



Jordan University of Science and Technology
Faculty of Agriculture
Plant Production Department

PP340 Apiculture And Bee Hives Mangement

Second Semester 2022-2023

Course Catalog

3 Credit Hours. This course is designed to teach the student all aspects of beekeeping. It includes the significance of honeybees and their value in crop pollinators, honeybee biology and behavior, honeybee races, hive management for honey production, diseases and pests of honeybees, and their control measures. Current issues related to bees will be highlighted.

Text Book

Title	The hive and the honeybee.
Author(s)	Dadant & Sons),
Edition	10th Edition
Short Name	Text book
Other Information	Dadant and Sons (ed.). 2010. The hive and the honey bee. (Hamilton, IL, USA: 1250 pp.

Course References

Short name	Book name	Author(s)	Edition	Other Information
Ref no 2	Bee and beekeeping.	Eva Crane	1st Edition	Crane, E. 1990. Bee and beekeeping. Heinemann Newtons. First edition. 614pp.

Instructor

Name	Prof. Abd Al-Majeed Al-Ghzawi
Office Location	C4L2
Office Hours	
Email	ghzawi@just.edu.jo

Class Schedule & Room

Section 1:

Lecture Time: Sun, Tue : 10:30 - 11:30

Room: C5025

Tentative List of Topics Covered

Weeks	Topic	References
Weeks 1, 2	Introduction and definitions	From Text book
Weeks 3, 4	The honeybee colony: The casts (queen, the drones, the workers) and the colony life and life requirements. Honeybee races	From Text book
Week 5	General anatomy of honeybees	From Text book , From Ref no 2
Week 6	Behavior of honeybees: Factors affecting bees? behavior, Activities inside the hive and Activities outside the hive	From Text book
Weeks 7, 8	Honeybee feed and feeding	From Text book
Weeks 9, 10, 11, 12, 13	Beehives management. Management during the period of colony growth, management during the honey flow and management after the honey flow.	From Text book , From Ref no 2
Week 14	Honeybee pests and diseases. Bacterial diseases, Viral diseases, Nosema diseases, Fungal diseases, Parasitic mites, Pests and predators.	From Text book
Week 15	Beehive products: definition, classification, chemical composition, physical properties, biological properties, adulteration, storage and uses	From Text book , From Ref no 2

Mapping of Course Outcomes to Program Student Outcomes	Course Outcome Weight (Out of 100%)	Assessment method
To understand the basic knowledge of beekeeping and the significance of honeybees and their value in crop pollinators.	10%	
To develop the basic knowledge of honeybee biology, behavior, and honeybee races.	20%	
To learn about different beehive management practices throughout the different seasons to keep healthy colonies and to maximize honey production	50%	
To learn how to diagnose diseases and pests of honeybees and their control measures.	10%	
To relate different beehive products? properties and their uses.	10%	

Relationship to Program Student Outcomes (Out of 100%)

PLO1	PLO2	PLO3	PLO4	PLO5	PLO6	PLO7

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