Course outline and manual

CONTENT – General description of the course
The course familiarizes the participant with:
(a) Basic features of problem-driven and systematic (deductive) theory construction, model building, and explanation in social science, including macro- and micro-features of explanatory models as well as macro-micro-macro transitions. This short first part of the course provides an introduction to the general approach to social science theory formation and research that underlies the topics discussed in the subsequent parts.
(b) Social embeddedness and trust. The first application in which part (a) is brought into action focuses on network explanation for social dilemma problems such as cooperation problems and trust problems. Theoretical models as well as empirical tests of these models will be discussed.
(c) Social capital. The second application in which part (a) is brought into action focuses on social capital. Again first some theoretical principles will be introduced. Thereafter different empirical applications will be discussed including questions on how to find a job, how do people become friends, and what is the role of institutions in the functioning of social capital.
(d) Principles of network data collection and analysis. To conclude the course participants get some hands-on instruction in how to do the type of data analyses discusses in parts (b) and (c) of the course. This will provide some specific insight in the features and problems that occur when one collects social network data. In addition, specific requirements to analyze social network data are discussed.

In correspondence with the description above, the course is divided in four parts:

Part I: Basic features of problem driven and systematic (deductive) theory construction, model building, and explanation in social science (first part day 1)
Part II: Social embeddedness and trust (second part day 1 and day 2)
Part III: Social capital (day 3 and 4)
Part IV: Data collection and analysis (day 5)

COURSE MATERIALS
All main readings will be made available before the course. General theoretical handbooks about sociological theory and explanation that might be of major interest to the participants are:

To facilitate day 5, datasets will be made available to illustrate some of the data analysis issues and let students practice with these data themselves. During day 5 computer facilities including statistical software STATA, SPSS, and UCINET will be available.

AIM OF THE COURSE
Based on readings, presentations, and class discussions, participants will build up (a) an overview of basic features of problem-driven and systematic (deductive) theory construction, model building, and explanation in social science, including macro- and micro-features of explanatory models as well as macro-micro-macro transitions; (b) application of these general feature of theory building to the case of experimental and survey research on embeddedness and trust. (c) a second case to make explicit the principles of sociological theory building based on different forms of social capital research; (d) hands-on instructions on the statistical treatment of data related to the two topics discussed above.

PREREQUISITES
General prerequisites are a graduate training in some social science discipline with considerable focus on social science theory and training in quantitative analysis.

Participants who are lacking background knowledge of sociological theory are strongly encouraged to study at least one of the books mentioned above by Coleman or Hedström.

COURSE PROCEEDINGS
Before each meeting, participants read the literature critically and prepare discussions of the literature, using reading guides that will be provided during the course. Class meetings might include participant presentations in terms of acting as discussants on some of the papers presented. These presentations include not only a structured summary of the literature but also a critical discussion of the strengths and weaknesses of the literature. In case some participants study related work themselves they might include some of their own material in the discussions. Presentations are followed by class discussions of the main issues raised in the readings and presentations. Active participant participation is a core feature of the course.
CLASS MEETINGS: PROCEDURES
Day 1 will mainly be filled with presentations by the teachers of the course with some room for discussion and time to figure out the precise details of the other days. Day 2 to 4 consist partly of presentations of work by the teachers as well as discussions by assigned discussants. We hope that most of the readings are prepared before the summer school and that participants with limited additional preparation can give a 15 minute discussion of some of the papers. After this part of the discussion, the discussion will be broadened to the complete audience. During the first 4 days we will investigate the interests of the participants in terms of data analysis and see to what extent we can accommodate that participants can do some analysis on the last day that is of interests for their own research projects.

DAILY OVERVIEW
The course comprises 5 days with class meetings according to the schedule below. There will be two class meetings of approximately 3 hours each per day.

Part I:
Basic features of problem-driven and systematic (deductive) theory construction, model building, and explanation in social science
Day 1, morning: Theory and explanation in social science (Buskens)

Part II:
Social embeddedness and trust
Day 1, afternoon: Social embeddedness and trust: theory (Buskens)
Day 2, morning: Social embeddedness and trust: experimental studies (Buskens)
Day 2, afternoon: Social embeddedness and trust: survey applications (Buskens)

Part III:
Social capital
Day 3, morning: The research program of social capital (Völker)
Day 3, afternoon: Application of the program:
  1) Creation of social capital: numbers and places (Völker)
Day 4, morning:
  2) Returns of social capital: getting a job (Völker)
  3) Institutional conditioning of social capital. (Völker)
Day 4, afternoon:
  4) Cooperation, conflict and fault lines. Micro and macro level social capital (Völker)

