

Laws in science and metaphysics

John Dougherty

SoSe 2026

Meeting:	Tuesdays, 14:00–16:00 (c.t.) Ludwigstr. 31, Room 021
Office Hours:	Thursdays, 15:00–17:00 Ludwigstr. 31, Room 131
Email:	john.dougherty@lrz.uni-muenchen.de

Description

Science is often described as searching for the laws that govern nature. In this course, we will investigate contemporary debates about what laws of nature are, how scientists can discover them, and how they relate to scientific explanation, reduction, and other philosophical questions.

Assessment

The evaluation for this course will be by means of a term paper submitted at the end of the semester. If you would like to submit a term paper, you must register through LSF during the registration period (22.05.–03.07.2026) and submit it to me by email by the term paper deadline (18.09.2026). Please note that extensions of this deadline are not up to me; if you need an extension, please contact Fabian Widerna (f.widerna@lmu.de) at the Prüfungsamt für Geistes- und Sozialwissenschaften (PAGS).

Your paper should be on a philosophical topic related to laws. Near the end of the semester I will distribute a list of suggested questions and grading criteria. You may write your paper on topic not on that list; if you do, then I recommend speaking to me before writing the paper, so that I can advise on the topic and scope of your planned alternative. The term paper should be 3000 words for BA students and 6000 words for MA students. In either case, it should be written in 12pt font, with 1.5 spacing, 3cm margins on the left and right, and a standard academic typeface (e.g., Computer Modern, Times New Roman, Palatino, Calibri, etc.)

Resources

Questions about the administration of philosophy teaching at LMU should be directed to Thomas Wyrwich (thomas.wyrwich@lrz.uni-muenchen.de). The Erasmus coordinator for philosophy at LMU is Peter Adamson (office.peter.adamson@lrz.uni-muenchen.de). The list of women's representatives (Frauenbeauftragte) for the Philosophy Faculty can be found on the Faculty's webpage (www.philosophie.uni-muenchen.de/fakultaet/frauenbeauftragte/index.html); the representative for the MCMP is Vanessa Carr. Issues regarding the economic, social, and cultural aspects of student life—including studying with a child or studying with a disability—are the responsibility of the Munich Student Union (<https://www.studentenwerk-muenchen.de>).

Schedule and readings

All texts will be available on LSF.

Introduction

14.04. Introduction

- 21.04.** Sections 1–5 and 8 of Maudlin, T. (2007). A modest proposal concerning laws, counterfactuals, and explanations. In *The Metaphysics Within Physics* (pp. 5–49). Oxford University Press
- 28.04.** Vetter, B. (2012). Dispositional essentialism and the laws of nature. In B. Ellis, H. Sankey, & A. Bird (Eds.), *Properties, Powers and Structures* (pp. 201–216). Routledge
- 05.05.** Cohen, J., & Callender, C. (2009). A better best system account of lawhood. *Philosophical Studies*, 145(1), 1–34
- 12.05.** Hall, N. (2015). Humean reductionism about laws of nature. In B. Loewer & J. Schaffer (Eds.), *The Blackwell Companion to David Lewis* (pp. 262–277). Blackwell
- 19.05.** Miller, E. (2015). Humean scientific explanation. *Philosophical Studies*, 172(5), 1311–1332
- 26.05.** (HOLIDAY)
- 08.06. (6-8pm)** Hicks, M. T. (2018). Dynamic humeanism. *The British Journal for the Philosophy of Science*, 69(4), 983–1007
- 09.06.** Callender, C. (2023). Humean laws of nature: The end of the good old days. In M. T. Hicks, S. Jaag, & C. Loew (Eds.), *Humean Laws for Human Agents* (pp. 16–41). Oxford University Press
- 22.06. (6-8pm)** Healey, R. (2022). Laws of nature as epistemic infrastructure not metaphysical superstructure. In Y. Ben-Menahem (Ed.), *Rethinking the Concept of Law of Nature* (pp. 161–184). Springer
- 23.06.** Adlam, E. (2022). Laws of nature as constraints. *Foundations of Physics*, 52(1), 28
- 30.06.** Demarest, H., & Miller, E. (2023). Generalizing the problem of Humean underdetermination. In M. T. Hicks, S. Jaag, & C. Loew (Eds.), *Humean Laws for Human Agents* (pp. 108–127). Oxford University Press
- 07.07.** Ismael, J. (2023). Humean disillusion. In M. T. Hicks, S. Jaag, & C. Loew (Eds.), *Humean Laws for Human Agents* (pp. 42–65). Oxford University Press
- 14.07.** Caulton, A. (2024). *Hume's dictum as a guide to ontology* [PhilSchi Archive #24004]