

The University of Texas Rio Grande Valley
Department of Occupational Therapy

Prerequisite Course Descriptions

Anatomy & Physiology I (lecture & lab)

4 credit hours

Course is the first of a two-course sequence examining the terminology, structure, function, and interdependence of the human body systems. This course should include a study of the cells, chemistry, tissues, integumentary, skeletal, muscular, nervous, and endocrine systems.

Anatomy & Physiology II (lecture & lab)

4 credit hours

This is the second in a two courses sequence examining the terminology, structure, function, and interdependence of systems within the human body. This course should include a study of circulatory, cardiovascular, lymphatic, immune, respiratory, digestive, urinary, and reproductive systems. Discussion could include the application of nutrition, fluid, electrolyte and acid base balance, and genetics as applicable to the content.

Basic Statistics

3 credit hours

The course would cover basic concepts of probability and statistics and focus on applications of statistical knowledge. The subject of statistics involves the study of methods for collecting, summarizing, and interpreting data. Students should be comfortable evaluating an author's use of data and be able to extract information from articles and display that information effectively. Student should also be able to understand the basics of how to draw statistical conclusions. This course might cover a range of topics, some which include descriptive statistics and the foundation of statistics, random variables, probability distributions, regression, and inferential statistics, independent events, dependent probability, combinatorics, and hypothesis testing,

Psychology of Lifespan

3 credit hours

This is the study of social, emotional, cognitive and physical factors and influences of a developing human from conception to death. Course should explore life span development through the lenses of social, cultural, cognitive, biological, and learning theories and research. Emphasis is on gaining conceptual understanding of healthy development. (Courses that focus on only one age group, i.e. infancy & adolescents or adults, will not be acceptable).

Abnormal Psychology

3 credit hours

Course is an introduction to theories and research concerning abnormal behavior (psychopathology). This course should provide an examination of the various psychological disorders such as emotional disorders, neuroses and psychoses as well as theoretical, clinical, and experimental perspectives of the study of psychopathology. Emphasis should include terminology, classification, etiology, assessment, and treatment of the major disorders. The student should be able to distinguish between normal and abnormal behavior patterns as well as demonstrate knowledge of etiology, symptoms, and therapeutic techniques.

Anthropology or Sociology

3 credit hours

This can be any anthropology or sociology course.

Biomechanics

3 credit hours

This ought to be a course to introduce students to concepts of mechanics as they apply to human movement, particularly those pertaining to exercise and physical activity. The course should provide an overview of musculoskeletal anatomy and principles of biomechanics to bodywork. The student would gain an understanding of the mechanical and anatomical principles that govern human motion and develop the ability to link the structure of the human body with its function from a mechanical perspective. At the completion of the course it is desired that each student be able to: 1) describe motion with precise, well-defined mechanical and anatomical terminology; 2) understand and quantify linear and angular characteristics of motion; 3) understand the quantitative relationships between angular and linear motion characteristics of a rotating body; and 4) understand and quantify the cause and effect relationship between force and linear and angular motion.

General Physics I (lecture & lab)

4 credit hours

This course would focus on Newton's laws, linear motion, circular and harmonic motion, fluids, heat, kinetic theory, wave motion and sound. A general math based physics course designed to present concepts and applications of the following topics: kinematics, dynamics, gravitation, energy, momentum and heat is needed.

Technical Writing

3 credit hours

The course ought to focus on the protocol and details for proper technical and scientific report writing, newsletters and online documentation. The course may address the creation of a variety of print and electronic documents, including brochures, reports, websites, software documents and scientific reports. Students should also learn how to format and layout these items. Specialized technical writing courses that focus on the documents most commonly used in health care and science is acceptable. Technical writing course should include an editing and proofreading, punctuation, grammar and research techniques, as well as the creation of title pages, tables of contents, format pages, glossaries and appendices. Courses emphasize style, tone and the importance of writing in plain, comprehensible English. While the emphasis may be on writing, oral communication of scientific and technical information will form an important component of the course. Students should learn how to organize and express facts and ideas through the written word.

Medical Terminology

1, 2, or 3 credit hours

This course would provide a basic working knowledge of medical terminology and medical abbreviations. The course will cover word analysis of terminology and abbreviations pertaining to anatomy, physiology, pathology, diagnostic processes/procedures and medical/surgical interventions by body system and spelling and pronunciation of common medical terms. The student should obtain a broad in-depth comprehensive understanding of the unique "language of medicine."