

1. Caracterização da Unidade Curricular

1.1. Designação da unidade curricular

Title of curricular unit:

Policy Evaluation (taught in English)

1.2. Sigla da área científica em que se insere

Acronym of scientific area:

Economia Pública e do Bem-Estar

1.3. Duração

Duration:

1 semestre

1.4. Horas de trabalho

Work hours:

160

1.5. Horas de contacto

Contact hours:

3h /week

1.6. ECTS

ECTS

6

1.7. Observações

Observations:

NA

2. Docente responsável e respetiva carga letiva na Unidade Curricular (preencher o nome completo).

Responsible teaching staff member and lecturing load in the curricular unit (fill in the fullname):

3.Outros docentes e respectivas cargas letivas na unidade curricular.

Other teaching staff and lecturing load in the curricular unit:

NA

4. Objetivos de aprendizagem (conhecimentos, aptidões e competências a desenvolver pelos estudantes).

Learning outcomes of the curricular unit:

Policy Evaluation introduces students to the foundations of public policy design. Students will learn methods that allow establishing causal inference between exposure to programs and public policies with their outcomes, as well as the importance of behavioural science in the promotion and design of public policies in different areas such as health, education, social security, taxation, and the environment. This discipline has two main objectives: 1) a broad understanding of various social and economic issues that policymakers face, and 2) obtaining essential tools for future public policy researchers, as well as for policymakers, program managers, consultants, and advisors so that public policies are designed, implemented, and evaluated efficiently and effectively.

This course is designed to give students the opportunity to choose, according to their own academic and professional interests, the topics they want to delve into. For each topic/lecture, a more specialized complementary bibliography will be indicated. This bibliography can be read individually or in groups through the creation of "reading and discussion groups" that enhance understanding and discussion of the topics.

This discipline uses recent empirical examples from studies published in the most prestigious international scientific journals to motivate the use of (quasi-) experimental frontier scientific methods in the evaluation of public policies. These real-world policy applications will be presented in a non-technical and analytical manner. In this context, the course will provide an introduction to basic methods in data science, including regression, causal inference, and machine learning.

Without neglecting economic theory and in-depth knowledge of institutional details, the goal is to estimate the causal impact of events and choices on a specific outcome of interest. The increase in computing power, the advent of big data, and new statistical and econometric

techniques have given a new impetus to our better understanding of the effects of public policies.

This discipline will take into account the importance of behavioural science in the design, implementation, and evaluation of public policies. We will also familiarize ourselves with concepts such as nudges. Finally, we will address recent methods for calculating the cost-benefit of different policies.

The course will use Stata software to showcase the main methods, but R and Python are also accepted in the evaluation components.

5. Conteúdos programáticos.

Syllabus:

Topic 1 (Classes 1 and 2):

Part I: Why are Big Data and administrative micro-data transforming the evaluation of public policies? The importance of doing evaluation. The differences between monitoring and conducting proper impact evaluation. Introduction to the Experimental Methodology and to Randomized Controlled Trials (RCTs).

Part II: Basic concepts in experimental design and procedures to consider in the implementation. Using RCTs to study perceptions, knowledge and beliefs, attitudes, and reasoning. Problems and limitations of this method.

Topic 2 (Classes 3 and 4): What to do when randomization is not possible or ethically acceptable? Difference-in-differences (DiD): Introduction, Main assumptions, Staggered interventions. Running examples: The importance of geographical context (Place-based policies); the child penalty.

Topic 3 (Class 5): Introduction to Regression Discontinuity Designs. Main assumptions. Running examples: Impact of attending elite universities; public policies and political support.

Topic 4 (Class 6): Saliency, enforcement, incidence, and asymmetry issues when designing public policy.

Topic 5 (Class 7): Introduction to Synthetic Control Methods and Synthetic DiD. Running examples: How can taxes and other public policies be designed and implemented to discourage socially harmful behaviours and negative externalities such as pollution? Pigouvian taxes and sin taxes.

Topic 6 (Class 8):

Bunching. Running example: Taxes on labor.

Topic 7 (Classes 9 and 10): Introduction to machine learning. Running example: Can computer assistance improve judicial decisions? Will these decisions be fairer, or do they raise technical and ethical issues?

