Course Syllabus

Title of the course	**Social Network Studies (offered in English)**		
Title of the Academic Programme	Sociology and Social Informatics		
Type of the course	Elective		
Prerequisites	Sociological Theory		
ECTS workload	6		
Total indicative study hours	Directed Study	Self-directed study	Total
	48	180	228
Course Overview	The course is basic course in social network analysis with special attention to exemplary empirical studies, including intra-organizational networks, creative networks, criminal networks, networks of political mobilizations etc.		
Intended Learning Outcomes (ILO)	The main learning outcomes of the course are abilities (a) to apply methods of social network analysis to sociological data and (b) develop research design within social network analysis framework. Students will also receive an overview of exemplary empirical studies designed with SNA methodology.		
Teaching and Learning Methods	The course is built as a discussion of textbook and original research papers. Students will present summaries of research papers and discuss them during classes. For each topic students receive assignment in a form of a small seminar project which should be fulfilled in working groups.		

Content and Structure of the Course

№	**Topic / Course Chapter**	**Total**	**Directed Study**		**Self-directed Study**
			Lectures	**Tutorials**	
1	Basic concepts of social network analysis	28		6	22
2	Centrality & centralization	28		6	22
3	Cohesion	28		6	22
4	Ego-networks & structural holes	28		6	22
5	Community structure	29		6	23
6	Equivalent positions & block-modelling	29		6	23
7	Multiplex & two-mode networks	29		6	23
8	Statistics & modelling in SNA	29		6	23
Total study hours		228		48	180

Indicative Assessment Methods and Strategy	F*inal grade* for the course is 0,29*seminar1 grade + 0,29* seminar2 grade + 0,22*discussion + 0,2*exam. *Seminar1 grade* is grade for home reading presentations during classes & class discussions. *Seminar2 grade* is grade for seminar project presentations.

	Discussion participation is grade for contributions in class discussion (a student ask questions or give critical remark demonstrating her\his knowledge of home reading). *Final exam* is organized in a form of a written research report discussing network measures & their interpretations.		
Readings / Indicative Learning Resources	Mandatory Luke, Douglas A. (2015) A User's Guide to Network Analysis in R, Springer. https://proxylibrary.hse.ru:2184/book/10.1007%2F978-3-319-23883-8 Optional Alhajj, Reda and Rokne, Jon. (eds.) (2014) Encyclopedia of Social Network Analysis and Mining, Springer. https://proxylibrary.hse.ru:2184/referencework/10.1007%2F978-1-4614-6170-8		
Indicative Self- Study Strategies	**Type**	**+/–**	**Hours**
	Reading for seminars / tutorials (lecture materials, mandatory and optional resources)	+	85
	Assignments for seminars / tutorials / labs	+	85
	E-learning / distance learning (MOOC / LMS)		
	Fieldwork		
	Project work		
	Other (please specify)		
	Preparation for the exam		10
Academic Support for the Course	Academic support for the course is provided via LMS, where students can find: guidelines and recommendations for doing the course; guidelines and recommendations for self-study; samples of assessment materials		
Facilities, Equipment and Software	The seminar requires a white board, laptop and projector.		
Course Instructor	Maria Safonova, PhD, associate professor, msafonova@hse.ru		

Intended Learning Outcomes (ILO) Delivering

Programme ILO(s)	Course ILO(s)	Teaching and Learning Methods for delivering ILO(s)	Indicative Assessment Methods of Delivered ILO(s)

Course Content

1. *Basic concepts of social network analysis.*

Nodes. Edges. Matrix. Graph. Observable and perceptive networks. Macro, meso- and micro-levels of analysis. Types of network data. Full network data & ego-network data. Network boundary: realist and nominalist approaches. Sampling in network analysis. Attributes. Measuring links. Sources of network data.

2. *Centrality & centralization.*

Centrality & centralization. In-degree & out-degree. Farness and closeness. Node betweenness & edge betweenness. Eigenvector centrality. Bonacich power.

3. *Cohesion.*

Cohesion in networks. Density. Geodesic distance. Diameter. Reciprocity and transitivity. Node's attributes, groups & homophily. Group's external and internal ties. Assortativity.

4. *Ego-networks & structural holes*

Defining ego-network. Ego-networks size and density. Redundancy, effective size and efficiency. Inefficiency as a function of size, density, hierarchy & structural equivalency. Structural holes and constraint.

5. *Community structure*

Top-down and bottom-up approaches to community structure. Cliques, n-cliques, clique percolation ect. Componets. Fractions. Modularity maximization. Goodness of fit measures.

6. *Equivalent positions & block-modelling*

Positions and roles in network analysis. Equivalent positions. Structural and regular equivalency. Blocks. Block-matrix and image-matrix. Goodness of fit. Coalition, hierarchy, community structure & isolation.

7. *Multiplex & two-mode networks*

Matrix operations. Two-mode to one-mode. Projection. Two-mode centralities, density, community structure.

8. *Statistics & modelling in SNA*

Monadic, dyadic and mixed hypothesis.

