

Semester:	05		
Course Code:	ZOOL 41711		
Course Name:	Insect Biology and Systematics Laboratory		
Credit Value:	01		
Status:	Compulsory		
Pre-requisite:	ZOOL 12711		
Co-requisite:	ZOOL 41703		
Hourly Breakdown:	Theory	Practical	Independent Learning
	-	45	55

Course Aims/ Intended Learning Outcomes:

After completion of this course unit, the student will be able to:

1. Use appropriate procedures and techniques in collection, handling and preservation of insects,
2. identify insects to the relevant order/ suborder/family on the basis of their major morphological features,
3. dissect adult and immature insects to display their anatomy,
4. rear insects to study the post-embryonic development,
5. identify life stages of insects in selected orders after examining their morphology,
6. classify insects to relevant orders and selected families using taxonomic keys, and
7. construct an insect taxonomic key.

Course Content:

Methods for field collection and handling insects, laboratory sessions on wet and dry preservation techniques: wet preservation, setting and mounting of butterfly/dragonfly for museum display, preparation of double mounts, permanent slide mounts of whole insect and mouthparts of selected insects. Observation of adult insects in selected orders and families to study their major morphological features, dissection of selected adult insects, nymphs and larvae to display their anatomy. Rearing techniques of insects, morphology of immature life stages of insects, use of taxonomic keys to assign insects to the order/suborder and family levels, preparation of an insect taxonomic key to assign adult insects observed in the laboratory.

Teaching/ Learning Methods:

Field and laboratory sessions and a case study presentation.

Assessment Strategy:

Continuous assessment and end of semester examination. Percentage given for each sub-component indicates the percent contribution to the final marks.

Continuous Assessment 30 %		Final Assessment 70 %		
Details:		Theory	Practical	Other
Case study	10 %	-	70 %	-
Field and laboratory reports	20 %			

Recommended Readings:

1. Youdeowei, A. (1978). A Laboratory Manual of Entomology. Oxford University Press.
2. Trigunayat M. M. (2016). Manual of Practical Entomology: Field and Laboratory Guide 3rd edition, Scientific J, India.
3. Triplehorn C. A. & N. F. Johnson (2005). Borror and Delong's Introduction to the study of insects. Seventh edition. Brooks/ Cole, USA (e-book available).
4. Recent insect taxonomic keys.