Modern Methods in Data Analysis

offered by the MSc Epidemiology Program
of the UMC Utrecht and Utrecht University

During this online course, you will learn to use statistical methods to study the association between (multiple) determinants and the occurrence of an outcome event. The course will begin with an introduction to likelihood theory, using simple examples and a minimum of mathematics. You will then move to learning about the most important regression models used in medical research.

These include logistic regression, Poisson regression, analysis of `event history´ data, and the Cox proportional hazards regression model. In addition, you will become familiar with model validation and regression diagnostics, as well as with the basic principles of resampling methods and longitudinal data analysis. The course is aimed at professionals who are interested in to learn more about statistics for medical research.

Cardiovascular Epidemiology is one of the courses of the MSc Epidemiology Postgraduate Online; the online MSc program in Epidemiology offered by Utrecht University, University Medical Center Utrecht, MSc Epidemiology and Elevate.

Learning objectives

By the end of this course, you should be able to:

- √ Explain the principles of the likelihood theory and maximum likelihood methods
- √ Explain model validation and regression diagnostics
- √ Describe the basic principles of longitudinal data analysis
- √ Apply the techniques above using statistical programs (SPSS or R)

Visit our course page to find out more about this course.

For whom?

- √ Researchers
- √ Medical doctors
- √ PhD candidates

Facts

- √ 4,5 ECTS
- √ 19 Mar 2018 to 27 May 2018
- √ Online
- √ 14 hrs/week workload
- √ 1.285 Euros
- √ English
- √ Web lectures, exercises, group discussions

You may be also interested in

- √ Classical Methods in Data Analysis
- √ Introduction to Analysis of Variance

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