Topic 8 (Classes 11 and 12): Essay presentations (research design)

Readings for each topic and lecture:

Topic 1 (Classes 1 and 2)

Essential applied readings:

- Bertrand, M., & Mullainathan, S. (2004). Are Emily and Greg more employable than Lakisha and Jamal? A field experiment on labor market discrimination. *American Economic Review*, 94(4), 991-1013.
- Alesina, Alberto, Armando Miano, and Stefanie Stantcheva. (2023). "Immigration and redistribution." *The Review of Economic Studies* 90(1): 1-39.

Methods readings:

- Course book Chapters 1-4.

- Stantcheva, S. (2023). How to run surveys: A guide to creating your own identifying variation and revealing the invisible. *Annual Review of Economics*, 15, 205-234

Topic 2 (Classes 3 and 4)

Essential applied readings:

- Chetty, R., Hendren, N., & Katz, L. F. (2016). The effects of exposure to better neighborhoods on children: New evidence from the moving to opportunity experiment. *American Economic Review*, 106(4), 855-902.
- Card, David, and Alan B. Krueger. (1994). "Minimum Wages and Employment: A Case Study of the Fast-Food Industry in New Jersey and Pennsylvania." *American Economic Review* 90 (5): 1397–1420.
- Kleven, Henrik, Camille Landais, and Jakob Egholt Sogaard. (2019). "Children and gender inequality: Evidence from Denmark." *American Economic Journal: Applied Economics* 11(4): 181-209.

Methods readings:

- Course book Chapters 5, 8-9
- Roth, J., Sant'Anna, P. H., Bilinski, A., & Poe, J. (2023). What's trending in difference-in-differences? A synthesis of the recent econometrics literature. *Journal of Econometrics*, 235(2), 2218-2244).

Topic 3 (Class 5)

Essential applied readings:

- Hoekstra, Mark. (2009). "The effect of attending the flagship state university on earnings: A discontinuity-based approach." *The Review of Economics and Statistics* 91(4): 717-724.
- Manacorda, Marco, Edward Miguel, and Andrea Vigorito. (2011). "Government Transfers and Political Support." *American Economic Journal: Applied Economics* 3 (3): 1–28.

Methods readings:

- Course book Chapters 6

- Cattaneo, Matias D., and Rocio Titiunik. (2022). "Regression discontinuity designs." *Annual Review of Economics* 14, no. 1: 821-851.

Topic 4 (Class 6)

Essential applied readings:

- Chetty, R., Looney, A., & Kroft, K. (2009). Salience and taxation: Theory and evidence. *American Economic Review*, 99(4), 1145-1177
- Benzarti, Y., Carloni, D., Harju, J., & Kosonen, T. (2020). What goes up may not come down: asymmetric incidence of value-added taxes. *Journal of Political Economy*, 128(12), 4438-4474.

Topic 5 (Class 7)

Essential applied readings:

- Abadie, A., Diamond, A., & Hainmueller, J. (2010). "Synthetic control methods for comparative case studies: Estimating the effect of California's tobacco control program." *Journal of the American Statistical Association*, 105(490), 493-505.

Methods readings:

- Course book Chapter 10
- Abadie, A. (2021). "Using synthetic controls: Feasibility, data requirements, and methodological aspects." *Journal of Economic Literature*, 59(2), 391-425.
- Arkhangelsky, Dmitry, Susan Athey, David A. Hirshberg, Guido W. Imbens, and Stefan Wager. (2021) "Synthetic difference-in-differences." *American Economic Review* 111(12): 4088-4118.

Topic 6 (Class 8):

Essential applied readings:

- Saez, E. (2010). "Do taxpayers bunch at kink points?" *American Economic Journal: Economic Policy*, 2(3), 180-212.

- Kleven, H. J., Landais, C., & Saez, E. (2013). “Taxation and international migration of superstars: Evidence from the European football market.” *American Economic Review*, 103(5), 1892-1924.
- Kleven, H. J., Knudsen, M. B., Kreiner, C. T., Pedersen, S., & Saez, E. (2011). Unwilling or unable to cheat? Evidence from a tax audit experiment in Denmark. *Econometrica*, 79(3), 651-692

Methods readings:

- Kleven, H. (2016). “Bunching.” *Annual Review of Economics*, 8, 435-464

Topic 7 (Classes 9 and 10)

Essential applied readings:

- Kleinberg, J., Lakkaraju, H., Leskovec, J., Ludwig, J., & Mullainathan, S. (2018). “Human decisions and machine predictions.” *The Quarterly Journal of Economics*, 133(1), 237-293.

