

# UNIVERSITY OF LADAKH



**SYLLABUS  
OF  
THE INTERDISCIPLINARY COURSE  
OF  
ZOOLOGY**

**TITLE: WILDLIFE AND CONSERVATION**

**(UNDER NEP – 2020)**

**(Implemented w.e.f Academic Session 2023-24)**

# UNIVERSITY OF LADAKH

## SYLLABI OF THE FOUNDATION/INTRODUCTORY COURSE IN \_\_\_\_\_ UNDER NATIONAL EDUCATION POLICY - 2020 (Session 2023-2024)

### OBJECTIVE OF THE COURSE

The curriculum of the program was developed with a view to help students to understand the concept of wildlife and conservation. To comprehend the threats to wildlife and study conservation strategies.

### **CHOICE BASED CREDIT SYSTEM**

The Four-year under-graduate level course ..... consists of 4-year course (under CBCS pattern) with semester system 8 semesters, with two semesters in a year and each semester carrying 20 credits, thus a total of 40 credits per year and 160 credits in all. Each credit carries a weightage of 25 marks and thus a total of 500 marks in a semester.

The new education policy – 2020 will be applicable to all the semesters from the academic session 2023-24.

#### **Semester-I**

(Marks: 500)

		(Core Courses)			
Paper	Course No.	Title	Max. Marks	Con. Hours	Total Credits
Foundation	FC-DSC		100	60	04
Foundation	FC-DSC-L	Lab work (if any)	25	30	01
Interdisciplinary	ID – 1		75	45	03
Interdisciplinary	ID – 2		75	45	03

**Total credits: 20**

#### **Semester-II**

(Marks: 500)

		(Core Courses)			
Paper	Course No.	Title	Max. Marks	Con. Hours	Total Credits
Foundation	FC-DSC		100	60	04
Foundation	FC-DSC - L		25	30	01
Interdisciplinary	ID – 1		75	45	03
Interdisciplinary	ID – 2		75	45	03

**Total credits = 20**

## Syllabus of the Interdisciplinary Course of Zoology under NEP-2020

**Semester – I**

**Credit – 3**

**Max Marks – 75**

**Objective:** The objective of the course is to help students to understand the concept of wildlife and conservation. To comprehend the threats to wildlife and study conservation strategies.

### **Unit – 1: Introduction to Wildlife**

- 1.1: Introduction, values and ecological significance of wildlife; Status of wildlife in India.
- 1.2: Threats to wildlife: (habitat loss, illegal wildlife trade, deforestation, Forest fires, Poaching)
- 1.3: Human-Wildlife Conflict: Concept, Causes and Control

### **Unit – 2: Introduction to Conservation**

- 2.1: Introduction and methods of wildlife Conservation; in-situ and ex-situ conservation.
- 2.2: Introduction to Protected Areas: National parks, Wildlife sanctuaries, wildlife reserves and Biosphere reserves.
- 2.3: Introduction to Wildlife Protection Act 1972

### **Unit – 3: Wildlife in Ladakh**

- 3.1: Wildlife of Ladakh with reference to Birds and Mammals.
- 3.2: Status, Distribution and Diagnostic Features of Snow leopard, Brown Bear and Black Neck Crane.
- 3.3: Protected areas in Ladakh: Wildlife sanctuaries and National Park

### **Unit – 4: Techniques and Practices in Wildlife Study**

- 4.1: Wildlife census technique - direct and indirect methods, Dos & Don'ts in field studies
- 4.2: Bird census methods - Call count and point count
- 4.3: Tools and Equipment in Wildlife study and research

### **References:**

#### **Essential Readings –**

- Saharia VB. (1982). Wildlife of India, Natraj Publishers, Dehra Dun.
- Negi, S.S. (1993). Manual for Wildlife Management in India, Indus Publishing Co. India
- Chundawat, R.S. & Rawat G.S. (1994). Indian Cold Deserts: A Status Report on Biodiversity. Wildlife Institute of India. Dehradun
- Sharma, B.D. (1999). Wild Animals of Ladakh. Asiatic Publishing House, Delhi
- Lawmann . (2017). Wildlife Protection Act 1972, Kamal Publishers, New Delhi.
- Menon, Vivek and Kumar, Ashok (1999). Wildlife Crime, Natraj Publishers, Dehradun
- Silvy N.J. Wildlife Techniques Manual Vol 1 and 2. The John Hopkins University Press, Maryland.

