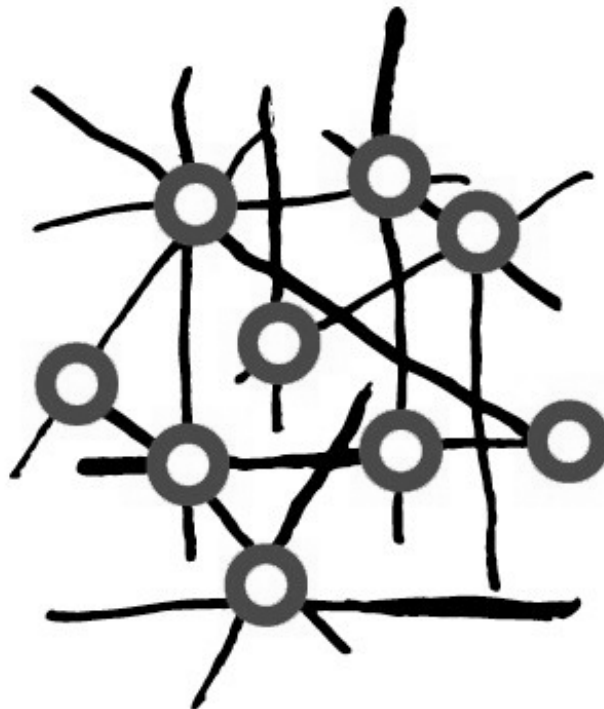


**LOK Research Centre
Management * Organization * Competence**

Ph.D. course on network analysis



Instructor

Associate Professor Thomas Schøtt, University of Pittsburgh, USA

Centre for Small Business Studies (CESFO)
University of Southern Denmark – Kolding
Denmark

March 3-7, 2003

Introducing LOK

The LOK (Management – Organization – Competence) Research Centre is a virtual centre with participation of researchers from Copenhagen Business School, Aalborg University, University of Southern Denmark and the Aarhus School of Business. Participants also include many enterprises and organisations.

The LOK Research Centre is a result of the government's initiative concerning how innovation in management, organisation and competence can be promoted in the economy, especially in small and medium-sized enterprises. More information is offered at the homepage at www.lok.cbs.dk

The research programme of LOK aims at creating, through collaboration with enterprises and other participants, new knowledge that can help enterprises improve their managerial and organisational dynamics and develop new competences to meet the challenges in the knowledge-economy.

The Ph.D. course in social network analysis

Networks can be mapped as relations among actors. An actor may be a person, an organisation, a nation, a region or some other entity that can engage in action. For example, we may examine – qualitatively and quantitatively, how networks constrain and enable actors' thoughts and behaviors. Networks are analysed in sociology, psychology, anthropology, political science, history, geography, communication, and studies of policy, administration and business. An introduction "What is network analysis?" can be read via www.sfu.ca/~insna. The course will teach the general theoretical and methodological principles and apply them to business networks.

The course has two goals. First, the participants will learn to conduct quantitative analyses of networks. Training will be offered in analyses at the level of the whole system, at the level of subgroups, and at the level of individual actors. Second, the participants will be exposed to, and discuss, a variety of theoretical perspectives on the study of business networks, along with methods utilized in these theoretical frameworks. The aim of the course is to empower the participants to analyse networks and to integrate theory and methodology in the analyses of social networks, specifically business networks.

The course is intended for researchers and Ph.D. students who are studying business networks and who wish to acquire this network analytic tool, the skill to map and analyse networks.

The format combines lectures and discussion with training in analyses. We use network analytic software such as UCINET and Pajek which each student will take home afterwards.

Data on some networks will be made available by the instructor (e.g. some data on interlocking directorates among enterprises in a city), but the participants are also welcome to bring some data on networks (if you have some data on networks, please email tschott@pitt.edu prior to the course).

The course does not presume any acquaintance with network analysis (although familiarity with statistics and quantitative methods is useful).

Programme for the course

The course will run from Monday morning through Friday afternoon, March 3 to 7, 2003. The schedule is planned to be the following:

Monday, March 3

Morning

Introduction – action is performed in a network of relations among actors. Our introductory lecture will focus on the theoretical ideas guiding analyses of networks. After a discussion we will engage in some training exercises. We will graph a real network (using the software Pajek in the computer lab).

Afternoon

Relations as the building block in a network. This lecture will focus on reciprocity, multiplexity, and other properties of a relationship between actors. After a discussion we will engage in some training exercises, analysing a relationship.

Tuesday, March 4

Morning

Actors and their contacts within a network. This lecture will focus on an actor's autonomy, constraint, density, structural holes, and other properties of the actor's contacts. A discussion will be followed by exercises, analyses of each actor's contacts (using the software UCINET in the computer lab).

Afternoon

Actors and their centrality in a network. The lecture focuses on an actor's outwardness, popularity, power, and other properties of the actor's participation in the system. After a discussion we will exercise analyses of each actor's participation (using the software UCINET in the computer lab).

Wednesday, March 5

Morning

Groups of actors in a network. The lecture focuses on cliques of cohesively related actors, positions of actors playing the same role, and other kinds of subgroups in the system. After a discussion we will exercise detection of subgroups (using the software UCINET in the computer lab).

Afternoon

Systemic properties of a network. The lecture focuses on a network's stratification and centralisation, horizontal differentiation and fragmentation, and other properties of the system. Our discussion is followed by training in system-level analyses (using the software UCINET in the computer lab).

Thursday, March 6

Morning

An ego's own network of related alters, and properties of this so-called ego-network, such as its size, range, and density of interrelations among the alters.

