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Seminar: *Empirical Analysis of the Law: A Challenge-Based Approach Using R*

Fall Semester 2025

Course Description

In today's data-driven world, empirical literacy is becoming increasingly important – including in law. Not only are data science skills highly sought-after by employers, but (big) data increasingly influences how the law is created, applied and evaluated. Already today, statistical analyses are being used to inform court judgments, to assess the impact of legislation, and to revolutionize legal research and practice. Given this ongoing 'datafication of law', it is crucial for future legal professionals to be able to understand, evaluate and critique the use of empirical methods in legal contexts.

This seminar aims to provide law students with a basic understanding of the empirical legal research process – from conceptualization, through data collection and analysis, to reporting. To learn how to apply this knowledge to their own research, students will work collaboratively in small groups to conceptualize and implement a small empirical legal research project using basic statistical methods in R. The seminar is designed for students who have previously completed the lecture *Introduction to Empirical Legal Studies* and/or the *Online Course II: Introduction to Legal Data Science*, or students who are taking one of these courses concurrently with the seminar in the Fall Semester 2025. In addition, students with basic prior knowledge of statistics and R are also eligible. Students are expected to take active part in the discussions and to provide feedback on fellow participants' presentations.

Learning Objectives

The course follows a hands-on, self-directed approach. Through a combination of in-class discussions and group work, students will learn how to formulate research questions, design research projects, collect and analyse data, and draw meaningful conclusions from their findings. Upon successful completion of the course, students will:

- have deepened their knowledge of quantitative methods and their application in the field of empirical legal studies;

- have acquired practical knowledge on how to plan and carry out entry-level empirical legal research projects;

- be able to employ simple quantitative methods in the legal field using the appropriate software, to assess the validity of the results and the limitations of empirical approaches to law;

- be able to read and to critically evaluate empirical research articles from different legal areas.

Prerequisites

Students should have some prior knowledge of statistics and R. Ideally, students have previously completed the lecture *Introduction to Empirical Legal Studies* and/or the *Online Course II: Introduction to Legal Data Science*, or are doing so concurrently with the seminar. Upon request, you will be provided with the recordings of the lecture *Introduction to Empirical Legal Studies* to learn the required knowledge of statistics on your own. Note, however, that this will be a substantial workload that has to be done prior to / on top of the seminar work.

Assessment

The seminar includes completion of a Bachelor's thesis (6 ECTS) or Master's thesis (12 ECTS). This is comprised of:

for Bachelor students:

1. **Group Project (40%):** Students will work in three groups of four persons to design, implement and present an entry-level empirical legal project. All group members will receive the same grade. Groups will present their research design on **31 October 2025** and their results on **28 November 2025**.

2. **Critical Review Paper (60%):** Each student submits a response paper on one of the assigned journal articles dealing with the empirical analysis of law (20–25 pages, 40'000– 50'000 characters, with footnotes but not including spaces; plus cover sheet and indices). The papers need to provide a summary of the article and a critical examination of the data, methods used, results and discussion. There will be no oral presentation of the paper; students will receive written feedback alongside their grade at the end of the course. The submission deadline for the Critical Review Paper is **17 October 2025**.

for Master students:

Individual Analysis (100%): Each student conducts an empirical analysis (topics and data sets will be provided) and submits a write-up in the style of an empirical legal journal article (30–40 pages, 60'000–80'000 characters, with footnotes but not including spaces; plus cover sheet and indices). The papers must detail the research question, a brief literature review, the data and chosen methodology, the results (incl. visualization in the form of plots) and a discussion of the results in light of the research question. Students will present their research design on **31 October 2025** and their results on **28 November 2025**.

Please note that if you are unable to submit your Master's Thesis within the deadline, the Seminar will be counted as a "failed attempt."

Course Structure

The seminar sessions will be held in-person at Pestalozzistrasse 24, 8032 Zurich (PES 205). Attendance is mandatory for all sessions.

The first two sessions, consisting of administrative information and some statistical repetition units, will already take place at the end of the Spring Semester 25, so participants can start their projects during the summer break. In the sessions during the Fall Semester 25, students will present their research designs and final group projects / Master's Thesis, followed by feedback from instructors and fellow students.

Seminar Dates

11 April 2025, 15:00-17:00	Preliminary session: Administrative Information and Repetition Unit on Research Designs
23 Mai 2025, 14:00-17:00	Introductory session: Repetition Units on Descriptive Statistics and Hypothesis Testing
17 October 2025, 23:59	Submission deadline: Bachelor's Thesis (Critical Review Paper)
27 October 2025, 23:59	Submission deadline: Research Design of Group Projects / Research Design of Master's Thesis
31 October 2025, 09:00-17:00	In-class Presentation and Discussion of Research Design of Group Projects / Research Design of Master's Thesis and Repetition Unit on Regression Analysis
24 November 2025, 23:59	Submission deadline: Project Report of Group Projects
28 November 2025, 14:00-17:00	Presentations of Group Projects / Presentation of Master's Thesis
29 December 2025, 23:59	Submission Deadline: Master's Thesis (Individual Analysis)

Participation
There are 15 seminar spots available, divided into 12 for Bachelor and 3 for Master students. For information on how to register, see https://www.ius.uzh.ch/de/studies/general/seminars.html.

Course Materials and Equipment
All necessary materials, including data sets for the empirical projects and journal articles for the review paper, will be provided on the OLAT course page. Students are required to bring their own device with a working installation of R and RStudio.

Contact

For further information, contact Una Schamberger (lst.altwicker@ius.uzh.ch) or Prof. Altwicker (lst.altwicker@ius.uzh.ch).