

SOCIAL NETWORK ANALYSIS

Degree(s):	Economics; Management; Finance; Mathematics Applied to Economics and Management
Type:	Optional course unit
Curricular year/semester:	3rd year / 1st Semester
ECTS / hours per week:	4 ECTS / 3.0 Hours
Workload per week:	2Theoretical/Practical x 1.5Hours
Teacher responsible:	Professor Marta Varanda

OBJECTIVES

Why do some organisations have self-destructive behaviours while others grow and innovate? Why do fans of a football team mostly hang out with fans of the same football team? Which strategies are used by corporate elites to increase their political and economic power? Why is difficult for an immigrant to integrate in the country of residence? Or why is it so easy for someone already rich to get richer? By using the method of social network analysis (SNA) we can answer questions as these. In this course, various types of social networks (intra and inter organizational) will be analysed as to understand socio-economic dynamics such as collective action, diffusion of information, interlocking directorships, elite formation, social capital development, etc. The software UCINET, NETdraw and Key player will be used.

PROGRAM

- **Introduction:** social network analysis: what is it? What value does it add to traditional statistical methodologies;
- **Methods of SNA:** methods for data collection; data management; data analysis and with UCINET VI and visualization using Net Draw;

- **Data formats:** one mode vs two modes. Themes of application: interlocking directorships...;
- **Whole networks** - organizations, communities, countries. SNA metrics: cohesion or density, centralization, reciprocity, core-periphery...); Themes of application: cooperation, conflict, power, solidarity, social capital, innovation;
- **Ego-networks:** SNA metrics: structural holes, density, homophily....; Themes of application: social capital, social support, innovation, creativity;
- **The individual level of analysis:** SNA metrics: centrality, social capital, key-players... Themes of application: leadership, information diffusion, power...;

- **The group level of analysis:**

A - Based on cohesion: SNA metrics: cliques, clans, k cores... Themes of application: cooperation, collective action, conflicts, performance, innovation diffusion, social influence;

B - Based on roles and position: SNA metrics: structural and regular equivalence... Themes of application: innovation diffusion, social influence, imitation, attitude and behavioural similarity:

- New challenges posed to SNA: big data, ethical questions...

BIBLIOGRAPHY

Recommended Bibliography:

- Hanneman, R. A., *Introduction to Social Network Methods*, n.d.
- Borgatti, S., Everett, M.G., Johnson, J.C., *Analyzing Social Networks*, Sage, 2013

Optional Bibliography:

- Scott, John, *Social Network Analysis*, Sage, 2000
- Christina, Prell, *Social Network Analysis, History, Theory and Methodology*, Sage, 2011
- Wasserman, S., Faust, K., *Social Network Analysis: Methods and Applications*, Cambridge University Press, 1994