

DUALITY THEORY WINTER 2024/5: FORMALITIES

Levin Hornischer // October 11, 2024

Welcome to the course *Duality Theory: Connecting Logic, Algebra, and Topology!*
This document collects the relevant organizational information.

Contact We have two sessions per week during the semester:

1. The *lecture* given by me, **Levin Hornischer**, on Wednesdays from 12:00 to 14:00 in room 021 (Ludwigstr. 31).
2. The *exercise class* given by **Marta Esteves**, on Thursdays from 18:15 to 19:45 in room 028 (Ludwigstr. 31).

If you have any questions, please do not hesitate to contact me!

Lecture material All materials for the course are provided on the following website:

<https://levinhornischer.github.io/DualityTheory/>

We follow the reader provided there which also include all the content information (topics, objectives, prerequisites, etc.).

Assessment If you take the course for credits (9 ECTS-points), you need to write a term paper whose grade will be your final grade for the course. The formalities are as follows.

- Topic: I will suggest some topics further into the course. But you can also suggest topics of your own: then get in contact with me so I can approve them. In any case, the topic should be related to the contents of the course. A paradigm example would be to work out a particular application of duality theory to philosophy (some applications are described in the reader).
- Word limit: 6000 words.
- Passing grades: 1.0, 1.3, 1.7, 2.0, 2.3, 2.7, 3.0, 3.3, 3.7, 4.0.
- Grading criteria: For an excellent grade, your paper should excel in the following criteria.

- You have a clearly articulated question and main claim, both of which have to be presented in the introduction (together with the motivation/relevance of the question and the context in which it occurs).
 - All required concepts are well explained, defined, and referenced. The essay is clearly and naturally structured in sections to answer the posed question.
 - You show that you are familiar with the relevant literature (refer to a substantial amount of publications that are not mentioned in the syllabus of the seminar). You show that you are able to reconstruct arguments from the relevant literature in a concise and accurate way.
 - You develop an independent and original argument supporting your main claim (not just reconstruct one from the literature). The argumentative structure is made explicit (by an overview in the introduction and by guiding the reader in the sections of the paper). You anticipate and discuss possible objections to your own arguments. The argument clearly states the assumptions (premises) and is logically correct.
 - The essay is typeset in an appealing format (e.g., 12pt, Times New Roman, 1.5 spacing, 3 cm margins), citations are according to academic standards and the references are presented in a detailed and consistent manner (e.g. APA).
 - The essay is written in clear and easy to understand language (as e.g. described in style books). There is no inappropriate language. Spelling and punctuation are largely correct.¹ (This is judged according to the standard of a good non-native speaker of English.)
 - And, of course, you should not plagiarize.
- Deadlines:
 - Registration period for exams and term papers: 15.01. 2024 – 26.01. 2024. (This registration is necessary for writing a term paper and getting the grade/credits.)

¹In case you are dyslexic, this of course does not apply—please let me know if this is the case (of course, I will treat this confidentially).

- Deadline for the submission of term papers: 28.03.2025.²
 - You receive your grade by: 14.04.2025.
- Submission: As PDF to me via email.³

²This deadline is fixed and I cannot change it. For extensions, you need to contact the examination office.

³These assessment formalities closely follow the suggestions of Alexander Reutlinger.