UNIVERSITI TEKNOLOGI MARA

AGR160: FIELD PRACTICAL I

Course Name (English)	FIELD PRACTICAL I APPROVED
Course Code	AGR160

MQF Credit	2

Course Description	This course will interactively engage students cooperatively and collaboratively in teams to formulate plans and execute a vegetable garden on a commercial basis. Students will discuss, identify resources and problems, make decisions on vegetable gardening, to produce a profitable harvest. The outcomes shall be assessed through a variety of tools which includes, group participation, farm observation, presentation of farm reports in writing and verbally

Transferable Skills	Demonstrate ability to work professionally and contribute positively in a team

Teaching Methodologies	Practical Classes

CLO	
	CLO1 Demonstrate proficiency by the correct use of basic farm tools and machineries in land preparation, their maintenance and observe safety precautions during farming operation. (LO 2)
	CLO2 Collaborate with group members to plan a vegetable farm using the right combination of resources. (LO 5 and LO9)
	CLO3 Interact cooperatively with group members in operations involved in the early preparation of a vegetable garden (leafy and fruit vegetable) such as seed selection, seed treatment, germination tests, nursery techniques and seed sowing. (LO 5 and LO9)
	CLO4 Demonstrate an ability to establish suitable planting beds and apply appropriate soil pre-treatment and management such as liming, manuring and mulching. (LO 2)
	CLO5 Employ appropriate skills in identifying and selecting the right fertilizers and fertilizer application techniques. (LO 2 and LO 3)
	CLO6 Employ appropriate skills in identifying vegetable diseases, pests and weed problems and apply suitable control measures. (LO 2 and LO 3)
	CLO7 Plan for harvesting of their crops and execute marketing strategies. (LO 8 and LO 9)
	CLO8 Write a simple farm report- gross profit and loss account. (LO 8)

Pre-Requisite Courses	No course recommendations

Topics
1. Introduction to farm tools and its maintenance. 1.1) Basic tools and farm machinery in land preparation that used
2. Introduction to farm machineries and land preparation 2.1) Introduction to power tiller and tractor for farm preparation. 2.2) Liming preparation for land preparation. 2.3) Introduction to the safety aspects during operation (OSHA).
3. Seed treatment 3.1) Common treatment for seed treatments 3.2) Mechanical treatments: Scarification, soaking 3.3) Chemical treatment : Acid treatment 3.4) Fungicide treatment on seeds
4. Establishment of planting beds 4.1) Planting bed preparation techniques 4.2) Application of organic manure 4.3) Common mulching techniques for planting bed

5. Fertilizer and fertilizer application 5.1) Techniques and application of organic fertilizers 5.2) Technique and application of inorganic fertilizers
6. Vegetable diseases, pests and weed management. 6.1) Identification of plant disease, pest, and weed problems 6.2) Application of fungicides, pesticides and herbicides
7. Harvesting and marketing 7.1) Proper technique of harvesting farm vegetables and post harvest treatments 7.2) Methods of marketing agricultural products.
8. Writing a farm report 8.1) Simple farm report gross and profit

Assessment Breakdown	%
Continuous Assessment	100.00%

Details of Continuous Assessment	Assessment Type	Assessment Description	% of Total Mark	CLO
	Group Project	peer evaluation	20%	CLO2 , CLO6
	Portfolio/Log Book	weekly report	10%	CLO7 , CLO8
	Practical	care of equipment	10%	CLO1 , CLO2 , CLO3
	Practical	attendance	10%	CLO1 , CLO2 , CLO3
	Practical	field observation	20%	CLO4 , CLO5 , CLO7 , CLO8
	Written Report	report presentation	10%	CLO7 , CLO8
	Written Report	final report	20%	CLO2 , CLO8

Reading List	Recommended Text	• Wan Hanisah, Wan Ismail, Sabki Hj Suhaili, Hasmah Mohidin 2008, *Guidelines for Vegetable Production*, UPENA, Universiti Teknologi MARA.
Article/Paper List	This Course does not have any article/paper resources	
Other References	This Course does not have any other resources	