

4.00 credits

15.0 h + 15.0 h


Q2



This learning unit is not being organized during this academic year.

Teacher(s)	Bleyenheuft Yannick ;
Language :	French
Place of the course	Louvain-la-Neuve
Main themes	<ul style="list-style-type: none"> • Importance of developing critical thinking • Stereotypes, biases and preconceptions in the field of motor science • Speech decoding • Evaluation of the quality of sources • Process and limits of the scientific approach • Introduction to the different fields of research in motor science • Introduction to the concepts of data, data analysis, representation (descriptive analysis of data: concept of sample, indicators of average, dispersion, etc.) and interpretation of data. • Introduction to the concepts of statistics and level of significance.
Learning outcomes	<p>At the end of this learning unit, the student is able to :</p> <ul style="list-style-type: none"> - Decode the biases and mechanisms at work behind our stereotypes (9.3 and 11.1 physiotherapist) / (7.3 and 9.1 EP) - Identify how the staging of content can manipulate us (9.3 physiotherapist and 11.1 physiotherapist) / (7.2 and 9.1 EP) - Determine the reliability of information and its source (6.3 physiotherapist and 11.1 physiotherapist) (2.2 and 7.2 and 9.1 EP) 1 - Describe the type of sources and the type of literature (6.1 and 6.3 physio) / (2.1; 2.4 and 7.2 EP) - Explain and illustrate the place and limits of science today (6.3 physiotherapist and 11.1 physiotherapist) / (2.4 and 9.1 EP) - Describe the concept of scientific approach and the different types of reasoning (6.1. physiotherapist) / (2.1 EP) - Describe and illustrate the fields of research in the field of motor skills (6.1–2.1) - Interpret scientific data and their graphic representations. (6.1-6.3-11.1 Physio – 2.1 and 2.3EP)
Evaluation methods	Multiple choice questionnaire (correct answer +1, no answer 0). In addition, in June, a bonus of 1 point can be gained through uploading on time 3 out of 4 practical reports fully correct.
Teaching methods	Auditorium teaching + practical sessions online
Content	<p>Description: # Theoretical: o Different types of data, o Concepts of population and sample o absolute frequency tables, cumulative frequency of relative frequencies and cumulative relative frequencies, o Representation of data in tables and graphs, o Key indicators of central tendency, o Key indicators of dispersion, o Concept of probability, o normality distribution o Hypothesis homoscedasticité, o parametric tests and nonparametric tests, o Comparisons of 2 and several medium and 2 or more rows means (for dependent or independent samples) (concept of post-hoc) o Comparisons of proportions (and conditions of use of different tests), o Relations between continuous variables, calculation of correlation and interpretation of correlation coefficients, o Coefficient of determination o Relationship between variables. # Practical: o Discover the Excel software - Mathematical functions, logical, dates - hours, statistics and text, - Representation of data in tables or graphs. o Discovery of statistical software SPSS - Links between SPSS and Excel (import data) - Documentation files * sav, - Descriptive analysis (variables [frequency] and continuous variables [central tendency and dispersion]), - Graphical representations as SPSS, - Splitting file - Selection of topics (select cases) - Verification of normal distribution of variables - Comparison of two independent samples ? Parametric Comparisons ? Comparisons nonparametric - Comparison of more than two independent samples ? Parametric Comparisons ? Comparisons nonparametric - Comparing two dependent samples ? Parametric Comparisons ? Comparisons nonparametric - Analysis of correlations (parametric and nonparametric) Methods: # lectures by audience # exercises supervision in computer classes or independently.</p>
Inline resources	moodle

Other infos	Interaction prerequisite courses with 1st Tray Evaluation Review written or oral and / or elements of continuous assessment Syllabus support and / or book (s) Encadrement Holder (s) and / or assistant (s), help (s) by any student (s) monitor (s) Other Content to articulate with the Master's course: "Statistical and Research Methodology motricity"
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		
Bachelor in Physiotherapy and Rehabilitation	KINE1BA	4		