Exercises in analysing data on a sample of ego-networks using SPSS.

Afternoon

Research designs for collecting data on networks, both the total enumeration in a bounded network, and sampling of ego-networks from a huge population.

Exercises in research design and questionnaire construction.

Friday, March 7

Morning

Guest speaker, focusing on more advanced analyses of networks.

Afternoon

Panel discussion with participation of our guest speaker and Thomas Schøtt.

Each participant in the seminar will briefly present their proposal for a research report.

The working language will be English (or in Danish in case this language is fully shared).

Afterwards each Ph.D. student will write a report based on an analysis of a network (using own data or data made available by the instructor). The report is expected to include some theorizing about a network, some hypotheses, and some empirical tests, all demonstrating an understanding of theory and methodology. Ph.D. students should discuss ideas for a report with Thomas Schøtt toward the end of the course. The report will be submitted for evaluation and grading within a month after the course. Within a month of submission, the grade and written evaluation will be returned to the student. This Ph.D. course has a workload and credit corresponding to 5 points in the international accreditation system e.c.t.s.

The detailed program will become available via the homepage www.sam.sdu.dk/CESFO

Location

The course will be held at University of Southern Denmark in Kolding; centrally located at the fjord where the Jutland peninsula faces the island of Funen. Participants from out-of-town will be housed at Kolding Byferie – a downtown resort facility neighboring the old royal castle Koldinghus, facing the lake of the castle, and near the university. View the location at www.kolding.dk and www.kolding-byferie.dk

Participation fee

The fee for participation is DKK 3.600,- which includes accommodation from March 3-7, breakfast and lunch, a collection of articles, and software programs (for students, researchers cannot take the software programs home but can buy it from the vendor). There is no tuition as the instruction is funded by the Danish Research Academy by a grant awarded the research center of LOK.

The participants will be housed in apartments for three but each will have their own bedroom. If you prefer, you can have your own apartment for an additional fee of DKK 1.200,-. On the registration form you may note colleagues with whom you prefer to share an apartment.

Cancellation may be made without any charge before February 15, 2003, but later cancellation will be charged 10% of the above fee.

Registration

Interested researchers and Ph.D. students should complete the enclosed registration form and return it together with

- A curriculum vitae
- A one-page description of own research specialisation
- A letter of recommendation from Ph.D.-advisor (not needed for researchers)

no later than February 1, 2003.

For further information please contact
Susanne Feldt Jørgensen
Centre for Small Business Studies (CESFO)
University of Southern Denmark
Engstien 1
DK- 6000 Kolding

Tel +45 6550 1356
Fax +45 6550 1357
Email SFJ@sam.sdu.dk

Instructor

Thomas Schøtt, Associate Professor of sociology at the University of Pittsburgh and visiting Associate Professor at the University of Southern Denmark in Kolding. He received his cand.scient. degree from Aarhus University and his Ph.D. from Columbia University in New York. His publications mostly analyse networks among persons, organizations and nations, e.g. in the journal *Social Networks*. He will give most of the instruction in the course.

Guest-speaker

We expect to bring a guest speaker for our last day of class.

Literature

In preparation for the course, each participant is expected to read an introduction to network analysis. Any of the following books offers a suitable introduction. During the course we cannot expect to have time for reading, and therefore no reading is assigned, but a compendium of articles and lecture notes will be distributed.

- “What is network analysis?” at <http://www.sfu.ca/~insna>
- Social network analysis. John Scott. (second edition is preferable)
- Analysis of social networks. David Knoke et al.
- Changing organizations: business networks. David Knoke.
- Achieving success through social capital. Wayne Baker.
- Networking smart. Wayne Baker.
- Networks in the global village. Barry Wellman.
- Social structures: a network approach. Barry Wellman et al. (second edition is preferable)
- Social network analysis. Stanley Wasserman et al.
- Network models of the diffusion of innovations. Thomas Valente.
- Social Networks (journal), see at <http://www.sfu.ca/~insna>
- Connections (journal), see at <http://www.sfu.ca/~insna>
- Journal of Social Structure, published at <http://www2.heinz.cmu.edu/prject/INSNA/joss>
- “Network analysis” by Ronald Burt and “Network models” by Thomas Schøtt, in *Structure Manual* which can be downloaded from <http://gsbwww.uchicago.edu/fac/ronald.burt/teaching/STRUCmanual.pdf>

Application form

For attending Ph.D. course in social network analysis 3-7 March 2003

NAME (Mr/Ms) _____

UNIVERSITY _____

DEPARTMENT _____

ADRESSE _____

PHONE _____ FAX _____ EMAIL _____

Conference fee, DKK. (see the invitation for what is included) DKK _____

I would like to stay in an apartment for 3 people

I would like to share apartment, if possible with _____

I prefer a single apartment and will pay the extra fee of DKK 1.200,- +DKK _____

I stay privately in Kolding, and do not need a room at Kolding Byferie -DKK _____

Please subtract DKK 2.100,- -DKK _____

Total amount to pay DKK _____

Please return this application to:

**University of Southern Denmark
Centre for Small Business Studies
Engstien 1
DK-6000 Kolding
Denmark
Phone: +45 6550 1356
Fax: +45 6550 1357
E-mail: CESFO@sam.sdu.dk**

DEADLINES:

APPLICATION, CV AND A DESCRIPTION OF YOUR RESEARCH INTEREST: 1 February 2003

PAYMENT: 15 February 2003 to Sydbank Sønderborg, kontonr. 8010-103439-7. "Projectnr. 97/544/25758" Please put your name on the payment.