

liepr1012
Biomechanics

Teacher(s)	Dewolf Arthur ;			
Language :	French			
Place of the course	Louvain-la-Neuve			
Learning outcomes				
Evaluation methods	The written exam includes questions on exercises and theory. The assessment is conducted using a multiple-choice exam (MCQ). For each question, 5 answer choices will be provided, along with a 6th choice "I don't know the answer." Among the 5 choices, only 1 correct answer is expected per question. No points are awarded for unanswered or incorrect responses. A quarter of the points will be awarded if the student selects the "I don't know the answer" option.  The minimum mastery threshold (c) for learning outcomes (corresponding to a score of 10/20) is determined by the following formula: $c = ((n+1)/2n) \times 100$ , where n represents the number of choices per question. In this case, the "minimum passing threshold" (c) is set at 60%.			
Teaching methods	The course aims to give students mathematical tools for modelling and understanding the movement of the human body.  Theory (lecture) + practical sessions			
Content	The course content will be divided into three parts:  - Anthropometry: concepts of the rigid body, the centre of gravity and moment of inertia  - Kinetic analysis: calculation of forces and moments of force in a static situation  - Dynamic situations and concepts of energy, work and power  The student will have to use the basics of biomechanics in an integrated way in the fields of motor science: analysis of joint movements; segmental modelling of the body; inertia; balance and posture; muscular leverage; energy transformation during a movement			
Inline resources	Moodle			
Other infos	This course is strictly reserved for FSM students and is not open to other UCLouvain students.			
Faculty or entity in charge	FSM			

Programmes containing this learning unit (UE)					
Program title	Acronym	Credits	Prerequisite	Learning outcomes	
Bachelor in Motor skills : General	EDPH1BA	4		٩	
Bachelor in Physiotherapy and Rehabilitation	KINE1BA	4		٩	