Graduate Rehabilitation Science Courses

RHSC 5325. Public Health & Population Wellbeing. 3 Credit Hours (Lecture: 3 Hours, Lab: 0 Hours).
The Public Health & Population Wellbeing course provides a comprehensive exploration of public health principles and strategies to promote the health and well-being of populations. This course addresses the social determinants of health, epidemiological methods, health promotion, and disease prevention. Students will examine the factors influencing population health and gain the knowledge and skills necessary to contribute to public health initiatives and improve the well-being of communities.

RHSC 5338. Lifestyle Medicine. 3 Credit Hours (Lecture: 3 Hours, Lab: 0 Hours).
The Lifestyle Medicine course is designed to provide students with a comprehensive understanding of the role of lifestyle factors in health and well-being. This course explores evidence-based practices and interventions that promote healthy behaviors, prevent chronic diseases, and enhance overall quality of life. Students will examine the impact of nutrition, physical activity, sleep, stress management, and other lifestyle factors on health outcomes, as well as strategies for implementing lifestyle medicine principles in clinical and community settings.

RHSC 5340. Laboratory Techniques in Rehabilitation Science. 3 Credit Hours (Lecture: 3 Hours, Lab: 0 Hours).
The Laboratory Techniques in Rehabilitation Science course is designed to provide students with hands-on experience in conducting laboratory-based research within the field of rehabilitation science. This course focuses on developing practical skills in various laboratory techniques used to investigate physiological, biomechanical, and motor control aspects relevant to rehabilitation. Students will gain proficiency in utilizing state-of-the-art equipment, data collection methods, and analysis tools commonly employed in rehabilitation research.

RHSC 5346. Cardiopulmonary Rehabilitation. 3 Credit Hours (Lecture: 3 Hours, Lab: 0 Hours).
The Cardiopulmonary Rehabilitation course is designed to provide students with a comprehensive understanding of rehabilitation strategies for individuals with cardiovascular and pulmonary conditions. This course explores the physiological basis of cardiopulmonary disorders, evidence-based interventions, and multidisciplinary approaches to enhance the functional capacity and quality of life of individuals with heart and lung diseases. Students will learn to assess, plan, and implement rehabilitation programs, incorporating exercise, education, and psychosocial support.

RHSC 5350. Disability and Rehabilitation. 3 Credit Hours (Lecture: 3 Hours, Lab: 0 Hours).
The Disability and Rehabilitation course is designed to provide students with a comprehensive understanding of the multifaceted nature of disability, rehabilitation theories, and interventions. This course explores the social, psychological, and physical aspects of disability, emphasizing evidence-based practices in rehabilitation. Students will examine the impact of disability on individuals and society, explore rehabilitation models, and develop skills to design and implement effective rehabilitation programs.

RHSC 5355. Neuromuscular Aspects of Fatigue and Training. 3 Credit Hours (Lecture: 3 Hours, Lab: 0 Hours).
The Neuromuscular Aspects of Fatigue and Training course is designed to provide students with a detailed exploration of the physiological and biomechanical factors influencing neuromuscular fatigue and adaptations to training. This course integrates principles of exercise physiology, neuroscience, and biomechanics to understand how the neuromuscular system responds to various forms of physical activity, and how fatigue and training can impact performance and overall health.

RHSC 5360. Theories & Mechanisms of Change in Rehabilitation Science. 3 Credit Hours (Lecture: 3 Hours, Lab: 0 Hours).
The Theories & Mechanisms of Change in Rehabilitation Science course is designed to provide students with an in-depth exploration of theoretical frameworks and the underlying mechanisms that drive change in the context of rehabilitation. This course focuses on understanding the theoretical foundations that guide rehabilitation interventions and examining the mechanisms through which these interventions produce positive outcomes. Students will critically analyze various rehabilitation theories and develop the knowledge and skills to apply these theories in evidence-based rehabilitation practices.

RHSC 5370. Human Neuroplasticity. 3 Credit Hours (Lecture: 3 Hours, Lab: 0 Hours).
The Human Neuroplasticity course delves into the fascinating field of neuroplasticity, exploring the brain's remarkable ability to adapt and reorganize itself in response to experience, injury, or environmental changes. This course provides a comprehensive examination of the underlying mechanisms, principles, and applications of neuroplasticity in both health and disease. Students will explore cutting-edge research, clinical applications, and interventions aimed at harnessing neuroplasticity for cognitive, motor, and sensory rehabilitation.

RHSC 5375. Rehabilitation Science in Professional Sports. 3 Credit Hours (Lecture: 3 Hours, Lab: 0 Hours).
The Rehabilitation Science in Professional Sports course is designed to provide students with an advanced understanding of rehabilitation principles and practices specific to the demands of professional sports settings. This course integrates theoretical concepts, evidence-based practices, and practical applications to prepare students for careers in sports rehabilitation, addressing the unique challenges and considerations associated with elite athletes and high-performance sports teams.

RHSC 5377. Exercise for Clinical Populations. 3 Credit Hours (Lecture: 3 Hours, Lab: 0 Hours).
The Exercise for Clinical Populations course is designed to provide a comprehensive understanding of exercise programming for individuals with various clinical conditions. This course explores the intersection of exercise science and healthcare, focusing on the application of evidence-based strategies to enhance the well-being and functional capacity of clinical populations. Students will gain knowledge in assessing, designing, and implementing exercise programs tailored to individuals with specific health concerns.

RHSC 5380. Capstone in Rehabilitation Science. 3 Credit Hours (Lecture: 3 Hours, Lab: 0 Hours).
The Capstone in Rehabilitation Science is a culminating course designed to integrate and apply the knowledge, skills, and experiences gained throughout the rehabilitation science program. This capstone experience provides students with an opportunity to engage in an in-depth, independent project or research study related to their chosen area within rehabilitation science. Under the guidance of faculty mentors, students will demonstrate advanced competencies and contribute to the advancement of knowledge in the field.

RHSC 5390. Internship in Rehabilitation Science. 3 Credit Hours (Lecture: 3 Hours, Lab: 0 Hours).
The Internship in Rehabilitation Science is a practical, hands-on course designed to provide students with real-world experience in the field of rehabilitation. Through supervised internships in rehabilitation settings, students will have the opportunity to apply theoretical knowledge, develop clinical skills, and engage in professional practices relevant to their discipline within rehabilitation science. This course aims to bridge the gap between academic learning and practical application, preparing students for careers in rehabilitation practice, research, or related fields.