

The Hebrew University of Jerusalem

Syllabus

Systematic Review and Meta Analysis in Criminology - 61941

Last update 04-11-2024

HU Credits: 2

Degree/Cycle: 2nd degree (Master)

Responsible Department: Criminology

Academic year: 0

Semester: 1st Semester

Teaching Languages: Hebrew

Campus: Mt. Scopus

Course/Module Coordinator: Dr. Michael Wolfowicz

Coordinator Email: michael.wolfowicz@mail.huji.ac.il

Coordinator Office Hours:

Teaching Staff:

Dr. Michael Wolfowicz

Course/Module description:

Like in all fields of science, evidence produced in the field of criminology is often mixed, and there is a range of quality of evidence.

Meta-research is the study of research itself: its methods, reporting, reproducibility, evaluation, and incentives. Meta-research uses an interdisciplinary approach to study, promote, and defend robust science. One of the most important tools in meta-research is systematic review and meta-analysis, which also includes the analysis of evidence bias, evidence quality, and publication bias.

In this course, we will develop a deep understanding about issues pertaining to quality of evidence and evidence synthesis in science and in criminology in particular. Students will acquire the technical skills required for conducting a systematic review and meta-analysis, including the ability to make statistical conversions between different types of statistics used in primary research.

The course will be based on in-class assignments (40%) and a final assignment which will be the development of a systematic review protocol (60%).

Course/Module aims:

Course aims:

- 1. To develop an understanding of various issues of bias that plague the evidence.*
- 2. To develop skills to evaluate quality of evidence.*
- 3. To develop skills for conducting a systematic review and meta-analysis.*
- 4. To develop the skills necessary for converting between effects in order to conduct a meta-analysis.*
- 5. To develop the skills necessary for conducting moderator analyses and meta-regressions.*

Learning outcomes - On successful completion of this module, students should be able to:

Learning outcomes:

- 1. Develop a systematic review protocol*

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2. Convert between effects using various equations
 3. Conduct a meta-analysis
 4. Conduct a moderator analysis/meta-regression
 5. Conduct a publication bias analysis

Attendance requirements(%):

80

Teaching arrangement and method of instruction: The course will be based on in-class assignments (40%) and a final assignment which will be the development of a systematic review protocol (60%).

Course/Module Content:

1. Meta-research as a scientific field
2. Developing a PICO question
3. Sources of bias
4. Developing a systematic review protocol
5. Meta-analysis
6. Moderator-analysis/meta-regression
7. Multi-level meta-analysis

Required Reading:

Ioannidis, J. P. (2005). Why most published research findings are false. *PLoS medicine*, 2(8), e124.

Wilson, D. B. (2001). Meta-analytic methods for criminology. *The Annals of the American Academy of Political and Social Science*, 578(1), 71-89.

Turanovic, J. J., & Pratt, T. C. (2021). Meta-analysis in criminology and criminal justice: Challenging the paradigm and charting a new path forward. *Justice Evaluation Journal*, 4(1), 21-47.

Borenstein, M., Hedges, L. V., Higgins, J. P., & Rothstein, H. R. (2021). *Introduction to meta-analysis*. John Wiley & Sons.

Additional Reading Material:

Grading Scheme:

Essay / Project / Final Assignment / Home Exam / Referat 60 %

Submission assignments during the semester: Exercises / Essays / Audits / Reports / Forum / Simulation / others 40 %

Additional information:

Students are asked to have Excel and Stata installed on their computers.

Students