EDUC90778 Primary Mathematics Education 1

Credit Points:	12.5
Level:	9 (Graduate/Postgraduate)
Dates & Locations:	2016, Parkville This subject commences in the following study period/s: February, Parkville - Taught on campus.
Time Commitment:	Contact Hours: 36 hours Total Time Commitment: 170 hours
Prerequisites:	Admission to the Master of Teaching (Primary)
Corequisites:	

Subject	Study Period Commencement:	Credit Points:
EDUC90772 Professional Practice and Seminar Prim 1	Semester 1, Semester 2	6.25

Recommended Background Knowledge:	None
Non Allowed Subjects:	None
Core Participation Requirements:	For the purposes of considering request for Reasonable Adjustments under the Disability Standards for Education (Cwth 2005), and Student Support and Engagement Policy, academic requirements for this subject are articulated in the Subject Overview, Learning Outcomes, Assessment and Generic Skills sections of this entry. It is University policy to take all reasonable steps to minimise the impact of disability upon academic study, and reasonable adjustments will be made to enhance a student's participation in the University's programs. Students who feel their disability may impact on meeting the requirements of this subject are encouraged to discuss this matter with a Faculty Student Adviser and Student Equity and Disability Support: http://services.unimelb.edu.au/disability
Coordinator:	Ms Amy Brass
Contact:	**amber.brass@unimelb.edu.au (mailto:amber.brass@unimelb.edu.au)**
Subject Overview:	This subject provides an orientation to teaching mathematics in Victorian primary schools. Teacher candidates will develop pedagogical content knowledge for the effective teaching and learning of the following mathematics strands from Prep to Year 6: # Content Strand: Number and Algebra # Proficiency Strands: Understanding, Fluency, Problem Solving, Reasoning. Within this content strand, teacher candidates will analyse the development of key concepts in primary mathematics and identify critical progression points for children's learning. They will consider typical conceptions and misconceptions held by children, their likely causes, diagnostic tools to diagnose them and teaching strategies for changing them. Teacher candidates will be introduced to assessment schemes for children's understanding (e.g., Mathematics Online Interview, NAPLAN) and the use of school and state-wide data to improve school students' learning in the content strand Number and Algebra. The four proficiency strands will be introduced and teacher candidates will identify the advantages and limitations of particular assessment items for monitoring children's understanding and fluency. Teacher candidates will consider Victorian and Australian curriculum documents and resources, lesson planning, classroom assessment and effective use of resources. Teacher candidates will consider important pedagogical issues such as: questioning, selection of good examples, representations and models of mathematical ideas. By widening their appreciation of exemplary mathematics teaching, teacher candidates are expected to develop reflective mathematics teaching practices.

Learning Outcomes:	On completion of this subject, with respect to the strands above, teacher candidates will be able to: # Demonstrate mastery of the topics and their everyday applications which are relevant to primary teaching or are necessary to be personally numerate; # Demonstrate an understanding of how children construct mathematical knowledge; # Demonstrate knowledge of a range of classroom teaching techniques; # Demonstrate knowledge of how children think and learn; # Demonstrate an ability to develop teaching activities and relate them to learning outcomes.
Assessment:	There are two assessment tasks, both assessment tasks must be passed: a report of a formative assessment task in one Number topic (2000 words) due mid semester, 50% A report of a formative assessment task in a second Number topic (2000 words) due end of semester, 50% There are two hurdle requirements: Completion of 8 weekly tasks, 0%. A mastery level pass (80%) of a Year 7 Number & Algebra Test, 0%. This subject has a minimum hurdle requirement of 80% attendance at all tutorials, seminars and workshops.
Prescribed Texts:	Collection of readings Reys, R.E., Lindquist, M.L., Lambdin, D.V., Smith, N.L., Rogers, A., Falle, J., Frid, S., & Bennett, S. (2012). Helping Children Learn Mathematics, 1st Australian Edition, Melbourne: John Wiley.
Breadth Options:	This subject is not available as a breadth subject.
Fees Information:	Subject EFTSL, Level, Discipline & Census Date, http://enrolment.unimelb.edu.au/fees
Generic Skills:	On completion of this subject, teacher candidates will have the knowledge, skills and understanding to enable them to: # Be skilled communicators who can effectively articulate and justify their practices as knowledgeable agents of change. # Be flexible and able to adapt to change through knowing how to learn; # Understand the significance of developing their practice on the basis of research evidence; # Be independent of mind, responsible, resilient, self-regulating.
Links to further information:	http://education.unimelb.edu.au/study_with_us/become_a_teacher/primary
Related Course(s):	Master of Teaching (Primary)