

EDUC90835 Primary Mathematics Education3 Extension

Credit Points:	6.25								
Level:	9 (Graduate/Postgraduate)								
Dates & Locations:	This subject is not offered in 2015.								
Time Commitment:	Contact Hours: 18 hours Total Time Commitment: 85 hours								
Prerequisites:	<table border="1"> <thead> <tr> <th>Subject</th> <th>Study Period Commencement:</th> <th>Credit Points:</th> </tr> </thead> <tbody> <tr> <td>EDUC90834 Primary Mathematics Education2 Extension</td> <td>Semester 2</td> <td>6.25</td> </tr> </tbody> </table>			Subject	Study Period Commencement:	Credit Points:	EDUC90834 Primary Mathematics Education2 Extension	Semester 2	6.25
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Corequisites:	<table border="1"> <thead> <tr> <th>Subject</th> <th>Study Period Commencement:</th> <th>Credit Points:</th> </tr> </thead> <tbody> <tr> <td>EDUC90771 Professional Practice & Seminar Prim 4</td> <td>Semester 2</td> <td>6.25</td> </tr> </tbody> </table>			Subject	Study Period Commencement:	Credit Points:	EDUC90771 Professional Practice & Seminar Prim 4	Semester 2	6.25
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EDUC90771 Professional Practice & Seminar Prim 4	Semester 2	6.25							
Recommended Background Knowledge:	None								
Non Allowed Subjects:	<table border="1"> <thead> <tr> <th>Subject</th> <th>Study Period Commencement:</th> <th>Credit Points:</th> </tr> </thead> <tbody> <tr> <td>EDUC90776 Primary Mathematics Education 3</td> <td>Semester 2</td> <td>6.25</td> </tr> </tbody> </table>			Subject	Study Period Commencement:	Credit Points:	EDUC90776 Primary Mathematics Education 3	Semester 2	6.25
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Core Participation Requirements:	<p>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 Description, Subject Objectives, Generic Skills 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</p>								
Contact:	<p>Contact Us (https://enquiry.app.unimelb.edu.au/?cc=MGSE-ALL&fn=MGSE) Call: 13 MELB (13 6352)</p>								
Subject Overview:	<p>Teacher candidates will develop pedagogical content knowledge for the effective teaching and learning of the following mathematics content and proficiency strands from Foundation to Level 6:</p> <ul style="list-style-type: none"> # Content Strand: Statistics and Probability # Proficiency Strands: Understanding, Fluency, Problem Solving, Reasoning. <p>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.</p> <p>Teacher candidates will learn to critically evaluate mathematics programs, materials and teaching methods. Teacher candidates will develop a mathematics unit in Statistics and Probability for use in primary mathematics classrooms.</p> <p>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.</p> <p>Candidates will be assisted to develop leadership skills to enable them to become future leaders of mathematics/numeracy in their future careers.</p>								
Learning Outcomes:	On completion of this subject, with respect to the strands above, Teacher Candidates will be able to:								

	<ul style="list-style-type: none"> # Demonstrate a deep understanding of how children construct mathematical knowledge; # Demonstrate expert knowledge of a range of classroom teaching techniques; # Demonstrate expert knowledge of how children think and learn; # Demonstrate an outstanding ability to develop teaching activities and relate them to learning outcomes that cater for a diverse range of students; # Demonstrate understanding of alternative approaches to the teaching of mathematics across a primary school; # Critically evaluate mathematics programs, materials and teaching methods; # Demonstrate an ability to develop a mathematics unit for use in primary classrooms; # Effectively engage students, parents, community members, and professional colleagues to support student learning and development; and # Demonstrate the ability to maintain effective, ethical and respectful relationships with all involved in the learning community.
Assessment:	A unit planning assignment (1,000 words) due mid-semester, 50% A one hour examination (equivalent to 1000 words) at end of semester, 50% Attendance at all classes (tutorial/seminars/practical classes/lectures/labs/online classes) is obligatory. Failure to attend 80% of classes will normally result in failure in the subject.
Prescribed Texts:	Reys, R.E., Lindquist, M.L., Lambdin, D.V., Smith, N.L., Rogers, A., Falle, J., Frid, S., & Bennett, S. (2012). <i>Helping Children Learn Mathematics</i> , 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:	<p>On completion of this subject, teacher candidates will have the knowledge, skills and understanding to enable them to:</p> <ul style="list-style-type: none"> # 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.