



Doctoral Programme in Epidemiology - courses fall semester 2023

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

Fundamentals of Stata Language (level 1)

Dates: 2023-09-11--2023-09-15, 1.5 HEC, course code 5315

This course aims at introducing students to the fundamental elements of the statistical software Stata. Motivating examples arising from health-related research will be used to demonstrate how to use the programming language. Learning activities will give students the possibility to learn Stata the hard yet easier way – that is – problem, code, and run.

Course leader: Nicola Orsini

Methods for Life Course Epidemiology (level 4)

Dates: 2023-09-11--2023-09-15, 1.5 HEC, course code 2968

The course critically reviews life course theory and methods for analysis of longitudinal data with applications to life course epidemiology. A special focus is put on discussing and applying methods for mediation analysis.

Course leader: Ilona Grünberger

Biostatistics II: Logistic regression for epidemiologists (level 2)

Dates: 2023-09-25--2023-09-29, 1.5 HEC, course code 5314

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

Course leader: Nicola Orsini

An introduction to genetic and molecular epidemiology (level 2)

Dates: 2023-10-02--2023-10-11, 1.5 HEC, course code 3077

The course focuses on basic concepts, methods, and study design in genetic and molecular epidemiology research.

Course leader: Ida Karlsson

Design and analysis of twin and family-based studies (level 4)

Dates: 2023-10-16--2023-10-20, 1.5 HEC, course code 2893

This course focuses on potential designs and analyses using twin- and family-data. Methods to estimate within-family associations and heritability are covered.

Course leader: Ralf Kuja-Halkola

Epidemiology I: Introduction to epidemiology (level 1)

Dates: 2023-11-06--2023-11-15, 1.5 HEC, course code 3128

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

Course leader: Giorgio Tettamanti

Biostatistics III: Survival analysis for epidemiologists (level 3)

Dates: 2023-11-06--2023-11-15, 1.5 HEC, course code 2992

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

Course leader: Mark Clements

Multivariate Prediction Models, Machine Learning and AI with Applications in Precision Medicine (level 4)

Dates: 2023-11-13--2023-11-17, 1.5 HEC, course code 5694

This course aims to provide an introduction to both supervised and unsupervised methodologies for prediction modelling with a focus on biomedical applications, molecular epidemiology and personalised medicine. The main objective of the course is to provide basic theory and to facilitate for the course participants to acquire practical knowledge that will enable to apply covered methodologies in their own research.

Course leader: Mattias Rantalainen

Causal inference for epidemiological research (level 3)

Dates: 2023-11-20--2023-11-24, 1.5 HEC, course code 2416

This course aims to present causal theory and introduces how concepts and methods can be understood within a general methodological framework.

Course leader: Arvid Sjölander



Advanced course in SAS programming for health care data (level 3)

Dates: 2023-11-27--2023-12-01, 1.5 HEC, course code 2868

The purpose of this course is to give students with prior experience in SAS the foundation needed to work independently with large data bases in SAS, performing the data management needed for observational studies from for instance a register linkage.

Course leader: Thomas Frisell

Applied longitudinal data analysis (level 4)

Dates: 2023-11-29--2023-12-06, 2.5 HEC, course code 2798

The course gives an introduction to modern methods for the analysis of longitudinal and repeated measures studies which are commonly used in epidemiological studies and in clinical trials.

Course leader: Rino Bellocco

Epidemiology II. Design of epidemiological studies (level 2)

Dates: 2023-12-07--2023-12-15, 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