

Course Objectives:

The objective of this course is

1. to enable the student to understand philosophy and significance of wildlife conservation
2. to understand the wildlife management rules and regulations in Pakistan
3. to understand how National and International agencies are involved in conservation and management of wildlife

Course Learning Outcomes:

Upon successful completion of this course, the student will be able to:

1. **ACQUIRE** theoretical knowledge about the identification, distribution, status, conservation and management of amphibians, reptiles, birds and mammals of major importance in Pakistan

2. **UNDERSTAND** the protected area system (Game Reserves, Wildlife Sanctuaries and National Parks)
3. **SOLVE** the threats to wildlife by applying the scientific principles and modern technologies (Sustainable development through local community participation).
4. **ANALYSE** interpret and synthesize data and other information about the population of wildlife
5. **EVALUATE** the conservation management by government department, National and International organisations
6. **DEMONSTRATE** the ecological assessment and importance of wildlife to certain area.

Course Outline

1. Wildlife of Pakistan

- Introduction
- Important Definitions
- Identification
- Distribution
- Status
- Conservation and Management of fishes, amphibians, reptiles, birds and mammals of major importance in Pakistan

2. Philosophy and significance of wildlife conservation

3. Biodiversity and sustainability of wildlife.

4. Wildlife rules and regulations in Pakistan

- Provincial Rules
- Federal Management of Wildlife (NCCW)

5. National and International agencies involved in conservation and management of wildlife

- National Organisations
- International Organisations

6. Protected Areas in Pakistan

- Sanctuaries
- Game Reserves
- National Parks

7. Ramsar convention

- Wetlands
- Ramsar Criteria
- Ramsar Sites

8. Threatened species of Pakistan

- Vulnerable
- Endangered
- Critically Endangered

Practicals:

1. Visit to protected areas of Pakistan (Captive, Semi-captive and Wild Areas)
2. Ecological Indices
3. Animal Distribution Maps

Teaching-Learning Strategies

Teaching will be a combination of class lectures, class discussions, and group work. Short videos/films will be shown on occasion.

Assignments

The sessional work will be a combination of written assignments, class quizzes, presentation, and class participation/attendance.

Assessments and Examination

Sessional Work: 25 marks

Midterm Exam: 35 marks

Final Exam: 40 marks

Text and Reference Books:

1. Miller, A.S. and Harley, J.B., 1999 & 2002. Zoology, Latest Edition (International). Singapore: McGraw-Hill.
2. Ali. S.S. 2005 Wildlife of Pakistan.
3. Odum, E.P., 1994. Fundamentals of Ecology, W.B. Saunders.
4. Smith, R.L. 1980. Ecology and Field Biology, Harper and Row.
6. Roberts, T. J., 1991, 1992. The Birds of Pakistan, Vol. I1 and II. Oxford University Press
7. Roberts, T. J., 1997. The Mammals of Pakistan, Oxford University Press
8. Robinson, W.L. and Bolen, E.G., 1984. Wildlife Ecology and Management. McMillan, Cambridge.
9. Wildlife of the Punjab, Punjab Wildlife Department.
10. Khan M. S. 2011, Amphibian and Reptiles of Pakistan
11. Mirza Z.B. 2011 Biodiversity of Pakistan.