Assessment Methods and Cri teria

Assessment Methods

Types of Assessment	**Forms of Assessment**	**Modules**			
		1	**2**	**3**	**4**
	Report/Presentation	*	*		
	Project	*	*		
	In-class Participation	*	*		
Summative Assessment	Exam (written report)		*		

Assessment Criteria

In-class Participation

Grades	Assessment Criteria
«Excellent» (8-10)	A critical analysis which demonstrates original thinking and shows strong evidence of preparatory research and broad background knowledge.
«Good» (6-7)	Shows strong evidence of preparatory research and broad background knowledge. Excellent oral expression.
«Satisfactory» (4-5)	Satisfactory overall, showing a fair knowledge of the topic, a reasonable standard of expression. Some hesitation in answering follow-up questions and/or gives incomplete or partly irrelevant answers.
«Fail» (0-2)	Limited evidence of relevant knowledge and an attempt to address the topic. Unable to offer relevant information or opinion in answer to follow-up questions.

Project Work

Grades	Assessment Criteria
«Excellent» (8-10)	A well-structured, analytical presentation of project work. Shows strong evidence and broad background knowledge. In a group presentation all members contribute equally and each contribution builds on the previous one clearly; Answers to follow-up questions reveal a good range and depth of knowledge beyond that covered in the presentation and show confidence in discussion.
«Good» (6-7)	Clearly organized analysis, showing evidence of a good overall knowledge of the topic. The presenter of the project work highlights key points and responds to follow up questions appropriately. In group presentations there is evidence that the group has met to discuss the topic and is presenting the results of that discussion, in an order previously agreed.
«Satisfactory» (4-5)	Takes a very basic approach to the topic, using broadly appropriate material but lacking focus. The presentation of project work is largely unstructured, and some points are irrelevant to the topic. Knowledge of the topic is limited and there may be evidence of basic misunderstanding. In a group presentation, most of the work is done by one or two students and the individual contributions do not add up.
«Fail» (0-2)	Fails to demonstrate any appropriate knowledge.

Written Assignments (Essay, Test/Quiz, Written Exam, etc.)

Grades	Assessment Criteria
«Excellent» (8-10)	Has a clear argument, which addresses the topic and responds effectively to all aspects of the task. Fully satisfies all the requirements of the task; rare minor errors occur;
«Good» (6-7)	Responds to most aspects of the topic with a clear, explicit argument. Covers the requirements of the task; may produce occasional errors.
«Satisfactory» (4-5)	Generally addresses the task; the format may be inappropriate in places; display little evidence of (depending on the assignment): independent thought and critical judgement include a partial superficial coverage of the key issues, lack critical analysis, may make frequent errors.
«Fail» (0-2)	Fails to demonstrate any appropriate knowledge.

Recommendations for students about organization of self-study

Self-study is organized in order to:

- Systemize theoretical knowledge received at lectures;
- Extending theoretical knowledge;
- Learn how to use legal, regulatory, referential information and professional literature;
- Development of cognitive and soft skills: creativity and self-sufficiency;
- Enhancing critical thinking and personal development skills;
- Development of research skills;
- Obtaining skills of efficient independent professional activities.

Self-study, which is not included into a course syllabus, but aimed at extending knowledge about the subject, is up to the student's own initiative. A teacher recommends relevant resources for self-study, defines relevant methods for self-study and demonstrates students' past experiences. Tasks for self-study and its content can vary depending on individual characteristics of a student. Self-study can be arranged individually or in groups both offline and online depending on the objectives, topics and difficulty degree. Assessment of self-study is made in the framework of teaching load for seminars or tests.

In order to show the outcomes of self-study it is recommended:

- Make a plan for 3-5 presentation which will include topic, how the self-study was organized, main conclusions and suggestions and its rationale and importance.
- Supply the presentation with illustrations. It should be defined by an actual task of the teacher.

Recommendations for essay

An essay is a written self-study on a topic offered by the teacher or by the student him/herself approved by teacher. The topic for essay includes development of skills for critical thinking and written argumentation of ideas. An essay should include clear statement of a research problem; include an analysis of the problem by using concepts and analytical tools within the subject that generalize the point of view of the author.

Essay structure:

1. *Introduction and formulation of a research question.*

2. *Body of the essay* and theoretical foundation of selected problem and argumentation of a research question.

3. *Conclusion* and argumentative summary about the research question and possibilities for further use or development.

Special conditions for organization of learning process for students with special needs

The following types of comprehension of learning information (including e-learning and distance learning) can be offered to students with disabilities (by their written request) in accordance with their individual psychophysical characteristics:

1. *for persons with vision disorders:* a printed text in enlarged font; an electronic document; audios (transferring of learning materials into the audio); an individual advising with an assistance of a sign language interpreter; individual assignments and advising.
2. *for persons with hearing disorders: a* printed text; an electronic document; video materials with subtitles; an individual advising with an assistance of a sign language interpreter; individual assignments and advising.
3. *for persons with muscle-skeleton disorders: a* printed text; an electronic document; audios; individual assignments and advising.