TEAC 4002 DEVELOPING PRIMARY MATHEMATICS

Credit Points 10

Legacy Code 102135

Coordinator John Ley (https://directory.westernsydney.edu.au/search/name/John Ley/)

Description The subject is only offered to students enrolled in the Bachelor of Education (Primary) Aboriginal and Torres Strait Islander Education program. This subject is designed to extend the development of mathematical concepts, skills and understandings for children from years 3 to 6 based on the Australian curriculum and the NSW Educational Standards Authority (NESA) requirements. An awareness of relevant research and curriculum documents, combined with the practical knowledge of teaching, learning and assessment strategies, will assist teachers to program and implement a series of investigative experiences that will enhance the conceptual knowledge of their students.

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 4 subject

Equivalent Subjects EDUC 2009 - Developing Primary Mathematics (AREP)

Restrictions

Students must be enrolled in 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. Explain the central concepts, modes of enquiry and structure of Mathematics.

2. Design and implement lesson sequences using developing knowledge of the NSW Syllabus For The Australian Curriculum: Mathematics K-10 Syllabus (K-6 Section).and recent Mathematics' theory and practice.

3. Apply the five interrelated processes of questioning, applying strategies, communicating, reasoning, reflecting when working mathematically.

4. Describe the five content strands of Number, Patterns and Algebra, Data, Measurement and Space and Geometry up to stage 4.

5. Apply concepts of assessment and children's learning within the Mathematics K-6 Learning Area and up to Stage 4.

6. Design and implement lesson sequences using knowledge of the NSW Syllabus For The Australian Curriculum: Mathematics K-10 Syllabus (K-6 Section) or other curriculum requirements.

7. Explain the role and value of Mathematics in the broader school curriculum and the relationship between numeracy and literacy.

8. Utilise a range of resources to meet the needs of diverse K-6 students in Mathematics K-6 including an Indigenous Australian perspective and catering to students with special needs.

Subject Content

1. The nature of mathematics learning and current trends in the teaching/learning of mathematics as a way to interpret the world, stages 2-4.
2. The place of communicating and problem solving, reasoning, understanding and fluency in working mathematically.
3. The development of number concepts and the number operations - addition and subtraction, multiplication and division, fractions and decimals.
4. The development of understanding patterns and algebra.
5. The development of measurement (length, area, volume and capacity, mass, time) and geometry concepts (3D, 2D space, angles and position)
6. The development of rational number concepts and data collection, including planning, gathering, organising, applying data to solve problems and communicating results through the selection of appropriate representations.
7. The development of chance concepts
8. Student assessment strategies

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	Mandatory
Professional Task	1,500 Words	50	N	Individual	Y
Case Study	1,500 Words	50	N	Individual	Y

Prescribed Texts

- Booker, G. (2010). Teaching primary mathematics (4th ed.). Sydney, Australia: Pearson Australia.
- NSW Board of Studies. (2012). NSW syllabus for the Australian curriculum: Mathematics K-10 syllabus (K-6 section). Sydney, Australia: NSW Board of Studies. Retrieved from http://syllabus.bos.nsw.edu.au/download/.