Birla Institute of Technology and Science, Pilani
Hyderabad Campus

INSTRUCTION DIVISION
FIRST SEMESTER 2016-2017
Course Handout Part II

Dated: August 01, 2016

In addition to part I (general handout for all courses appended to the timetable) this portion gives further specific details regarding the course.

Course No **: BIO F313**
Course Title : Animal Physiology
Instructor-In charge : Dr. K. Naga Mohan
Instructor : Hemalatha Beesetti

1. Course Description:
Principles and concepts underlying the function of tissues and organ systems in animals with emphasis on mammalian systems and integration of systems at the level of the whole organism. Several biological systems are considered, including respiratory, circulatory, nervous, endocrine, immune, excretory, muscles, skeletal and reproductive systems.
Laboratory session will help to study function of any organ system.

2. Scope & Objective:
This course attempts to bring the awareness to the students of major features of physiology of in animals especially in human. Emphasis will be given to function and adaptations as related to the survival of organisms in their natural environment.

Text Book:
Sherwood, L., Klandorf, H. and Yancey, P.H., Animal Physiology: From Genes to Organisms, 2005, Brook/Cole Cengage Learning., Singapore

Reference books:
Sherwood L: principles of Human Physiology. Brook/Cole Cengage Learning., Indian edition

Course plan:

Lect.	Learning objective	Topic	Ref.
1-3	Foundations of Physiology	Homeostasis	TB: Chap 1 RB: Chap 1
4-7	How electric signals are generated	Neuronal Physiology	TB: Chap 4
8-12	Whole body regulation, Brain and spinal cord	Nervous system	TB: Chap 5
13-15	Sensing in animals	Sensory Physiology	TB: Chap 6
16-19	Support and movement	Muscles Physiology	TB: Chap 8
20-23	Understanding hormones and their function	Endocrine system	TB: Chap 7
24-27	Self-maintenance	Circulatory system	TB: Chap 9
28-31	Why do we need to breathe?	Respiration system	TB: Chap 11
32-34	Complex series of organs & glands that processes food	Digestive system	TB: Chap 14
35-38	Regulating the Internal Environment	Excretory system	TB: Chap 12
39-42	How animals multiply?	Reproductive system	TB: Chap 16

Evaluation scheme:

Component	Duration	Weightage %	Date & Time	Venue	Remarks
Test 1 (closed book)	50 Min.	20	13/09/2016; 10-11 AM		CB
Test 2 (closed book)	50 Min.	20	21/10/2016; 10-11 AM		CB
Multiple Quizzes (surprise and may be conducted in tutorial or lecture hours)		20	Random days	G106	CB
Comprehensive (Closed Book)	3 Hrs.	20 20	14/12/2016; AN		CB OB

Chamber consultation hour: To be announced in the class.

Notices: All notices will be displayed on the Biological Sciences Group notice board.

Grading policy: Students missing one or more component of evaluation completely may be given NC.

Make-up policy: Make-up will be granted only if candidate is sick and hospitalized.
No make-up will be granted for quizzes under any circumstances.

Instructor-in- charge
BIO F313