

COURSE OUTLINE: POPULATION HEALTH

Course coordinator: Yana Vierboom

Instructor: Various

Start date: Nov. 18, 2019

End date: Nov. 29, 2019

Course description

This two-week course introduces key substantive and methodological topics in population health. The first week will cover substantive areas, including mortality trends, differentials by socio-economic status, early life influences on adult health, and health behaviors. During the second week, students are introduced to methodological approaches and innovations in studying population health, including methods for estimating causality, multistate modeling, advances in forecasting, and epidemiological research designs.

Organization

Each day covers one topic, and is taught by an expert in that specific topic. Teaching days typically consist of morning lectures (10:30 - 12:00) and afternoon sessions (14:00 – 16:00). Depending on the instructor, the format of the afternoon sessions may be lectures, labs, or discussions.

Topics and lecturers

Week 1

- Mortality trends (Enrique Acosta)
- SES and health (Rasmus Hoffmann)
- Cognitive ageing (Jo Mhairi Hale)
- Early life exposures and health (Kieron Barclay & Nicolas Todd)
- Health behaviors (Yana Vierboom & Nicolas Todd)

Week 2

- Design of epidemiological studies (Anna Oksuzyan)
- Health expectancies and multistate modeling (Tim Riffe)
- Forecasting mortality (Christina Bohk-Ewald)
- Causality I (Peter Eibich)
- Causality II (Maarten Bijlsma)

Course prerequisites

Some lectures may include a lab component. Students should possess knowledge of a statistical program language, such as R or Stata. Students may use their own laptops or the desktop computers provided by the MPIDR.

Examination

Attendance and completion of the assigned readings.

General readings

To be announced. Instructors will typically assign one or two core readings, and several optional readings to develop a deeper understanding of the topic.