Network Analysis: A Second Course  
(Three day workshop)  
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Instructors: Stanley Wasserman, Indiana University Bloomington  
stanwass@indiana.edu  
Ann McCranie, Indiana University Bloomington  
amccrani@indiana.edu  
Lab Assistant: Shiri Noy  
snoy@indiana.edu

Course Description  
This workshop covers advanced methodology for network analysis. Topics to be covered in lecture and 
lab sessions include p* (the new exponential family of random graph distributions) and approaches to 
longitudinal network data (such as actor-oriented models like SIENA). Generalized blockmodeling (fit 
with software Pajek) and general estimating equations (as used by econometricians and networkers for the 
analysis of data measured over time) will be introduced, though not extensively covered in labs. The 
morning and afternoon sessions are coordinated so that each day presents methodological developments 
in the morning with afternoon computer lab sessions enabling applications to real data. The workshop 
will meet each day from 9:00 a.m. – 6:00 p.m. with a break for lunch. This workshop assumes that 
participants have already taken a first course in network analysis, such as the ICPSR Summer Program 
workshop “Network Analysis: An Introduction.”

Schedule  
**Day One (Sunday)**  
8:30-noon Lecture  
noon-1:15 Lunch  
1:15-5:00 Lecture and Lab  
5:00-6:00 Discussion and Wrap-up  
**Day Two (Monday)**  
8:30-noon Lecture  
noon-1:15 Lunch  
1:15-5:00 Lecture and Lab  
5:00-6:00 Discussion and Wrap-up  
**Day Three (Tuesday)**  
8:30-noon Lecture  
noon-1:15 Lunch  
1:15-2:30 Lecture and Lab  
2:30-3:30 Discussion and Wrap-up  
3:30-6 Informal one-on-one discussion with instructors (Optional)

Course texts  
There are two necessary texts for this class. Please bring them both.

Wasserman, S., and Faust, K. (1994). *Social Network Analysis: Methods and Applications*. Cambridge, 
ENG and New York: Cambridge University Press.  
As this is an advanced course, we recommend that you are familiar with the contents of Wasserman 
and Faust before we begin.


New York: Cambridge University Press.

Additionally, you may find the following texts helpful:

Topics
In this course we will cover the following topics:
1. p*
2. Two-mode networks
3. Blockmodeling - generalized
4. Network change approaches: General estimating equations, co-evolutionary, actor-oriented/tie-oriented
5. Advanced Visualization

Computer Programs
We will be using a number of different social network analysis computer programs. All of these are available in the computer labs. All but UCINET are freely available on the web.
- UCINET, available in computer labs and for purchase from Analytic Technologies: http://www.analytictech.com
- Pajek: http://pajek.imfm.si/doku.php?id=download
- Netdraw, comes with the UCINET package or individually at: http://www.analytictech.com
- STOCNET: http://stat.gamma.rug.nl/stocnet/ (see also http://stat.gamma.rug.nl/snjders/siena.html)
- Network Workbench: http://nwb.slis.indiana.edu/download.html
- Statnet Package in R: http://csde.washington.edu/statnet/

Other Resources
These are some particularly useful resources on social networks available online.
The International Network for Social Network Analysis (INSNA) is the international and interdisciplinary professional association for people interested in social network research. Its website (http://insna.org) is a wonderful source of information and resources on social networks, including links to many informative sites and to social network computer programs and data.

The listserv, SOCNET, is the main on-line forum for discussion of current topics on social networks. Information on how to join is available through the INSNA site (see above) or at: http://www.insna.org/pubs/soenet.html

Connections is INSNA’s newsletter/informal journal. It is available through the INSNA website or directly at: http://www.insna.org/pubs/connections/index.html

Journal of Social Structure is a peer-reviews online journal with many articles of interest to social network researchers. http://www.cmu.edu/joss/
Complexity and Social Networks Blog (http://www.iq.harvard.edu/blog/netgov/) is a new “on-line journal” devoted to network analysis.

Steve Borgatti’s web page is a nice source of introductory material and handouts on various topics on social networks. http://www.analytictech.com/networks/

Data examples from Wasserman and Faust are available at the INSNA website.