UCLouvain

lephy2122

2026

Strength and conditioning

3.00 credits	15.0 h + 30.0 h	Q2

Teacher(s)	Francaux Marc (coordinator) ;
Language :	French
Place of the course	Louvain-la-Neuve
Main themes	· The impact of bodybuilding exercises on basic physical qualities. · Assessment methods for basic physical qualities. · Methods of intervention (plyometrics, weightlifting, etc.) and tools used (VBT, BFR, etc.) with a view to improving basic physical qualities. · Planning and periodisation of physical preparation sessions · Focus on specific populations (disabled athletes, etc.)
Learning outcomes	**At the end of this learning unit, the student is able to :** · Analyse the physical qualities required in a given sport (1.1 and 1.2) · Use the appropriate tools to assess these physical qualities (1.1, 1.2, 1.3, 1.8 and 1.10) · Demonstrate correct execution of the movements used in physical preparation (1.1, 1.2 and 1.3). · Design a training plan according to the target audience and objectives (1.1, 1.2, 1.6, 1.7 and 1.10). · Coach an athlete during the implementation of the training plan (1.7 and 1.12).
Evaluation methods	Active participation in practical and theoretical classes (reading articles, presentations, etc.) is assessed using a pass/fail system. All of these assessments account for 4/20 of the final score. The final assessment therefore accounts for 16/20 of the final score. It consists of an oral exam that will take place in the gym and will involve demonstrations of practical exercises. The questions will focus on case studies. The final grade will be equal to the score out of twenty thus obtained multiplied by the attendance rate for practical and theoretical classes.
Teaching methods	Lectures - flipped classrooms - practical work Students are informed that the course requires regular reading and preparation for teaching sessions. Attendance at both practical and theoretical sessions is strictly mandatory.
Content	**Lectures** · Differences between PP, fitness, weight training, CrossFit, etc. · Adaptations to strength and power training · Methods for increasing strength · Methods for inducing muscle hypertrophy · Methods for increasing power · Concurrent training in a performance context · Concurrent training in a health context · Flexibility · Endurance training planning · Planning team sports and sprint training **Practical classes** · Flexibility - Principles and application · Introduction to weightlifting · Muscle testing · Power testing · Speed and agility testing · Circuit training · Methods for increasing maximum strength · Methods for increasing power
Inline resources	Moodle: https://moodle.uclouvain.be/course/view.php?id=10366

Other infos	**This course is strictly reserved for FSM students. It is not open to other UCLouvain st** udents. **How and when should I submit a medical certificate?** 1. A specific certificate template must be completed by the doctor. 2. The student must scan their certificate in good quality. They must name the file with their first name, last name, and year of enrollment. The file must be saved in .pdf format. (example: Delie_Arnaud_EDPH1BA.pdf) 3. The original or scanned copy of the medical certificate must be sent to a.mortier@uclouvain.be , and 4. The scan must also be sent to the faculty administration using the specific form available at the following address: www.uclouvain.be/fsm-cm . 5. Students must keep the original certificate until the end of the academic year, as it may be requested if necessary. The General Regulations for Studies and Evaluations (RGEE) require students to submit supporting documents relating to an absence from an assessment no later than the day after the absence (see Article 103 of the RGEE).
Faculty or entity in charge	FSM

Programmes containing this learning unit (UE)

Program title	Acronym	Credits	Prerequisite	Learning outcomes
Master [120] in Motor Skills: Physical Education	EDPH2M	3		