

## Syllabus Module 208 A. Evaluation of Public Health Programs

<b>Module 208</b>	<b>: Evaluation of public health programs</b>
<b>UE coordinators</b>	Erin STRUMPF & Julien MOUSQUES
<b>Dates</b>	From November 29 <sup>th</sup> to December 3 <sup>rd</sup> 2021
<b>Credits/ECTS</b>	3 (1 ECTS = 30 h student's work)
<b>Duration</b>	Number of days: 5
<b>UE description</b>	<p>This course is designed to introduce students to major issues related to the evaluation of public policy (EPP) or intervention/program/strategies applied to Health Policy or Health Care Delivery or Health Technology including their impact.</p> <p>The course is recommended for students who have an interest in better understanding why and how EPP may be used and run. We will talk about resources allocation and utilization, opportunity costs, efficacy and effectiveness, efficiency and others.</p> <p>This course aims to equip students with basic methodological knowledge and research skills to be able to critically appraise evaluation research. In the context of the rise of evidence-based policy and call for accountability, the course is designed to extend students' abilities to use evaluative knowledge carefully and critically.</p> <p>The courses will mainly focus on Impact Evaluation based on positivist logic models (experimental and quasi-experimental design) but will also give a broader perspective with other significant contributions coming social sciences based on other models as the realist model, that crossed or combined qualitative and quantitative framework (Mixed Methods).</p> <p>The course will introduce students to some basic definition, concept, and design models. The course will also explore some economic and statistical methods that are commonly used to evaluate such policy, intervention or program and strategies and notably experimental (RCT, regression discontinuity) and quasi experimental design (group control and matching procedures, random and fixed effects, difference-in-differences estimates).</p> <p>Examples from the fields of health policy, intervention, program or strategies will be used throughout the lectures, and students assignment.</p>
<b>Prerequisites</b>	Core curriculum in Information Sciences and Biostatistics and in Epidemiology. Basic knowledge of Stata© or R statistical software. A liking for social sciences is a plus.

<p><b>Course learning objectives</b></p>	<p><u>Competencies</u></p> <p>We follow the Who/Aspher Competencies in Public Health Document: <a href="https://www.euro.who.int/_data/assets/pdf_file/0003/444576/WHO-ASPHER-Public-Health-Workforce-Europe-eng.pdf">https://www.euro.who.int/_data/assets/pdf_file/0003/444576/WHO-ASPHER-Public-Health-Workforce-Europe-eng.pdf</a></p> <ul style="list-style-type: none"> <li>• 1.3 Uses vital statistics and health indicators effectively to increase knowledge and generate evidence about population health, including within at-risk and vulnerable groups</li> <li>• 1.4 Knows how to retrieve, analyse and appraise evidence from all data sources to support decision-making</li> <li>• 1.7 Designs and conducts qualitative and/or quantitative research that builds on existing evidence and adds to the evidence base for public health practice, involving relevant stakeholders in this process</li> <li>• 1.8 Evaluates local public health services and interventions, applying sound methods based on recognized evaluation models</li> <li>• 8.10 Performs health economic evaluation and assessment of a given procedure, intervention, strategy or policy</li> </ul> <p><u>Learning objectives</u></p> <p>At the completion of the module, the students should be able to:</p> <ul style="list-style-type: none"> <li>• Identify the basic concepts that are used to evaluate policy, intervention, programs and strategies and valuing health and quality of life</li> <li>• Identify the strengths and weaknesses of research designs for the evaluation of interventions and policies</li> <li>• Critically appraise evaluation reports or articles or design evaluation studies protocol</li> <li>• Assess the strength of a body of evidence and its potential policy implications</li> </ul>
<p><b>UE Structure</b></p>	<p>Session 1 &amp; 3: Concepts, Methods and Purposes of evaluation research of program/intervention/policy applied to Health Policy and, Health Care Delivery, Julien Mousquès, November 29 &amp; December 01, 12 hours</p> <p>Session 2 &amp; 4: Evaluation of PH programs in Low &amp; Middle Income Countries (LMIC), &amp; statistical methods for evaluation, Erin Strumpf, Nov 30 &amp; December 02, 12 hours</p> <p>Session 5: Economic evaluation: How much is health worth? Erin Strumpf, December 02, 6 hours</p> <p>Paper reading, case studies are part of the sessions</p>
<p><b>Course requirement</b></p>	<p>Students are expected to attend all lectures and make individual &amp; by pair group works.</p> <p>Students will be expected to prepare class, participate actively and discuss some</p>

