

UZO-403

Animal Behaviour

Cr. (2)

Course Objectives:

The objectives of the course are:

1. To impart knowledge about animal responses to external stimuli
2. To emphasize on different behavioural mechanisms (classical and recent concepts).
3. To explain development of behavior with suitable examples of animals.
4. To understand role of genetic and neuro-physiology in behavioural development.

Course Learning Outcomes:

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

1. **OUTLINE** the baseline information and knowledge for animal behavior.

2. ASSOCIATE the likely role of external and internal stimuli on various animals during the day, season and year.
3. RELATE daily behavioural rhythms in diurnal and nocturnal periodicities.
4. PREDICT and anticipate variety of animal actions (costs and benefits) as assessed by innate and learned behaviours; displays.
5. INTEGRATE the animal behavior as balanced mechanism to develop animal personality.

Course Contents:

The Study of Animal Behaviour: Introduction. History of Animal Behaviour. Approaches and Methods.

Behaviour Genetics and Evolution: Genes and Evolution. Behavioural Genetics. Evolution of Behaviour Patterns.

Mechanisms of Behaviour: The Nervous System and Behaviour. Hormones and Behaviour and Immunology and Behaviour. Biological Rhythms. Development of Behaviour. Learning Behaviour. Communication.

Finding Food and Shelter: Migration, Orientation and Navigation. Habitat Selection. Foraging Behaviour.

Social Organization and Mating Systems: Conflict. Sexual Reproduction and Parental Care. Mating Systems and Parental Care. Social Systems.

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

Books Recommended:

1. Drickamer, L.C., Vessey, S.H. and Jacob, E., 2002. Animal Behaviour: Mechanism, Ecology, Evolution. 5th Ed..
2. Manning, A. and Dawkins, M.S., 1997. An introduction to animal behaviour, 4th Ed.. Cambridge University Press, Cambridge.

UZO-404

Animal Behaviour (Lab.)

Cr. (1)

Course Objectives:

1. To impart knowledge about animal responses to external stimuli
2. To emphasize on different behavioural mechanisms (classical and recent concepts).
3. To explain development of behavior with suitable examples of animals.
4. To understand role of genetic and neuro-physiology in behavioural development.

Course Learning Outcomes:

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

1. OUTLINE the baseline information and knowledge for animal behavior.
2. ASSOCIATE the likely role of external and internal stimuli on various animals during the day, season and year.

3. RELATE daily behavioural rhythms in diurnal and nocturnal periodicities.
4. PREDICT and anticipate variety of animal actions (costs and benefits) as assessed by innate and learned behavioura; displays.
5. INTEGRATE the animal behavior as balanced mechanism to develop animal personality.

Course Contents:

Experiments on reflexes, latency, after-discharge, summation, warm up, fatigue, inhibition and feedback. Experiments on habituation, conditioned reflex type I and trial and error learning. Experiments showing hormonal involvement in behavioural responses. Study of social integration in social insects. Study of hibernation and biological rhythms.

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

Books Recommended:

1. Drickamer, L.C., Vessey, S.H. and Jacob, E., 2002. Animal Behaviour: Mechanism, Ecology, Evolution. 5th Ed..
2. Manning, A. and Dawkins, M.S., 1997. An introduction to animal behaviour, 4th Ed.. Cambridge University Press, Cambridge.