COURSE DETAIL

BIOMECHANICS
Country Sweden
Host Institution Lund University
Program(s) Lund University
UCEAP Course Level Upper Division
UCEAP Subject Area(s) Mechanical Engineering Bioengineering
UCEAP Course Number 155
UCEAP Course Suffix
UCEAP Official Title BIOMECHANICS
UCEAP Transcript Title BIOMECHANICS
UCEAP Quarter Units 6.00
UCEAP Semester Units 4.00

Course Description

In the study of physiology and anatomy, the course explores how organs are built and how they work together. The building stones of the human body (bone, articular cartilage, ligaments, tendons, muscles, blood, and body fluids) are described and situated in the context of students' previous knowledge of mechanics and solid mechanics. Concepts like constitutive equations and evolution laws are applied to biological material, like bone, where effects from mechanical loading on the inner structure are modeled. The architecture of the skeleton and the apparatus of locomotion are described as a mechanical system where the bones are coupled together in joints and the activity in the muscles controls the movements.

Language(s) of Instruction
English

Host Institution Course Number
BMEN05

Host Institution Course Title
BIOMECHANICS

Host Institution Campus
Engineering

Host Institution Faculty

Host Institution Degree

Host Institution Department
Engineering - Biomedical Engineering

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