## STELLA MARIS COLLEGE (AUTONOMOUS), CHENNAI

Course Schedule – November 2018 – April 2019

Department : Zoology

Name/s of the Faculty : Dr. Kalpana Jayaraman (4 hours)

Course Title : Animal Behaviour

Course Code : 15ZL/MC/AB64

Shift : I

| Week & No. of<br>hours                             | Units & Topics  | Teaching<br>Methodology  | Text & References   | Method of<br>Evaluation               |
|--|---|--|---|---------------------------------------|
| Nov. 14 - 20,<br>2018<br>(Day Order 1 to<br>6)     | Syllabus Unit 1 Introduction to behavior- its causes and significance Ethology – A brief history - Methods of studying behaviour: Observation Identification and Location of individuals Describing Recording Cataloguing Interpreting and presenting data Niko Tinbergen's four whys | Lecture  | A Textbook of Animal Behavior – Harjinder Singh Understanding Biology – Raven and Johnson Animal Behaviour – Reena Mathur | Discussion                            |
| Nov. 22 - 29,<br>2018<br>(Day Order 1 to<br>6)     | Unit 1 Studies in Laboratories – Studies in the Wild Concepts and terms – Motivation - Fixed Action Pattern(FAP) – Sign Stimulus  | Workshop on<br>"Methodology<br>for Animal<br>Behaviour<br>Studies" | Animal Behaviour –<br>Reena Mathur<br>Animal Behaviour –<br>An Evolutionary<br>Approach- Alcock                           | Questioning                           |
| Nov. 30 – Dec 06,<br>2018<br>(Day Order 1 to<br>6) | Unit 1 Innate Releasing Mechanism (IRM) - Action Specific Energy (ASE) Concept of behavioural genetics Research Methodology - The Scientific Method   | Lecture  PowerPoint Presentation                                   | A Textbook of Animal<br>Behaviour – Harjinder<br>Singh<br>Animal Behavior –<br>Reena Mathur                               | Discussion  Questioning               |
| Dec 07 - 14, 2018<br>(Day Order 1 to               | Unit 2 Basic and Maintenance Behaviour- Maintenance   | Lecture  | A Textbook of Animal<br>Behaviour – Harjinder   | Submission<br>of topics for<br>Animal |

| 6)  | and Related Behaviour - Foraging and Caching – Shelter Seeking and Construction Research Methodology – Sampling Methods Ethogram                                 | PowerPoint<br>Presentation       | Singh  | Behaviour<br>Project  |  |
|---|--|----------------------------------|--|---|--|
| Dec. 15 - 21,<br>2018<br>(Day Order 1 to<br>6)    | Unit 2 Habitat Selection and Territory – Homing – Chronobiology Rhythms - Sleep Research Methodology – Scientific Writing, Getting access to scientific articles | Lecture  PowerPoint Presentation | Biology of Animal<br>Behaviour – Grier<br>Animal Behaviour –<br>Reena Mathur | Questioning  Submission of Project outline                              |  |
| Jan. 03- 09, 2019<br>(Day Order 1 to<br>6)        | Unit 3 Sociobiology: Communication – Methods of Study  | Lecture                          | Biology of Animal<br>Behaviour – Grier                                       | Questioning   |  |
| Jan. 10- 21, 2019<br>(Day Order 1 to<br>6)        | Unit 3 Modes and Mechanism of Communication — Chemical, Auditory, Tactile, Visual and Electrical Social organization in Primates                                 | Lecture  PowerPoint Presentation | Biology of Animal<br>Behaviour – Grier<br>Animal Behaviour –<br>Reena Mathur | Project<br>Review of<br>Literature<br>deadline –<br>January 18,<br>2019 |  |
| Jan. 22, 2019<br>(Day Order 1)                    | -  | -                                | -  | -   |  |
| Jan.23 - 29, 2019                                 | C.A. Test  |                                  |  |   |  |
| Jan.30 – Feb 05,<br>2019<br>(Day Order 2 to<br>6) | Unit 3 Behaviour and Reproduction: Breeding Patterns Courtship Unit 4 Play: General attributes of Play – examples – descriptions of play behavior - theories     | PowerPoint<br>Presentation       | Biology of Animal<br>Behaviour – Grier                                       | Questioning   |  |
| Feb.06 - 13, 2019<br>(Day Order 1 to 6)           | Unit 4 Interspecific Behaviour: Aggregations, Commensalism, Mutualism  | Lecture<br>PowerPoint            | Biology of Animal<br>Behaviour – Grier<br>Animal Behaviour –                 | Questioning Project related discussion on                               |  |

| Feb.14 - 21, 2019                                  | Parasitism, Predation  Unit 5  | Presentation                    | Reena Mathur  Biology of Animal   | abnormal<br>behaviour<br>observed in<br>pet/caged<br>animals                 |
|--|--|---------------------------------|---|--|
| (Day Order 1 to 6)                                 | Internal Control of Behaviour: Brain Research Methodology: Data Analysis   | Guest Lecture                   | Behaviour – Grier  Animal Behaviour –  Reena Mathur   | Discussion   |
| Feb.22 – Mar. 01,<br>2019<br>(Day Order 1 to<br>6) | Unit 5 Internal Control of Behaviour: Neurochemicals and Neurotransmitters Hormones and Behaviour Research Methodology: Evaluating a project report                | Lecture PowerPoint Presentation | Biology of Animal<br>Behaviour – Grier<br>Animal Behaviour –<br>Reena Mathur                        | Component<br>Quiz -<br>February 26,<br>2019                                  |
| Mar 04 -11, 2019 (Day Order 1 to 6)                | Unit 5 Sensory worlds – vision, hearing, taste, olfaction and tactile sensation  | Lecture PowerPoint Presentation | Biology of Animal<br>Behaviour – Grier<br>Animal Behaviour –<br>Reena Mathur                        | Project Presentations and final submission of Project Report – March 5, 2019 |
| Mar. 12 - 19,<br>2019<br>(Day Order 1 to<br>6)     | Unit 5 Internal Control of Behaviour: Psychoactive Drugs and Human Behaviour Animal Learning — Different forms of learning — habituation, conditioning, imprinting | Lecture                         | Biology of Animal<br>Behaviour – Grier<br>A Textbook of Animal<br>Behaviour – Harjinder<br>Singh    | Discussion   |
| Mar. 20 - 26,<br>2019<br>(Day Order 1 to<br>6)     | Unit 5  Abnormal Behaviour in Human Beings – Neurotic Disorder – Phobic and Obsessive Compulsive Disorder (OCD)Psychotic Disorder - Schizophrenia                  | Lecture                         | Animal behavior – Psychology Ethology and Evolution – McFarland Biology of Animal Behaviour – Grier | Discussion   |
| Mar. 27 - 28,<br>2019                              |  | REVISION                        | DAYS  | 1  |

| (Day Order 1 to |  |
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| 2)              |  |