

Courses description:

- **RHS 501 : FUNCTIONAL ANATOMY (2 Cr.):**

This course focuses on functional human anatomy as a basic science necessary for safe medical and paramedical practice. It is an overview of human anatomy (i.e., body structure and function), given in preparation for later courses that cover anatomical regions in greater depth. Special emphasis will be given on the Musculoskeletal, Nervous, Cardiovascular systems and development.

- **RHS 502 : RESEARCH METHODOLOGY AND STATISTICS (2 Cr.):**

This course explains the steps of the clinical research process. Identification of research problems and formulating research questions, research objectives and hypotheses will be discussed. This course will cover the different types of clinical research methods. Students will also be exposed to the components of research proposals. Additional topics such as searching medical databases, appraisal of research studies and evidence to practice translation will also be covered.

- **RHS 503: TESTS AND MEASUREMENTS (2 Cr.):**

This course discusses the concept of measurement related to rehabilitation. Measurement theories will be discussed with an emphasis on classical test theory. The course focuses on the evaluation of the measurement properties of patient-reported outcome measures including its reliability, validity, responsiveness, and interpretability

- **RHS 504: EXERCISE PHYSIOLOGY (3 Cr.):**

Advanced study of the functional relationships for the different systems . And the study of the different exercises whether passive or active for upper and lower extremities on functions and different reactions of body systems. And the hormonal response to different exercises with practical applications for studying the effect of exercises.

- **RHS 505: RESEARCH SEMINARS (2 Cr.):**

This course describes descriptive and inferential statistics commonly used in clinical research. The course focuses on choosing appropriate statistical test, using statistical software to conduct the analysis, interpretation and reporting of the results. Inferential statistical analyses include but not limited to independent t-test, dependent t-test, Analysis of Variance (ANOVA) and correlation.

- **RHS 506: PSYCHOLOGY AND SOCIAL REHABILITATION (2 Cr.):**

Study of different theories of human behavior and the factors which help in the formation of personality. And a study of the reactions between persons and their reactions in facing the different situations. Relationship between the human being and

the family and society and the stages of growth and development of personality. In addition to that, recognition of psychology theories of the patients who suffer from damage or disability or handicap. Study of the psychological and behavioral deviations and psychology of the abnormal and methods of evaluation and development of the special skills for their psychological rehabilitation.

- **RHS 507: BIOMECHANICS (2 Cr.):**

This course discusses biomechanical concepts and techniques related to studying human motion. The topics discussed will include but not limited to kinematics, kinetics, and muscle function of human movement. The course will also cover advancements in biomechanical methods and techniques related to the study of the human movement.

- **RHS 508: PHYSICAL THERAPY FOR NEUROLOGICAL CONDITIONS I. (3 Cr.):**

Advanced clinical case studies (selective) related to neurological diseases with emphasis on the role of physical therapy based on evidence-based practice.

- **RHS 509: PHYSICAL THERAPY FOR NEUROLOGICAL CONDITIONS II. (3 Cr.):**

Advanced applied study in rehabilitation procedures of common neurological diseases using new management modalities based on evidence base practice in the physical therapy field.

- **RHS 510: PHYSICAL THERAPY FOR NEUROLOGICAL CONDITIONS III. (3 Cr.):**

This course is concerned with the role of physical therapy in rehabilitation procedures of neurological injuries through applied study and clinical practice

- **RHS 511: PEDIATRIC PHYSICAL THERAPY I. (3 Cr.):**

This course will cover the theoretical and advanced clinical management of the pediatric neurological and neuromuscular conditions (including chronic, acute, congenital and rare disorders). Lectures will also cover the normal growth and development as well as standardized assessments of movement and function in children with neurological and neuromuscular disorders

- **RHS 512: PEDIATRIC PHYSICAL THERAPY II. (3 Cr.):**

This course will cover the advanced clinical management of acute and chronic pediatric musculoskeletal conditions with emphasis on gait development and gait analysis throughout childhood.