	issues related to methods studies and their application.
<b>Grading and assessment</b>	Individual in class assignment and homework: 40% of the final grade & Final test 60%.
<b>Location</b>	EHESP Building 20 Avenue George Sand, 93210 La Plaine Saint Denis (Greater Paris)
<b>Course policy</b>	<p>Attendance &amp; punctuality</p> <p>Regular and punctual class attendance is a prerequisite for receiving credit in a course. Students are expected to attend each class. Attendance will be taken at each class.</p> <p>The obligations of attendance and punctuality cover every aspect of the course: - lectures, conferences, group projects, assessments, examinations, as described in EHESP Academic Regulations <a href="http://mph.ehesp.fr">http://mph.ehesp.fr</a> EHESP Academic Regulation Article. 3).</p> <p>If students are not able to make it to class, they are required to send an email to the instructor and to the MPH program coordinating team explaining their absence prior to the scheduled class date. All supporting documents are provided to the end-of-year panel.</p> <p>Students who miss class are responsible for content. Any student who misses a class has the responsibility for obtaining copies of notes, handouts and assignments. If additional assistance is still necessary, an appointment should be scheduled with the instructor. Class time is not to be used to go over material with students who have missed class.</p> <p>Lateness: Students who are more than 10 minutes late may be denied access to a class. Repeated late arrivals may be counted as absences (See <a href="http://mph.ehesp.fr">http://mph.ehesp.fr</a> EHESP Academic Regulation Article. 3 Attendance &amp; Punctuality)</p> <p>Maximum absences authorized &amp; penalty otherwise</p> <p>Above 20% of absences will be designated a fail for a given class. The students will be entitled to be reassessed in any failed component(s). If they undertake a reassessment or they retake a module this means that they cannot normally obtain more than the minimum pass mark (i.e. 10 out of 20)</p> <p>Exceptional circumstances</p> <p>Absence from any examination or test, or late submission of assignments due to illness, psychological problems, or exceptional personal reasons must be justified; otherwise, students will be penalized, as above mentioned. Students must directly notify their professor or the MPH academic secretariat before the exam or before the assignment deadline. Before accepting the student's justification, the professor or the MPH academic secretariat has the right to request either a certificate from the attending physician or from a psychologist, or from any other relevant person (See <a href="http://mph.ehesp.fr">http://mph.ehesp.fr</a> EHESP Academic Regulation Article 4 Examinations).</p>

	Students are required to conduct themselves according to professional standards, eating during class time is not permitted during class time, such as course or group work.
<b>Valuing diversity</b>	<p>Diversity enriches learning. It requires an atmosphere of inclusion and tolerance, which oftentimes challenges our own closely-held ideas, as well as our personal comfort zones. The results, however, create a sense of community and promote excellence in the learning environment. This class will follow principles of inclusion, respect, tolerance, and acceptance that support the values of diversity.</p> <p>Diversity includes consideration of: (1) life experiences, including type, variety, uniqueness, duration, personal values, political viewpoints, and intensity; and (2) factors related to “diversity of presence,” including, among others, age, economic circumstances, ethnic identification, family educational attainment, disability, gender, geographic origin, maturity, race, religion, sexual orientation and social position.</p>
<b>Course evaluation</b>	EHESP requests that you complete a course evaluation at the end of the school year. Your responses will be anonymous, with feedback provided in the aggregate. Open-ended comments will be shared with instructors, but not identified with individual students. Your participation in course evaluation is an expectation, since providing constructive feedback is a professional obligation. Feedback is critical, moreover, to improving the quality of our courses, as well as for instructor assessment.

<b>Sessions 1 &amp; 3</b>	<b>Concepts, Methods and Purposes of evaluation research of program/intervention/policy applied to Health Policy and, Health Care Delivery</b>
<b>Speakers</b>	<p>Julien Mousquès,  PhD, Economics,  Director of Research, Health Economic, IRDES  <a href="mailto:mousques@irdes.fr">mousques@irdes.fr</a></p>
<b>Session Outline</b>	<p>The session comprises two sub-sessions. The first is used for introducing students to basic principles of evaluation of public policy (and intervention or program) and related methods in the field of social sciences.</p> <p>Issues related to the evaluation of public policy (EPP) or intervention/program/strategies applied to health</p> <p>Main analytical models in the social science field</p>

