

HTI 5126 Clinical Biomechanics Credit Value: 3

Responsible Staff and Department(s): Dr. ZHANG Ming (HTI) **Pre-requisites:** Nil

Recommended Background Knowledge: Knowledge in general mechanics

Learning Outcomes:

At completion of the subject, students should be able to apply biomechanical concept to appreciate and analyze the pathomechanics of common musculoskeletal disorders.

Syllabus:

Various clinically relevant musculoskeletal disorders, such as low back disorder, neck pain, foot disorder, pressure ulcer and bone fracture, will be used as examples to illustrate the application of biomechanical principles for understanding the normal functions of the musculoskeletal system, investigating possible causes of the disorders, evaluating the level of severity as well as devising possible treatments for the disorders. Biomechanics of the disorders will be appreciated at the tissue, organ and system levels.