

Open Science for Business Research

Master of Business Research | Winter term 2025/2026

OVERVIEW

Module	A/II
SWS	2 SWS
Language	English
Type	Seminar
Lecturer	Susanne Adler (LMU Munich)

COURSE DESCRIPTION

In recent years, various research fields have witnessed widespread discussions about limited replicability and reproducibility as well as the impact of researchers' degrees of freedom on research findings. In response to these developments, researchers called for increased transparency, accountability, and integrity, which culminated in an open science movement. Open science reflects "the idea that scientific knowledge of all kinds, where appropriate, should be openly accessible, transparent, rigorous, reproducible, replicable, accumulative, and inclusive" (Parsons et al., 2022, p. 314). Related policies such as the FAIR (Findable, Accessible, Interoperable, and Reusable) data management guidelines have found their way into the requirements issued by multiple funding bodies and institutions, including those by the "Deutsche Forschungsgemeinschaft" (DFG) and LMU's Code of Conduct.

The course provides an introduction to the core concepts and practices of open science alongside an overview of the developments that fostered the open science movement and its current directions. The course specifically focuses on open science practices that are useful in business research. These include preregistration and registered reports as well as the preparation of replication packages that contain open materials, open data, and open code. In addition, further practices such as preprints and open peer review are discussed.

In this course, students are familiarized with the objectives and concepts of open science, learn to navigate open science practices, and discuss how to apply them to their own research projects.

COURSE OUTLINE AND SCHEDULE

Timing	Content
Day 1 October 13, 2025 4 p.m. to 6 p.m. <i>Room 329, Ludwigstr. 28RG</i>	What is open science, why is it needed, and what is it useful for? Overview of objectives, concepts, and practices related to open science
Day 2 October 20, 2025 9 a.m. to 3 p.m. <i>Room 329, Ludwigstr. 28RG</i>	Writing preregistrations and registered reports <ul style="list-style-type: none">- Guidelines for conducting preregistrations and registered reports- Discussing applications to own research projects
Day 3 October 27, 2025 9 a.m. to 3 p.m. <i>Room 329, Ludwigstr. 28RG</i>	Preparing replication packages <ul style="list-style-type: none">- Guidelines for supplying open materials, open data, and open code for replication packages- Discussing applications to own research projects

GRADING

Grading is pass/fail based on attendance. Students must attend at least 80% of all classes.

RECOMMENDED LITERATURE

Deer, L., Adler, S. J., Datta, H., Mizik, N., & Sarstedt, M. (2025). Toward open science in marketing research. *International Journal of Research in Marketing*, 42(1), 212-233.

<https://doi.org/10.1016/j.ijresmar.2024.12.005>

Hardwicke, T. E., & Wagenmakers, E.-J. (2023). Reducing bias, increasing transparency and calibrating confidence with preregistration. *Nature Human Behaviour*, 7(1), 15–26.

<https://doi.org/10.1038/s41562-022-01497-2>

Munafò, M. R., Nosek, B. A., Bishop, D. V. M., Button, K. S., Chambers, C. D., Du Sert, N. P., Simonsohn, U., Wagenmakers, E.-J., Ware, J. J., & Ioannidis, J. P. A. (2017). A manifesto for reproducible science. *Nature Human Behaviour*, 1(1), 1–9. [https://doi.org/10.1038/s41562-](https://doi.org/10.1038/s41562-016-0021)

[016-0021](https://doi.org/10.1038/s41562-016-0021)

Parsons, S., Azevedo, F., Elsherif, M. M., Guay, S., Shahim, O. N., Govaart, G. H., ... & Aczel, B. (2022). A community-sourced glossary of open scholarship terms. *Nature Human Behaviour*, 6(3), 312-318. <https://doi.org/10.1038/s41562-021-01269-4>

Pennington, C. R. (2023). *A student's guide to open science: Using the replication crisis to reform psychology*. Open University Press.

Sarstedt, M., Adler, S. J., Ringle, C. M., Cho, G., Diamantopoulos, A., Hwang, H., & Liengaard, B. D. (2024). Same model, same data, but different outcomes: Evaluating the impact of method choices in structural equation modeling. *Journal of Product Innovation Management*, 41(6), 1100–1117. <https://doi.org/10.1111/jpim.12738>

Silberzahn, R., Uhlmann, E. L., Martin, D. P., Anselmi, P., Aust, F., Awtrey, E., Bahnik, Š., Bai, F., Bannard, C., Bonnier, E., Carlsson, R., Cheung, F., Christensen, G., Clay, R., Craig, M. A., Dalla Rosa, A., Dam, L., Evans, M. H., Flores Cervantes, I., . . . Nosek, B. A. (2018). Many analysts, one data set: Making transparent how variations in analytic choices affect results. *Advances in Methods and Practices in Psychological Science*, 1(3), 337–356.

<https://doi.org/10.1177/2515245917747646>

Simonsohn, U., Simmons, J. P., & Nelson, L. D. (2020). Specification curve analysis. *Nature Human Behaviour*, 4(11), 1208–1214. <https://doi.org/10.1038/s41562-020-0912-z>