



UNIVERSITI TEKNOLOGI MARA

MAE575: METHODOLOGY IN TEACHING MATHEMATICS

<b>Course Name (English)</b>	METHODOLOGY IN TEACHING MATHEMATICS <b>APPROVED</b>
<b>Course Code</b>	MAE575
<b>MQF Credit</b>	3
<b>Course Description</b>	As the era of reform education continues, it becomes essentially important that we develop a conceptually rich understanding of what effective mathematics teaching is and how to foster it. A major part of this course centers on the teaching process itself and takes into account many inextricably linked ideas, including the ways in which student learns mathematics, the nature of mathematics to be taught, underlying social condition, and the many constraints placed directly or indirectly on classroom teachers. The content of this course is designed, basically, to perturb teachers' thinking, provide a vision of teaching and ideas to implement these visions.
<b>Transferable Skills</b>	Communication skill
<b>Teaching Methodologies</b>	Lectures, Microteaching, Discussion, Presentation
<b>CLO</b>	CLO1 Apply theories of teaching and learning in Mathematics. CLO2 Explain Mathematics curriculum, contents and instruction. CLO3 Organize Mathematical pedagogy and instruction in classroom setting. CLO4 Develop the materials that connect real-life experience with mathematics teaching and learning.
<b>Pre-Requisite Courses</b>	No course recommendations
<b>Topics</b>	
<b>1. Learning to Teach Mathematics [Content knowledge (CK), Pedagogical Knowledge (PK), Pedagogical Content Knowledge (PCK), Teacher Knowledge Model]</b> 1.1) N/A	
<b>2. Theories in Teaching and Learning Mathematics (Behaviorism, Cognitivism and Constructivism)</b> 2.1) N/A	
<b>3. An Analysis of Mathematics Curriculum</b> 3.1) N/A	
<b>4. Planning a Mathematical Instruction</b> 4.1) N/A	
<b>5. Mathematics Pedagogies</b> 5.1) N/A	
<b>6. Assessments in Teaching Mathematics</b> 6.1) N/A	

Assessment Breakdown		%		
Continuous Assessment		100.00%		
Details of Continuous Assessment	Assessment Type	Assessment Description	% of Total Mark	CLO
	Group Project	n/a	30%	CLO4
	Practical	Microteaching	30%	CLO3
	Presentation	n/a	20%	CLO2
	Test	n/a	20%	CLO1
Reading List	This Course does not have any book resources			
Article/Paper List	This Course does not have any article/paper resources			
Other References	<ul style="list-style-type: none"> <li>• <b>Book Saad, N. A &amp; Ghani, S. A. 2010, <i>Teaching Mathematics in Secondary Schools: Theories and Practices</i> , Universiti Pendidikan Sultan Idris</b></li> <li>• <b>Book G. Donald Allen, Amanda Ross 2017, <i>Pedagogy and Content in Middle and High School Mathematics</i> , Sense Publishers</b></li> <li>• <b>Book Noraini Idris 2005, <i>Pedagogi Dalam Pendidikan Matematik</i>, Utusan Publications &amp; Distribution Sdn. Bhd</b></li> </ul>			