



Entomology

Course Code	Course Num.	Course Name	Credit Hours	Lec	Lab	Tut	Prerequisites
BIO	353	Entomology	4	3	2	0	BIO252

Objectives:

On successfully completing this course , students will be expected :

- To appreciate the value and importance of insects.
- To learn about the classification, biology, ecology, behaviour, and control of insects.
- To identify major orders and families of insects and acquire their general characteristics.
- To acquire practical skills in collecting, mounting, preserving insects for scientific study.
- To understand the general external and internal anatomy and physiology insects.
- To appreciate the impacts of insects on humans and the environment.

Syllabus

- Insects position in the animal kingdom.
- General traits of Insects , the reasons for enormous proliferation of insects.
- The body wall: Structure and its characteristics and study of Metamorphosis process .
- Study parts of the body and its extensions and various modifications- Study of head, antennae, and mouth parts.
- Chest study: its composition, legs, movement, Wings, aviation, and mechanical factors affecting it .
- Study abdomen: abdominal appendages and non-genital and Genital.
- Study the structure of various organs in the body of the insect Including Digestive system.
- Circulatory system: blood vessel, , blood circulation, and blood cells, blood clot.
- Respiratory system : the structure of bronchial device, operation of breathing in both terrestrial , aquatic and parasitic insects.
- Nervous system: its divisions, nerve conduction, the members of the Sense, mechanical and chemical receptors, members of hearing and vision.
- Muscular system: muscle types, their structure,
- Excretory system : excretory organs and excretory process,
- Reproductive system: its structure , methods of reproduction.
- A brief study of the growth after embryonic including types of transformation
- Study the types of larvae and pupae in insects

References:

- Howard E. Evans Insect Biology: A Textbook of Entomology (1984) ISBN-13: 978-0201119817.
- Gullan P. J. The Insects: An Outline of Entomology 3rd Edition (2010). ISBN-13: 978-1405111133.
- William S. Romoser The Science of Entomology 4th Edition. (1998). ISBN-13: 978-0697228482.

