

## **Animal Physiology**

## Swayam Prabha Course Code – G24

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DEPARTMENT	
	Department of Biological Sciences & Bioengineering
INSTITUTE	
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COURSE OUTLINE	
	The course will be an informal journey to know your own body. It will provoke you to think the following: How our body functions?
	What it is made up of and what are the organizational hierarchy of your body?
	How its regular function is disrupted and how the body tries to restore its normal functioning?
	How the body adjusts itself under extreme physiological
	situations and how it re-calibrates its functions?

## **COURSE DETAILS**

S. No	Module ID/ Lecture ID	Lecture Title/Topic
1	M1L1	An Introduction to Anatomy and Physiology
2	M1L2	Organization of living system
3	M1L3	Homeostasis & system integration
4	M1L4	Positive feedback loop in homeostasis
5	M1L5	Chemical basis of organization of the body
6	M2L6	Integumentary System I
7	M2L7	Integumentary system II
8	M2L8	Integumentary System III
9	M2L9	Bone & Cartilage I

10	M2L10	Bone & Cartilage II
11	M3L11	Introduction of muscle
12	M3L12	Skeletal muscle formation
13	M3L13	Anatomy of skeletal muscle
14	M3L14	Contraction in muscle
15	M3L15	Function of actin and myosin
16	M4L16	Length tension relationship of skeletal muscle
17	M4L17	Excitation contraction coupling with nervous system
18	M4L18	Stretch reflex phenomena
19	M4L19	Nervous system anatomy and signaling
20	M4L20	Structure and circuit of neurons
21	M5L21	Origin of biological cell
22	M5L22	Excitability in cell
23	M5L23	Ion transportation in the cell
24	M5L24	Signal propagation in neurons
25	M5L25	Neurotransmitter and action potential
26	M6L26	Spatial temporal summation of signal in mesh neurons
27	M6L27	Anatomy of Hippo-campus
28	M6L28	Epilepsy and memory
29	M6L29	Long term potentiation
30	M6L30	Long term depression
31	M7L31	Alzheimers disease
32	M7L32	Parkinsons disease
33	M7L33	Amyotrophic lateral sclerosis
34	M7L34	Spinal cord injury
35	M7L35	Glial cells
36	M8L36	Stretch reflex circuit - I

37	M8L37	Stretch reflex arc circuit - II
38	M8L38	Neuro muscular junction
39	M8L39	Hearing system
40	M8L40	Olfaction system
41	M9	Will be updated soon
42	M10	Will be updated soon
43	M11	Will be updated soon
44	M12	Will be updated soon