

# **EASTERN KARBI ANGLONG COLLEGE**

**Sarihajan, Karbi Anglong, Assam**



## **Key Indicator**

### **1.3 - Curriculum Enrichment**

#### **Metric No. 1.3.2**

Number of courses that include experiential learning through project work/field work/internship during the year

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#### **Metric No. 1.3.3**

Number of students undertaking project work/field work/ internships

Department of Zoology  
CBCS syllabus on  
Project Work/Field Study  
Session: 2022-23



**COURSE STRUCTURE:**

**CHOICE BASED CREDIT SYSTEM FOR B.Sc. ZOOLOGY HONOURS**

Semester	Honours core course (HCC)	Core course Name (14)	Ability Enhancement Compulsory Courses AEC (2)	Skill Enhancement Courses SEC (2)	Discipline Specific Elective DSE (4)	Generic Elective GE (4)
Semester I	ZOOHCC - 101	Non-chordates I: Protozoa and Metazoa	English Communication or MIL			GE - I
	ZOOHCC - 102	Principles of Ecology				
Semester II	ZOOHCC - 201	Non-chordates II: Coelomates	Environmental Science			GE - II
	ZOOHCC - 202	Cell Biology				
Semester III	ZOOHCC - 301	Diversity of Chordates		ZOOSEC-301 Apiculture		GE - III
	ZOOHCC - 302	Physiology: Controlling and Coordinating Systems				
	ZOOHCC - 303	Fundamentals of Biochemistry				
Semester IV	ZOOHCC - 401	Comparative Anatomy of Vertebrates		ZOOSEC-401 Medical Diagnostics		GE - IV
	ZOOHCC - 402	Physiology: Life Sustaining Systems				
	ZOOHCC - 403	Biochemistry of Metabolic Processes				
Semester V	ZOOHCC - 501	Molecular Biology			ZOODSE-501 Immunology	
	ZOOHCC - 502	Principles of Genetics			ZOODSE-502 Fish and Fisheries	
Semester VI	ZOOHCC - 601	Developmental Biology			ZOODSE-601 Reproductive Biology	
	ZOOHCC - 602	Evolutionary Biology			ZOODSE-602 Animal Behavior and Chronobiology	



**ZOOHCC - 201: Non-chordates II: Coelomates (Practical)**

Credits 2

Marks 30

1. Study of following specimens:
2. Annelids - *Nereis*, *Heteronereis*, *Chaetopterus*, *Pheretima*, *Hirudinaria*
3. Arthropods - *Limulus*, *Palaemon*, *Daphnia*, *Balanus*, *Sacculina*, *Cancer*, *Scolopendra*, *Julus*, *Bombyx*,
4. *Periplaneta*, *termites and honey bees*; Onychophora - *Peripatus*
5. Molluscs - *Chiton*, *Pila*, *Doris*, *Helix*, *Unio*, *Sepia*, *Octopus*, *Nautilus*
6. Echinodermates - *Pentaceros/Asterias*, *Ophiura*, *Echinus*, *Cucumaria* and *Antedon*
7. Study of digestive system, nephridia of earthworm and Leech through powerpoint presentation
8. T.S. through pharynx, gizzard, and typhlosolar intestine of earthworm
9. To submit a Project Report on arthropoda and mollusca

**Suggested Readings:**

- Ruppert and Barnes, R.D. (2006). *Invertebrate Zoology*, VIII Edition. Holt Saunders International Edition
- Barnes, R.S.K., Calow, P., Olive, P. J. W., Golding, D.W. and Spicer, J.I. (2002). *The Invertebrates: A New Synthesis*, III Edition, Blackwell Science
- Barrington, E.J.W. (1979). *Invertebrate Structure and Functions*. II Edition, E.L.B.S. and Nelson
- Ganguly, Sinha and Adhikari – *Biology of Animals*, Vol I
- Parker and Hall – *Text Book of Zoology*, Vol I

**Marks Distribution:**

<b>Internal</b>	<b>: 20 marks</b>
<b>Theory</b>	<b>: 50 marks</b>
<b>Practical</b>	<b>: 30 marks</b>
Spotting	: 14 marks
Project	: 7 marks
Regularity	: 5 marks
Laboratory Notebook	: 2 marks
Viva voce	: 2 marks



