**EHS 1211 VECTOR AND VERMIN CONTROL (3 CU)**

**Course description:** The course describes different vectors and vermins of environmental health importance, their life cycles, and methods of disease transmission and measures to control them.

**Course Objectives**

By the end of this course, the student should be able to:

1. Classify various types of vectors and vermin of environmental health importance.
2. Describe the characteristics of disease causing vectors.
3. Describe the life histories and control measures of the vectors of environmental heath importance.
4. Describe the public health importance of various vectors and vermin.
5. Initiate control measures for vectors and vermin.

**Detailed Course Outline**

* Classification of vectors and vermin of environmental health importance
* Characteristics, habitats, life history, economic/medical importance of vectors and vermin.
* Medical Entomology: vector and pest biology and control.
* Diseases caused by vectors and vermin
* Control measures of vectors of environmental health importance (Vectors: Mosquitoes, Latrine flies, Tsetse flies, Simulium flies, Fleas, Ticks,-Pests of stored food products, House flies, Blow flies, Snails, Lice, Bed bugs, Cockroaches, Mite, Scorpions). Control measures to include use of pesticides and other methods
* Control measures of vermin of environmental health importance (Vermin:Rodents, bees, scorpions, bats, ants etc). Use of rodenticide, rodent proofing dusts, Gassing and fumigation, Trapping, Sewer treatment, Rodent proofing of premises
* Surveying for vermin infestation
* Vector-borne diseases (e.g. Malaria)
* Practical/Laboratory work

# Mode of delivery:

* Lectures, tutorials, seminars, laboratory and other practical work.

**Mode of Assessment**

- Continuous assessment **(40%)**.

- End of semester exam: MCQ’s, short answer and long assay questions **(60%)**.

**Suggested Reading List**

1. Lecture handouts and additional materials on reserve at the MUSPH Resource Centre.

2. Nadakavukavien. A; Man and Environment- A Health Perspective 3rd Edition

Jackson H.H & Moris G. P. et al. Environmental Health; Reference book; Butterworths, London. 1989

3. Sandy Caircross & Feachem Richard G; Environmental health- an introductory text; John Wiley & sons, N.Y., 1982

4. Sandy Cairncross and Feachem Richard G; *Environmental Health Engineering in the Tropics* John Wiley & sons, N.Y., 2002

5. Salvato Joseph, Environmental Engineering & Sanitation 4th edition; John Wiley & sons 1992.

6. Salvato Joseph, Nemerow N. L. and Argady, F. J., *Environmental Engineering & Sanitation* 5th Ed; John Wiley & sons, 2003.