



Social Network Analysis a shadow course

*Doe Computer Lab (105 Doe)
Fridays, 3pm-5pm*

Course Description

www.coursera.org/course/sna

Webcast from the University of Michigan and available at coursera.org, this course uses Gephi to teach network analysis through “online interactive demonstrations and hands-on analysis of real-world data sets will focus on a range of tasks: from identifying important nodes in the network, to detecting communities, to tracing information diffusion and opinion formation.”

(Shadow) Course Format

The course has two parts: an online, interactive lecture and an in-person discussion section. Each week, the class will watch relevant online lecture videos, each between 8 and 12 minutes in length, that contain 1-2 integrated quiz questions. Led by a team of graduate students at the Social Science D-Lab, the “shadow course” will meet every Friday from 3pm to 5pm in the Doe Computer Lab (105 Doe) to watch the lectures, conduct hands-on exercises, review the material, answer questions, and explore topics relevant to the participants’ own research.

About the Instructor

[Lada Adamic](#) is Associate Professor in the School of Information and the Center for the Study of Complex Systems at the University of Michigan. She holds a PhD in Applied Physics from Stanford and has taught "[Networks: Theory and Application](#)" there since 2006. She has received an NSF Career Award to fund her research on the social dynamics of information, and a University of Michigan Henry Russell award in recognition of her teaching and research.

Course Schedule (*lectures available online the preceding Monday; lectures begin 9/24*)

Week 1 (9/28): What are networks and what use is it to study them?

Week 2 (10/5): Random network models: Erdos-Renyi and Barabasi-Albert

Week 3: (10/12) Network centrality

Week 4: (10/19) Community

Week 5: (10/26) Small world network models, optimization, strategic network formation and search

Week 6: (11/2) Contagion, opinion formation, coordination and cooperation

Week 7: (11/9) Cool and unusual applications of SNA

Week 8: (11/16) SNA and online social networks

Recommended Background

No math or programming prerequisites for the class. Optional assignments use the R statistical programming language. The course will use Gephi, an open-source network analysis tool available online at www.gephi.org/

If you are interested in attending this 8-week series, please email dlab@berkeley.edu to register and then enroll online at www.coursera.org/course/sna