

Doctoral Programme in Epidemiology - courses spring semester 2023

Courses are given on four levels (1-4), from introductory to more advanced.

Biostatistics II: Logistic regression for epidemiologists (level 2)

Dates: 2023-01-09—2023-01-13, 1.5 HEC, course code 5519

The course introduces statistical methods for the analysis of categorical outcome data.

Course leader: Rino Bellocco

Biostatistics III: Survival analysis for epidemiologists (level 3)

Dates: 2023-02-06—2023-02-15, 1.5 HEC, course code 3142

This course focuses on the application of survival analysis methods to epidemiological studies.

The statistical software Stata will be used in the course.

Course leader: Therese M-L Andersson

Epidemiology I: Introduction to epidemiology (level 1)

Dates: 2023-02-06—2023-02-15, 1.5 HEC, course code 3078

The aim of the course is to give an introduction to epidemiological theory and practice.

Course leader: Renee Gardner

Introduction to R (level 2)

Dates: 2023-03-06—2023-03-17, 1.5 HEC, course code 2958

The purpose of this course is to introduce students to using the R statistical software to perform

basic to intermediate statistical data analysis in a replicable manner.

Course leader: Alexander Ploner

Biostatistics I: Introduction for epidemiologists (level 1)

Dates: 2023-04-12—2023-05-03, 3.0 HEC, course code 3042

The aim is to introduce classical statistical concepts and methods with emphasis on methods for

continuous outcome data Course leader: Matteo Bottai

<u>Transporting treatment effects from randomized trials to populations</u> (level 3)

Dates: 2023-04-17—2023-04-21, 1.5 HEC, course code 5649

The course will provide participants with understanding of why and how one should undertake transportability analyses to estimate treatment effectiveness and safety in populations that are not included in randomized trials.

Course leader: Anthony Matthews



Application of epidemiological methods in aging research (level 2)

Dates: 2023-04-24—2023-04-28, 1.5 HEC, course code 3131

The aim of the course is to critically review epidemiological methods with applications to aging research. The course is arranged in collaboration between the Epidemiology and Neuroscience Programmes.

Course leader: Amaia Calderon Larrañaga

Introductory course in SAS programming (level 1)

Dates: 2023-05-08—2023-05-12, 1.5 HEC, course code 3143

The aim is to introduce fundamental SAS programming language for use in database handling and preparation for analyses. Further, the aim is to introduce the student on how to use statistical procedures in SAS, with focus on descriptive statistics.

Course leader: Susanne Wicks

Fundamentals of statistical modeling (level 4)

Dates: 2023-05-08—2023-05-12, 1.5 HEC, course code 2959

The purpose of this advanced course is to provide an introduction to the tools of statistical

modeling.

Course leader: Matteo Bottai

Epidemiology III. Analysis and interpretation of epidemiological data (level 3)

Dates: 2023-05-16—2023-05-25, 1.5 HEC, course code 3129

The purpose of the course is to familiarise the student with principles for epidemiological data

analysis and critical interpretation of study results.

Course leader: Anita Berglund

Epidemiology II. Design of epidemiological studies (level 2)

Dates: 2023-05-29—2023-06-07, 1.5 HEC, course code 3138

The course focuses on key considerations in designing and critically interpreting different types of

case-control studies, as well as matching in cohort and case-control studies.

Course leader: Karin Leander

Introduction to machine learning (level 2)

Dates: 2023-04-24—2023-04-28, 1.5 HEC, course code 5650

The purpose of this course is to give an introduction to machine learning without heavy-mathematics. A main focus is on machine learning algorithms for regression analyses using large datasets, both in terms of the number of variables observed and/or the number of units (sample size). Given by the SINGS research school.

Course leader: Xavier de Luna