

Course Objectives:

The objectives of the course are:-

1. To provide the fundamental information necessary for understanding the role of arthropod vectors in the transmission of diseases in humans.
2. To establish the understanding about taxonomy, morphology, life history, ecology, behavior and public health concerns of the insects of public health importance.
3. To familiarize with management (IPM) techniques that are helpful in preventing and controlling disease vectors.

Course Learning Outcomes:

Upon successful completion of the course, the student will be able to:

1. **IDENTIFY** important arthropods of medical importance.
2. **COMPREHEND** how each arthropod become involved in the transmission of causative agents of human diseases.
3. **DEVELOP** methods to control arthropod borne diseases based on knowledge of vector biology.

Course Contents:

Detailed studies of systematic, Biology and Ecology of some vectors of medical importance (order Diptera):

Mosquitoes; Anopheles mosquitoes, culicine mosquitoes, Black flies, sand flies, biting midges, horse flies, deer flies, and clegs, tsetse flies, house flies, Myiasia producing flies, (blow flies, blue bottles, green bottles, flesh flies, warable flies and bot flies).

The study will cover following aspects: Morphology, anatomy, distribution, breeding habits, Life-cycle, pathogenesis and seasonal prevalence of the species. Brief account of diseases spread by these vectors, methods of control, modern trends in their biological and chemical control.

Teaching-Learning Strategies

Teaching will be a combination of class lectures, class discussions, and group work. Short videos /films will be shown on occasion.

Assignments

The sessional work will be a combination of written assignments, class quizzes, presentation, and class participation/attendance.

Assessments and Examination

Sessional Work:	25 marks
Midterm Exam:	35 marks
Final term Exam:	40 marks

Books Recommended:

1. William A. Riley. Medical Entomology. Mc-Graw Hill book Co., Inc. London.
2. McDonald, G. The Epidemiology and Control of Malaria, London Oxford Press.
3. World Health Organization. Vector Control series, Training and information guide. The House Fly.
4. World Health Organization. Chemical methods for the control of Arthropod Vectors and pests of Public Health Importance Geneva, WHO, 1984.
5. Walker, A. 1994. Arthropods of human and domestic animals. A guide to preliminary identification. Chapman and Hall.
6. Seevic, M.W., 1980. A guide to medical entomology. MacMillan International College Ed..
7. Herms, W.B. and James, M.T. 1960. Medical entomology. The MacMillan Company, New York.

Course Objectives:

The objectives of the course are:-

1. To provide the fundamental information necessary for understanding the role of arthropod vectors in the transmission of diseases in humans.
2. To establish the understanding about taxonomy, morphology, life history, ecology, behavior and public health concerns of the insects of public health importance.
3. To familiarize with management (IPM) techniques that are helpful in preventing and controlling disease vectors.

Course Learning Outcomes:

Upon successful completion of the course, the student will be able to:

1. **IDENTIFY** important arthropods of medical importance.
2. **COMPREHEND** how each arthropod become involved in the transmission of causative agents of human diseases.
3. **DEVELOP** methods to control arthropod borne diseases based on knowledge of vector biology.

Course Contents:

Methods if identification; Dissection of selected vectors i.e. Mosquito, House fly, blue bottles, green bottles, bot flies. Study of prepared slides of parasites. Epidemiological studies of Vector bourne diseases (one e.g. malaria) including field studies of control methods and parasite evaluation.

Teaching-Learning Strategies

Teaching will be a combination of class lectures, class discussions, and group work. Short videos /films will be shown on occasion.

Assignments

The sessional work will be a combination of written assignments, class quizzes, presentation, and class participation/attendance.

Assessments and Examination

Sessional Work:	25 marks
Midterm Exam:	35 marks
Final term Exam:	40 marks