



### **Planning and Quality Assurance Affairs**

# **Course Specifications**

General Information		
Course name	Biomechanics (1)	
Course number	AMSP2207	
Faculty		
Department		
Course type	Major Needs	
Course level	2	
Credit hours (theoretical)	2	
Credit hours (practical)	0	
Course Prerequisites		

## **Course Objectives**

- 1 Integrate Anatomy and Physiology in the in the study of human motion
- 2 Describe the different forces acting on the human bones, muscles, and joints of the LE
- 3 Describe the mechanical behavior of human bone, joint, and muscle against imposed forces
- 4 Describe the structural properties of tghe human bone, muscle, and joints of the lower extremity

## **Course Contents**

- 1 \_ Introduction to Biomechanics
- 2 Biomechanics of the bone
- 3 Biomechanics of the muscle
- 4 Biomechanics of the joints of the lower extremity

## **Teaching and Learning Methods**

- 1 Power point presentation
- 2 Formal lectures
- 3 Hand outs
- 4 Animated videos

#### **Students Assessment**

Assessment Method	<u>TIME</u>	MARKS
First exam	One hour	25%
Second exam	One hour	25%
Final exam	Two hours	50%

#### **Books and References**

Course note	Basic Biomechanics of the Musculoskeletal System, Margareta Nordin and Vector H.
	Frankel, Lippincott, 2012