

DEPARTMENT OF ZOOLOGY				CLASS: I B.Sc. Chemistry				
Semester	Course Type	Course Code	Course Title	Credits	Contact Hours/week	CIA	Ext	Total
I & II	Allied	20U2ZAP1	Zoology Ancillary Practical – I	2	2	40	60	100

Dissection

Digestive system of Cockroach
Reproductive system of Cockroach

Virtual Dissection

Frog Arterial system
Fifth cranial nerve
Urinogenetal system

Mountings

Earth worm: Body Setae
Cockroach: Mouth parts and Salivary glands
House fly: Mouth parts
Honey Bee: Mouth parts
Brain of Frog (Procedure with illustration)

Spotters

Trypanosoma, Obelia, Ephyra, Taenia, Ascaris, Dracunculus, Leech, Trochophore larva, Appendages of prawn, Nauplius, Albulia, Glochidium, Star fish, Bipinnaria larva, Amphioxus, Placoid scale, Axolotl larva, Frog - Osteology, Poisonous snakes of south India, Feather of bird.

(Note: Mounting and dissections are to be done by using live specimen or virtual method or slides and preserved specimens from archives).

Books for References

1. Jayasurya, Nair N.C, Soundarapandian N, Arumugem N, Leelavathy S and Murugan T, 2013. *Practical Zoology Vol. 1 Invertebrata*, Saras publication, Nagercoil.
2. Jayasurya, Thangamani A, Arumugam N, Prasanakumar S and Narayanan L.M, 2013. *Practical Zoology Vol. 2 Chordata*, Saras publication, Nagercoil.
3. Sinha J, Chatterjee A.K and Chattopadhyay P, 2011. *Advanced practical zoology*, Books and Allied (P) Ltd., Kolkata.

Web Resources

1. <https://www.youtube.com/watch?v=wF7ew2w24as>

Pedagogy

PPT, group discussion, interaction, quiz, tutorial and virtual labs.

Course Learning Outcomes:

	CLO Statement	Knowledge level
CLO-1	Recall the diversity of Invertebrates and Chordates.	K1
CLO-2	Understand the structure and functions of the organism.	K2
CLO-3	Apply the knowledge to identify the Invertebrate and Chordate fauna based on their unique characters.	K3
CLO-4	Analyse the organs/systems and their role in Invertebrate and Chordates.	K4
CLO-5	Examine the role of Invertebrates and Chordates in biological communities and ecological interactions.	K4

Mapping with Programme Specific Outcomes:

	PSO-1	PSO-2	PSO-3	PSO-4	PSO-5	PSO-6	PSO-7	PSO-8
CLO-1	1	1	1	1			1	
CLO-2	1	2	3	3			3	
CLO-3	1	3	3	3			3	
CLO-4	1	3	3	3			3	
CLO-5	1	2	2	1	2	2	2	

3- Advance application; 2- Intermediate level; 1- Basic level

Mapping with Programme Outcomes:

	PO-1	PO-2	PO-3	PO-4	PO-5
CLO-1	2	2		2	
CLO-2	2	2		2	
CLO-3	2	2	1	3	2
CLO-4	2	2	2	2	1
CLO-5	2	2		3	3

3- Advance application; 2- Intermediate level; 1- Basic level

LESSON PLAN FOR ODD SEMESTER (Total hours: 30)

Cycle	Description	Staff Name	Hours	Mode
Dissection				
1	Digestive system of Cockroach		2	Procedure with illustration
2	Reproductive system of Cockroach		2	Procedure with illustration
Virtual Dissection				
3	Arterial system of frog		2	Procedure with illustration
4	V Cranial nerve of frog		2	Procedure with illustration
5	Urinogenetal system of frog		2	Procedure with illustration
Mountings				
6	Body setae of Earthworm		2	Mounting
7	Mouth parts of Cockroach		2	Mounting
8	Salivary glands of Cockroach		2	Mounting
9	Mouth parts of Housefly		2	Mounting
10	Mouth parts of Honey bee		2	Mounting
11	Brain of Frog		2	Procedure with illustration
Spotters				
12	<i>Trypanosoma, Obelia</i>		2	Specimen & Image
13	<i>Ephyra, Taenia</i>		2	Specimen & Image
14	<i>Ascaris, Dracunculus</i>		2	Specimen & Image
15	Internal Practical Test – I		2	

LESSON PLAN FOR EVEN SEMESTER (Total hours: 30)

Cycle	Description	Staff Name	Hours	Mode
Spotters				
1	Leech, Trochophore larva		2	Specimen & Image
2	Appendages of Prawn		2	Specimen & Image
3	Appendages of Prawn		2	Specimen & Image
4	Appendages of Prawn		2	Specimen & Image
5	<i>Albunea</i> , Nauplius		2	Specimen & Image
6	Glochidium, Star fish		2	Specimen & Image
7	Bipinnaria larva, Amphioxus		2	Specimen & Image
8	Placoid scale, Axolotl larva		2	Specimen & Image
9	Frog Osteology		2	Image
10	Frog Osteology		2	Image
11	Poisonous snakes of south India		2	Specimen & Image
12	Poisonous snakes of south India		2	Specimen & Image
13	Feather of Bird		2	Specimen & Image
14	Internal Practical Test – II		2	
15	Summative Practical Examination		2	

Course designers: Dr. L.D. Devasree and Dr. R. Eswaran