The neuromuscular function during posture and balance tasks. Students in this course learn how to collect and interpret kinematic, kinetic and electrophysiological data associated with falls will be a particular focus. Changes that can be observed in postural control following damage, dysfunction and/or disease, cerebellar disease, and muscle and joint pathologies are examined. Pathological conditions such as (but not limited to) stroke, Parkinson's disease, and cerebral palsy are examined. This course covers neuroscience with specific regard to the fundamental development of motor function and changes in motor control throughout the lifespan. This course also assesses motor-control problems that occur as a result of congenital conditions, acquired damage, dysfunction or disease. Pathological conditions such as (but not limited to) stroke, Parkinson's disease, cerebellar disease, and muscle and joint pathologies are examined.

KRS 857. Motor Learning in Rehabilitation. 3 Credits.
This course studies theories and research on the enhancement of motor skills in children and adults, both with and without neurological disorders, as well as the response of nervous and musculoskeletal systems to injuries and different treatments.

KRS 887. Structured Teaching Experience for Kinesiology and Rehabilitation Professions. 1-3 Credits.
This course is designed to provide supervised and mentored teaching experience within fields applicable to kinesiology and rehabilitation.

KRS 895. Special Topics in Kinesiology and Rehabilitation. 3 Credits.
The advanced study of special topics in kinesiology and rehabilitation.

KRS 898. Supervised Research. 1-3 Credits.
This course is designed to provide supervised and mentored research experience within specialized topics applicable to kinesiology and rehabilitation.

KRS 899. Dissertation. 1-12 Credits.
An approved research project written under the supervision of a faculty advisor, in which the student demonstrates the capacity to design and complete independent applied research. The completed project must be approved by the dissertation committee.