Course Description Form - HYIE001 -

GENERAL DESCRIPTION

**Professor:** Milovich, Juliana – juliana-yael.milovich@sorbonne-nouvelle.fr

**Course title:** Impact evaluation of public policies [2022-2023]
**Monday, 16h00-18h00 (Room Rivet)**

**Language of instruction:** English
**Semester:** Fall Semester

Lectures will be taught in-person and online: in-person lectures will be taught in a 4-hour format, joining two lectures the same day; online session will be taught in a 2-hour format.

**Timetable of the lectures (provisional)**
19th September: no lecture
26th September, 16h00-20h00: Lecture 1 & Lecture 2 (in-person)
3rd October, 16h00-20h00: Lecture 3 & Lecture 4 (in-person)
10th October: Lecture 5 (online)
17th October: Lecture 6 (online)
24th October: Lecture 7 (online)
31st October: Lecture 8 (online)
7th November: Lecture 9 & Lecture 10 (in-person)
14th November: no lecture
21st November: no lecture
28th November: no lecture
5th or 12th December (TBC): Lecture 11 & Lecture 12 (in-person)

**Course description – Aims of the course:**
Public policy is being reshaped, guided by a growing global trend marked by a shift in focus from measuring and analysing the inputs of a program – for instance, how much money is spent, how many school materials are distributed, or how many children participate in a nutritional intervention – to assessing the differences in outcomes as a result of an intervention – such as raising incomes, stimulate cognitive abilities, or improve nutritional health.

In this sense, impact evaluations seek to answer a basic question: what is the impact or causal effect of an intervention on an outcome of interest? This can be applied to many contexts in social sciences: what is the causal effect of a maternity leave policy? If natural resources are extracted by contaminating rivers and lands, what will be the impact on food security? Does pre-school education contributes to improve children’s social, emotional and physical development, and if so, how much? Answering these questions enables to provide convincing and comprehensive evidence that could be used to inform policy, shape public opinion, and improve program design.

Different methodologies can be used, according to the approach to address the causal-and-effect question. This course will provide a detailed understanding of impact evaluations in practice and the main
methodologies that can be implemented. In particular, the course will focus on randomized assignment, instrumental variables, regression discontinuity design, differences-in-differences, and matching. The course will present advantages and disadvantages of each approach. Each empirical method will be presented and illustrated using applications in the areas of labor, health, education, development and political economy. Tutorials and laboratory sessions, in which students can apply the techniques using micro-econometric software packages, could complete the course.

**Knowledge, skills and understanding:**
- Acquire skills and knowledge of the main methods that have been developed to estimate the causal impact on one or more outcomes of interest of any intervention (particular focus in Latin America and the Caribbean region)
- Learn to apply the appropriate techniques through case studies from development economics.

**Course Pre-requirements:**
- Take the courses of Initiation to MQSS and/or MQSS, taught during the same semester, is highly recommended. Both courses complement each other and the understanding of the content of each course would be reinforced.
- Some (basic) knowledge on Statistics and/or Econometrics could be helpful. Students without this knowledge are invited to follow the course, but will require some additional effort to understand some specific technical notations.

Having said this, during previous years, some of the students who got the highest grades, were those who didn't have previous knowledge on Statistics, but followed the MQSS course and dedicated themselves intensively to the course.
- For the last lectures, which will be done using the software Stata to empirically apply the methods, basic knowledge on Stata would be helpful. But if not, this knowledge will most likely be learned in the MQSS courses. Stata is available in the computers located in the computer room of the building.

**Course requirements (grading & assessment):**
Grades will be calculated as follows:

- **(Team) Research project: 50%**

Submission via email  
**Deadline for submission: Friday 16th December 2022 at midnight**

It must be written in no more than 5 pages (bibliography included). Preferably in English but the language shouldn’t be a constraint or an additional difficulty, rather a useful skill to develop. If you feel more comfortable writing in French, Spanish or Portuguese, you can do it so.

This project could be done individually or as a team group of 2 persons. If you work on it as a team, it would be advisable that both team members have similar research interests. Any research project takes time to disentangle and write. Therefore, you are encouraged to start working on it from the beginning of the course.