	<p>Focus on the positivist and logic models</p> <p>The contribution from other model (realist model, constructivist,...)</p> <p>Add value of Mixed Method design</p> <p>The second sub-session is dedicated to application and illustration of mixed method design evaluation program of policy interventions in health care delivery.</p> <p>All sessions include 2 by 2 students critical review of an EPP article in class.</p>
<b>Learning Objectives</b>	<p>At the end of the sessions, the students should be able to:</p> <ul style="list-style-type: none"> <li>• Identify the basic concepts that are used to evaluate policy, intervention, programs and strategies</li> <li>• Identify the strengths and weaknesses of research designs for the evaluation of interventions and policies</li> <li>• Critically appraise evaluation reports or articles or design evaluation studies protocol</li> <li>• Assess the strength of a body of evidence and its potential policy implications</li> </ul>
<b>Duration</b>	2 sessions of 6 hours
<b>Dates</b>	November 29 and December 01
<b>Training methods</b>	Lectures alternate with 2*2 assignments
<b>Validation</b>	
<b>Reading</b>	<p>Duran P. (2018). L'évaluation des politiques publiques - Les sciences sociales comme sciences de gouvernement. Réseau Canopé, Idées économiques et sociales, n°193, pp 6-27</p> <p>Annie Fouquet (2009). L'évaluation des politiques publiques - concept et enjeux, in Evaluer les politiques publiques pour améliorer l'action publique, ed. Syvie Trosa, Institut de la gestion publique et du développement économique, Comité pour l'histoire économique et financière de la France, pp 21-33</p> <p>Rossi PH, Lipsey MW, Henry GT (2019). Evaluation – A systematic Approach, Sage, 8th Edition, 342 pages.</p> <p>Raftery J, Hanney S, Greenhalgh T, et al. Models and applications for measuring the impact of health research: update of a systematic review for the Health Technology Assessment programme. Southampton (UK): NIHR Journals Library; 2016 Oct. (Health Technology Assessment, No. 20.76.)</p>

	<p>Skivington al. (2021), A new framework for developing and evaluating complex interventions: update of Medical Research Council guidance. <i>BMJ</i>, 374: n2061. 30 Sep. 2021, doi:10.1136/bmj.n2061</p> <p>Pawson R. (2013). <i>The science of evaluation – A realist Manifesto</i>, Sage, 216 p.</p> <p>Smeets et al. (2021), First Things First: How to Elicit the Initial Program Theory for a Realist Evaluation of Complex Integrated Care Programs. <i>The Milbank Quarterly</i>. <a href="https://doi.org/10.1111/1468-0009.12543">https://doi.org/10.1111/1468-0009.12543</a></p> <p>Henri Bergeron et Patrick Hassenteufel. Une contribution de la sociologie de l'action publique à l'évaluation de processus - Le cas des « politiques d'organisation, Réseau Canopé, Idées économiques et sociales, n°193, pp. 42-50</p> <p>Lascoumes P., Le Galès P. (2012), <i>Sociologie de l'action publique</i>. (2e édition), Armand Colin, 128 p.</p> <p>Creswell, 2020, <i>Research Design: Qualitative, Quantitative, and Mixed Methods Approaches</i>, Sage</p> <p>Ridde and Olivier de Sardan (2015). A mixed methods contribution to the study of health public policies: complementarities and difficulties <i>BMC Health Services Research</i>, 15(Suppl 3):S7. <a href="http://www.biomedcentral.com/1472-6963/15/S3/S7">http://www.biomedcentral.com/1472-6963/15/S3/S7</a></p> <p>Tremblay et al. Collaborative governance in the Quebec Cancer Network: a realist evaluation of emerging mechanisms of institutionalization, multi-level governance, and value creation using a longitudinal multiple case study design. <i>BMC Health Services Research</i> (2019) 19:752. <a href="https://doi.org/10.1186/s12913-019-4586-z">https://doi.org/10.1186/s12913-019-4586-z</a></p> <p>Tremblay et al. (2021). Patient participation in cancer network governance: a six-year case study. <i>BMC Health Services Research</i> 21:929 <a href="https://doi.org/10.1186/s12913-021-06834-1">https://doi.org/10.1186/s12913-021-06834-1</a></p> <p>Bamberger, et al 2006, <i>RealWorld Evaluation</i>, Sage. World Bank, 2016, <i>Impact Evaluation in Practice</i>.</p> <p>Loussouarn, C., Franc, C., Videau, Y., &amp; Mousquès, J. Can General Practitioners Be More Productive? The Impact of Teamwork and Cooperation with Nurses on GP Activities. <i>Health Economics</i>. 12/2020. <a href="https://doi.org/10.1002/hec.4214">https://doi.org/10.1002/hec.4214</a></p>
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<b>Session 2 &amp; 4</b>	<b>Impact evaluation : Experimental &amp; quasi-experimental studies on health related topics in Low &amp; Middle Income Countries (LMICs)</b>
<b>Speakers</b>	Erin Strumpf , PhD, Associate Professor, McGill University <a href="mailto:erin.strumpf@mcgill.ca">erin.strumpf@mcgill.ca</a>
<b>Session Outline</b>	<p>Program evaluation: Framing your research question</p> <p>Choosing an appropriate method given the context, data, and research question</p> <p>Implementing program evaluation in practice: assumptions, challenges, and strategies</p>
<b>Learning Objectives</b>	At the end of the sessions, students will be able to:

