

KINESIOLOGY (KIN)

KIN-300 Biomechanics (4 credits)

Biomechanics is a 4 credit course designed to give students an understanding of the mechanical and anatomical principles that govern human motion through the action of external and internal forces. After completing this course, students will be able to describe motions of the body during typical activities, predict which muscles are responsible for controlling movement, quantify the forces acting on the body during movement, and evaluate studies of human movement.

Prerequisite(s): BI 231 & BI 231L, PH-231

KIN-410 Anatomy & Physiology for Exercise Physio (4 credits)

This course provides a continuation of the comprehensive study of the anatomy and physiology of the human body and how the different body systems work. Human anatomy and exercise physiology is a sub-discipline of kinesiology. Students will address the short-term biological responses to the stress of physical activity and how the body adapts to repeated bouts of physical activity over time. Through detailed examination she will study the reciprocal relations among physical activity, exercise behavior, and biochemical and physiological adaptation. At the completion of this course students will be able to recognize signs and symptoms of environmental stress, measure cardiovascular and respiratory fitness, body composition, flexibility and muscular strength, power and endurance.

Prerequisite(s): KIN-300