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

Programme	BS Zoology	**Course Code**	**ZOOL-419**	**Credit Hours**	2
Course Title	**Zoogeography**				

Course Introduction

The course is designed to provide students with an understanding of zoogeography, the study of the spatial patterns, or geography, of animals. The focus of the course will be on the ecology of zoogeography and the application of zoogeography theory to conservation of species and biodiversity. However, we will also examine basic environmental and zoogeographic patterns and basic zoogeographic processes.

Learning Outcomes

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

1. Describe the zoogeographical distribution of animals and processes involved in the fossilization of animals.
2. Illustrate the association of animals present to their past through fossils record.
3. Develop the understanding of speciation, dispersal isolation and extinction process through biogeography and fossils record.
4. Illustrate the ability to locate, characterize and differentiate various biomes and fossils of animals over time.
5. Explain the distribution of animals on the basis of fossils record.
6. Develop understanding regarding process of fossilization and its importance in evolutionary history of an animal and its distribution.

	Course Content	**Assignments/Readings**
Week 1	**Unit-I** 1.1 Zoogeography 1.1.1 Definition, Introduction	Introduction
	Unit-II 2.1 Zoogeography 2.1.1 Branches of Zoogeography	Descriptive, chorology, Faunistics etc.
Week 2	**Unit-III** 3.1 Animal Distribution 3.1.1 Introduction	Introduction
	Unit-IV 4.1 Animal Distribution 4.1.1 Discontinuous Distribution	Importance of Distribution
Week 3	**Unit-V** 5.1 Animal Distribution 5.1.1 Cosmopolitan Distribution 5.1.2 Bipolar Distribution	Distribution Types
	Unit-VI 6.1 Animal Distribution 6.1.1 Isolation Distribution 6.1.2 Bipolar Distribution 6.1.3 Endemic Distribution	Distribution Types
Week 4	**Unit-VII** 7.1 Barriers and Means of Dispersals	General Description

	7.1.1 Barriers	
	Unit-VIII 8.1 Barriers and Means of Dispersals 8.1.1 Dispersals	General Description
Week 5	**Unit-IX** 9.1 Barriers and Means of Dispersals 9.1.1 For Freshwater Animals	Distribution in Freshwater Environment
	Unit-X 10.1 Barriers and Means of Dispersals 10.1.1 For Terrestrial Animals	Distribution in Terrestrial Environment
Week 6	**Unit-XI** 11.1 Barriers and Means of Dispersals 11.1.1 Barriers for Marine Animals	Distribution in Marine Environment
	Unit-XII 12.1 Barriers and Means of Dispersals 12.1.1 Dispersals for Marine Animals	Distribution in Marine Environment
Week 7	**Unit-XIII** 13.1 Islands 13.1.1 Definition, Types	Introduction
	Unit-XIV 14.1 Islands 14.1.1 Continental Islands	Types of Islands
Week 8	**Unit-XV** 15.1 Islands 15.1.1 Oceanic Islands	Types of Islands
	Unit-XVI 16.1 Islands 16.1.1 Coral Islands	Types of Islands
Week 9	**Unit-XVII** 17.1 Continental Drift Theory 17.1.1 Introduction	Introduction
	Unit-XVIII 18.1 Continental Drift Theory 18.1.1 Explanation	Continental Drift Theory
Week 10	**Unit-XIX** 19.1 Plate Tectonics Theory 19.1.1 Introduction	Base of the Theory
	Unit-XX 20.1 Plate Tectonics Theory 20.1.1 Explanation	Plate Tectonics Theory
Week 11	**Unit-XXI** 21.1 Zoogeographical Regions 21.1.1 Introduction / Historical Background	History
	Unit-XXII 22.1 Palearctic Region 22.1.1 Geographic ranges and Physical Features, Division	Palearctic Region - Division and Boundaries
Week 12	**Unit-XXIII** 23.1 Palearctic Region 23.1.1 Climates, Faunas and Affinities of Palearctic Region	Faunas and Affinities of Palearctic Region

	Unit-XXIV 24.1 Oriental Region 24.1.1 Geographic ranges and Physical Features, Division	Oriental Region - Division and Boundaries
Week 13	**Unit-XXV** 25.1 Oriental Region 25.1.1 Climates, Faunas and Affinities of Oriental Region	Faunas and Affinities of Oriental Region
	Unit-XXVI 26.1 Nearctic Region 26.1.1 Geographic ranges and Physical Features, Division	Nearctic Region - Division and Boundaries
Week 14	**Unit-XXVII** 27.1 Nearctic Region 27.1.1 Climates, Faunas and Affinities of Nearctic Region	Faunas and Affinities of Nearctic Region
	Unit-XXVIII 28.1 Ethiopian Region 28.1.1 Geographic ranges and Physical Features, Division	Ethiopian Region - Division and Boundaries
Week 15	**Unit-XXIX** 29.1 Ethiopian Region 29.1.1 Climates, Faunas and Affinities of Ethiopian Region	Faunas and Affinities of Ethiopian Region
	Unit-XXX 30.1 Australian Region 30.1.1 Geographic ranges and Physical Features, Division	Australian Region - Division and Boundaries
Week 16	**Unit-XXXI** 31.1 Australian Region 31.1.1 Climates, Faunas and Affinities of Australian Region	Faunas and Affinities of Australian Region
	Unit-XXXII 32.1 Neotropical Region 32.1.1 Geographic ranges and Physical Features, Division Climates, Faunas and Affinities	Geographic ranges and Physical Features, Division Climates, Faunas and Affinities of Neotropical Region

Textbooks and Reading Material

1. Cox C.B. and Moore P.D., 2016. Biogeography: An Ecological and Evolutionary Approach. 9th edition. Wiley, USA.
2. Darlington, 1980. Zoogeography. John Wiley & Sons, New York.
3. Allee, Schmidth and Hesse, 1966. Ecological Animal Geography. John Wiley & Sons, Ltd., New York.
4. De Beaufort, 2003. Zoogeography of the Land Inland Waters. Sidgwick & Jackson, Ltd., London.
5. Ekman, 1967. Zoogeography of the sea. London, Sedgwick and Jackson, Ltd London.
6. Lillies, 1974. Introduction to Zoogeography. By Joachim lilies. Translated by WD Williams. London: Macmillan.
7. Muller, 1974. Aspects of Zoogeography. Hague, Dr. W. Junk Publishers
8. Jafri, 1977. Land Zoogeography of World.

Teaching Learning Strategies
1. Class lectures 2. Class discussions 3. Group work 4. Documentary
Assignments: Types and Number with Calendar
Assignments as mentioned in the above column.

Assessment

Sr. No.	Elements	Weightage	Details
1.	Midterm Assessment	35%	Written Assessment at the mid-point of the semester.
2.	Formative Assessment	25%	Continuous assessment includes: Classroom participation, assignments, presentations, viva voce, attitude and behavior, hands-on-activities, short tests, projects, practical, reflections, readings, quizzes etc.
3.	Final Assessment	40%	Written Examination at the end of the semester. It is mostly in the form of a test, but owing to the nature of the course the teacher may assess their students based on term paper, research proposal development, field work and report writing etc.