Neuroendocrinology
11:067:410:01
(3 credits)

Normally Offered: The course is offered every other year in the fall semester by Dr. Dipak K. Sarkar. This course is cross-listed with the graduate course 16:340:510. The class (upper class undergrad and grad) will be held in Foran-138A on Thursdays, Pds 5-6.

Prerequisites and other Registration Restrictions: Pre- or corequisite: 11:067:300 or 01:146:356 or by special permission. Open to juniors and seniors.

Format: This course is conducted primarily as a lecture course for undergraduates. However, undergraduate students also need to present a case study and participate in discussion of research presentations by the graduate students in the class. Additional help is provided through office hours (2-3PM on Thursday or 10-11AM on Friday in Endocrine Research Building, Room 104, Cook College) or by appointment (voice: 732-932-1529; email: sarkar@aesop.rutgers.edu).

Course Objectives and Description: The course provides a comprehensive and up-to-date coverage of the inter-relationships between the central nervous system and the endocrine system in the mammal. The course also provides the student with basic concepts and experimental approaches in mammalian neuroendocrinology including cellular and molecular actions of hypothalamic and pituitary hormones and the role of these hormones in controlling reproductive functions, body metabolism (e.g. obesity and diabetes), stress, growth, biological rhythms, drug addiction and immunity. It also provides the opportunity for the student to learn how to critically interpret information from the neuroendocrinology literature. It is expected that students in the class have a solid background in biology and in physiological processes. The course materials will be provided in the class (class notes and case study presentations). For additional reading material it is recommended that the student contact Cambridge University Press to obtain the textbook: An Introduction to Neuroendocrinology by Richard E Brown (1999), Cambridge University Press, New York, NY.

Examinations: One case study presentation consisting of 20 points. Case presentation will be a 20 min seminar describing the case and then analyzing the problem. In addition, student should take two take-home examinations, each consisting of 40 points, will be given on the topics discussed in the lectures. These exams will be formatted as short-essay and problem-solving questions. A grade of "F" be assigned for any missing exam. The letter and % grade equivalence are: A=91-100%; B+=86-90%; B=81-85%; C+=76-80%; C=71-75%; D=61-70%; F=0-60%.

Other Requirements: None

Additional Information: Contact Dr. Sarkar (room 67 Poultry Lane) by phone at 848-932-1529 or by e-mail at: sarkar@AESOP.Rutgers.edu