#### **Suggested Readings –**

- Pfister, O. (2004). Birds and Mammals of Ladakh. Oxford University Press, USA.
- Anthony R. E. Sinclair, John M. Fryxell, Graeme Caughley (2006). Wildlife, Ecology, Conservation and Management (2014), John Wiley & Sons, Chichester, West Sussex.
- Woodroffe, R., Thirgood, S., & Rabinowitz, A. (Eds.). (2005). People and Wildlife, Conflict or Co-existence? (Conservation Biology). Cambridge: Cambridge University Press.  
doi:10.1017/CBO9780511614774

# UNIVERSITY OF LADAKH

## General elective course

Syllabus for NEP-FYUG Programme Semester-II

Subject: Zoology

Course code: LFS-ZO-201-G

Credits: 03

Course Title: Life style diseases and management

**Objective:** To create awareness among students about the various diseases which originate and which could be prevented by controlling the life style. The course also covers the general aspects of diagnosis, prevention and management strategies.

**UNIT- I** (15 hours)

- 1.1 Concept of Lifestyle diseases, Types of Lifestyle diseases.
- 1.2 Overview of Lifestyle Diseases and its Implications in India and the World.
- 1.3 Major Risk Factors: Environmental, Dietary, Psychological, Occupational

**UNIT- II** (15 hours)

- 2.1 Body Mass Index: Determination and Significance.
- 2.2 Obesity; Causes, Prevention, Management
- 2.3 Atherosclerosis, Arteriosclerosis: Causes, Prevention, Management.

**UNIT- II** (15 hours)

- 3.1 Hypertension and Hypotension: Causes, Prevention, Management.
- 3.2 Stress and Mental Illness; Causes, Prevention and Management.
- 3.3 Diabetes; Types, Characteristics, Causes, Diagnosis, Prevention and Management

### Books Recommended:

#### Essentials books

1. M.N Kumar, R. Kumar. Guide to prevention of lifestyle diseases
2. Gary Eggar et al. Lifestyle Medicine

#### Further readings

3. Akira et al. New Frontiers in Lifestyle Related Diseases

# UNIVERSITY OF LADAKH

## General elective course

Syllabus for NEP-FYUG Programme Semester-III

Subject: Zoology

Course code: LFS-ZO-301-G

Credits: 03

Course Title: Public health and hygiene

Objective: To make the student aware of the essentials of public health and sanitation.

### **Unit 1: Public Health**

- 1.1. Health: Concept and Meaning, Determinants of Health and Well-being, Right to Health
- 1.2. Nutrition – definition, importance, Good nutrition and mal-nutrition; Balanced Diet
- 1.3. Communicable and Water Borne Diseases, Non-communicable Diseases and Lifestyle Illnesses.

### **Unit 2: Hygiene**

- 2.1. Hygiene: Concept, Meaning, Principles, and Importance.
- 2.2. Types of Hygiene: Personal, Food, and Community
- 2.3. Standard Hygiene Practices, WASH (Water, Sanitation and Hygiene) programme

### **Unit 3: Health Programmes**

- 3.1. National Rural Health Mission (NRHM), National Immunisation Programme
- 3.2. Integrated Child Development Services Scheme, Poshan Scheme
- 3.3. Pradhan Mantri Matru Vandana Yojana (PMMVY), Accredited Social Health Activist (ASHA)

### Practical

1. Study of laboratory instruments
2. Determination of individual overall health level
3. Collection and interpretation of local data on diseases prevalence
4. Field work on public awareness on Health and Hygenic.

5. Demonstration of medically important entomological specimens
6. Drinking water quality assessment.
7. Microscopic examination of Fungi

### **Book recommended**

1. Gordon Edlin and Eric Golanty (2010) Health & Wellness (10th Edn) Jones &Barlett Publisher.
2. Skolnik Richard (2012) Global Health 101 (2nd Edn, Riegelman Richard Ed.) Jones &Barlett Learning.
3. Mary-Jane Schneider (2014) Introduction to Public Health (4th Edn,) Jones &Barlett