

### Doctoral Programme in Epidemiology - courses fall semester 2022

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

## Fundamentals of Stata Language (level 1)

Dates: 2022-09-12--2022-09-16, 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

### Biostatistics II: Logistic regression for epidemiologists (level 2)

Dates: 2022-09-19--2022-09-23, 1.5 HEC, course code 5314

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

Course leader: Nicola Orsini

## **Epidemiology I: Introduction to epidemiology** (level 1)

Dates: 2022-09-26--2022-10-05, 1.5 HEC, course code 3041

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

Course leader: Zheng Chang

### Fundamentals of Python language for researchers in medical science (level 3)

Dates: 2022-10-17--2022-10-21, 1.5 HEC, course code 5316

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

Course leader: Nicola Orsini

## Causal inference for epidemiological research (level 3)

Dates: 2022-10-24--2022-10-28, 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

# Biostatistics III: Survival analysis for epidemiologists (level 3)

Dates: 2022-11-07--2022-11-16, 1.5 HEC, course code 2992

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

Course leader: Mark Clements

# Extensions to the design and analysis of controlled epidemiological studies (level 4)

Dates: 2022-11-16--2022-11-25, 1.5 HEC, course code 5577

This course aims to enable practicing epidemiologists to make more efficient use of already-available epidemiological data, and to design studies that are more efficient and that will extend possibilities for future analysis.

Course leader: Marie Reilly

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

Dates: 2022-11-28--2022-12-02, 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

# **Epidemiology II. Design of epidemiological studies** (level 2)

Dates: 2022-12-05--2022-12-14, 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