

Animal Physiology - Video course

COURSE OUTLINE

The Course aims at helping the students to think_ and appreciate the integrative physiological functioning of the living systems. The thrust of the course will be to highlight "how are the separate organs and systems themselves controlled so that no one system over-functions while others fail to provide their share?" The underlining feature of the course is to take an holistic approach, whereby integrating the individual functions of all the body's different cells and organs into a functional whole, the human or animal body. The final goal of the course is to empower students to use their conceptual understanding to solve problems.

Course Contents:

Basic Physiology, Homeostasis, Membrane Physiology, Cardiovascular Physiology, Excretory System, Hematology, Extreme Physiology, Nervous System, Digestive System, Endocrine System, Sports Physiology

COURSE DETAIL

Sl. No.	Topics	Lectures
1	Introduction to Physiology : Cell & General Physiology	2
2	Membrane Physiology, Nerve and Muscle	3
3	The Heart	3
4	The Circulation	3
5	The Kidneys and Body Fluids	3
6	Blood Cells, Immunity, and Blood Clotting	3
7	Respiration	3
8	Aviation, Space, and Deep Sea Diving Physiology	2
9	The Nervous System: General Principles and Sensory Physiology	2
10	The Nervous System: The Special Senses	3



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11	11. The Nervous System : Motor and Integrative Neurophysiology	3
12	Gastrointestinal Physiology	3
13	Metabolism and Temperature Regulation	2
14	Endocrinology and Reproduction	3
15	Sports Physiology	2
	Toal Number of Lectures	40

References:

1. Textbook of Medical Physiology, A C, Guyton and John E Hall, W. B. Saunders Company, ISBN: 0-7216-5944-6
2. Fundamentals of anatomy and physiology, F, H, Martini, Prentice Hall, ISBN: 0-13-017292-8
3. Some additional material to cover non additive processes is not in books. I will try top prepare a handout for the same.