UCLouvain

wesp2235

## Biostatistique

|  | 5.00 credits | 35.0 h + 20.0 h | Q2 |
|--|--------------|-----------------|----|
|--|--------------|-----------------|----|

| T!(-)                       | Considerated Nilse  |
|-----------------------------|---|
| Teacher(s)                  | Speybroeck Niko ;   |
| Language :                  | French  |
| Place of the course         | Bruxelles Woluwe  |
| Main themes                 | The course will be divided into two large sections: statistics and epidemiology. Statistics: Subjects covered: descriptive statistics (variables, statistical measures, distributions), estimation (statistical measures, parameter estimation), statistical test (principles, practical use of statistical tests), introduction to regression models. Epidemiology: Subjects covered: introduction to epidemiology, measures in epidemiology, types of epidemiological studies, measures of effects and population impacts, standardisation of rates, bias evaluation, causality concept, technique performances. Contents. Statistics: "descriptive statistics (variables, statistical measures, distributions), " estimation (statistical measures, parameter estimation), " statistical test (principles, practical use of statistical tests), " introduction to regression models. Epidemiology: " introduction to epidemiology, " measures in epidemiology, " types of epidemiological studies, " measures of effects and population impacts, " standardisation of rates, " bias evaluation, " causality concept, " performance of a technique. Method. The lectures will be illustrated by concrete cases extracted from literature. Sessions of exercises will go along with the lectures |
| Learning outcomes           | At the end of this learning unit, the student is able to:  Using a practical approach, this course introduces students to the basics of common statistical methods and initiates them in the principles and basic methods of epidemiology. The goal being, on the one hand, to guide students in making relevant choices of statistical methods for a concrete public health or medical problem and in understanding the results and, on the other hand, to enable students to read and to include/ understand epidemiologic and statistical aspects of public health publications in a critical way.   |
| Teaching methods            | The lectures will be illustrated by concrete cases extracted from literature. Sessions of exercises will go along with the lectures   |
| Content                     | Statistics: "descriptive statistics (variables, statistical measures, distributions), "estimation (statistical measures, parameter estimation), "statistical test (principles, practical use of statistical tests), "introduction to regression models.  Epidemiology: "introduction to epidemiology, "measures in epidemiology, "types of epidemiological studies, measures of effects and population impacts, standardisation of rates, bias evaluation, causality concept, performance of a technique.   |
| Bibliography                | Statistique/épidémiologie " T. Ancelle; collection " Sciences fondamentales "; éditions Maloine, Paris (2002).  |
| Faculty or entity in charge | FSP   |

| Programmes containing this learning unit (UE) |         |         |              |                   |  |  |
|---|---------|---------|--------------|-------------------|--|--|
| Program title                                 | Acronym | Credits | Prerequisite | Learning outcomes |  |  |
| Advanced Master in Occupational Medicine      | MDTR2MC | 5       |              | <b>Q</b>          |  |  |