Part IV
Data collection and analysis
Day 5, morning: Data management and descriptive analyses (Buskens / Völker)
Day 5, afternoon: Explanatory analyses (Buskens / Völker)
COURSE MANUAL

Part I:
Basic features of problem-driven and systematic (deductive) theory construction, model building, and explanation in social science

Day 1, morning (Buskens)

Theory and explanation in social science – by way of examples

Following a general introduction to the course, we review some paradigmatic examples of theory construction in social science, with a focus on core features of theory construction and model building like those that will be discussed more systematically in week 2. We start with a set of examples from two chapters by Coleman and subsequently consider one example, namely, Schelling’s models of residential segregation in more detail. Based on these examples, we highlight common features of problem-driven and systematic (deductive) theory construction and model building in social science with an emphasis on macro-micro-macro transitions, including: P-T-E scheme; types of problems; the logical structure of theories and explanations; middle range theories and ‘mechanisms’; theories and testable hypotheses; methodological individualism (Coleman’s scheme and the core elements of social science explanation according to Coleman’s scheme); unintended consequences of goal-directed behavior; different types of theoretical arguments; model building and the method of decreasing abstraction; the logic of testing theories; policy implications of theories.

Required readings:

Optional readings:
Part II:
Social embeddedness and trust

Day 1, afternoon (Buskens)
Social embeddedness and trust: theory
The second part of the summer school focuses on theory, hypotheses, and results of empirical research on effects of social embeddedness on trust in different economic and social relations. We thus focus on effects of macro-conditions (effects of ‘social embeddedness’) on behavior (we will show that this behavior, in turn, has macro-implications). Trust relations are an example of exchange relations with strategic interdependencies between actors. The most important micro-model for this kind of situations is game theory. Applications of these models meanwhile abound in social science, not only in economics and political science but also in sociology. In the first session in Part II, we investigate different ways of theory building to derive hypotheses on effects of social embeddedness on trust including analytic, game-theoretic model building as well as the use of simulation to augment the hypotheses derived from the analytic analyses. Finally, we discuss advantages and disadvantages of informally combining different models to test simultaneously hypotheses derived from various formal models.

Required readings:

Optional readings (the first paper presents an extensive review of the arguments and studies discussed in this part of the summer school; the other two papers are specifically for participants interested in game-theoretic analysis):

Day 2, morning (Buskens)
Social embeddedness and trust: experimental studies
Two types of experimental studies are used to test the hypotheses on effects on embeddedness on trust: laboratory experiments and vignette experiments. By illustrating how the hypotheses developed on effects of embeddedness on trust are tested with different types of experiments, we will also be able to detail out some of the principles of doing experimental research in sociology in general. Two participants will be requested to act as discussants in this session, to elaborate on the strengths and weaknesses of Buskens et al. (2009) and Buskens & Weesie (2000). The session will then be ended by a more general discussion of the possibilities and opportunities for experimental research in the social sciences, possibly related to research of some of the participants.
Required readings:
- Buskens, Vincent, Werner Raub, and Joris van der Veer (2009). Trust and Triads: An Experimental Study (submitted for publication).

Optional readings (for participants with interest in additional experimental evidence):

Day 2, afternoon (Buskens)
**Social embeddedness and trust: survey applications**
We continue our discussion of theory, hypotheses, and results of empirical research on effects of social embeddedness on trust with a special focus on buyer-supplier relations between business firms. We will use empirical studies in this field to also develop some basic understanding with respect to the advantages and disadvantages to doing survey research in this field. In the second part of this session, we discuss the complementaries between the different research designs discussed in part II. Specifically, we pay attention to the advantage of using complementary research design to study the same research questions and to test the same hypotheses. Again two discussants will be asked to reflect on the Batenburg et al. (2003) study as well as on Buskens and Raub (2008).

Required readings:

Optional readings:
Day 3, morning (Völker)

The research program of social capital theory

Social networks seem to be quasi omnipresent in social situations. The purpose of this lecture is to think and learn about the importance of social networks in social life and their central role within the theoretical analysis of social situations. Therefore it is important to gain some theoretical skills in analyzing social networks, their emergence and their influence on human actions and the effect of these actions on the emergence or maintenance and change of collective social phenomena such as social inequality, cohesion or rationalization. First, the background and current state of social network research is discussed. Second, participants are acquainted with the structuralist position that holds that you only need to know the structure of an actor’s network to explain what s/he does. Third, we discuss social exchange theory that prepared the road for social capital theory, the hard core of the social capital theory and its auxiliary assumptions, indicate the research problems that it helps to solve and the degree to which it is supported by empirical findings. Finally, we discuss different approaches to inquire social capital in empirical research. There are different measurement possibilities of social capital and social networks, which will be presented and discussed accordingly.

