

PT 562: Neural Plasticity and Pathophysiology

Course description: This course provides students with an understanding of the neuropathology of movement dysfunctions from 3 thematic perspectives: 1. From embryo to senescence, 2. From molecule to systems, and 3. From the lab to the clinic. Using a variety of classical and contemporary research papers and case histories, the students will gain an understanding of the neuropathology of various movement disorders and the bases of therapeutic intervention.

Instructor: Carolyn R. Mason, PhD, PT, is an assistant professor of physical therapy at Angelo State University, San Angelo, TX. She received both her physical therapy education and her PhD in neurosciences at Northwestern University and completed postdoctoral training at the University of Minnesota. Dr. Mason's research is on the control of grasping and reaching by the cerebellum and motor cortex.

University Credit Hours: 3

Continuing Education Hours: 45

Course schedule:

January 25, 2003	Orientation to the course and its format. Introduction of the themes.
Feb. 22, 2003	From embryo to senescence. a. Spina bifida b. Cerebral palsy c. Cerebral vascular accident d. Aging
March 8, 2003	From molecules to systems. a. Something molecular to be determined b. Myasthenia gravis c. Multiple sclerosis d. Parkinson's disease
March 29, 2003	From the lab to the clinic
April 26, 2003	Student presentations on their independent projects

The class will meet for 8 hours each Saturday.

Course grades will be based on class participation and independent projects.