

UZO-529

Mammalogy

Cr. (2)

Introduction:

Mammalogy is concerned primarily with the natural history, taxonomy, systematics, anatomy, physiology, ethology, and ecology of mammals. This course outlines the Evolution and adaptation of animals to their environment. It gives a brief account of classification of extinct and extant mammals along with their dispersal strategies and distribution in zoogeographic regions. It explains how animal move in their home range and defends their territory.

Course Objectives:

The objectives of this course are to:

- Assess ecological and evolutionary processes which led to the diversification and diversity of mammals.
- Identify factors for mammalian adaptations for survival in a variety of conditions
- Study mammalian classification up to orders
- Determine the distribution and abundance of the mammalian species with structure communities for various ecosystems

Course Learning Outcomes:

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

- Acquire the basic knowledge of the mammals in diversified ecosystems.
- Understand the behavior of the mammals and their relationships to the natural habitats.
- Solve the problems in the mammalian study using scientific approaches and methods.
- Analyze the impacts of mammals on the ecosystem and likely impacts on economy.
- Understanding the role played by mammalogists in the conservation and management of mammals.

Course Contents:

1. Classification of Mammals (including Mesozoic mammals: Triconodonts, Symmetrodonts, Multituberculates, Docodonts and Pantotheres)
2. Evolution of Mammalian Molar
3. Distribution
4. Dispersal
5. Territory and Territoriality
6. Food and food storage in Mammals
7. Defence and Protection
8. Movement in Mammals
9. Origin and Evolution in Mammals

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 term Exam:	40 marks

Recommended Books:

1. Vaghuan, T. A., J. M. Ryan and N. J. Czaplewski. 2010. **Mammalogy**. 5th Ed. The John Hopkins University Press, New York, USA.
2. Feldhamer, G. A., L. C. Drickamer, S. H. Vessey, J. F. Merritt and C. Krajewski. 2007. **Mammalogy: Adaptation, Diversity, Ecology**. 3rd Ed. The John Hopkins University Press, New York, USA.
3. Genoways, H.H., 2000. **Current Mammalogy**. Plennium Press, New York
4. Miller and Harley, 2005. **Zoology** (6th edition). McGraw Hill, New York

Introduction:

Mammalogy is concerned primarily with the natural history, taxonomy, systematics, anatomy, physiology, ethology, and ecology of mammals. This course outlines the Evolution and adaptation of animals to their environment. It gives a brief account of classification of extinct and extant mammals along with their dispersal strategies and distribution in zoogeographic regions. It explains how animals move in their home range and defend their territory.

Course Objectives:

The objectives of this course are to:

- Assess ecological and evolutionary processes which led to the diversification and diversity of mammals.
- Identify factors for mammalian adaptations for survival in a variety of conditions
- Study mammalian classification up to orders
- Determine the distribution and abundance of the mammalian species with structure communities for various ecosystems

Course Learning Outcomes:

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

- Acquire the basic knowledge of the mammals in diversified ecosystems.
- Understand the behavior of the mammals and their relationships to the natural habitats.
- Solve the problems in the mammalian study using scientific approaches and methods.
- Analyze the impacts of mammals on the ecosystem and likely impacts on economy.
- Understanding the role played by mammalogists in the conservation and management of mammals.

Course Contents:

1. General survey of mammalian species
2. Lateral, Dorsal and ventral views of skulls of rabbit and cat
3. Pelvic and pectoral girdle of mammals

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 term Exam:	40 marks

Recommended Books:

1. Vaghuwan, T. A., J. M. Ryan and N. J. Czaplewski. 2010. **Mammalogy**. 5th Ed. The John Hopkins University Press, New York, USA.
2. Feldhamer, G. A., L. C. Drickamer, S. H. Vessey, J. F. Merritt and C. Krajewski. 2007. **Mammalogy: Adaptation, Diversity, Ecology**. 3rd Ed. The John Hopkins University Press, New York, USA.
3. Genoways, H.H., 2000. **Current Mammalogy**. Plennium Press, New York
4. Miller and Harley, 2005. **Zoology** (6th edition). McGraw Hill, New York