



Applied Social Network Analysis

Instructor: Dr Silvia I. Fierăscu, West University of Timișoara

Course outline

Social Network Analysis is a comprehensive research framework that is strongly rooted in interdisciplinary theory, data, and practice. It looks at the interconnected world and it maps, measures, and identifies where it is hyperconnected and where it lacks connectivity; who are the key players, what is the role of groups and communities, and how information, engagement, resources, influence travel through social networks; and what all of these imply for individuals, organizations, and societies at large. It seeks to pinpoint recurrent relational mechanisms and test network building and network disruption scenarios, to do better informed decision-making at all levels – personal, organizational, and in public policy.

In this class, you will learn about the power and limitations of a scientific research framework to, quite literally, change the world. It will be an intense intellectual challenge that starts before this course and hopefully lasts a long time after. Through the assigned readings, you will be challenged to rethink how the world works and connect the previously known dots in a different way. You will struggle through the process of working with imperfect data and software. And, most importantly, you will be challenged to put your research into perspective – to think about ways in which you can make it better, more visible, and actionable. You are encouraged to bring your own data and work through each level of analysis throughout the week together. If you do not yet have data, that is fine. We provide interesting data, and you can work on the research design and the plan for data collection.

We designed the course for an interdisciplinary cohort of participants. We will cover three new things for most who attend: (1) problem perspective and jargon, (2) data and software, and (3) analytic techniques and interpretation of results.

Prerequisites

- Interdisciplinary readings (network science, social network analysis, political network analysis, organizational network analysis, policy network analysis)
- Software fundamentals (tutorials of R and Gephi)

Time Schedule and Topics covered

Monday 27.03.2023:

Social Network Analysis & Network Data – Past, Present and Future

Tuesday 28.03.2023:

Insights at the Network Level – Understanding Complex Ecosystems

Wednesday 29.03.2023:

Insights at the Community Level – Understanding Groups and Group Dynamics

Thursday 30.03.2023:

Insights at the Individual Level – Understanding Key Actors, Their Potential and Limitations

Friday 31.03.2023:

Causality in Networks – Intro to Inferential Network Analysis & Impact Assessment

About the trainer

Dr Fierăscu is a Lecturer at the Department of Philosophy and Communication Sciences, the Founder and Director of FabLab - Social Fabrics Research Lab, and Researcher at the Big Data Science Laboratory, all at West University of Timișoara. She holds a PhD in Political Science with a specialization in Network Science from Central European University in Budapest, and she is Head of OrgMapper Academy at Maven7 Network Research Inc. Her research interests lie in the application of network and data science to social science problems. She works in various international, intersectoral and interdisciplinary projects, translating complex problems into solutions for organizational development, change management, better communication, good governance, public policy, and social impact.