Required readings:


Optional readings:


**Day 3, afternoon (Völker)**

**Creation of social capital: numbers and places - meeting chances and social settings**

Before any tie can be established, first of all people have to meet, as ‘there will be no mating, without meeting’. Therefore places that bring people together will be an important prerequisite for the formation and maintenance of social networks. An even more basic element of this ‘supply side’ explanation of social networks are numbers, since, according to Peter Blau’s one-liner ‘you cannot marry an Eskimo if no Eskimo is around’. In the second part of the afternoon own research on the influence of contexts, places, on social relationships and networks will be presented and future research questions will be discussed.

**Required readings:**


**Optional readings:**


Day 4, morning (Völker)
a) Returns of social capital: getting a job
The social world abounds with network effects. Conceiving of social capital as being social capital helps to explain these effects. The key to the explanation of network effects is the idea that if someone has more social capital (s)he will better be able to attain his or her ends. The first example concerns social inequality and occupational attainment. In this example the effects of social networks on employment chances will be modeled with the help of the notion of social capital. We also will discuss the work by Lin (2004), showing that the impact of social contacts on getting a job might even be underestimated in current research.

Required readings:

Optional readings:
b) Institutional conditioning of social capital
To think of networks as social capital helps to see that there will be institutional conditioning of the returns to social capital, that is, a particular network will be more or less instrumental depending on the institutions in which it is embedded. We will deal, inter alia, with the case of personal networks under communism. Ins and outs of collecting data on social institutions will also be discussed.

Required readings:

Optional readings:

Day 4, afternoon:
Cooperation, conflict and fault lines. Micro and macro level social capital (Völker)
The distribution of social capital is not only relevant to the problem of inequality and openness, but also to the other key problems in sociology, e.g. societal cohesion. This afternoon we deal with the collective phenomenon of inter-group violence as well as with economic cooperation. We consider social capital as a collective feature of e.g., neighborhoods and discuss the recent proposition of Putnam (2007) who stated that high ethnic diversity in neighborhoods enhances distrust, even among people who have the same ethnicity. Furthermore, we review the general literature and research on consequences of ethnic diversity for social capital and trust. Further, own research in that field is presented and problems of data analyses and their tentative solutions are mentioned.

Required readings
Optional reading


Part IV

Data collection and analysis

Day 5, morning (Buskens / Völker)

Data management and descriptive analyses

In this part of the course, we will illustrate some techniques to work with network data either from Ego-networks or complete networks, but network information may also be acquired through so-called resource of position generators. Participants more interested in analyzing data from experimental methods, we refer them back to the references mentioned under Part II. In this morning session, we focus on getting your data in the right format, which is often neither straightforward for network data nor for experimental data. Participants might be willing to work with their own data. Alternatively, we will make available some data on Ego-networks (e.g., from the General Social Survey in the United States) and complete networks (e.g., dataset from Krackhardt 1988). In addition, data of some of the experiments discussed in Part II will be made available.

*To make this day as productive as possible, participants should indicate as early as possible during the course what their main interest is in terms of the data analysis you would like to do on this last day and which data you would like to use. Therefore, all participants hand in a one page description of a research question they would like to analyze related to trust, networks, and/or social capital including an indication of the data they would like to have to investigate this question. The morning session will then be devoted to getting acquainted with the data, operationalizing main concepts and constructing related variables. Participants will be working in pairs or on their own and the teachers will provide hands-on help in a computer laboratory.*
Day 5, afternoon (Buskens / Völker)

Descriptive and explanatory analyses
In this final part, the preparations of the first part of the day will be used to do one explanatory analysis, which hopefully provides a tentative answer to the research question proposed. The final part of the day should be used to evaluate the effectiveness and usefulness of the summer school as a whole.

Required readings:

- Wasserman, S. and Faust, K. (1994) Social Network Analysis: Methods and Application. Cambridge: Cambridge University Press. (This is THE reference work on social network analysis; for the summer school in particular chapters 2, 5, and 6.4 are of interest).

Optional readings (depending on the specific network measurements participants want to work with):

- Freeman, L.C. (1979) Centrality in Social Networks Conceptual Clarification. Social Networks 1: 215-139. (A classic article comparing several centrality measures.)