**Urban Integrated Pest Management**

**אנטומולוגיה תברואית והדברה משולבת**

Scheduled for 25-30 June, 2023

Course: 1885-0103

**Instructor:** Dr. Andrew M. Sutherland, Urban Integrated Pest Management Advisor, University of California Cooperative Extension, Alameda County, Hayward

**Israeli Host:** Dr. Gal Zagron, Head of Pest Control and Pesticides Division, Ministry of Environmental Protection and Prof.

Netta Dorchin, School of Zoology and the Steinhardt Museum of Natural History, Tel Aviv University

**Dates:** 25-30June 2023

**Hours:** 9:00-17:00 daily

**Location:** Tel Aviv University

**Prerequisites:** None. the course will be taught mainly in English

**Course materials:** Papers will be distributed in advance

**Credit:** 2 academic points

**Grading**: Final exam and participation in fieldwork and discussions.

**COURSE DESCRIPTION:** Pests are common in human environments, and can cause a range of issues, including damage to property, health problems, and economic losses. Common pests in human environments include mainly insects and rodents, which can be targeted by urban integrated pest management (IPM). IPM utilizes a range of techniques, including prevention measures, non-chemical control methods, and targeted chemical treatments to minimize the use of harmful chemicals and reduce the impact on the environment and on public health. Utilizing sustainable pest management strategies leads to healthier and safer environments for urban residents and communities.

This course will focus on identification, behavior, ecology, economic impact, and control methods of urban pests. The majority of these pests are insects associated with homes and other urban settings. The course will provide students with a working knowledge on pests in urban environments and their management methods. Upon completing the course, students should be able to identify various urban pests, be familiar with their life history and ecology, and design and implement appropriate management strategies.

**Course syllabus**

Day 1 **Introduction**

* Principles of Integrated Pest Management (IPM)
* Introduction to entomology
* Insect development, classification and identification
* Pesticides, safety and the environment

Day 2 **Stored food pests and wood destroying pests**

* Termites and other wood destroying organisms.
* Stored food pests
* IPM for Structural & Industrial Settings

Day 3 **Medical & Veterinary Entomology**

* Fleas, ticks and other ectoparasites
* Bedbugs
* Flies and mosquitoes

Day 4 **Insects in urban areas and their control**

* Cockroaches
* Ants and other Hymenopterous pests
* Field excursion (sites to be determined)

Day 5 **Fieldtrip to aquatic habitat and course summary**

* Monitoring and control of mosquitoes in aquatic habitats
* Questions, comments, course evaluation

Day 6

* Final exam