	<ul style="list-style-type: none"> <li>- Identify the main steps of impact analysis and evaluation, including the assumptions that must be met in order to draw causal conclusions.</li> <li>- Identify the main challenges of impact evaluation</li> <li>- Critically read an impact analysis.</li> <li>- Use retrospective surveys for impact evaluation.</li> </ul>
<b>Duration</b>	6 hours + Practice during group work, case studies, and computer lab sessions
<b>Dates</b>	Nov 30 & December 02, 12 hours
<b>Training methods</b>	Lectures alternate with in class applications/lab session
<b>Reading</b>	<p>Gertler PJ, Martinez S, Premand, et al. Impact Evaluation in Practice, Interactive textbook 2010 available at <a href="http://www.worldbank.org/pdt">http://www.worldbank.org/pdt</a> Chapters 2, 3, 4, 6</p> <p>Strumpf EC, Harper S, Kaufman JS, 2017. “Fixed Effects and Difference-in-Differences” chapter 14 in Methods in Social Epidemiology, 2nd Edition (Oakes and Kaufman, Editors), March, ISBN: 978-1-118-50559-5.</p> <p>Harper S and Strumpf EC, 2012. “Social Epidemiology: Questionable Answers and Answerable Questions” Epidemiology, invited editorial, 23(6): 795-798.</p> <p>Optional :</p> <p>Blundell, Richard, and Monica Costa Dias. 2009. “Alternative Approaches to Evaluation in Empirical Microeconomics.” Journal of Human Resources 44(3): 565–640.</p> <p>Enjeux, approches et contraintes de l'évaluation dans les pays à faible revenu. M Audibert - Comptes Rendus Biologies, 2008.</p> <p>McKinnon B, Harper S, Kaufman JS, Bergevin Y, 2015. “Removing user fees for facility-based delivery services: a difference-in-differences evaluation from ten sub-Saharan African countries” Health Policy and Planning 2015;30:432–441. doi:10.1093/heapol/czu027</p> <p>Hutcheon JA, Strumpf EC, Harper S, Giesbrecht E, 2015 “Maternal and neonatal outcomes after implementation of a hospital policy to limit low-risk planned caesarean deliveries before 39 weeks of gestation: an interrupted time-series analysis,” BJOG: An International Journal of Obstetrics and Gynaecology, 122(9):1200-6, Apr. DOI: 10.1111/1471-0528.13396</p> <p>Books:</p> <p>Morris, S., Devlin, N., Parkin, D. 2012 Economic Analysis in Health Care 2nd Edition. John Wiley&amp; Sons: Chichester</p> <p>Drummond, M.F., Sculpher, M.J., Torrance, G.W. O'Brien, B., Stoddart, G.L. 2005 Methods for the Economic Evaluation of Health Care Programmes. 3rd ed. Oxford</p>

	<p>University Press: Oxford</p> <p>Gray AM, Clarke PM, Wolstenholme JL &amp; Wordsworth S. (2012) Applied Methods of Cost Effectiveness Analysis in Health Care, Oxford University Press (OUP)</p> <p>Briggs A, Claxton K &amp; Sculpher (2012) M. Decision Modelling For Health Economic Evaluation.</p> <p>Articles:</p> <p>Gertler PJ, Martinez S, Premand, et al. Impact Evaluation in Practice, Interactive textbook 2010 available at <a href="http://www.worldbank.org/pdt">http://www.worldbank.org/pdt</a></p> <p>Valente, T. Evaluating Health Promotion Programs. 2002. Oxford University Press: New York. p.87-162.</p>
<b>Validation</b>	Individual or by pair work during the lab session; final exam

<b>Session 5</b>	<b>Economic Evaluation: an introduction</b>
<b>Speakers</b>	Erin Strumpf , PhD, Associate Professor, McGill University <a href="mailto:erin.strumpf@mcgill.ca">erin.strumpf@mcgill.ca</a>
<b>Session Outline</b>	An introduction to the basic ideas of economic evaluation, an element that can be useful in program and impact evaluation.
<b>Learning Objectives</b>	<p>At the end of the session, students will be able to:</p> <ul style="list-style-type: none"> <li>- Identify the key elements of cost-benefit analysis, cost-effectiveness analysis, and cost-utility analysis</li> <li>- Understand key elements of such analyses, including VSL, ICER, QALY, and DALY</li> <li>- Explain techniques for valuing human life and health states, including their strengths and weaknesses</li> </ul>
<b>Duration</b>	1 session of 6 hours
<b>Dates</b>	December 03



<b>Training methods</b>	Lecture and in-class discussion
<b>Validation</b>	Final exam
<b>Reading</b>	Salomon JA, 2014. "Techniques for Valuing Health States," The Encyclopedia of Health Economics, Elsevier, p.454-458.