

## Biology 251 Fall 2009 Study Guide for Exam 2

Exam 2 is on Tuesday 6 October from Noon to 1:15. The exam will consist of multiple choice questions. Questions will cover Topics 6 through 10:

Topic 6: Central Nervous System

Topic 7: Peripheral Nervous System: Afferent Division

Topic 8: Peripheral Nervous System: Efferent Division

Topic 9: Endocrine System

Topic 10: Thyroid and Reproductive Hormones

Questions will be to the level of detail presented in lecture; therefore, you will not be held responsible for detail presented in the book but not covered in lecture. About 10% of the questions will focus on the special clinical and applied examples given in class but that are not in the printed lecture notes.

You should know how the nervous system is organized, the organization, support and function of the CNS (including the functions controlled by each major region of the brain) and the peripheral nervous system. You should understand mechanisms of information transfer in the CNS and in both parts of the PNS, including how motor neurons initiate APs in muscle and how .

You should understand general principles and function of the endocrine system, including the major classifications of hormones and how different hormones work at the cellular level. You should be familiar with non-tropic hormones and with the hypothalamus-pituitary axis. You should know in detail how the thyroid and reproductive endocrine systems function and are regulated.

I hope that you have been studying as the semester progresses; the best way to do well in this course is to spend time studying the material as soon as possible after lecture. Because of the large amount of material that we must cover in this class, I estimate that on average you should be spending at least 6 hours per week outside of class reviewing notes and reading. To prepare for this exam, I suggest studying the lecture notes thoroughly while referencing figures in the book; if some concepts do not make sense, then read those sections in the book. In addition, use the old exam posted on the web as a practice exam. **If you have time, write your own exam questions, find a friend to do the same, and exchange them for practice.** Finally, you should make use of the practice exam posted on the web site.