

<i>DEPARTMENT OF ZOOLOGY</i>				<i>CLASS: I B.Sc. Zoology</i>				
Semester	Course Type	Course Code	Course Title	Credits	Contact Hours/week	CIA	Ext	Total
I & II	Core	20U2ZMP1	Major Practical – I	3	3	40	60	100

Mountings

Body Setae of Earth worm
Mouth parts of Cockroach
Salivary glands of Cockroach
Placoid scales of Shark
Brain of frog (Procedure with illustration)

Dissections

Digestive system of Cockroach
Nervous system of Cockroach
Reproductive system of Cockroach
V cranial nerve of Frog (Procedure with illustration)

Spotters:

Invertebrata

Amoeba, Euglena, Paramoecium, Trypanosoma, Elphidium, Noctiluca, Spicules, Obelia, Physalia, Porpita, Pennatula, Adamsia, Fungia, Tape worm, Redia larva, Cercaria, Liver fluke, Planaria, Ascaris, Dracunculus, Chaetopterus, Arenicola, Aphrodite, Leech, Sacculina, Albunea, Scolopendra, Limulus, Scorpion, Aplysia, Vaginulus, Pinctada, Octopus, Nautilus, Chiton, Dentalium, Star fish, Bipinnaria larva.

Chordata

Amphioxus, Balanoglossus, Ascidian, Doliolum, Petromyzon, Narcine, Trygon, Hippocampus, Echeneis, Exocoetes, Cynoglossus, Rhacophorus, Uracotyphlus, Axolotle, Tadpole larva, Draco, Chameleon, Typhlops, Bungarus, Naja, Viper, Enhydryna, Eudynamys, King fisher, Ant eater, Loris and Pteropus.

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:

CLOs	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 Invertebrates and Chordate fauna based on their unique characters.	K3
CLO-4	Analyse the organs/systems and their role in Invertebrates 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	2	2					1	
CLO-2	1	2	3				3	
CLO-3	1	3	2	1			3	
CLO-4	1	3	3	2			3	
CLO-5	1	2	3	2			3	

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

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

LESSON PLAN FOR ODD SEMESTER (Total hours: 45)

Cycle	Description	Staff Name	Hours	Mode
Dissection				
1	Digestive system of Cockroach		3	Procedure with illustration
2	Nervous system of Cockroach		3	Procedure with illustration
3	Reproductive system of Cockroach		3	Procedure with illustration
4	V Cranial nerve of Frog		3	Procedure with illustration
Mountings				
5	Body setae of Earth worm		3	Mounting
6	Mouth parts of Cockroach		3	Mounting
7	Salivary glands of Cockroach		3	Mounting
8	Placoid scales of Shark		3	Mounting
9	Brain of frog		3	Procedure with illustration
Spotters				
10	Amoeba, Euglena, Paramoecium, Trypanosoma		3	Slides
11	Elphidium, Noctiluca, Spicules, Obelia		3	Slides & Specimen
12	Physalia, Porpita, Pennatula, Adamsia		3	Specimens & Images
13	Fungia, Tape worm, Redia larva, Cercaria		3	Specimens & Images
14	Liver fluke, Planaria, Ascaris, Dracunculus		3	Specimens & Images
15	Internal Practical Test – I		3	

LESSON PLAN FOR EVEN SEMESTER (Total hours: 45)

Cycle	Description	Staff Name	Hours	Mode
Spotters				
1	Chaetopterus, Arenicola, Aphrodite, Leech		3	Specimens & Images
2	<i>Sacculina, Albunea, Scolopendra, Limulus</i>		3	Specimens & Images
3	Scorpion, <i>Aplysia, Vaginulus, Pinctada</i>		3	Specimens & Images
4	Octopus, Nautilus, Chiton, Dentalium		3	Specimens & Images
5	Star fish, Bipinnaria larva, Amphioxus, Balanoglossus		3	Specimens, Images
6	Ascidian, Doliolum, Petromyzon		3	Specimens & Images
7	Narcine, Trygon, Hippocampus		3	Specimens & Images
8	Echeneis, Exocetes, Cynoglossus		3	Specimens & Images
9	Rhacophorus, Uracotyphlus, Axolotle, Tadpole larva		3	Specimens & Images
10	Draco, Chameleon, Typhlops		3	Specimens & Images
11	Bungarus, Naja, Viper		3	Specimens & Images
12	Enhydrina, Eudynamys, King fisher		3	Specimens & Images
13	Ant eater, Loris and Pteropus		3	Specimens & Images
14	Internal Practical Test – II		3	
15	Summative Practical Examination		3	

Course designers: Dr. S. Dinakaran and Mrs. P. Sumathi