## **Methods for Evaluating Policies 2**

## Prof. Luca Stella

***COURSE AIMS AND INTENDED LEARNING OUTCOMES***

This 40-hour module is delivered in semester 2. The module aims to introduce students to policy-evaluation techniques, particularly those that take a counterfactual approach. More specifically, students will be equipped to reflect on the notion of policy effect and understand which hypotheses are required to obtain an estimate. The lecturer will use simulated exercises to illustrate these techniques, and software (spreadsheets and STATA) to demonstrate the use of counterfactual techniques.

*Knowledge and understanding*

At the end of this module, students will be able to interpret and understand the implications of policy-effect estimations in policy evaluation reports, being aware of the techniques used, the underlying hypotheses and the types of data required. In particular, students will acquire thorough knowledge of the controlled experiment method, and of the steps required to implement it.

*Ability to apply knowledge and understanding*

Not only will students be able to accurately interpret the findings of an impact evaluation, but, above all, they will be able to evaluate their credibility, identifying the underlying hypotheses and critically evaluating whether it is possible to diminish their reach. Moreover, by using appropriate commands in STATA, students will be able to generate their own empirical policy-evaluation analyses. Finally, students will be able to conduct all phases of a controlled experiment, applying the methods required successfully.

***COURSE CONTENT***

The course will demonstrate the various interpretations of the term “evaluation” and will focus on the concept of policy effect. Continuing from Module 1, students will use regression to estimate policy effect, exploring key aspects of causal inference and statistical inference in the context of impact evaluation. Next, the course will demonstrate the counterfactual approach to estimating policy effects and will examine the various available estimation techniques, identifying their advantages and limitations, as well as their conditions of applicability. In particular, the course will focus on the credibility of the necessary hypotheses and requisite data for each technique.

Ample time will be dedicated to controlled experimentation, as a benchmark for the other counterfactual evaluation techniques. After reviewing the various methods for estimating policy effect, and examples of their use, the course will examine the evidence-based policy paradigm.

***READING LIST***

In addition to the notes taken during the lectures and the practical activities in the Laboratory, students are advised to study a selection of chapters from the following textbooks:

A. Martini-M. Sisti, *Valutare il successo delle politiche pubbliche,* Il Mulino, Bologna, 2012.

P.J. Gertler Et Alii (2011), *Impact evaluation in practice,* Washington DC: The World Bank. The pdf file can be downloaded for free at the following link:

<https://openknowledge.worldbank.org/handle/10986/2550>.

Further recommended readings:

J.H. Stock-M.W. Watson, *Introduzione all’econometria*, Pearson, Prentice Hall, 2016, 4th edition.

A. Martini-U. Trivellato, *Sono soldi ben spesi? Perchè e come valutare l’efficacia*

*delle politiche pubbliche,* Marsilio, Venice, 2011.

Further information on the reading list and additional teaching material will be indicated in class and made available on Blackboard, so students are strongly invited to study it.

***TEACHING METHOD***

The course will be taught through frontal lectures, including slide presentations, which will be shared with students, along with Stata syntax. The course will make use of the Blackboard platform, with the relevant lecture slides uploaded on a weekly basis. Please note that the lecture slides alone do not constitute sufficient preparation for the exam.

***ASSESSMENT METHOD AND CRITERIA***

The final mark will result from the weighted average between the written exam (67%) and the project work (33%).

The first part of the exam will be based on a written exam including closed-ended and open-ended theoretical questions aimed to test the knowledge of impact assessment techniques. The second part of the exam will consist in a project work, aimed to test the knowledge of STATA, and the ability to put into practice the methods presented in class. The project work must be submitted on Blackboard before the official exam date in which students intend to take the written exam. Further and detailed information on the workshop and the content of the project work will be made available at the beginning of the course.

 Students will be allowed to take the assessment starting from June 2021, after registering to the official exam on I-catt.

Further information on the written exam (if it is going to be a face-to-face or a remote assessment) will be made available during the course (as soon as the health emergency situation is stable).

***NOTES AND PREREQUISITES***

The basic knowledge of statistics and econometrics – acquired during Module 1 – is a prerequisite for this course, especially in terms of: descriptive statistics, inferential statistics and the uncertainty of estimations, the OLS regression model, and nonlinear regression models.

In order to be allowed to take the Module 2 exam, students will have to pass the one at the end of Module 1.

Further information can be found on the lecturer's webpage at http://docenti.unicatt.it/web/searchByName.do?language=ENG or on the Faculty notice board.