Physiology of Movement

BSC 4933/6932
Fall 2010
Dr. Stephen Deban
CHE 102
Tuesday & Thursday
12:30-1:45 PM

Physiological and biomechanical mechanisms underlying movement in animals are explored in a conceptual and evolutionary framework.

A range of behaviors such as feeding, locomotion, and vocalization from a diversity of animal species are used to explore general phenomena and key concepts.

Topics include:
Activation, contraction and metabolism of muscles
Physiology of muscle activation by the central nervous system
Mechanisms of control and adjustment
Sensory-motor integration Forces, work, and power of movements
Modulation and stereotypy of movement
Effects of body size and environment on speed and patterns of movement.

Reading of recent primary literature and group discussion are a substantial portion of the course.

Permit Required.
Prerequisites: PCB 3712, PCB 3713L, BSC 2010/L, BSC2011/L, CHM 2045, CHM 2046.