TEAC 7038 EARLY MATHEMATICS AND NUMERACY

Credit Points 10

Legacy Code 102603

Coordinator Janene Rox (https://directory.westernsydney.edu.au/search/name/Janene Rox/)

Description From 2020 students should note that core units are now taught in semesters rather than half yearly sessions. This subject aims to develop students' critical understandings of how numeracy and powerful mathematical ideas shape young children's lives during their first eight years. Students will develop their ability to provide rich learning experiences that enhance and assess the growth of children's numeracy and foundational mathematical concepts. The subject will foster positive dispositions towards teaching and applying mathematics and numeracy in diverse settings for children aged birth to eight years, using the current Early Years Learning Framework and the NSW Mathematics K-10 Syllabus curriculum document.

School Education

Discipline Teacher Education: Early Childhood

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

Equivalent Subjects LGYA 1111 - Mathematics Science Technology 0-8 TEAC 7060 - Investigating with Mathematics Science and Technology

Restrictions

Students must be enrolled in the Master of Teaching (Birth-5 Years/Birth-12 Years).

Learning Outcomes

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

1. Evaluate the different theoretical approaches relevant to early years' mathematics teaching and learning.
2. Develop understandings of deep mathematical concepts, skills and processes relevant to young children birth-8 years.
3. Apply the principles, practices and learning outcomes of The Early Years Learning Framework for Australia to mathematical assessment and planning.
4. Apply knowledge and understanding of the NSW Mathematics K-10 Syllabus and Australian Curriculum documents to plan rich mathematical lessons for lower primary school students.
5. Demonstrate understandings of issues of diversity and equity in mathematics teaching and learning for example, and strategies to support the learning needs of Aboriginal and Torres Strait Islander students and students from low socio-economic communities.
6. Assess and Plan appropriate, engaging experiences to develop mathematical concepts and numeracy for young children.
7. Assess the mathematical understandings of young children.
8. Locate, select and apply a range of appropriate resources, including digital technologies to promote the development of mathematical concepts and kills for a diverse range of abilities.

Subject Content

1. Knowledge and understanding of mathematics curriculum birth - 8 years.
2. Understanding development of number and algebra, measurement and geometry, and statistics and probability concepts.
3. The processes of working mathematically to investigate explore and engage in problem solving.
4. Applying the Early Years Learning Framework principles, practices and learning outcomes to document, assess and plan for experiences in the teaching and learning of mathematics.
5. Using the current NSW Mathematics K-10 syllabus to plan appropriate, engaging mathematics lessons.
6. Issues of diversity and equity in mathematics teaching and learning, for example, addressing the needs of Aboriginal and Torres Strait Islander students, bilingual students, and students from low socio-economic communities.
7. Teaching strategies that promote deep mathematical understanding incorporating a range of materials including digital technologies, concrete manipulatives, games and children's literature.
8. Effective programming, planning and assessment strategies for early year's mathematics and numeracy 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.

Item	Length	Percent	Threshold	Individual/Group Task
Report	2500 words	50	N	Individual
Professional Task	2500 words	50	N	Individual

Prescribed Texts

- Yelland, N., Diezmann, C., & Butler, D. (2014).?Early mathematical explorations.?Port Melbourne, Victoria: Cambridge University Press.
- Board of Studies NSW (2012). Mathematics K-10 ? NSW syllabus for the Australian Curriculum. Retrieved from http://syllabus.bos.nsw.edu.au/
- Department of Education, Employment and Workplace Relations (DEEWR). (2009). Belonging, being and becoming: The early years learning framework for Australia. ACT: Commonwealth of Australia.Retrieved from https://docs.education.gov.au/documents/belonging-being-becoming-early-years-learning-framework-australia

Teaching Periods

Spring

Bankstown

Day

Subject Contact Janene Rox (https://directory.westernsydney.edu.au/search/name/Janene Rox/)

View timetable (https://classregistration.westernsydney.edu.au/even/timetable/?subject_code=TEAC7038_22-SPR_BA_D#subjects)