DNDS5010 - Conceptions of Social Dynamics

Room A-103

Instructor: Julia Koltai
Credits: 0
Prerequisite: None
Term: Pre-term course (during two weeks before Fall term)
Level: MS
Course type: Elective
Module: Bootcamp

Brief course description: This course aims to introduce social science concepts for data scientists. The first motivation is to improve the validity of data science research designs that target social problems. The second motivation is to equip students with heuristic tools to identify novel social problems, and to shape relevant research questions about them. The course is organized around the structure-agency-culture triangle of social science concepts, and offers both good and bad examples of how the validity of research designs depends on conceptual foundations.

Learning outcomes: By the end of the course participants will be able to:

•   Identify social science concepts and literatures relevant for a research problem

•   Critique and improve data science research designs for validity concerns

•   Generate original data science research ideas responding to pressing social problems

What you will NOT learn in this course : This course will not give you a complete overview of social science concepts, approaches, and research designs. Social science is a vast field with many large areas of literatures that are not immediately relevant to data science approaches (because they are not easily operationalized, or they are oriented towards qualitative methods exclusively, or they do not target pressing social problems, etc). The course is highly selective and it is also adopted to a social data science context, so you will not learn the equivalent of what a core theory course would offer in a social science program.

Learning activities and teaching methods: The course blends lectures, seminar discussions, and group tasks. The course counts on light reading done before class (about 5-10 pages per day), and many further readings will be offered on the e-learning site.

Assessment: The course is evaluated on a Pass-Fail scale; anything at and above the C+ level is a Pass, and below that level is a Fail. There is no homework or final assignment; to pass students need to attend classes and participate in seminar discussions.

Grade	Name	Austrian equivalent	Points (0-4 scale)	Points (0-100 scale)	Credit
A	Outstanding	Excellent (1)	4	96-100	yes
A-	Excellent	Excellent (1)	3.67	88-95	yes
B+	Good	Good (2)	3.33	80-87	yes
B	Fair	Satisfactory (3)	3	71-79	yes
B-	Satisfactory	Sufficient (4)	2.67	63-70	yes
C+	Minimum Pass	Sufficient(4)	2.33	58-62	yes
F	Fail	Insufficient (5)	0	0-57	no

Attendance: Attendance is mandatory; two sessions can be missed without consequence. Further absence is possible with documented reasons only. Online attendance (via Zoom or Teams) is possible for visa and residency reasons only.

Assignments: No out-of-class assignments will be given.

Course reading: Core readings for sessions will be uploaded and identified clearly on the e-learning page. We will read (excerpts from) original texts, rather than using a (non-existent) textbook.

Course sessions and topics:

1. Lecture 1: Introduction to research design, social science concepts
2. Lecture 2: In-class practical implementation of different research phases
3. Lecture 3: Posing questions, finding problems
4. Lecture 4: Crafting answers; testing theories; examples of great questions and designs
5. Lecture 5: Structure and institutions
6. Lecture 6: Dyads, triads, networks
7. Lecture 7: Culture, meaning, frames, discourses, NLP
8. Lecture 8: Action and agency: rationality, game theory, mechanisms
9. Lecture 9: Critical Perspectives
10. Lecture 10: Ethics and Big Data
11. Lecture 11: Experiments
12. Lecture 12: Analytical Strategies

Schedule:

Bootcamp courses	Wed 04.09.2024	Thu 05.09.2024	Fri 06.09.2024	Mon 09.09.2024	Tue 10.09.2024	Wed 11.09.2024
8:50-10:30		Lect. 3	Lect. 5 (starts at 8.15)	Lect. 7	Lect. 9	Lect. 11
10:50-12:30		Lect. 4	Lect. 6 (starts at 10.05)	Lect. 8	Lect. 10	Lect. 12
13:30-15:10	Lect. 1					
15:40-17:20	Lect 2					