Methods readings:

- Athey, Susan and Imbens, Guido W (2019). “Machine Learning Methods That Economists Should Know About.” *Annual Review of Economics*, 11(1), 685-725).

Topic 8 (Classes 11 and 12): Essay presentations (research design) (see evaluation).

6. Demonstração da coerência dos conteúdos programáticos com os objetivos de aprendizagem da unidade curricular.

Demonstration of the syllabus coherence with the curricular unit's learning objectives.

The course follows a theory-practice-policy approach by presenting economic models to students together with existing empirical evidence and policy discussions.

The learning materials include empirical academic papers provided to students throughout the term. In addition to the pre-class readings and in-class discussions, students will carry out a research project using real-world data to study current problems and propose policy recommendations.

The objectives are as follows:

- Understand the reasons for the intervention of the State in the economy;
- Learn the importance of evaluating public policies with rigorous scientific methods, applying basic knowledge of experimental design;
- Distinguish studies with correlations from studies concerned with assessing causal effects;
- Understand the relevance of micro data to evaluate the effects of public policies on different economic agents;
- Perceive the response and incentives of economic agents to government actions in real-world applications;
- Learn about cognitive and emotional biases and how individuals use heuristics in the decision-making process;
- Encourage the consumption and production of specialized literature as an essential tool in the decision-making process.

7. Metodologias de ensino (avaliação incluída).

Teaching methodologies (including evaluation):

The teaching approach will strive to integrate, whenever possible, the exposition of concepts and theories with methodological analysis based on real cases of implementation and evaluation of public policies. Lecture slides will be made available on the course page on FÉNIX. Attendance and active participation in the majority of classes are expected from students.

To encourage participation in the assessment, the evaluation during the regular period will consist of:

- **12min Individual in-class presentation of a recently published research paper from a scientific journal** (list below), followed by discussion, worth **25% of the final grade**

This should include:

- (i) the research question, explaining why this policy is important and why it should be studied (why is this paper better/ different than others in the literature?);
- (ii) the data and method(s) – theory components of the papers are not relevant
- (iii) main results and robustness checks

Bonus: Limitations.

- **12min Group in-class presentation of a research project** (2/3 students), followed by discussion, in the last week of the term: **25% of the final grade.**

This should include:

- (i) a relevant research question related to the evaluation of a real public policy, explaining why this policy is important and why it should be studied (including a brief review of the literature);
 - (ii) an evaluation design, with an explanation of the data and method(s)
 - (iii) potential limitations of the proposed approach.
- **Written final exam: 50% of the grade.**

8. Demonstração da coerência das metodologias de ensino com os objetivos de aprendizagem da unidade curricular.

Demonstration of the coherence between the teaching methodologies and the learning outcomes.

The teaching approach aims at promoting students' views on the topics and problems covered in the module from an applied, evidence-based and policy-oriented perspective. This allows students to learn about the models presented in a more critical and realistic way by combining active discussion of empirical evidence and urban policies with applied group research focused on current policy problems.

9. Bibliografia de consulta/existência obrigatória.

Bibliography (Mandatory resources):

Survey papers covering the course material– More advanced:

Allcott, H., Lockwood, B. B., & Taubinsky, D. (2019). Should we tax sugar-sweetened beverages? An overview of theory and evidence. *Journal of Economic Perspectives*, 33(3), 202-27.

Kleven, H., Landaís, C., Munoz, M., & Stantcheva, S. (2020). Taxation and migration: Evidence and policy implications. *Journal of Economic Perspectives*, 34(2), 119-142.

Kleven, H. J. (2014). How can Scandinavians tax so much? *Journal of Economic Perspectives*, 28(4), 77-98.

Kahneman, D. (2011). *Thinking, Fast and Slow*. London, Allen Lane

List of possible paper to be discussed in class:

