

The University of British Columbia  
School of Human Kinetics

**Human Kinetics 489C**  
**Movement Disorders Due to Brain Injury and Disease**

**Instructor:** Dr. Mark G. Carpenter

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Office: Room 213 – Osborne Centre Unit I

Office Hours: Tuesdays/Thursdays 10:00 am – 11:00 am or by appointment

**Location and Time:**

Tuesday/Thursday Room 206/208 War Gym 8:00 – 9:30 am. (TERM 2, 2007)

**Global Learning Objectives**

1. To learn functional neuroanatomy through the study of clinical cases
2. To learn clinical symptoms associated with disorders of the central nervous system (CNS)

**Course Learning Objectives:**

By the end of this course, you will be expected to:

- 1) Understand the spatial and functional organization of the brain and spinal cord
- 2) Know the major ascending and descending motor and sensory pathways in the CNS
- 3) Learn the major symptoms of movement disorders due to brain injury and disease
- 4) Be able to diagnose from clinical symptoms, the major neural structures and pathways involved in a specific movement disorder
- 5) Demonstrate a professional behavior toward class participation and involvement.

**Prerequisites:** HKIN 389 or equivalent

**Course Evaluation**

**1. Midterm examination** - 30% All students are **required** to write the mid-term exam

**Date for Midterm Examination: Thursday, February 15, 2007**

**2. Clinical Presentation** – 20 % All students are **required** to make a clinical presentation of a selected movement disorder and submit three scientific articles that were used as resource material. Specific details to follow.

**Date for Clinical Presentations: April 5<sup>th</sup>, April 10<sup>th</sup> and April 12<sup>th</sup>, 2007**

**3. Final Exam** - 50% All students are **required** to write the final examination.

**Date and time of the final exam set by registrar during final exam period (April 16-30th)**

***NOTE:*** refer to UBC calendar for policy and definitions of misconduct and plagiarism.

**Required Textbook:**

A. **“Neuroanatomy Through Clinical Cases”** by Hal Blumenfeld

Publisher: Sinauer Associates Inc.

**Outline of Lectured Topics**

- A. Overview of Neuroanatomy**
- B. Disorders involving Primary Motor Cortex and Cortico-spinal Tracts**
- C. Disorders involving Primary Somatosensory Cortex and Ascending Afferent Pathways**
- D. Disorders involving the Higher Order Processing**
- E. Disorders involving the Cerebellum**
- F. Disorders involving Basal Ganglia**
- G. Disorders involving Cranial Nerves V, VII, VIII**
- H. Major Vascular Supplies to Brain and Spinal Cord**