

REHABILITATION SCIENCES (RS)

RS 5143. Research Methods In Rehabilitation Sciences. 3 Credit Hours.

Prerequisites: Permission This course addresses basic research methods, including formulation of research questions, preparation of a literature review, development of a research proposal, and basic techniques of data collection and analysis. Students design a study during the course.

Course Type: Lecture

RS 5153. Biomechanics. 3 Credit Hours.

Prerequisites: By Permission This is an advanced course about pathokinesiology and biomechanics designed for rehabilitation professional. Basic knowledge of mathematics, physics, and kinesiology is expected and will be utilized. A review of statics, dynamics and strength of materials will be covered. The objective of the course is to teach the use biomechanics principles to solve clinical problems. The topics include kinematics, Kinetics, mechanical work, power and energy, muscle biomechanics, soft tissue biomechanics, orthopedic biomechanics, electromyography, and biosignal processing.

Course Type: Lecture

RS 5263. Family and Diversity. 3 Credit Hours.

Prerequisites: By Permission. May be repeated; maximum credit 6 hours. This 3 credit hour, web-based course is designed to prepare students with the knowledge and skills necessary to support families who have a child with a disability. Participants in this course will explore the practical and theoretical basis for assessing and developing supports for children and their families.

Course Type: Lecture

RS 5443. Early Intervention and School Based Practice. 3 Credit Hours.

Prerequisites: By Permission This course is developed for practicing occupational therapists and physical therapists that provide services for children under the Individuals with Disabilities Education Improvement Act (IDEA), attitudes needed to provide team-oriented, family and child-centered early intervention, and special education and related services for children and students with disabilities age birth through 21 years regulations, and best practices in early intervention, special education and related services.

Course Type: Lecture

RS 5483. Topics In Assistive Technology. 3 Credit Hours.

Prerequisites: By permission This course introduces assistive technology (AT) as an intervention to preserve, augment or improve physical, emotional, social, and academic well-being via topics. Assistive technologies that maximize participation in daily activities for people with varying limitations and disabilities will be examined in home, school, workplace, and community settings. (Summer)

Course Type: Lecture

RS 5950. Clinical Internship. 2-4 Credit Hours.

Students will be scheduled for a clinical internship in teaching, research, or their area of clinical specialization for not less than 60 contact hours and not to exceed 320 contact hours. Students will assume identified responsibilities under the supervision of their major advisor or the individual responsible for the onsite internship.

Course Type: Internship

RS 5960. Directed Readings. 1-6 Credit Hours.

May be repeated with change of content; maximum credit 6 hours. This course is designed to permit the student to read extensively in one or more areas of special interest in physical therapy.

Course Type: Lecture

RS 5970. Seminar In Rehabilitation Sciences. 1-2 Credit Hours.

Prerequisites: Permission May be repeated; maximum credit 2 hours. Students read, analyze, synthesize, discuss, and apply literature related to research and current and emerging practice in rehabilitation sciences and related fields.

Course Type: Discussion

RS 5990. Special Studies. 1-6 Credit Hours.

May be repeated; maximum credit 6 hours. This course is designed for the specific needs of students desiring intensive study in a specialized aspect of rehabilitation sciences.

Course Type: Independent Study

RS 6003. Differential Diagnosis in Rehabilitation Sciences. 3 Credit Hours.

Prerequisites: By instructor permission. Multi-Level Listed: RS 8003 This course is designed for the rehabilitation professional. Clinical reasoning skills are expected utilized, and enhanced by applying screening approaches for conditions that interfere with therapy intervention or require medical attention prior to therapy. Diagnostic imaging, clinical laboratory, and other diagnostic testing that impact client/patient performance will be integrated. (Fall I, II, III)

Course Type: Lecture

RS 6113. Anatomy & Physiology of the Axial Skeleton. 3 Credit Hours.

Prerequisites: None Built on core knowledge of cadaveric gross anatomy, biomechanics, neurology and muscle functions. Core knowledge is briefly reviewed, discussed in greater detail relative to functions and relationships of the musculoskeletal system, specifically concerning clinical muscular and skeletal conditions which produce loss of function.

Course Type: Lecture

RS 6133. Program Evaluation and Development in Rehabilitation Sciences. 3 Credit Hours.

Prerequisites: None This course prepares students to serve as consultants in program development and evaluation of services for children and adults with disabilities, and their families. Prerequisites include skills and knowledge in application of evidence-based practice, research methodology, and statistics covers topics such as needs assessment, formative and outcome research, process evaluation, cost analysis, and program development.

Course Type: Lecture

RS 6173. Rehabilitation Sciences I. 3 Credit Hours.

Prerequisites: Permission Covers contemporary rehabilitation sciences concepts. Includes analysis of contemporary theories and conceptual frameworks and policy in rehabilitation of individuals with disabilities. Focus is interdisciplinary, with contributions from epidemiology, rehabilitation, disability, and health/wellness literature. Students develop a broad perspective of rehabilitation as a multifaceted and multilevel entity requiring an interdisciplinary approach.

Course Type: Lecture

RS 6232. Applied Radiology and Diagnostic Testing. 2 Credit Hours.

