



Code	Subject Title	Cr. Hrs	Semester
ZOOL-306	Animal Physiology II Lab	1	V
Year	Discipline		
3	Zoology		

1. Recording of action potentials on oscilloscope and effects of various factors on its characters.
2. Study of synaptic activity with neuromuscular preparations.
3. Sciatic nerve compound action potential.
4. Demonstration of nervous system organization while studying brain, cranial nerve, spinal cord and spinal nerves.
5. Experiments on sensory organs study.
6. Experiments on characteristics of skeletal muscle contractions;
7. Responses of intestinal muscles and effect of drugs.
8. Demonstration of endocrine glands in a mammal (mouse).
9. Effect of hormones on glycemia and calcemia.
10. Effect of thyroxine on oxygen consumption.
11. Effect of androgen on accessory sex organs and of estrogens on target tissues.
12. Study of estrous cycle and effects of the hormones.

Textbooks

1. Guyton, A.C. and Hall, J.E., 2006. Textbook of Medical Physiology, 11th Edition. W.B. Saunders Company, Philadelphia.
2. Withers, P.C., 1992. *Comparative Animal Physiology*. Saunders College Publishing, Philadelphia.
3. Tharp, G. and Woodman, D., 2011. Experiments in Physiology, 10th Edition. Prentice Hall, London.

Additional Readings

1. Randall, D., Burggren, W., French, K. and Fernald, R., 2002. *Eckert Animal Physiology: Mechanisms and Adaptations*, 5th ed. W.H. Freeman and Company, New York