COURSE DETAIL

SOCIAL NETWORK ANALYSIS IN THE DIGITAL AGE

Country
France

Host Institution
Institut d'Etudes Politiques (Sciences Po)

Program(s)
Sciences Po Paris

UCEAP Course Level
Upper Division

UCEAP Subject Area(s)
Sociology

UCEAP Course Number
148

UCEAP Course Suffix

UCEAP Official Title
SOCIAL NETWORK ANALYSIS IN THE DIGITAL AGE

UCEAP Transcript Title
SOC NETWORK ANLYS

UCEAP Quarter Units
4.50

UCEAP Semester Units
3.00

Course Description

This course introduces the field of social network analysis (SNA). Social networks are ubiquitous nowadays; SNA emerged in the 1960s as a vibrant social science specialty trying to give substance to individuals, not through their inner psychological and demographic, or professional characteristics but through the relationships they entertain with their social environment. The first objective of this class is to introduce the concepts and metrics designed and theorized by this specific stream of sociology and test how operative they still are in our connected environment. How useful are centrality or cohesion measures today? What can we learn about our current online world with concepts forged in the 1960s and the 1970s like homophily, transitivity, cohesion, diffusion processes? To do so, this course examines the seminal papers in SNA. However, this intellectual journey is complemented by a more hands-on approach, as half of the course is devoted to teaching the students basic operations in Python such that they can collect data from digital social media platforms before modeling, measuring, and visualizing this data using recent network analysis libraries. The course puts the ancient concepts of SNA to the test and assesses how fruitful they are in understanding online interaction data. No prior coding experience is required as the course extensively uses AI capacities (such as Gemini, directly available in Google Colab notebooks) to assist with coding. The class alternates readings of historical sociology papers and more contemporaneous articles typical of the digital age mixing concepts from SNA in the larger realm of computational social sciences. Most classes are split into three parts: the discussion around a scientific paper, a lecture about a new SNA-related concept, and a third part where students are invited to experiment on their own laptops with the newly introduced concepts, metrics, or algorithms with empirical data.

Language(s) of Instruction
English

Host Institution Course Number
DSOC 25A21

Host Institution Course Title
SNA2: SOCIAL NETWORK ANALYSIS IN THE DIGITAL AGE

Host Institution Campus

Host Institution Faculty

Host Institution Degree
Seminar

Host Institution Department
Sociology

[Print](#)