EDUC90776 Primary Mathematics Education 3

Credit Points:	6.25
Level:	9 (Graduate/Postgraduate)
Dates & Locations:	2015, Parkville This subject commences in the following study period/s: Semester 2, Parkville - Taught on campus.
Time Commitment:	Contact Hours: 18 hours Total Time Commitment: 85 hours

Prerequisites:

Subject	Study Period Commencement:	Credit Points:
EDUC90773 Primary Mathematics Education 2	March, July	6.25

Corequisites:

Subject	Study Period Commencement:	Credit Points:
EDUC90771 Professional Practice & Seminar Prim 4	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 Students Experiencing Academic Disadvantage Policy, academic requirements for this subject are articulated in the Subject Overview, Learning Outcomes and Assessment Requirements of this entry.The University is dedicated to provide support to those with special requirements. Further details on the disability support scheme can be found at the Disability Liaison website: http://www.services.unimelb.edu.au/disability
Coordinator:	Dr Vicki Steinle
Contact:	**Contact Us (https://enquiry.app.unimelb.edu.au/?cc=MGSE-ALL&fn=MGSE)** Call: 13 MELB (13 6352)

Subject Overview:	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: Statistics and Probability
	  # Proficiency Strands: Understanding, Fluency, Problem Solving, Reasoning.
	
	Within this content strand, 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.
	
	They will review and critique resources for primary mathematics and examine tasks designed to achieve specific learning outcomes in these strands.
	
	Candidates will consider research evidence related to selected key issues of teaching Statistics and Probability. They will examine cognitive and affective characteristics of mathematics classrooms that encourage deep learning in these content areas and in the proficiency strands.

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 describing the development of 3 cross-curricular lessons using an investigative approach for either Probability or Statistics (1000 words), due mid semester 50% A group report and presentation of a unit of work using an investigative approach for either Probability or Statistics (1000 words) due at end of semester, 50% There are two hurdle requirements: Completion of 8 weekly tasks, 0% A mastery level pass (80%) of a Year 7 Statistics and Probability Test, 0% Attendance at all classes (lectures, workshops) is obligatory. Failure to attend 80% of classes will normally result in failure in the subject.
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 teaching practices; # 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; # Work in teams with skills in cooperation, communication and negotiation; # Be responsible, resilient, self-regulating and independent of mind; # Have a conscious personal and social values base.
Links to further information:	http://education.unimelb.edu.au/study_with_us/become_a_teacher/primary
Related Course(s):	Master of Teaching (Primary)