- **RHS 513: PEDIATRIC PHYSICAL THERAPY III. (3 Cr.):**

This course will deal with advanced clinical physical therapy management for different pediatric conditions (e.g. oncology and genetic conditions). In addition to

incorporating clinical case studies with problem solving approach for different chronic conditions.

- **RHS 514: PHYSICAL THERAPY FOR CARDIOPULMONARY CONDITIONS I. (3 Cr.):**

This course is intended to provide advanced pathophysiology and clinical manifestations of common cardiopulmonary disorders. This course will provide the student with different skills to identify various signs and symptoms of most common cardiopulmonary disorders.

- **RHS 515 : PHYSICAL THERAPY FOR CARDIOPULMONARY CONDITIONS II. (3 Cr.):**

This course aims to enable the students to apply and interpret various diagnostic techniques in patients with cardiopulmonary diseases and critically evaluate assessment methods based on evidence- based practice. The students will also develop the expertise to assess outcome measures related to cardiopulmonary field in treatment and research settings.

- **RHS 516: PHYSICAL THERAPY FOR CARDIOPULMONARY CONDITIONS III.(3 Cr.):**

This course is intended to provide the student with advanced cardiopulmonary rehabilitation techniques and evidence-based clinical protocols for patients with common cardiopulmonary disorders. The student in this course will be able to critically select appropriate therapeutic methods based on the stage of disease and clinical status of the patients.

- **RHS 517: PHYSICAL THERAPY FOR ORTHOPAEDIC CONDITIONS I. (3 Cr.):**

This course discusses advanced and contemporary topics in musculoskeletal physical therapy with emphasis on clinical reasoning related to spine musculoskeletal disorders. The course will include advanced topics covering the whole continuum of patient management (examination, evaluation, diagnosis, prognosis, prevention, and intervention) from an evidence-based biopsychosocial perspective.

- **RHS 518: PHYSICAL THERAPY FOR ORTHOPAEDIC CONDITIONS II. (3 Cr.):**

This course discusses advanced and contemporary topics in musculoskeletal physical therapy with emphasis on clinical reasoning related to lower extremity musculoskeletal disorders. The course will include advanced topics covering the whole continuum of patient management (examination, evaluation, diagnosis, prognosis, prevention, and intervention) from an evidence-based biopsychosocial perspective.

- **RHS 519: PHYSICAL THERAPY FOR ORTHOPAEDIC CONDITIONS III. (3 Cr.):**

This course discusses advanced and contemporary topics in musculoskeletal physical

therapy with emphasis on clinical reasoning related to upper extremity musculoskeletal disorders. The course will include advanced topics covering the whole continuum of patient management (examination, evaluation, diagnosis, prognosis, prevention, and intervention) from an evidence-based biopsychosocial perspective

- **RHS 520: PHYSICAL THERAPY IN GERIATRICS I. (3 Cr.):**

This course introduces first-year master's students to the fundamentals of geriatric physical therapy. It covers core theories, concepts, and physiological and psychological changes associated with aging. It provides evidence-based interventions and strategies to support physical and mental health, functional independence, safety, social engagement, and quality of life for older adults

- **RHS 521: PHYSICAL THERAPY IN GERIATRICS II. (3 Cr.):**

This second course in the series provides an overview of physical therapy roles in different geriatric healthcare settings. The course will cover the differences between healthcare settings, the populations they serve, and the staffing and organization of each setting. Students will learn about the effectiveness of physical therapy in various settings and can identify areas for improvement and innovation in these different settings

- **RHS 522: PHYSICAL THERAPY IN GERIATRICS III. (3 Cr.):**

This is the final course in a series of three courses designed to provide students with an advanced understanding of physical therapy in assessing and managing the most common geriatric conditions. The course covers physical and mental health problems associated with aging and evidence-based physical therapy interventions for these problems. [View](#)

- **RHS 596 RESEARCH PROPOSAL (1 CR.):**

This course allows master students to complete writing the dissertation proposal as a research proposal, on a topic of their choice, that can be implemented later as thesis.

- **RHS 600 THESIS (1 CR.):**

This comprehensive course allows master students to complete their proposed research project through an entire process of thesis development from the initial concept to the final defense.