

**Programme:** M. Sc. (Zoology)

**Course Code:** ZOO-401

**Number of Credits:** 2

**Effective from AY:** 2018-19

**Title of the Course:** Ethology

<b><u>Prerequisites for the course:</u></b>	Basic knowledge of animal science and behaviour.	
<b><u>Objective:</u></b>	This course develops concepts in the behaviour of animals such as underlying genetic and molecular mechanisms of behaviour as well as its importance in the animal kingdom	
<b><u>Content:</u></b>	<b>Module 1:</b> Introduction to Behaviour: Evolution of behaviour: natural selection and behaviour, Behaviour genetics: single gene and behaviour, polygenic inheritance behaviour, Heritability of behaviour, colony and behaviour, adaptational behaviour, social behaviour: sexual selection, altruism, social organization.	12 hours
	<b>Module 2:</b> Mechanism of Behaviour: Mechanism of behaviour: Natural control of behaviours, sensory process and perception, Homeostasis and behaviour, behaviour in changing environment. Animal learning and decision making, mentality of animals: language and mental representation, Intelligence, tool using, animal awareness and Emotion	12 hours
<b><u>Pedagogy:</u></b>	lectures/ tutorials/assignments/self-study	
<b><u>References/Readings</u></b>	<ol style="list-style-type: none"><li>1. Alcock, J, Animal Behavior, Sunderland Sinauer Associates</li><li>2. Bonner JT, Evolution of Culture in Animals, Princeton Univ Press. New Jersey</li><li>3. Ehrman L and Parsons PA, The Genetics of Behavior, Sinauer Associates, Massachusetts.</li><li>4. Halliday T, Sexual Strategies, Oxford University Press, Oxford. Lythgoe, JN, The Ecology of Vision, Clarendon press, Oxford McFarland D, Animal Behavior, ELBS Longman Publ. London</li></ol>	
<b><u>Learning Outcomes</u></b>	<ol style="list-style-type: none"><li>1. Understand the genetic and molecular mechanisms underlying behaviour.</li><li>2. Gain insight on the different types of behaviours used for survival in the animal kingdom</li></ol>	