You can choose among the following options:

- Use the project of this course as a beginning to start developing the main document of your Master Thesis.
- Or you could work on another different personal research project.
- Alternatively, in case you may have a personal research project that doesn't involve using the methodologies nor the content that we learn in this course, I suggest you search for interventions (policies, programs, or projects) on a topic of your interest, that has taken
place/is currently taking place in the Latin American region or any country within the region.

Whichever option you choose is up to you and, irrespective of your choice, here below you have a suggested structure and the main points that you will need to cover.

As a suggestion, the content of this project could be structured as follows:

- Introduction
- The intervention: description of the policy, program, project you are interest in evaluating its impact
- Evaluation design:
  - Data
  - Methodology
  - Estimated equation (optional)
- Expected main results
- Expected policy impact & Conclusions
- References

Feel free to include graphs and tables whenever you consider they could be useful to illustrate your development.

The following questions/steps could help you guide the development of your research and the information your research project should include:

- What is the research question (description of the intervention and motivation)?
- Why is it relevant (context, existing literature, contribution of the research)?
- How is the research question answered (methodology)?
- How is the evaluation designed (design of the data collection, description of data, empirical strategy/estimated equation)?
- Which are the main findings?
- Which is the policy impact?

If you encounter any difficulties or you would like to exchange on your research project, please do not hesitate to let me know. When possible, you will be given space and time to work on it at the end of each lecture.

- **Team presentation of a paper in class: 50%**

Presentations will be organized during Sessions 11 & 12: 4 presentations per session

This team project will contribute to enhance your comprehension and analysis of a research article -- useful to learn about the research that has been carried out on the topic, stimulate inspiration and ideas for your own research and reflect on how your research could contribute --, while developing group work skills.

It is to be done as a team group of 2-3 persons and you are encouraged to choose together the paper that is of interest of both team members. For instance, each team member could search for one article and then you could exchange and choose. If encountered any difficulties in finding a proper article, we could see together how to find one. When possible, you will also be given space and time to work on it at the end of each lecture.
As a suggestion, the structure of the presentation could be as follows:

- What is the research question (description of the intervention and motivation)?
- Why is it relevant (context, existing literature, contribution of the research)?
- How is the research question answered (methodology)?
- How is the evaluation designed (design of the data collection, description of data, empirical strategy/estimated equation)?
- Which are the main findings?
- Which is the policy impact?

The presentation needs to be done in no more than 10-15 minutes, to leave 5-10 minutes for questions and discussion. In total, each group will have a slot of 20 minutes. The preferred language for the presentation is English but this shouldn’t be a constraint or an additional difficulty, rather a useful skill to develop. If you feel more comfortable presenting in Spanish or in French, you can do it so.

**Course workload:**
Students are expected to read the required readings before each class and to actively participate in class discussions.

**Pedagogical format:**
The lectures are interactive. Theory and key concepts will be presented in lecture format. After each lecture, the presentation will be shared with you through iCampus.

For the online sessions, a specific link will be provided and uploaded into the iCampus platform.

**Readings:**
All readings will be shared with you before each lecture through iCampus.
The following readings will be used throughout the course:
- Scientific papers specified in the outline of the course.

**Course Outline (provisional)**

**Lecture 1&2: Why evaluate? What is impact evaluation?**
Presentation of the semester.
Required reading:
Chapter 1 in: Gertler et al., *Impact evaluation in practice.*

Suggested readings:

**Lecture 3: How to evaluate? How to implement an impact evaluation?**
Required reading:
Chapter 3 in: Gertler et al., Impact evaluation in practice.

Suggested reading:

Optional reading:

Lecture 4: Randomized assignment
Required reading:
Chapter 4 in: Gertler et al., Impact evaluation in practice.

Optional reading:

Additional material:
https://vimeo.com/86744573

Lecture 5: Observational Setting and Natural Experiments
Required reading:

Suggested reading:

Lecture 6: Instrumental Variables
Required reading:
Chapter 5 (pp. 89-100) in: Gertler et al., Impact evaluation in practice.

Suggested readings:


Optional reading:

Lecture 7: Difference-in-Difference
Required readings:
Chapter 7 in: Gertler et al., *Impact evaluation in practice*.

Suggested readings:

**Lecture 8: Matching**
Required readings:
Chapter 8 in: Gertler et al., *Impact evaluation in practice*.

Suggested readings:

**Lecture 9 & 10: Tutorials and laboratory sessions**
Apply methods using publicly available data and the software Stata

**Sessions 11 & 12:**
Oral presentations