



UNIVERSITI TEKNOLOGI MARA

AGR358: LAND SURVEY

<b>Course Name (English)</b>	LAND SURVEY <b>APPROVED</b>
<b>Course Code</b>	AGR358
<b>MQF Credit</b>	3
<b>Course Description</b>	Introductory course of land surveying, to expose student to the knowledge and skills in land surveying, in conducting simple land surveying in the estate, to draw and read map and to estimate areas and volumes of earthwork.
<b>Transferable Skills</b>	Confident
<b>Teaching Methodologies</b>	Lectures, Lab Work, Practical Classes
<b>CLO</b>	<p>CLO1 Able to identify, recognize and operate simple land surveying in the estate using the relevant surveying tools.</p> <p>CLO2 Draw and read site maps and plans.</p> <p>CLO3 Able to calculate areas using various mathematical and surveying methods.</p> <p>CLO4 Plan and supervise the construction of estate roads, drains and terraces.</p>
<b>Pre-Requisite Courses</b>	No course recommendations
<b>Topics</b>	
<b>1. Introduction</b>	
1.1) Definition	
1.2) Branches of Surveying	
1.3) Basic Measurement	
<b>2. Chain Survey</b>	
2.1) Procedure	
2.2) Overcoming Obstruction, Slope Correction	
2.3) Mapping & Area Calculation	
<b>3. Compass Survey</b>	
3.1) Basic Concept	
3.2) Instrument	
3.3) Plotting & Closing Error	
<b>4. Levelling</b>	
4.1) Introduction	
4.2) Instruments	
4.3) Procedure	
<b>5. Contouring</b>	
5.1) Characteristics	
5.2) Plotting Procedure	
<b>6. Estate Road &amp; Drain Construction</b>	
6.1) The Concept	
6.2) Trapezoidal Formula	
6.3) Simpson's Method	
<b>7. Introduction to GPS and GIS</b>	
7.1) n/a	

Assessment Breakdown	%
Continuous Assessment	50.00%
Final Assessment	50.00%

Details of Continuous Assessment	Assessment Type	Assessment Description	% of Total Mark	CLO
	Practical	n/a	10%	CLO2 , CLO4
	Quiz	Quiz 1	5%	CLO1
	Quiz	Quiz 2	5%	CLO1
	Test	Test 1	15%	CLO1 , CLO3
	Test	Test 2	15%	CLO2 , CLO3

Reading List	Recommended Text	<ul style="list-style-type: none"> <li>Perkins, R.B. 1978, <i>Estate Surveying. Incorporated Society of Pla</i>, 2 Ed., Kuala Lumpur</li> </ul>
	Reference Book Resources	<ul style="list-style-type: none"> <li>Jumri B. Ramli 1989, <i>Ukur Kejuruteraan</i>, Delta, Petaling Jaya</li> <li>Paul R. Wolf and Russel C. Brinkler 1998, <i>Elementary Surveying</i>, Harper Collins College Publishers</li> <li>Malcom, John 1981, <i>Elementary Surveying</i>, 3 Ed., University Tutorial Press, London</li> </ul>
Article/Paper List	This Course does not have any article/paper resources	
Other References	This Course does not have any other resources	