

## Course Description Form

### 1. Course Name:

Principles of Horticultural Science

### 2. Course Code:

PRHS116

### 3. Semester / Year:

First semester (autumn)/2023-2024

### 4. Description Preparation Date:

1/2/2024

### 5. Available Attendance Forms:

Attendance lesson

### 6. Number of Credit Hours (Total) / Number of Units (Total): units

75hour / 3.5 units

### 7. Course administrator's name (mention all, if more than one name):

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### 8. Course Objectives

The learner should be able to understand and comprehend what is related to the subject principles of horticulture and its relationship to other sciences  
Their selection of important agricultural processes in horticultural plants  
Differentiating between different planning systems and the appropriate ones  
Understand the basics and concepts of horticulture  
Distinguish between processes that are suitable for fruit, vegetable and ornamental crops

Familiarity with the information the farmer needs and what is available to him to understand the science of horticulture and its divisions  
Agricultural awareness of the factors affecting yield  
Determine methods of producing seeds in horticultural crops and methods of caring for them in terms of storage and marketing  
A comprehensive study on how to establish vegetable farms or fruit orchards and establish nurseries for horticultural plants.

### 9. Teaching and Learning Strategies

Interactive lecture

Brainstorming

Dialogue and discussion

Field Training

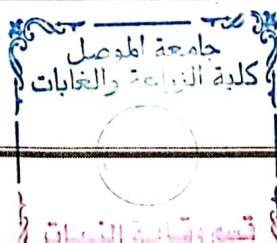
Practical exercises

Field project

Self-education

### 10. Course Structure

Week	Hours	Required Learning Outcomes	Name of Unit or subject	Learning method	Evaluation method
1	2	Theoretical 2: L'étudiant apprend le concept d'horticulture, ses divisions et sa définition	An overview of the concept of horticulture, its benefits, and an introduction and definition of	Interactive lecture, brainstorming, dialogue and discussion, self-learning	Interactive lecture, brainstorming, dialogue and discussion, self-learning

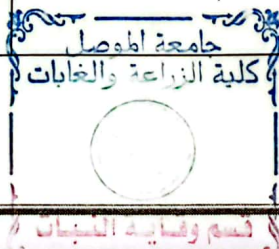




			horticulture		
	3Practical	a 2 : L'élève apprend les informations dont l'agriculteur a besoin et ce dont il dispose pour maîtriser son travail	Learn about practical concepts and agricultural operations related to horticulture principles	Interactive lecture, brainstorming, dialogue and discussion, training, and self-learning	Short practical test 1
2	2Theoretical	b2 : L'élève explique les facteurs affectant la croissance des cultures maraîchères	Factors affecting the growth of vegetable crops	Interactive lecture, brainstorming, dialogue and discussion, self-learning	Scientific tour of horticultural facilities
	3Practical	a2 : Détermine les méthodes de culture des cultures horticoles	How to identify horticultural facilities and detect agricultural environments	Interactive lecture, brainstorming, dialogue and discussion, training, practical exercises, and self-learning	Scientific tour of horticultural facilities
3	2Theoretical	a2 : Détermine les modes de propagation des cultures maraîchères et leurs spécifications	Sexual reproduction and its specifications	Interactive lecture, brainstorming, dialogue and discussion, self-learning	Semester exam 1, final exam
	3Practical	b4 : L'étudiant tentera d'acquérir les compétences de communication nécessaires pour aborder avec confiance et certitude tous les sujets liés à la production végétale.	How to train to carry out some important agricultural operations to increase and improve production	Interactive lecture, brainstorming, dialogue and discussion, field training, and self-learning	Short test
4	2Theoretical	a2 : L'étudiant détermine une définition de la localisation, quelles sont ses methods et comment la réaliser.	The general foundations and principles used in carrying out agricultural operations	Identify the benefits of acclimatization and its effect on plants and their resistance to harsh environmental conditions	Semester test 1, final test, report
	3Practical	b4 : L'élève distingue les informations dont l'agriculteur a besoin et celles dont il dispose pour maîtriser son travail	Identify the benefits of acclimatization and its effect on plants and their resistance to harsh environmental conditions	Interactive lecture, brainstorming, dialogue and discussion, field training, practical exercises, and self-learning	Short practical test 2
5	2Theoretical	A4 : L'étudiant sait comment développer des plans et des programmes pour les divisions d'élevage et leurs avantages.	Climatic conditions and their impact on garden landscaping, choice of plants, and the factors on which garden design depends	Interactive lecture, brainstorming, dialogue and discussion, learning	Semester test 1, final test, report
	3Practical	b4 : L'étudiant examine comment l'information est amenée et ce qui est à sa disposition pour maîtriser son travail	Different methods of raising trees by pruning	Interactive lecture, brainstorming, dialogue and discussion, learning	writing a report
6	2Theoretical	a 4 : L'étudiant discute des systèmes de floraison dans les cultures maraîchères	Nutritional value of vegetable crops	Interactive lecture, brainstorming, dialogue and discussion, learning	Short test, final test
	3Practical	b 4 : L'étudiant examine les méthodes de sélection et d'amélioration de différents types de variétés conçues pour des conditions environnementales difficiles	The basic factors that increase quality of the yield	Interactive lecture, brainstorming, dialogue and discussion, self-learning	Write a report and homework
7	2Theoretical	b 4 : L'élève explique l'importance des aménagements structurels et techniques pour diviser le fruit en plusieurs zones distinctes	Uses of greenhouses and wooden canopies in the production of various crops	Interactive lecture, brainstorming, dialogue and discussion, self-learning	Semester exam 2, final exam
	3Practical	b 2 : L'élève explique toutes les informations dont l'agriculteur a besoin et ce dont il dispose pour maîtriser son travail	A scientific visit to one of the horticultural facilities	Interactive lecture, brainstorming, dialogue and discussion, self-learning	Short test
8	2Theoretical	a4 : Discute des plans et programmes de développement dans le domaine de la culture des arbres fruitiers, des légumes et des plantes	Available horticultural facilities and surrounding weather conditions	Interactive lecture, brainstorming, dialogue and discussion.	Semester exam 2, final exam



