CORE COURSE FOR B.Sc FYUGP SEMESTER-I

DEPARTMENT OF ZOOLOGY,MANGALDAI COLLEGE

SESSION : 2024-25

CORE A1 **DIVERSITY OF NON-CHORDATES**

CREDIT:3 **CODE: ZOO-1011** **Total Hrs: 45**

TOPIC NO.	THEORY	Alloted Teachers
Unit1:		
1	General characteristics and Classification upto classes of Protista	MS
2	General characteristics and Classification upto classes of Porifera	SJ
3	General characteristics and Classification upto classes of Cnidaria	BR
4	General characteristics and Classification upto classes of Ctenophora	SJ
5	General characteristics and Classification upto classes of Platyhelminthes	PD
6	General characteristics and Classification upto classes of Nemathelminthes	PD
Unit 2:		
1	Evolution of coelom	SJ
2	Metamerism	SJ
3	General characteristics and Classification upto classes of Annelida	SJ
3	General characteristics and Classification upto classes of Arthropoda	BR
4	General characteristics and Classification upto classes of Mollusca	PD
5	General characteristics and Classification upto classes of Echinodermata	BR
Unit 3:		
1	Locomotion and Reproduction in Protista	MS
2	Evolution of symmetry and segmentation of Metazoa	MS
3	Canal system in Sponges	SJ
4	Spicules in Sponges	SJ
5	Polymorphism in Cnidaria	BR
6	Corals and coral reef formation	BR
7	Parasitic adaptations in helminths-*Fasciola hepatica*	PD
8	Parasitic adaptations in helminths- *Wuchereria bancrofti*	PD
9	Excretion in Annelida	SJ
10	Vision and respiration in Arthropoda	BR
11	Evolutionary significance of Onychophora	SJ
12	Torsion and detorsion in Gastropoda	PD
13	Water vascular system of Echinodermata	BR

Theory Classes:

Monday- 9am to 10am

Wednesday- 9am to 10am

Thursday- 11am to 12pm

1.08.2024

Department of Zoology
Mangaldai College
Darrang

Signature of HOD

Department of Zoology

COURSE FOR B.Sc FYUGP SEMESTER-I

DEPARTMENT OF ZOOLOGY,MANGALDAI COLLEGE

SESSION : 2024-25

CORE A1 **DIVERSITY OF NON-CHORDATES**

CREDIT:1 **CODE: ZOO-1011**

S.NO.	PRACTICAL
1	Study of the whole mount of *Euglena, Amoeba* and *Paramecium* collected from different water sources.
2	Study of Porifera-*Sycon/Grantia, Hyalonema, Spongilla.*
3	Study of Coelenterates- *Millepora, Physalia, Tubipora, Gorgonia, Pennatula, Metridium.*
4	Study of Ctenophore- *Ctenoplana, Beroe*
5	Study of *Fasciola hepatica, Taenia solium*
6	Study of adult *Ascaris lumbricoides* (male/female)
7	Study of Annelids-*Aphrodite, Chaetopterus, Amphitrite, Pheretima, Hirudinaria*
8	Study of Onychophora- *Peripatus*
9	Study of Arthropods - *Limulus, Palaemon, Balanus, Cancer, Julus, Apis*
10	Study of Molluscs- *Chiton, Dentalium, Pila, Mytilus, Pinctada, Sepia, Octopus*
11	Study of Echinodermates - *Antedon, Asterias, Ophioderma, Clypeaster/Echinocardium, Cucumaria*
12	Study of larval forms of Arthropoda- *Nauplius, Cypris, Zoaea, Mysis,* Eri silk larva
13	Study of larval forms of Echinodermata-*Bipinnaria, Dipleurula, Echinopluteus.*
14	T.S. through pharynx, gizzard and typhlosolar intestine of Earthworm.
15	To submit a Project Report on life cycle of Helminth parasite-*Fasciola hepatica* by students.

GROUP A: Dr. Minati Sharma & Pritimoni Das (Day: Tuesday)

GROUP B: Dr. Seema Jyoti & Bikash Rabha (Day: Thursday)

Practical Classes:

Tuesday- 1pm to 3pm

Thursday- 9am to 11 am

1.08.2024

Signature of HOD

Department of Zoology

Head
Department of Zoology
Mangaldai College, Mangaldai
Darrang, Assam

COURSE FOR B.Sc FYUGP SEMESTER-I (SEC)

DEPARTMENT OF ZOOLOGY,MANGALDAI COLLEGE

SESSION : 2024-25

SKILL ENHANCEMENT COURSE

ORNAMENTAL FISH AND FISHERIES

CREDIT:4

TOPIC NO.	THEORY	Teacher Alloted
1	Ornamental Fish Diversity of North-East India.	SJ
2	Aquarium plant diversity in the wetland of Assam.	SJ
3	Construction and management of Home Aquarium.	SJ
4	Natural feed of Ornamental Fish	TB
5	Strategies for maintenance of natural colour of Ornamental Fish	TB
6	Natural Breeding of *Trichogaster* species	SJ
7	Health management of Ornamental Fish	SJ
8	Feed formulation of Ornamental Fish	TB
9	Development of Biological filtration in Aquarium	TB
10	Pure culture of planktons	TB

EXP NO.	PRACTICAL
1	Identification of Ornamental Fish
2	Culture of Indigenous ornamental fish in Aquarium
3	Estimation of Physico-chemical characteristics of Aquarium water
4	Biological filter for removal of Ammonia from Aquarium
5	Culture of Planktons
6	Field visit to Fish farm/ Fish breeding centre

Theory Classes

Tuesday: 3-4 pm

Friday: 1-2 pm

1.08.2024

Signature of HOD
Department of Zoology

Head
Department of Zoology
Mangaldai College, Mangaldai
Darrang, Assam