



UNIVERSITI TEKNOLOGI MARA

AGA502: AGRICULTURAL BOTANY

<b>Course Name (English)</b>	AGRICULTURAL BOTANY <b>APPROVED</b>
<b>Course Code</b>	AGA502
<b>MQF Credit</b>	3
<b>Course Description</b>	This course will introduce students to the basic concepts in agricultural botany, definitions, their importance, relevance to agricultural production and its development which emphasis on anatomy, morphology and classification of agricultural crops. This course will provide a knowledge, especially in various plant morphological features and function, growth development and reproduction. The systematic survey will be conducted to focus on plant taxonomy in order to relate their origin, diversity, ecology and economic importance in agriculture. The agricultural importance of plants for commercial application in agricultural will be used as an example. This subject focuses only on a representative group of economic crops.
<b>Transferable Skills</b>	Practical fieldwork sampling
<b>Teaching Methodologies</b>	Lectures, Blended Learning, Lab Work, Project-based Learning
<b>CLO</b>	CLO1 State the basic concept and theories of taxonomy. CLO2 Identify basic plant morphology, anatomy, growth development of agricultural crop CLO3 Present the knowledge of agricultural botany for horticultural purposes
<b>Pre-Requisite Courses</b>	No course recommendations
<b>Topics</b>	
<b>1. INTRODUCTION</b> 1.1) Angiosperm	
<b>2. GYMNOSPERM</b> 2.1) Classification 2.2) Morphology	
<b>3. PTERYDOPHYTES</b> 3.1) Classification 3.2) Structural features	
<b>4. ECONOMIC BOTANY</b> 4.1) Food Crop 4.2) Plantation and Ornamental crop 4.3) Biofuel	

Assessment Breakdown	%
Continuous Assessment	50.00%
Final Assessment	50.00%

Details of Continuous Assessment	Assessment Type	Assessment Description	% of Total Mark	CLO
	Assignment	Assignment of the economic importance in agricultural crop industry and in horticultural purposes	10%	CLO3
	Lab Exercise	Lab report and sketch drawing evaluation	20%	CLO2
	Test	The test will assess all topic unit from introduction until the economic importance of crop thru online	20%	CLO1

Reading List	Recommended Text	<ul style="list-style-type: none"> <li>• Elizabeth A. Kellogg 2015, <i>Flowering Plants. Monocots</i>, Springer [ISBN: 9783319153322]</li> <li>• Walter S. Judd, Michael J. Donoghue 2015, <i>Plant Systematics</i>, Sinauer Associates [ISBN: 1605353892]</li> </ul>
	Reference Book Resources	<ul style="list-style-type: none"> <li>• Lewis, W. H., and M. P. F. Elvin-Lewis 2003, <i>Medical botany: plants affecting human health</i>, 2nd edition Ed., J. Wiley, Hoboken, N.J.</li> <li>• Pollan, M 2001, <i>The botany of desire: a plant's eye view of the world</i>, Random House, New York</li> <li>• Simpson, B.B. &amp; M. Conner-Ogorzaly 2001, <i>Economic Botany: Plants in our World</i>, McGraw-Hill</li> <li>• Alexander Nelson 2007, <i>Principles of Agricultural Botany</i>, Alexander Nelson Publisher: Read book</li> <li>• Joachim W. Kadereit, Volker Bittrich 2016, <i>Flowering Plants. Eudicots</i>, 14 Ed., Springer [ISBN: 9783319285344]</li> <li>• R-E Spichiger, Vincent V. Savolainen, Murielle Figeat 2004, <i>Systematic Botany of Flowering Plants</i>, CRC Press [ISBN: 9781578083732]</li> </ul>
Article/Paper List	This Course does not have any article/paper resources	
Other References	This Course does not have any other resources	