



PhD Course

EPIDEMIOLOGY AND ECONOMICS

Block course:

27.11.2017: 10:00 am - 05:00 pm 28.11.2017: 10:00 am - 05:00 pm 29.11.2017: 10:00 am - 05:00 pm 30.11.2017: 10:00 am - 05:00 pm **Classroom:** 5B3SR01 (Via Roentgen, 1; Fifth floor)

Course Instructor: Dr. Simone Ghislandi

Course Value: 5 ECTS

Course Overview: This course provides an introduction into Epidemiology for economists. We focus on the most commonly used models, and provide examples for their application.

Topics: We will cover the basic concepts in epidemiology that can be useful for economists working in the broad area of health. The course is divided in three parts. First we will introduce the basic measures of occurrence and effect. We will focus in particular on the difference between rates and ratios, between incidence and prevalence and on the main approaches to calculate these measures. Second we will introduce and analyze the study design and conduct in epidemiology, focusing on cohort studies and case control studies. Third, students will be invited to structure a presentation on a general epidemiologic topic assigned in class the day of the first meeting.

Prerequisits: We will make use of some statistical concepts including random variables, conditional expectations, as well as inference. Familiarity with non linear models like Poisson and Cox regressions could also help. The reference computer package is STATA.

General literature: Kenneth Rothman, Sander Greenland and Timothy Lash. "Modern Epidemiology". Lippincott Williams and Wilkins, Third edition

Assessment: Students will have to present a general topic in class and they will have to complete a take-home assignment.

Teaching language: English