RCTs

- Haaland, Ingar and Christopher Roth. (2020). "Labor market concerns and support for immigration" *Journal of Public Economics*, 2020, 191, 104256.
- Stantcheva, Stefanie. (2021). "Understanding tax policy: How do people reason?" *The Quarterly Journal of Economics*, 136(4), 2309-2369.
- Ali, A. and Qazi, I.A. (2023) 'Countering misinformation on social media through educational interventions: Evidence from a randomized experiment in Pakistan', *Journal of Development Economics*, 163, 103108.
- Yu, H. (2023) 'Social stigma as a barrier to HIV testing: Evidence from a randomized experiment in Mozambique', *Journal of Development Economics*, 161, 103035.
- Cortés, P., Pan, J., Pilossoph, L., Reuben, E. and Zafar, B. (2023) 'Gender differences in job search and the earnings gap: Evidence from the field and lab', *The Quarterly Journal of Economics*, 138(4), pp. 2069–2126.
- Bursztyn, L., Egorov, G., Haaland, I., Rao, A. and Roth, C. (2023) 'Justifying dissent', *The Quarterly Journal of Economics*, 138(3), pp. 1403–1451.
- Bursztyn, L., Fiorin, S., Gottlieb, D. and Kanz, M. (2019) 'Moral incentives in credit card debt repayment: Evidence from a field experiment', *Journal of Political Economy*, 127(4), pp. 1641–1683.
- Bursztyn, L., Callen, M., Ferman, B., Gulzar, S., Hasanain, A. and Yuchtman, N. (2020) 'Political identity: Experimental evidence on anti-Americanism in Pakistan', *Journal of the European Economic Association*, 18(5), pp. 2532–2560.
- Armona, L., Fuster, A. and Zafar, B. (2019) 'Home price expectations and behaviour: Evidence from a randomized information experiment', *The Review of Economic Studies*, 86(4), pp. 1371–1410.
- Coibion, O., Gorodnichenko, Y. & Weber, M. (2022) 'Monetary Policy Communications and Their Effects on Household Inflation Expectations', *Journal of Political Economy*, 130(6), pp. 1537–1584.

- Ganimian, A.J., Muralidharan, K. & Walters, C.R. (2024) ‘Augmenting State Capacity for Child Development: Experimental Evidence from India’, *Journal of Political Economy*, 132(5), pp. 1565–1602.
- Resnjanskij, S., Ruhose, J., Wiederhold, S., Woessmann, L. & Wedel, K. (2024) ‘Can Mentoring Alleviate Family Disadvantage in Adolescence? A Field Experiment to Improve Labor-Market Prospects’, *Journal of Political Economy*, 132(3), pp. 1013–1062.
- Anderson, S.J. and McKenzie, D., 2022. Improving business practices and the boundary of the entrepreneur: A randomized experiment comparing training, consulting, insourcing, and outsourcing. *Journal of Political Economy*, 130(1), 157-209.

Difference-in-differences

- Diamond, R., McQuade, T. and Qian, F. (2019) ‘The effects of rent control expansion on tenants, landlords, and inequality: Evidence from San Francisco’, *American Economic Review*, 109(9), pp. 3365–3394.
- Lu, Y., Wang, J. and Zhu, L. (2019) ‘Place-Based Policies, Creation, and Agglomeration Economies: Evidence from China’s Economic Zone Program’, *American Economic Journal: Economic Policy*, 11(3), pp. 325–360.
- Galdon-Sanchez, J.E., Gil, R., Holub, F. & Uriz-Uharte, G. (2023) ‘Social Benefits and Private Costs of Driving Restriction Policies: The Impact of Madrid Central on Congestion, Pollution, and Consumer Spending’, *Journal of the European Economic Association*, 21(3), pp. 1227–1267.
- Halla, M., Schmieder, J. and Weber, A. (2020) ‘Job Displacement, Family Dynamics, and Spousal Labor Supply’, *American Economic Journal: Applied Economics*, 12(4), pp. 253–287.
- Cunningham, S. and Shah, M. (2018) ‘Decriminalizing Indoor Prostitution: Implications for Sexual Violence and Public Health’, *Review of Economic Studies*, 85(3), pp. 1683–1715.
- Jones, D. and Marinescu, I. (2022) ‘The labor market impacts of universal and permanent cash transfers: Evidence from the Alaska Permanent Fund’, *American Economic Journal: Economic Policy*, 14(2), pp. 315–340.

