This is an introductory course on the brain and spinal cord suitable for both new and advanced students of Neuroscience. Students will explore the entire central nervous system in the human and rat in informal, small-group sessions. We will view and discuss the cellular structure and function of major regions in the brain and spinal cord. Our focus is on the cellular organization of each region, and this complements the study of physiological neural systems. Activities will include the analysis of the human and rodent gross spinal cord and gross brain and a detailed analysis of human and rodent brains in histological sections stained with conventional stains as well as for gene expression using in situ hybridization. Students will integrate their knowledge of cellular, molecular, and systems neurobiology to understanding how brain function and structure differ in each anatomical region. Students will receive grades for a mid-term exam, a final exam, and interim exams to be determined. The BME course includes a term paper.


Prerequisite: Physiology & Neurobiology 2264 (or equivalent); Instructor consent required.

Instructors: Prof. Douglas Oliver, (860) 679-2241, doliver@neuron.uchc.edu
Prof. Nada Zecevic, (860) 679-1768, nzecevic@neuron.uchc.edu

Dates: Spring semester 2011 according to graduate school calendar. Tentative start date: Jan 24, 2011; ends May 9, 2011

Day/Time: Monday, 2:30-4:30 pm (All students must be at UCHC for the first two classes and for two exams)

Location: UCHC room E-4036 (Gross Anatomy Lab location TBA); Distance Learning from UCHC: CUE Room 321

Credits: MEDS 5384, 2 credits; BME 6086, 3 credits

Enrollment: 3 or more students must be enrolled for the course to take place; cap 15

Laptop computer requirement: Students must provide a laptop computer to use in class.