



PhD Course

EXPERIMENTAL DESIGN in HEALTH ECONOMICS & POLICY

Block course:

19.03.2018: 10:00 am - 05.00 pm

20.03.2018: 10:00 am - 05.00 pm

21.03.2018: 10:00 am - 05.00 pm

22.03.2018: 10:00 am - 05.00 pm

Classroom: tba

Main Instructor: Aleksandra Torbica

Course Value: 5 ECTS

Course Overview: The use of experimental studies in health service research evolved over time and has expanded its scope. The experimental study designs traditionally used in medicine (notably randomized clinical trials commonly associated with drugs and devices) are increasingly applied to address a wide range of health economics and health policy-related concerns. Experimental studies can be used to investigate health and economic impact of healthcare technologies, but also innovations in the delivery of services, different health policies as well as patient, provider and policy makers' behaviors. The course is aimed for students interested in research that employs tools of experimental design to understand and critically appraise various issues in health economics and health policy fields. It also aims to give insights to students on experimental design issues from different disciplinary perspectives (epidemiology, statistics, economics).

This course will provide students with the fundamentals in the design of experimental studies of different types (i.e. randomized studies, field and lab experiments, discrete choice experiments). The course aims at familiarizing the students with the concrete application of experimental methodologies, giving them the opportunity to experience for themselves the strengths and weaknesses of such approaches. The course, therefore, will entail traditional lectures, the discussion of scholarly papers, guest lectures and examples of evaluations conducted with the methodologies discussed.

Monday 19.03.2018

10:00 – 13:00	Introduction and course overview <ul style="list-style-type: none">- Experiments in health economics and policy: rationale- Comparison to other design used in health service research- Overview of applications of experimental studies in health economics and policy
14:00 – 17:00	<i>Prof Simone Ghislandi</i> Using experimental design to evaluate health policy: class discussion on most notable experimental studies in health policy research



Tuesday 20.03.2018

10:00 – 13:00	<p>Prof. Marco Bonetti</p> <p>Experimental design for evaluation in health: overview of different randomization methods:</p> <ul style="list-style-type: none"> - Simple - Constrained - Adaptive
14:00 – 17:00	<p>Main elements of experimental study design:</p> <ul style="list-style-type: none"> - defining a protocol - calculating sample size - monitoring enrollment <p>Group work</p>

Wednesday 21.03.2018

10:00 – 13:00	<p>Running randomized experiments for policy evaluation in health (and beyond): opportunities and challenges</p> <ul style="list-style-type: none"> - Experimental designs with random assignment: overview of theory and econometrics - Running randomized studies to evaluate policy: practical challenges (ethics, recruitment, treatment implementation, attrition) - Financial implications (budget) <p><i>Guest lecturer: Prof Lucia Corno</i></p>
14:00 – 17:00	<p>Use of randomized experiments in health economics and health policy research: class discussion on case studies</p> <p>Group work</p>

Thursday 22.03.2018

10:00 – 13:00	<p>Discrete Choice Experiments in health economics research</p> <ul style="list-style-type: none"> - what are they and their application in health economics? - conducting a DCE: choice of attributes, dimensions and choice format - experimental design: general issues - overview of discrete choice modelling techniques
14:00 – 17:00	<ul style="list-style-type: none"> - Student presentation of research proposal

General literature: All reading material will be provided during the course.

Assessment: Students are assessed on the basis of following elements:

(i) in class presentation (30%)

(ii) submission of a research idea in the field of experimental health economics/policy (70%) (including review of related literature, hypotheses, description of the intended experimental design, feasibility issues and budget)

Teaching language: English