		ornementales.		learning	
9	3Practical	B3 : L'étudiant applique des plans et programmes de développement dans le domaine de la culture des cultures, des arbres fruitiers, des légumes et des plantes ornementales.	Practical steps on how to plant trees	Interactive lecture, brainstorming, dialogue and discussion, learning	writing a report
	2Theoretical	a 2 : L'élève apprend les informations dont l'agriculteur a besoin et ce dont il dispose pour maîtriser son travail	The concept of the effect of temperature on the growth of fruit trees	Interactive lecture, brainstorming, dialogue and discussion, self-learning	Semester exam 2, final exam
	3Practical	b4 : L'étudiant examine comment élaborer des programmes de développement dans le domaine des opérations agricoles importantes pour la production végétale.	Designing an agricultural cycle to improve production and crop visits	Interactive lecture, brainstorming, dialogue and discussion, self-learning	short exam
10	2Theoretical	a2 : L'élève détermine quels sont les effets des facteurs météorologiques sur la croissance des arbres fruitiers.	Types of horticultural facilities	Interactive lecture, brainstorming, dialogue and discussion, self-learning	Semester test2
	3Practical	b3 : L'élève applique toutes les informations dont l'agriculteur a besoin et celles dont il dispose pour maîtriser son travail	Practical steps for designing and establishing a nursery	Interactive lecture, brainstorming, dialogue and discussion, self-learning	short exam
11	2Theoretical	a2 : L'élève identifie les systems reproducteurs entre la reproduction sexuée et la reproduction végétative	Types of horticultural facilities	Interactive lecture, brainstorming, dialogue and discussion, self-learning	Semester test2
	3Practical	b3 : L'étudiant identifie des plans et des programmes concernant les méthodes les plus importantes de culture de légumes en Irak.	Practical steps for designing and establishing a nursery	Interactive lecture, brainstorming, dialogue and discussion, self-learning	short exam
12	2Theoretical	a2 : Détermine comment faire la distinction entre le processus de greffage et d'installation	Divisions of areas in terms of growing fruit trees	Interactive lecture, brainstorming, dialogue and discussion, self-learning	Final test
	3Practical	b4 : L'étudiant tente de savoir de quelles informations l'agriculteur a besoin et de celles dont il dispose pour maîtriser son travail	Practical steps for growing vegetable crops	Interactive lecture, brainstorming, dialogue and discussion, self-learning	writing a report
13	2Theoretical	a2 : L'élève identifie la différence entre la taille et le marcottage	How to carry out agricultural operations, including thinning and pruning	Interactive lecture, brainstorming, dialogue and discussion, self-learning	Final test
	3Practical	b4 : L'étudiant expérimente toutes les informations dont l'agriculteur a besoin et celles dont il dispose pour maîtriser son travail	Methods of growing vegetable crops in Iraq	Interactive lecture, brainstorming, dialogue and discussion, self-learning	Wooden canopy tour
14	2Theoretical	a 4 : L'élève discute de toutes les informations dont l'agriculteur a besoin et de ce dont il dispose pour maîtriser son travail	Designing an agricultural cycle for vegetable crops	Interactive lecture, brainstorming, dialogue and discussion, self-learning	Short test, final test






3	Practical	b3 : Application par l'étudiant des plans et programmes de développement dans le domaine culture des légumes, des fruits et des plantes ornementales	Designing an agricultural cycle for fruit trees	Interactive lecture, brainstorming, dialogue and discussion, self-learning	Short practical test3	
15	2	Theoretical	a4 : L'étudiant discute des plans et programmes de développement dans le domaine de la culture des légumes, des fruits et des cultures ornementales au sein des établissements.	Practical steps for dividing the nursery and distributing the plants within it	Interactive lecture, brainstorming, dialogue and discussion, self-learning	Short test, final test
3	Practical	b3 : L'application de l'étudiant pour acquérir les compétences de communication nécessaires aux agriculteurs pour gérer avec confiance et certitude aux niveaux individuel et collectif le marché du travail et l'élimination des produits.	The effects of environmental conditions on yield	Interactive lecture, brainstorming, dialogue and discussion, self-learning	A tour of the canopy and the greenhouse inside the university	


### 11. Course Evaluation

Distribution of the grade out of 100 according to the tasks assigned to the student, such as daily preparation, daily, oral, monthly, written exams, and reports.

### 12. Learning and Teaching Resources

Required textbooks (methodology, if any)	Learning and teaching resources Gardening principles book, Part 1 and Part 2
Main references (sources)	Scientific references specialized in fruit trees, vegetables, greenhouses, and books related to nurseries
Recommended books and references (scientific journals, reports...)	Principles of horticulture Dr. Karim Saleh Abdul and Dr. Saad Zaghloul Principles of Horticulture, written by Dr. Faisal Rashid Nasser
Electronic References, Websites	<a href="https://exa.unne.edu.ar/">https://exa.unne.edu.ar/</a> Principles of Horticultural Science

  
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