Prerequisites: Permission of instructor This web-based course in differential diagnosis is designed for the rehabilitation professional. Clinical reasoning in history-taking and clinical evaluative skills are expected, utilized, and enhanced. Student will apply screening approaches in the intake process for medical conditions that interfere with therapy intervention or require medical attention prior to receipt of therapy. Diagnostic imaging, clinical laboratory, and other diagnostic testing that impact client/patient performance will be integrated into the process.

Course Type: Lecture

RS 6233. Arthrology And Tissue Physiology. 3 Credit Hours.

Human physiology, exercise physiology, permission from instructor. Student will learn the pathophysiology and healing, physiology of various joint-related tissues. Tissue response to injury for ligament, tendon, muscle, bone, nerve and cartilage will be covered, with emphasis on application of basic science to clinical practice.

Course Type: Lecture

RS 6263. Community Assessment and Analysis. 3 Credit Hours.

Prerequisites: Permission of Instructor This course is designed for the specific needs of students desiring intensive study in a specialized aspect of rehabilitation sciences. Specifically, this 3 credit hour course is designed to prepare students with the knowledge and skills necessary for community assessment and analysis.

Course Type: Lecture

RS 6273. Rehabilitation Sciences II. 3 Credit Hours.

Prerequisites: Permission This course provides applications of theoretical constructs of rehabilitation presented in Rehabilitation Sciences I. Emphasis is on methodological underpinnings to gather information for diagnosis and develop rehabilitation programs, innovations in conceptualizing intervention, the role of technology, and documenting rehabilitation outcomes. The course helps students advance knowledge through evidence-based perspective papers.

Course Type: Lecture

RS 6283. Ethical & Professional Conduct of Behavior Analysts. 3 Credit Hours.

Prerequisites: By permission This course will familiarize the student with ethical issues and responsibilities of special educators and behavior analysts by leading organizations in the fields of education and mental health. Informed consent, due process, protection of confidentiality, and selection of least intrusive, least restrictive behavior change procedures will be presented and discussed within the context of case method. Ethical decision making processes will be emphasized, and the relationship between ethics and law will be explored.

Course Type: Lecture

RS 6293. Applied Behavior Analysis III. 3 Credit Hours.

Prerequisites: ABA I and ABA II and by Permission This course focuses on the principles, procedures and underlying philosophy of applied behavior analysis (ABA); on identification of factors that contribute to behavioral challenges and improved performance; and on procedures that minimize behavioral challenges, improve performance, and teach new behaviors and increase probability of behaviors occurring under appropriate circumstances.

Course Type: Lecture

RS 6433. Measurement. 3 Credit Hours.

Prerequisites: By Permission This 3 credit hour course is designed to enhance students' knowledge and skills in measurement and evaluation as they relate to assessment of individuals with various disabilities and their environments. The first part of the course covers measurement theory, advanced measurement concepts, principles of testing, and test construction and their applications in rehabilitation. The second part focuses on application of test and measures as data gathering approaches in assessment of body functions and structures, activity, and participation levels of individuals with or at risk for disabilities.

Course Type: Lecture

RS 8003. Differential Diagnosis in Rehabilitation Sciences. 3 Credit Hours.

Prerequisites: By instructor permission. Multi-Level Listed: RS 6003 This course is designed for the rehabilitation professional. Clinical reasoning skills are expected utilized, and enhanced by applying screening approaches for conditions that interfere with therapy intervention or require medical attention prior to therapy. Diagnostic imaging, clinical laboratory, and other diagnostic testing that impact client/patient performance will be integrated. (Fall I, II, III)

Course Type: Lecture

RS 8013. Leadership Sciences. 3 Credit Hours.

Prerequisites: Permission of course director The course will explore the theoretical and empirical evidence which embodies leadership. Students will synthesize scientific evidence, as well as evaluate current leadership capabilities to develop a well reasoned individual leader profile and leadership plan. (Summer I)

Course Type: Lecture

RS 8133. Rehabilitation Sciences I. 3 Credit Hours.

Prerequisites: Permission of instructor. This course covers contemporary theories and conceptual frameworks for rehabilitation science and policy in rehabilitation of individuals with disabilities. The focus is interdisciplinary, with contributions from epidemiology, rehabilitation, disability, and health and wellness. Students develop a broad perspective of rehabilitation as a multifaceted and multilevel entity requiring a multidisciplinary approach.

Course Type: Lecture

RS 8153. Clinical Reasoning and Instruction. 3 Credit Hours.

Prerequisites: Permission of instructor. This class is part of the core course work for the post-professional clinical doctoral degree. It investigates two important aspects of being a doctoral-level practitioner: clinical reasoning and its related elements, and teaching novice practitioners in both the clinic and classroom environments.

Course Type: Lecture

RS 8233. Rehabilitation Sciences II. 3 Credit Hours.

Prerequisites: Permission of instructor. Students apply the theoretical constructs covered in Rehabilitation Sciences I. Emphasis is on methods used to gather information for diagnosis and to develop rehabilitation programs, innovations in conceptualizing intervention, the role of technology in rehabilitation, and documenting outcomes. Experts from related disciplines facilitate discussions on course topics.

Course Type: Lecture

RS 8430. Doctoral Thesis. 2-6 Credit Hours.

Prerequisites: Permission of instructor. May be repeated; maximum credit 16 hours. Students complete a research-oriented project that culminates in a publishable product. The purpose of the project is for students to gain an understanding of one or more aspects of the research process and apply that understanding to practice.

Course Type: Independent Study