DUKE DOCTOR OF PHYSICAL THERAPY
ELECTIVES – PT-D-725/726

**Applied Movement Science**
In this elective students will be guided to write a research paper introduction, construct an abstract per CSM guidelines and develop a professional research presentation using PowerPoint. In addition, students will be mentored by K-Lab staff to complete tasks associated with data processing and analysis. The course will rely on a foundation of previous basic science and clinical work and critical thinking to guide scientific inquiry.

**Geriatrics**
In the geriatrics elective, students will have in-class, community, and independent study/project experiences. Content will be geared toward learning about the needs and goals of older adults via direct contact with patients receiving PT care and older adults in the community, best PT practice for select conditions (e.g., falls and fracture prevention and treatment, optimal post hip and vertebral fracture rehabilitation), evidence-based health promotion exercise and self-management programs offered in the community, practical communication strategies for working with people with cognitive impairment, and opportunities, rewards, and challenges in the variety of settings in which geriatric PT is delivered. Field experiences will include visiting a continuing care retirement community, a senior center, the VA-based Gerofit exercise class, a memory care program, and the PACE (Program of All-Inclusive Care for the Elderly) program serving Durham and Wake counties. Students will choose a topic to explore in depth and either write a short paper on the topic or complete a project related to the topic. At the last class session, students will share what they discovered about their topic with their classmates and instructors.

**Global Health Institute**
Global Health Institute: This course will introduce students to the core competencies required of global health practitioners and the principles of community-based rehabilitation. Students will understand the issues surrounding high, middle and low-income countries, and the extent to which physical therapists can be involved in addressing health disparities and disability. Topics to be covered include: global burden of disease, globalization of health services, health disparities, global content of disability, and the humanitarian paradox of international aid. The format of this course is a 7-day intensive international learning experience comprised of physiotherapy students from Norway, Canada and Ireland. This course is required for all students intending or planning on being involved global health service initiatives as a student, or as part of their clinical internship year.
**Manual Therapy**
Manual therapy provides further learning in the areas of evaluation, assessment and application. This course discusses the reliability, validity and applicability of manual therapy techniques at major physiologic anatomic regions. The course is primarily lab-based, with appropriate lecture topics to solidify learning opportunities.

**Medical Spanish**
This elective course is designed to improve students’ communication in clinical situations with patients whose native language is Spanish. The focus will be on learning conversational skills necessary to take clinical histories, conduct physical examinations and give instructions to Spanish-speaking patients.

**Neurological Gait**
Advanced clinical knowledge and skills are needed for physical therapy evaluation and management of complex neurological disorders. The Neurological Gait Elective will enrich your understanding of gait pathomechanics, observational capacity to identify and analyze gait deviations, problem solving skills for determining the underlying causes of gait deviations and formulating and providing effective treatment interventions for individuals with neurological conditions. The students will have the opportunity to participate in a variety of unique learning experiences including visiting a gait lab, observing locomotor training using robotics, and participating in an orthotic assessment and casting with an orthotist. Students will actively engage in literature reviews for evidence-based practice and participate in small group discussions.

**Pediatrics**
Students will hear lectures from experts in the field and have opportunities to observe the provision of pediatric physical therapy in a variety of specialized settings. They will observe a child over the time period of the course in order to develop and refine their observational skills and enhance their knowledge of typical development. Students will be exposed to advanced levels of literature, research and clinical experiences or observations in pediatrics.

**Sports Physical Therapy**
This course will allow students to engage in techniques for the evaluation and treatment of high-level collegiate athletes from time of injury to return-to-play. They will gain exposure to the clinical rehabilitation aspect with dual credential physical therapists/certified athletic trainers. In addition, students will complete several psychomotor labs, learning various taping and strapping procedures. Specialists in the areas of sports nutrition, sports psychology and strength and conditioning will lecture on their professions and interaction with sports physical therapy.
Topics in Women’s Health
Students will review and discuss female anatomy and physiology; pregnancy, labor and delivery; examination and interventions for obstetric and gynecological symptoms; lymphedema; endocrinology of the female; pediatric urinary incontinence and sexual dysfunction. The course will include both lecture and laboratory sessions. Students will select research and present a special topic to the entire class and complete a descriptive paper.

Vestibular Rehabilitation
This course will focus on the assessment and treatment of patients with vertigo and disequilibrium from vestibular causes. Material covered will include the neuroanatomy and neurophysiology of the normal vestibular system, the various pathological conditions that result in vertigo or disturbances in balance and the compensatory mechanisms available for recovery. Specific emphasis will be on the assessment and treatment of unilateral and bilateral vestibular hypofunction, benign paroxysmal positioning vertigo, central vestibular disorders and multisensory dizziness. This information is applicable to a large patient population including geriatric patients as well as individuals with CNS lesions such as multiple sclerosis, CVA and head injury.