

# EDUC90778 Primary Mathematics Education 1

<b>Credit Points:</b>	12.50								
<b>Level:</b>	9 (Graduate/Postgraduate)								
<b>Dates &amp; Locations:</b>	This subject is not offered in 2013.								
<b>Time Commitment:</b>	Contact Hours: 36 hours Total Time Commitment: 125 hours total commitment. Attendance at all classes (tutorial/seminars/practical classes/lectures/labs) is obligatory. Failure to attend 80% of classes will normally result in failure in the subject.								
<b>Prerequisites:</b>	None								
<b>Corequisites:</b>	<table border="1"> <thead> <tr> <th>Subject</th> <th>Study Period Commencement:</th> <th>Credit Points:</th> </tr> </thead> <tbody> <tr> <td>EDUC90772 Professional Practice and Seminar Prim 1</td> <td>Semester 2</td> <td>6.25</td> </tr> </tbody> </table>			Subject	Study Period Commencement:	Credit Points:	EDUC90772 Professional Practice and Seminar Prim 1	Semester 2	6.25
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EDUC90772 Professional Practice and Seminar Prim 1	Semester 2	6.25							
<b>Recommended Background Knowledge:</b>	None								
<b>Non Allowed Subjects:</b>	None								
<b>Core Participation Requirements:</b>	<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: <a href="http://www.services.unimelb.edu.au/disability">http://www.services.unimelb.edu.au/disability</a>.</p>								
<b>Contact:</b>	Education Student Centre 234 Queensberry Street Call: 13 MELB (13 6352)								
<b>Subject Overview:</b>	<p>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:</p> <ul style="list-style-type: none"> <li># Content Strand: Number and Algebra</li> <li># Proficiency Strands: Understanding, Fluency, Problem Solving, Reasoning.</li> </ul> <p>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.</p> <p>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.</p> <p>Teacher candidates will consider Victorian and Australian curriculum documents and resources, lesson planning, classroom assessment and effective use of resources.</p> <p>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.</p>								
<b>Objectives:</b>	<p>On completion of this subject, with respect to the strands above, teacher candidates will be able to:</p> <ul style="list-style-type: none"> <li># Demonstrate mastery of the topics and their everyday applications which are relevant to primary teaching or are necessary to be personally numerate;</li> </ul>								

	<ul style="list-style-type: none"> <li># Demonstrate an understanding of how children construct mathematical knowledge;</li> <li># Demonstrate knowledge of a range of classroom teaching techniques;</li> <li># Demonstrate knowledge of how children think and learn;</li> <li># Demonstrate an ability to develop teaching activities and relate them to learning outcomes.</li> </ul>
<b>Assessment:</b>	There are two assessment tasks, both assessment tasks must be passed: a report (2000 words) due mid semester, 50% a 2 hour examination at end of semester, 50% There are two hurdle requirements: Completion of 8 weekly tasks. A mastery level pass of a Basic Skills Test of Mathematics set at Year 7 level.
<b>Prescribed Texts:</b>	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.
<b>Breadth Options:</b>	This subject is not available as a breadth subject.
<b>Fees Information:</b>	Subject EFTSL, Level, Discipline & Census Date, <a href="http://enrolment.unimelb.edu.au/fees">http://enrolment.unimelb.edu.au/fees</a>
<b>Generic Skills:</b>	<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"> <li># Be skilled communicators who can effectively articulate and justify their practices as knowledgeable agents of change.</li> <li># Be flexible and able to adapt to change through knowing how to learn;</li> <li># Understand the significance of developing their practice on the basis of research evidence;</li> <li># Be independent of mind, responsible, resilient, self-regulating.</li> </ul>
<b>Links to further information:</b>	<a href="http://education.unimelb.edu.au/study_with_us/become_a_teacher/primary">http://education.unimelb.edu.au/study_with_us/become_a_teacher/primary</a>
<b>Related Course(s):</b>	Master of Teaching (Primary)