Department of Plant Protection
Course Description

0606101 Principles of Plant Protection

This course is designed to familiarize the student with the principles of plant protection. It will focus on the basic aspects of entomology and plant pathology.

(1) Entomology

0606211 Agricultural Entomology

Insects and arthoropods; principles of insect control; geographical distribution, damage, life cycle and control of insect pests of horticultural and field crops.

0606212 General Entomology

Insect histology, morphology, physiology and classification; insect behavior and adaptation to environment; factors affecting population dynamics; economic insect pests.

0606213 Economic Entomology

Identification of insects; damage and symptoms on vegetables and fruit trees; life cycles; geographical distribution of insects, and control of economic insects.

0606311 General Acarology

Principles of mites and their relationship with animals and plants. Characteristics, classification, morphology and biology.General information on the habitat and methods of control will be discussed.

0606315 Insects of Field crops and Stored Products

The course involves study of the pests of field crops and stored food with special reference to their life cycles, damage caused by them and their control especially in Jordan and neighboring countries.

0606316 Medicinal and Veterinary Entomology

This course will present the students with the fundamental of medical and veterinary entomology, its aim is to provides basic information on the identification, biology, habits, medical importance and control of insects important in the health and well-being of man and animals.

0606417 Insect Classification

Principles of insect classification, identification of insect orders and families. Study of life cycle, habitats, habits, adaptations to the environment. Methods of collecting, preserving and identification of insects using taxonomic keys.

0606418 Insect Ecology

This course incorporated population ecology, and applied ecology. It deals with elementary
concepts of insect ecology, the various factors regulating abundance and distribution of insect
populations, the tritrophic relationship between host plants/herbivores /natural enemies, and the
applied aspects of insect ecology in plant protection.

0606221 Plant Pathology

The course is designed for students without previous exposure to plant pathology. It covers the main concepts of phytopathology with respect to disease development requirements, host–pathogen relation, ecological, and histological factors affecting the disease spread.

0606222 Plant Fungal Diseases

Study of the most important diseases of vegetables, legumes, cereals and crucifies. Diseases on grapes, olives, stone fruits and home fruits will be also covered. This includes the etiology of causal agents, symptoms and pathogenesis.

0606322 General Mycology

This course covers the study of fungal morphology, reproduction, economic importance and classification of fungi according to their structures. Examples on selected economically important fungi will be discussed.

0606325 Phytopathogenic Bacteria

The aim of this course is to give an idea to the students about the genera of phytopathogenic bacteria, their classification and identification using the recent techniques, plant diseases caused by these genera, their symptoms, epidemiology and control.

0606326 Plant Viral Diseases

Principles of virology, morphology structure, replication and spread of viruses: techniques and methods in virus isolation, purification and characterization of viruses.

0606327 Plant Nematology

This course deals with the basic principles of nematology; involving the morphology, biology, hostparasite
relationship, and management of phytonematodes. This course also covers individual
nematodes of significant economic importance from various nematode taxa. The laboratory part
includes isolation and identification of phytonematodes

0606423 Beneficial Fungi
This course deals with the botany of mushrooms and truftles and their cultivation especially
white mushroom and other agaricus species, cultivation of padi straw mushroom and shiitake.
Truffllles and its cultivation in France. Mushroom and truffle diseases. Mycorrhizal fungi and it's
use in agriculture. Identification of edible wild mushrooms and their uses.

0606428 Epidemiology of Plant Diseases

The course deals with basic principles of epidemiology, involving patterns and dynamics of epidemics, inoculum potential, dispersal of inocula, environmental factors affecting epidemics of diseases , and management strategies of diseases.

Weed Control
0606231

This course covers various aspects of weed biology and ecology, weed categories, interference and economic importance. It also provides various methods of their control.

0606452 Herbicides

This course addresses herbicides with respect to their nomenclature, categories, formulations and their chemical groups, applications and safe use. It also provides the mode of actions, resistance to herbicide, and impact on the environment.

Honeybee
0606242

Beekeeping past and present. Honeybee relatives and social life. H.bee colony, castes, morphology, anatomy, activities and communication. Colony nutrition, diseases and pests. Hive products. Beekeeping equipment.

0606442 Honeybee Products

Apiary construction, economics. Honeybee plants, pollination. Seasonal management. Reproductive system of Q,W,D.H.bee Queen production . Instrumental insemination. Honey, Royal Jelly production and marketing. Apitherapy and bee venom. Pollen, wax and propolis production

Pest Control
0606351

Introduction; groups of pesticides, toxicity; chemical structure and nomenclature, methods of application and safety regulations.

0606451 Biological Control

Biological control history, principles of biological control, parasitism, predation, uses in pest control are covered.

(9) Training, research and seminars
0606491 Seminar in Plant Protection
Department approval

The course is intended to expose different aspects of plant protection, and proper way of using
the library. Students will experience presentation of seminars in front of audience

0606494 Practical Work in Plant Protection
Identification and diagnosing crop pests (insects, diseases caused by fungi, nematodes, bacteria and viruses);practical application of pest control and integrated pest management.

0606499 Field Training in Plant Protection

Identification and diagnosing crop pests (insects, diseases caused by fungi, nematodes, bacteria
and viruses);practical application of pest control and integrated pest management.
(*) Minimum successful 99 credit hours and Department approval.