

CURRICULUM PLAN (29August-2024 to Jan-2025)

Name– **Dr. P.P. Saini**

Subject- **Non-Chordata-I Protista to Pseudocoelomates (DSC; Theory)**

Course- **B.Sc. (hons.) Zoology Semester I (NEP)**

Hrs/Wk- 02

Contents	Allocation of lectures	Monthwise schedule to be followed	Tutorial/ Assignments / Presentations
Unit I: Introduction to Non-chordates: General characteristics of non-chordates and basis of classification	2 lectures	29 Aug-7 Sep-2024	<ul style="list-style-type: none"> Lecture followed by interactive open session
Unit II: Protista (07 Hours) General characteristics and classification; Life cycle of Plasmodium vivax; Locomotion and reproduction in Protista. Unit III: Porifera (05 Hours) Introduction to Parazoa; General characteristics and classification; Canal system in sponges.	13 lectures	Sep-Oct-2024	<ul style="list-style-type: none"> 2 minutes lecture on previous class Lecture and discussion
Unit IV: Cnidaria and Ctenophora Introduction to Metazoa; General characteristics and classification; Polymorphism in Cnidaria; Corals and coral reefs.	16 lectures	Nov-Dec-2024	<ul style="list-style-type: none"> Test Lecture and discussion Sharing and discussion on previous year questions
Unit V: Platyhelminthes and Nematelminthes : General characteristics and classification; Parasitic adaptations of Helminthes; Life cycle of Taenia solium and Ascaris lumbricoides.	08 lectures	Dec-Jan-2024	<ul style="list-style-type: none"> Assignment Submission Presentations by students
REVISION		Dec-Jan-2024	REVISION

CURRICULUM PLAN (August to Dec-2024)

Practical 60 hrs (Laboratory periods: 15 classes of 4 hours each)

Name– **Dr. P. P. Saini**

Subject- **Diversity of Chordates (DSC; Practical)**

Course- **B.Sc. (Hons.) Zoology Semester I (NEP)**

Shared with- **Dr. Kanchan Batra**

Date	Practical
02/08/2024 09/08/2024 16/08/2024	<ul style="list-style-type: none">Syllabus DiscussionProtochordata: Balanoglossus, Herdmania, Branchiostoma, Colonial Urochordata, Sections of Balanoglossus through proboscis and branchio-genital regions, Sections of Amphioxus through pharyngeal, intestinal and caudal regions. Permanent slide of Herdmania spicules. 2. Agnatha: Petromyzon, Myxine.
23/08/2024 30/08/2024	<p>Pisces: <i>Scoliodon, Sphyrna, Pristis, Torpedo, Chimaera, Mystus, Heteropneustes, Labeo, Exocoetus, Echeneis, Anguilla, Hippocampus, Tetradon/Diodon, Anabas, Flatfish.</i></p> <ul style="list-style-type: none">Permanent slides of Placoid and Cycloid Scales.
06/09/2024	<ul style="list-style-type: none">Amphibia: <i>Ichthyophis/Ureotyphlus, Necturus, Bufo, Hyla, Alytes, Salamandra.</i>
13/09/2024 20/09/2024	<ul style="list-style-type: none">Reptilia: <i>Chelone, Trionyx, Hemidactylus, Varanus, Uromastix, Chamaeleon, Ophiosaurus, Draco, Bungarus, Vipera, Naja, Hydrophis, Zamenis, Crocodylus;</i>Key for Identification of poisonous and non-poisonous snakes.Student Presentation: Power point presentation on any two animals from two different classes.
20/09/2024 27/09/2024	<ul style="list-style-type: none">Aves: Study of six common birds from different orders.Types of beaks and claws.Student Presentation: Power point presentation on any two animals from two different classes
04/10/2024	<ul style="list-style-type: none">Mammalia: <i>Sorex, Bat (Insectivorous and Frugivorous), Funambulus, Loris, Herpestes, Erinaceus.</i>
Oct-Nov-2024	<ul style="list-style-type: none">RevisionStudent Presentation: Power point presentation on any two animals from two different classesMock Test
Nov-Dec-2024	<ul style="list-style-type: none">Practical Examination

CURRICULUM PLAN (August to Dec-2024)

Practical 60 hrs (Laboratory periods: 15 classes of 4 hours each)

Name– **Dr. P. P. Saini**

Subject- **Human Physiology (GE; Practical)**

Course- **Zoology GE Semester I (NEP)**

Date	Practical
14/09/2024 21/09/2024 28/09/2024	<ul style="list-style-type: none">• Syllabus Discussion• Preparation of haemin and haemochromogen crystals.• Recording of blood pressure using a Sphygmomanometer.
05/10/2024 19/10/2024	<ul style="list-style-type: none">• Haemoglobin estimation using Sahli's haemoglobinometer.• Determination of ABO Blood group.
26/10/2024 09/11/2024	<ul style="list-style-type: none">• Examination and detailed study of permanent histological sections of mammalian Stomach, Duodenum, Liver, Lung, Kidney, Pancreas, Testis and Ovary.
16/11/2024	<ul style="list-style-type: none">• Preparation of temporary mount of neurons and blood cells (blood film preparation)
Nov-Dec-2024	<ul style="list-style-type: none">• Revision• Mock Test• Practical Examination

CURRICULUM PLAN (August to Dec-2024)

Name– **Dr. P. P. Saini**

Subject- **Public Health and Hygein (SEC; Practical)**

Course- **B.Sc. (Hons.) Zoology Semester I (NEP)**

Shared with- **Dr. Kanchan Batra**

Date	Practical
21/08/2024 22/08/2024 28/08/2024 29/08/2024	<ul style="list-style-type: none"> Syllabus Discussion To study various hygiene practices like personal, menstrual, oral and hand hygiene etc Assessment of nutritional status using anthropometric indices like BMI, WHR. Assessment of Nutritional status by a survey of clinical and non-invasive biochemical parameters
04/09/2024 05/09/2024 11/09/2024 12/09/2024	<ul style="list-style-type: none"> To study the following medically important organisms like mosquito, house fly cockroach and rats as transmission vectors for infectious dise
11/09/2024 12/09/2024	<ul style="list-style-type: none"> Measuring blood pressure and correlating it with lifestyle.
18/09/2024 19/09/2024	<ul style="list-style-type: none"> Discussion on Case study of a disease (Nutritional, infectious and lifestyle) along with the public health data with analysis and discussion.
25/09/2024 26/09/2024	<ul style="list-style-type: none"> Collecting secondary data on AQI from different areas and correlate with health indices in that area
03/10/2024 09/10/2024 10/10/2024	<ul style="list-style-type: none"> To determine the portability of water using, pH, BOD, COD and MPN of the water sample from different sources
Oct-Nov-Dec-2024	<ul style="list-style-type: none"> Revision Student Presentation: Power point presentation on any two animals from two different classes Field Visit <ol style="list-style-type: none"> Field visits to nearby health care center to collect some data on the rate of a particular disease over past few months or years. Field visit for understanding the health programs and hygiene like Asha worker interviews/Sulabh international museum of toilets/Water Treatment Plant (any one) Mock Test
Nov-Dec-2024	<ul style="list-style-type: none"> Practical Examination