# TEAC 7094 PRIMARY MATHEMATICS AND NUMERACY 2

Credit Points 10

Legacy Code 101584

Coordinator Maree Skillen (https://directory.westernsydney.edu.au/search/name/Maree Skillen/)

Description From 2020 students should note that core units are now taught in semesters rather than half yearly sessions. This unit builds on the unit Primary Mathematics and Numeracy 1 with a focus on learners from Year 3 to Year 6, and assumes students have gained familiarity with the knowledge, skills and understandings children require across all strands of the NSW K-10 Syllabus, including the Working Mathematically components. In this unit students develop their understanding of primary mathematics in the mid to upper primary years, with a strong emphasis on aspects of teaching such as student engagement, assessment, differentiation for diversity and the integration of technology. By engaging with this unit, students will have the opportunity to experience, plan and assess a broad range of practices to enhance student learning outcomes and improve student engagement with mathematics.

**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/)

Level Postgraduate Coursework Level 7 subject

Pre-requisite(s) Students enrolled in course 17811663 Master of Teaching (Primary) must have completed the pre-requisite unit TEAC 7093 - Primary Mathematics before enrolling in this unit Students enrolled in course 17831691 Master of Teaching (Birth – 5Birth – 12 Years) must have completed the pre-requisite unit TEAC 7038 - Early Mathematics and Numeracy before enrolling in this unit

#### Restrictions

Students must be enrolled in one of the following programs, 1663 Master of Teaching (Primary), 1691 Master of Teaching (Birth - 5 Years/Birth - 12 Years), 1781 Master of Teaching (Primary) or 1783 Master of Teaching (Birth - 5 Years/Birth - 12 Years)

## **Learning Outcomes**

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

- Demonstrate knowledge and understanding of the development of the concepts, skills and processes of mathematics related to the teaching of number and algebra, measurement and geometry, and statistics and probability for 8 to 12 year olds in accordance with the NSW K-10 Syllabus for the Australian Curriculum: Mathematics K-10 syllabus (for K-6), and the ACARA Numeracy Progressions.
- 2. Explain the importance of the Working Mathematically processes for primary school mathematics learners and teachers.

- Plan effective and engaging teaching and learning experiences for mid to upper primary learners that include the use of a range of digital resources to enhance student outcomes.
- Apply knowledge and understanding of a range of engaging pedagogies for teaching and learning mathematics, including cooperative learning, problem solving and investigation based approaches.
- Evaluate student learning against curriculum requirements by interpreting student work samples, practising consistent and comparable judgements, and explain the importance of timely and appropriate feedback for student learning.
- Demonstrate knowledge and understanding of teaching and assessment strategies for differentiating teaching and learning experiences in mathematics to meet the specific needs of students across the full range of abilities.

### **Subject Content**

- 1. Theories of engagement, numeracy development and learning in mathematics for students in the primary years.
- 2. Implementation of the NSW K-10 Mathematics syllabus across all strands, with particular focus on the Working Mathematically strand.
- 3. Incorporation of problem solving and investigation-based pedagogies in primary mathematics and numeracy.
- 4. Strategies to address affective issues relating to the teaching and learning of primary mathematics.
- 5. Effective use of digital technologies to enhance the teaching and learning of mathematics and improve student engagement.
- 6. Catering to learners from diverse backgrounds (e.g. cultural and linguistic).
- 7. Differentiation to address a range of abilities (including special needs and gifted and talented).
- 8. Investigation of rich tasks to promote critical numeracy.
- 9. Effective assessment of mathematics and numeracy.
- 10. Investigation of the requirements of the ACARA Numeracy Progressions.

#### 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
Professional Task	2,000 words	50	N	Individual
Report	2,000 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). (2019). Mathematics K-10 syllabus. http://educationstandards.nsw.edu.au/wps/portal/nesa/k-10/learning-areas/mathematics/mathematics-k-10

**Teaching Periods** 

#### **Autumn**

#### Bankstown

#### Day

**Subject Contact** Maree Skillen (https://directory.westernsydney.edu.au/search/name/Maree Skillen/)

View timetable (https://classregistration.westernsydney.edu.au/even/timetable/?subject\_code=TEAC7094\_22-AUT\_BA\_D#subjects)

# **Spring**

## Bankstown

#### Day

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View timetable (https://classregistration.westernsydney.edu.au/even/timetable/?subject\_code=TEAC7094\_22-SPR\_BA\_D#subjects)