Institute of Zoology
Faculty of Life Sciences
University of the Punjab, Lahore

Course Outline

Programme	BS Zoology	Course Code	ZOOL-305	Credit Hours	2
Course Title	**Wildlife**				

Course Introduction

This course provides an in-depth exploration of the wildlife of Pakistan, examining protected areas, international conservation conventions, zoo regulations, threatened species, habitat ecology, and conservation strategies. Students will gain an understanding of the biodiversity of Pakistan, the challenges faced in wildlife conservation, and the policies and practices in place to protect and manage wildlife.

Learning Outcomes

On the completion of the course, the students will:

1. Understand the diversity and distribution of wildlife in Pakistan.
2. Explore the roles and significance of protected areas in wildlife conservation.
3. Examine international conventions and agreements related to wildlife conservation.
4. Study the rules and regulations governing zoos and captive wildlife.
5. Identify and understand the threats to species and their habitats.
6. Investigate habitat ecology and the principles of wildlife conservation.
7. Develop skills in conservation planning and management.

	Course Content	Assignments/Readings
Week 1	Introduction to Wildlife and Biodiversity of Pakistan, Major wildlife species in Pakistan (mammals, birds, reptiles, amphibians, and insects)	
	Biogeographic zones of Pakistan	
Week 2	Types of protected areas (National Parks, Wildlife Sanctuaries, Game Reserves)	
	IUCN protected areas categories, Management practices and challenges in protected areas	
Week 3	Criteria for listing threatened species (IUCN Red List)	
	Causes of species decline and extinction	
Week 4	Standards and guidelines for zoo management (e.g., WAZA, AZA standards)	
	Role of zoos in wildlife conservation and education	
Week 5	Overview of key international conventions (CITES, CBD, CMS)	
	Ramsar Convention and Criteria	
Week 6	Threats To Wetlands	
	Pakistan's role and commitments under these conventions	
Week 7	Role of non-governmental organizations in conservation	
	In-situ and ex-situ conservation methods	
Week 8	Principles of habitat ecology and its importance for wildlife	
	Types of habitats in Pakistan (forests, grasslands, wetlands, deserts)	

Week 9	Impact of habitat loss and fragmentation on wildlife	
	Causes and consequences of human-wildlife conflict	
Week 10	Strategies for mitigating conflicts	
	Community-based conservation approaches (trophy hunting programme)	
Week 11	National conservation policies and legal frameworks	
	Role of government agencies in wildlife conservation,	
Week 12	Implementation and enforcement challenges	
	Importance of conservation education and public awareness	
Week 13	Strategies for effective communication and outreach	
	Research design and methodologies in wildlife studies	
Week 14	Data collection and analysis techniques	
	Role of media and technology in conservation education	
Week 15	Application of technology in wildlife research (e.g., GIS, remote sensing)	
	Integrated approaches to conservation planning	
Week 16	Adaptive management and monitoring	
	Future challenges and opportunities in wildlife conservation	

Textbooks and Reading Material

1. Wildlife of Pakistan" by Tom Roberts
2. "Field Guide to the Birds of Pakistan" by Richard Grimmett, Tom Roberts, and Tim Inskipp
3. "A Guide to the Reptiles of Pakistan" by Muhammad Sharif Khan
4. "The Mammals of Pakistan" by T.J. Roberts
5. "Pakistan: A Natural History" by Richard F. Porter
6. "Biodiversity of Pakistan" edited by Shahina A. Ghazanfar and Stephen A. Ghazanfar
7. "Birds of Pakistan" by Z.B. Mirza
8. "Freshwater Fishes of Pakistan" by Muhammad Naeem Khan
9. "Butterflies of Pakistan" by Col. Muhammad Afzal Shabbir
10. "The Large Mammals of Pakistan" by Asad R. Rahmani and Rafaqat Masroor
11. "Conservation and Management of Wildlife in Pakistan" by Shehzad A. Mufti
12. "Wildlife and Protected Areas of Pakistan: A Review" by A. Khan and M. Hassan

Suggested Readings

13. Wildlife and Biodiversity of Pakistan Lecture Notes by Prof. Dr. Zulfiqar Ali

Teaching Learning Strategies

Course Overview:

Teaching a course on the wildlife of Pakistan can be engaging and educational by using a variety of learning strategies to cater to different learning styles and enhance student understanding. Here are some strategies to consider:

Learning Objectives:

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Teaching Strategies:

Teaching a course on the wildlife of Pakistan can be engaging and educational by using a variety of learning strategies to cater to different learning styles and enhance student understanding. Here are some strategies to consider:

1. Interactive Lectures

Use Multimedia: Incorporate videos, documentaries, and virtual tours to showcase Pakistan's diverse wildlife and habitats.

Guest Speakers: Invite wildlife experts, conservationists, and researchers to give talks and share their experiences.

2. Field Trips and Outdoor Activities

Nature Walks and Field Trips: Organize visits to national parks, wildlife reserves, and natural habitats to observe wildlife in their natural environment.

Wildlife Observation: Teach students how to use binoculars, field guides, and cameras for wildlife observation and documentation.

3. Hands-On Activities

Wildlife Photography: Encourage students to take photographs of local wildlife and create a photo journal or gallery.

Specimen Collection and Study: Collect and study specimens (insects, plants, etc.) to understand their roles in the ecosystem.

4. Group Work and Collaboration

Group Discussions and Debates: Facilitate discussions and debates on topics such as wildlife conservation, human-wildlife conflict, and biodiversity.

Collaborative Presentations: Have students work in groups to prepare and present on various aspects of Pakistan's wildlife.

- Overview of the wildlife of Pakistan and its importance.
- Show a documentary clip on Pakistan's wildlife or general wildlife around he world.
- Discuss the main groups of wildlife found in Pakistan, including mammals, birds, reptiles, amphibians, and insects.
- Use diagrams, maps, and videos to illustrate different species and their habitats.
- Wildlife photography workshop where students learn techniques for photographing animals.
- Divide students into groups and assign each group a specific region of Pakistan to research its wildlife.
- Groups prepare a short presentation on the wildlife of their assigned region, including key species and conservation issues.
- Conduct a quick quiz or use flashcards to review key concepts.

By using these strategies, you can create an engaging and comprehensive course that helps students appreciate the diversity and importance of wildlife in Pakistan.

Assignments: Types and Number with Calendar

Group Presentations:

Objective: Foster collaboration and deeper understanding through research and peer teaching.

Strategy:

- Assign group projects on specific topics such as evolutionary relationships, ecological roles, or conservation issues.
- Require groups to prepare and deliver presentations, promoting peer learning.
- Incorporate peer assessment and feedback to improve learning outcomes and presentation skills.