

## UNIT OUTLINE FOR EDP151.5 Primary Mathematics

<b>Name of Unit 1 (Unit Code 1)</b>
Primary Mathematics (EDP151.5)

### SECTION 1 – GENERAL INFORMATION

#### Administrative details

<b>Associated higher education awards</b>	<b>Duration</b>	<b>Level</b> <i>(for example, introductory, intermediate, advanced level, 1st year, 2nd year, 3rd year)</i>	<b>Unit Coordinator</b> <i>(incl. academic title)</i>
Bachelor of Education	One semester	1 <sup>st</sup> year	Head of Program

#### Core or elective unit

Indicate if the unit is a

core unit

elective unit

other (please specify below):

#### Unit weighting

Using the table below, indicate the credit point weighting of this unit and the credit point total for the course of study (for example, 10 credit points for the unit and 320 credit points for the course of study).

<b>Unit credit points</b>	<b>Total course credit points</b>
6 credit points	192 credit points

#### Student workload

Using the table below, indicate the expected student workload per week for this unit.

<b>No. timetabled hours per week</b>	<b>No. personal study hours per week</b>	<b>Total workload hours per week</b>
3	7	10

For those students requiring additional English language support, how many additional hours per week is it expected that they will undertake?

Additional English language support:   0   hours per week

**SECTION 2 – ACADEMIC DETAILS****Brief description of the content of the unit**

This unit introduces the pre-service teacher to research-based theories and teaching methodologies which lead to the development of mathematical competence in learners. It examines engaging approaches, strategies, and resources for the teaching and learning of the current Primary Mathematics curriculum based on the Australian Curriculum.

**Learning outcomes for the unit**

1. Outline and evaluate the research on how Mathematics is best taught and learnt.
2. Identify and explain the place for conceptual understanding in the teaching and learning of Mathematics concepts.
3. Analyse and interpret the Australian Curriculum: Mathematics and the implications for planning, teaching, and learning.
4. Select and plan rich learning tasks that develop specific mathematical concepts for effective learning.

**Assessment tasks**

Type	Learning Outcome/s assessed	When assessed – year, session and week	Weighting
<b>Essay</b> Based on current research, explain how mathematics is best taught and learnt and give an example. (1350 words)	1,2,4	S1 Week 5	30%
<b>Reading Journal and Activities</b> Reading journal and in class activities – done weekly (Minimum 1350 words)	1,2,3,4	S1 Week 14	30%
<b>Unit Plan</b> Students will develop a modified unit plan based on a mathematics topic and year level using the Australian curriculum (1800 words equivalent)	1,2,3,4	S1 Week 14	40%

## 2.1 Prescribed and recommended readings

Provide below, in formal reference format, a list of the prescribed and recommended readings for the unit.

### Prescribed reading:

Jorgensen, R., & Dole, S. (2020). *Teaching mathematics in Primary School*. (3<sup>rd</sup> ed.). Allen & Unwin.

### Recommended reading:

Bobis, J., Mulligan, J., & Lowrie, T. (2013). *Mathematics for children: Challenging children to think mathematically*. (4<sup>th</sup> ed.). Pearson Education.

Booker, G., Bond, D., Sparrow, L., & Swan, P. (2014). *Teaching primary mathematics* (5<sup>th</sup> ed.). Pearson Australia.

Haylock, D. (2018). *Mathematics explained for primary teachers* (6<sup>th</sup> ed.). Sage Publications

Reys, R. E. et al. (2021). *Helping Children Learn Mathematics* (4<sup>th</sup> ed.). John Wiley & Sons Australia, (2012).

Rickard, C. (2013), *Essential Primary Mathematics*. Open University.

Siemon, D. E., Warren, E., Faragher, R. (2020). *Teaching Mathematics: Foundations to Middle Years* (3<sup>rd</sup> ed.). Oxford University Press.

Van de Walle, J. A., Karp, K. S. (2019). *Elementary and Middle School Mathematics: Teaching Developmentally, Global Edition* (10<sup>th</sup> ed.). P&C Education.