



NEUROSCIENCES (Dr. Ravi Shankar Akundi)

(2 credits)

1. Introduction to Neurosciences – Terminology, Brain mapping & Comparative Neurobiology
2. Neuroanatomy
3. Cellular architecture and function of the nervous system
4. Electrophysiology – Resting neuron and action potential
5. Neurochemistry – Neurotransmitters and signalling pathways in the brain
6. Techniques in Neurosciences
7. Neural Basis of Cognition
8. Sensory and Motor Systems
9. Sleep & circadian rhythm
10. Learning & Memory
11. Behavioural Neurosciences
12. Developmental Neurosciences

Suggested Reading:

1. Principles of Neural Science – Eric Kandel, Schwartz and Jessell – McGraw Hill (2000)
2. Neuroscience – Dale Purves – Sinauer (2011: 5th ed.)
3. Fundamental Neuroscience – Larry Squire (2008: 3rd ed.)

Websites

1. Society for Neuroscience (www.sfn.org)
2. Journal of Neuroscience (www.jneurosci.org)
3. National Institute of Neurological Disorders and Stroke (www.ninds.nih.gov)
4. The Whole Brain Atlas (www.med.harvard.edu/AANLIB/home.html)