learning and teaching;
2. Apply the concepts, skills and processes of mathematics related to the teaching of space, measurement, data, patterns and algebra and number for 5 to 9 year olds in accordance with the current NSW Syllabus for the Australian Curriculum: Mathematics K-10, Support Documents and ACARA Numeracy Progressions;
3. Apply a range of pedagogies 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, and the relationship to literacy;
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 programs such as Count Me In Too, Count Me In Too (Indigenous), Targeted Early Numeracy (TEN) and Taking off with Numeracy (TOWN);
6. Apply understandings of the role of mathematics within the broader school curriculum, including the relationship between mathematics, numeracy and literacy;

7. Examine the mathematical learning needs of students from diverse backgrounds, such as Aboriginal and Torres Strait Islander, English as an Additional Language/ Dialect, culturally diverse.

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
- 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
- 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	2000 words	50	N	Individual
Professional Task	5 minute video, 500 word justification, transcript of video.	50	N	Individual

Prescribed Texts

- Booker, G., Bond, D., & Seah, R. (2020). Teaching primary mathematics (6th edition.). Pearson Australia.
- NSW Education Standards Authority (NESA). (2022). Mathematics K-10 syllabus. <https://curriculum.nsw.edu.au/learning-areas/mathematics/mathematics-k-10-2022/content> (<https://curriculum.nsw.edu.au/learning-areas/mathematics/mathematics-k-10-2022/content/>)

Teaching Periods

Autumn (2024)

Bankstown City

On-site

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

View timetable (https://classregistration.westernsydney.edu.au/even/timetable/?subject_code=TEAC2043_24-AUT_BK_1#subjects)