

Endocrine-Neurophysiology – Summer 2010

Course Title: Physiology II PH-3542

Instructor: Rafael A Segrera, BS, DO and Nancy K. Wills, Ph.D.

Office Hours: Monday - Friday 8: 00 am - 5:00pm (by appointment)

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Required Texts:

Human Physiology, Stuart Ira Fox 11th Edition

Recommended Texts:

Physiology, Linda S. Costanzo 4th Edition Board Review Series

Course Objectives: This course studies the endocrine and nervous system, their relationship to control and regulate the internal environment and their contribution to homeostasis. A description of common dysfunctions of these systems and the consequences to the function of the whole organism are discussed.

Learning Outcome: Upon completion of this course the student should be able to do the following:

1. Describe the physiology of a neuron, and be able to make associations with neurological disorders.
2. Describe and define special senses: smell, taste, hearing, balance and vision, and be able to explain clinical manifestations in the loss of each special sense.
3. Describe the fundamentals of the motor and autonomic systems.
4. Define and describe components of the endocrine system and corresponding pathways.
5. Understand hormone interactions, and reproductive physiology, and be able to apply hormone normal physiology to corresponding pathophysiology.
6. Acquire first hand training in cranial nerve testing and muscle testing.

Clinical Competencies:

Clinical competencies set forth by CCE (Council on Chiropractic Education) to be derived from this source are among the following:

1. Professional Issues
2. Neuromusculoskeletal Examination
3. The doctor-Patient relationship
4. Wellness

Teaching Philosophy:

The approach used in this class is to begin with a review of the basic sciences covered in the course, then build into pathophysiology in each discipline area

Method of Determining Grades: There will be four (4) major lecture exams, plus the final exam. Two exams will be given for the lab session. In addition ten (10) quizzes will be given throughout the trimester. Class and lab attendance is required.

Grade Distribution: A=90-100 B=80-89 C= 70-79 D= 60-69 F= 59-0

Lecture Exams (4)	= 400 points	(45.0 %)
Final Exam (1)	= 100 points	(15 %)
Lab Exams (2)	= 100 points	(10 %)
Quizzes (10)	= 100 points	(20%)
Participation/Presentation	= 100	(5%)

Suggestions: Best results will be obtained if the textbook chapter reading assignments are read before lecture and lecture notes are reviewed shortly after class. So please try to keep up with the reading. If feel you need extra help, please come in to see us. Do not wait until the end of the semester to seek help. Come in early in the trimester.

Special Note: Please inform the instructors if you are a student with a disability and need any accommodations for this class.

NOTICE: Fall 2010 is the last time that Endocrine and Neurophysiology PH-3542 will be offered as a 5 credit (4 lecture, 2 lab hour) course. Due to curricular changes, starting Spring 2011, the current three physiology courses will be merged into two courses in trimesters 2 and 3. Should you fail Endocrine and Neurophysiology in Fall 2010, you will be enrolled in the newly adapted 6.5 credit (5 lecture, 3 lab hours) Endocrine/Neuro/Renal/GE/GU physiology course PH-3653 and well as a transition course in respiratory physiology. This will ensure that you are exposed to all required material in the physiology curriculum.

Tentative Schedule of Lectures and Labs

Week 1	May 11-13	Endocrine Glands- Chapter 11
Week 2	May 17-20	Endocrine Glands- Chapter 11 Quiz # 1: Endocrine Glands
Week 3	May 24-27	Metabolism Regulation- Chapter 19 Quiz # 2: Endocrine Glands (cont'd)
Week 4	June 1- 3	Metabolism Regulation- Chapter 19 Quiz # 3: Metabolism Board Review on Endocrine System

Week 5 June 7-10	Review for Endocrine Exam # 1 Reproductive System- Chapter 20 Quiz # 4: Metabolism
Week 6 June 14-17	<u>Endocrine Exam # 1: Chapter 11 & 19</u> Reproductive System- Chapter 20
Week 7 June 21-24	Reproductive- Chapter 20 Quiz # 5: Reproductive System
Week 8 June 28-July 1	Neurons & Synapses - Chapter 7 Quiz #6
Week 9 July 6-8	Central Nervous System- Chapter 8 Quiz #7 Neurons and Synapses
Week 10 July 12-14	Autonomic Nervous System- Chapter 9 Quiz # 8 CNS
Week 11 July 19-22	Review for Neuro Exam# 1 Quiz # 9: ANS
Week 12 July 26-29	<u>Neuro Midterm Exam # 1: Chapters 7-9</u> Sensory & Motor- Chapter 10 Quiz # 10 Sensory & Motor
Week 13 Aug 2-6	Sensory & Motor- Chapter 10 Review Neuro Midterm Exam # 2 Lab Exam #2: Neurological Exam
Week 14-16	Comprehensive Final Exam