

# CLINICAL MOVEMENT NEUROSCIENCE

Course Announcement: **KIN 5941 — Fall Semester 2016**

## Instructor:

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## Course Description

This course provides an overview of various neural subsystems involved in controlling human motor behavior with a special emphasis on understanding how various neurological disease states affect motor function. The effects of specific brain lesions and nervous system diseases on overt behavior will serve as a guide to assess the role of different neural structures for movement control. The overall aim of the course is to gain a better understanding of how a specific dysfunction at the neural level leads to specific impairments in behavioral or sensorimotor function. In addition, the course will review how current pharmacological, behavioral and technology-driven treatments help to alleviate sensorimotor symptoms and improve function.

### Q: For whom is this a good class?

**A:** Graduate students and advanced undergraduate students seeking careers in the health sciences and/or interested in the neural basis of neurological disorders affecting movement control.

*"I liked that I didn't just show up to class and have info handed to me, but that I actually got to think about what it meant."*

### Q: What will I learn?

**A:** At the end of the course you will know -

- the neural structures involved in voluntary and involuntary motor control,
- the neurophysiological mechanisms underlying human motor control,
- the motor disorders resulting from lesions in the major cortical and subcortical motor areas,
- the major treatment regimes for the most common neurological motor disorders.

- Student comment