**ZOOHCC - 401: Comparative Anatomy of Vertebrates (Practical)**

Credits 2

Marks 30

1. Study of placoid, cycloid and ctenoid scales through permanent slides/photographs
2. Disarticulated skeleton of Frog/Toad/Calotes/Fowl/Pigeon/Guineapig
3. Mammalian skulls: One herbivorous and one carnivorous animal
4. Dissection of rat to study arterial and urinogenital system through audio-visual aids
5. Study of structure of any two organs (heart, lung, kidney, eye and ear) from video recording
6. **Project on skeletal modifications in vertebrates**

**Suggested Readings**

- Kardong, K.V. (2005) *Vertebrates' Comparative Anatomy, Function and Evolution*. IV Edition. McGraw-Hill Higher Education
- Kent, G.C. and Carr R.K. (2000). *Comparative Anatomy of the Vertebrates*. IX Edition. The McGraw-Hill Companies
- Hilderbrand, M and Gaslow G.E. *Analysis of Vertebrate Structure*, John Wiley and Sons
- Walter, H.E. and Sayles, L.P; *Biology of Vertebrates*, Khosla Publishing House

**Marks Distribution**

<b>Internal</b>	<b>: 20 marks</b>
<b>Theory</b>	<b>: 50 marks</b>
<b>Practical</b>	<b>: 30 marks</b>
Identification	: 14 marks
Project	: 7 marks
Regularity	: 5 marks
Laboratory Notebook	: 2 marks
Viva voce	: 2 marks

# Department of Zoology

Session: 2022-23

## List of students participated in the field study

Programme	Department	Honours/Pass Course	Semester	Course Code	Course Name	Date	Place Visited	Name of the students	Total No. of students
Bachelor of Science (BSc)	Zoology	Honours	2 <sup>nd</sup>	ZOOHCC-201L	Non-chordates II: Coelomates (Practical)	5 <sup>th</sup> November, 2022	Gibbon Wildlife Sanctuary, Mariani, Jorhat, Assam	Sonali Sarkar	17
								Prosenjit Debnath	
								Rupdihin Beypi	
								Sarhon Bey	
								Mohit Rai Gupta	
								Ankita Singh	
								Anshu Singh	
								Mohan Aley	
								Swapna Parbin	
								Rupdihun Rngpipi	
								Rahul Mahatu	
								Nazma Hissain	
								Khushbu Bubey	
								Purabi Debnath	
								Glorish Bongrungpi	
Ruplin Hansepi									
Dipti Gouthum									

# Department of Zoology

Session: 2022-23

## List of students participated in the field study

Programme	Department	Honours/Pass Course	Semester	Course Code	Course Name	Date	Place Visited	Name of the students	Total No. of students
Bachelor of Science (BSc)	Zoology	Honours	4 <sup>th</sup>	ZOOHCC-401L	Comparative anatomy of vertebrates (Practical)	5 <sup>th</sup> November, 2022	Gibbon Wildlife Sanctuary, Mariani, Jorhat, Assam	Sanam Mishra	13
								Rabina Phangchopi	
								Bikash Dey	
								Sarkim Timung	
								Sarbini Tokbi	
								Nisha Sutradhar	
								Purna Shyam	
								Rinky Das	
								Ankita Deb	
								Anilson Teron	
								Lipihikha Mech	
								Anirudha Phukan	
Long Im Taro									



## Field Visit Report of Department of Zoology

**Date:** 5<sup>th</sup> November, 2022  
**Place Visited:** Gibbon Wildlife Sanctuary, Mariani, Jorhat, Assam  
**Department:** Zoology  
**Class:** B.Sc. 1<sup>st</sup> Semester (Honours & Pass)

As a part of B.Sc. 1<sup>st</sup> Semester curriculum one day field trip was organized to Gibbon Wildlife Sanctuary, Mariani by the Department of Zoology, Eastern Karbi Anglong College, Sarihajan, Assam. The Major objective was to familiarise the students with the fauna of the region and also to acquaint them with the importance of fauna of forest area and the threats these ecosystems face due to natural and anthropogenic pressures.

A group of 30 students were accompanied by our Zoology department staffs. As a part of their curriculum students took pictures of gibbon and fauna rich in the region for preparing field Report.

### **Program Outcome:**

By visiting these places, the students were entitled and they came to know different animal specimens in wildlife area. The field trip sensitized the students towards caring for the environment and the importance of conservation of endemic faunal species.



  
Dr. Anil Ch. Das, Principal  
Eastern Karbi Anglong College  
Sarihajan, Karbi Anglong.