- Funke, M., Schularick, M. and Trebesch, C. (2023) ‘Populist leaders and the economy’, *American Economic Review*, 113(12), pp. 3249–3288.
- Dench, D., Pineda-Torres, M. and Myers, C. (2024) ‘The effects of post-Dobbs abortion bans on fertility’, *Journal of Public Economics*, 234, 105124.
- Martinez, I.Z., Saez, E. and Siegenthaler, M. (2021) ‘Intertemporal labor supply substitution? Evidence from the Swiss income tax holidays’, *American Economic Review*, 111(2), pp. 506–546.
- Gruber, J., Jensen, A. and Kleven, H. (2021) ‘Do People Respond to the Mortgage Interest Deduction? Quasi-experimental Evidence from Denmark’, *American Economic Journal: Economic Policy*, 13(2), pp. 273–303.
- Liu, Y. and Mao, J. (2019) ‘How do tax incentives affect investment and productivity? Firm-level evidence from China’, *American Economic Journal: Economic Policy*, 11(3), pp. 261–291.
- Agrawal, A., Rosell, C. and Simcoe, T. (2020) ‘Tax credits and small firm R&D spending’, *American Economic Journal: Economic Policy*, 12(2), pp. 1–21.
- Doran, K., Gelber, A. & Isen, A. (2022) ‘The Effects of High-Skilled Immigration Policy on Firms: Evidence from Visa Lotteries’, *Journal of Political Economy*, 130(10).

Regression Discontinuity Design

- Li, B., Liu, C. and Sun, S.T. (2021) ‘Do corporate income tax cuts decrease labor share? Regression discontinuity evidence from China’, *Journal of Development Economics*, 150, 102624.
- Özek, U. (2021) ‘The effects of middle school remediation on postsecondary success: Regression discontinuity evidence from Florida’, *Journal of Public Economics*, 203, 104518.
- Kreiner, C.T., Reck, D. and Skov, P.E. (2020) ‘Do lower minimum wages for young workers raise their employment? Evidence from a Danish discontinuity’, *Review of Economics and Statistics*, 102(2), pp. 339–354.
- Abbate, N. and Jiménez, B., 2026. Do minimum wage hikes lead to employment destruction? Evidence from a regression discontinuity design in Argentina. *Journal of Development Economics*, 178, p.103558.

- Bosch, M. and Schady, N. (2019) ‘The effect of welfare payments on work: Regression discontinuity evidence from Ecuador’, *Journal of Development Economics*, 139, pp. 17–27.
- Canaan, S. and Mouganie, P. (2017) ‘Returns to education quality for low-skilled students: Evidence from a discontinuity’, *Journal of Labor Economics*, 36(2), 395–436.
- Chen, Y., Shi, S. and Tang, Y. (2019) ‘Valuing the urban hukou in China: Evidence from a regression discontinuity design for housing prices’, *Journal of Development Economics*, 141, 102381.

Bunching

- Slemrod, J., Weber, C. and Shan, H. (2017) ‘The behavioral response to housing transfer taxes: Evidence from a notched change in DC policy’, *Journal of Urban Economics*, 100, pp. 137–153.
- Harju, J., Matikka, T. and Rauhanen, T. (2019) ‘Compliance costs vs. tax incentives: Why do entrepreneurs respond to size-based regulations?’, *Journal of Public Economics*, 173, pp. 139–164.
- Dee, T.S., Dobbie, W., Jacob, B.A. and Rockoff, J. (2019) ‘The causes and consequences of test score manipulation: Evidence from the New York Regents Examinations’, *American Economic Journal: Applied Economics*, 11(3), pp. 382–423.
- Mavrokonstantis, P. & Seibold, A. (2022) ‘Bunching and Adjustment Costs: Evidence from Cypriot Tax Reforms’, *Journal of Public Economics*, 214, 104727.
- Bergolo, M., Burdin, G., De Rosa, M., Giacobasso, M. & Leites, M. (2021) ‘Digging Into the Channels of Bunching: Evidence from the Uruguayan Income Tax’, *The Economic Journal*, 131(639), pp. 2726–2762.

Synthetic control methods

- Ando, M. (2015) ‘Dreams of urbanization: Quantitative case studies on the local impacts of nuclear power facilities using the synthetic control method’, *Journal of Urban Economics*, 85, pp. 68–85.
- Bohn, S., Lofstrom, M. and Raphael, S. (2014) ‘Did the 2007 Legal Arizona Workers Act reduce the state’s unauthorized immigrant population?’, *The Review of Economics and Statistics*, 96(2), pp. 258–269.

- Depew, B. & Swensen, I. (2022) ‘The Effect of Concealed-Carry and Handgun Restrictions on Gun-Related Deaths: Evidence from the Sullivan Act of 1911’, *The Economic Journal*, 132(646), pp. 2118–2140.
- Bhalotra, S., Clarke, D., Gomes, J.F. & Venkataramani, A. (2023) ‘Maternal Mortality and Women’s Political Power’, *Journal of the European Economic Association*, 21(5), pp. 2172–2208.