**“Introduction to Social Network Analysis Methods and Applications”**

Summer School, 2014

**Syllabus**

**Instructor Team**

***Stanley Wasserman,*** Professor, Indiana University and Higher School of Economics; ANR Scientific Supervisor, swasserman@hse.ru

***Valentina Kuskova,*** Assistant professor, Higher School of Economics; ANR director, vkuskova@hse.ru

***Benjamin Lind****,* Assistant professor, Higher School of Economics; ANR lead scientist, lind.benjamin@gmail.com

***Olga Mayorova,*** Assistant professor, Higher School of Economics; ANR lead scientist, mayorova8@gmail.com

**Course preparation and organization**

***Enge Iskhakova,*** laboratory manager, eiskhakova@hse.ru

**Time and place**

July 7-11, 2014; 9:30 am - ~7 pm.

Faculty of Management Building, Kirpichnaya 33/5, Room 901 on July 7, 9-11; Room 902 on July 8th.

**Text & Materials**

***Required***

Wasserman, S., & Faust, K. (1994). *Social network analysis: Methods and applications*. Cambridge, England: Cambridge University Press.

***Optional***

Reading lists (individual and group, posted in the dropbox folder)

## Course Overview & Objectives

The purpose of the school is to introduce students to the foundations of theory and methods of social network analysis (SNA), and to demonstrate how networks are used to explain and predict phenomena in a wide range of other applied disciplines. The school contains three independent, but interconnected components:

1. Theoretical: network theory and theory of networks, and their role in nomological network of focal constructs of interest;
2. Methodological: methods of analysis and software programs used to analyze network data;
3. Applied: the theory and instruments learned in class are then used in individual and group work to design a research project in student’s own area of interest.

The main goal of the school is to help participants, who have never worked with network theory and methods, to use the integrated systems thinking approach to create theoretically driven, methodologically sound research projects. The ultimate outcome of the school is the completed project proposal for a study, which can later be completed as a full-scale research project. Participants will also receive three ECTS credits for their participation in the course. The School is designed for researchers and students who have never worked with network analysis before, but are interested in utilizing this method in their respective areas of study. Working language of the School is English.

**Teaching Format**

This is an interactive, participatory course, which will run as a combination of lectures, small group discussions (working on projects), and in-class exercises. We ask that to the extent possible, students **read the assigned reading materials** and come prepared to discuss the readings and ask questions. We want you to have good projects at the end of the week!

**Course Competencies**

The course develops the following competencies:

| **Competencies** | **NC/NRU-HSE Code** | **Descriptors - the learning outcomes (the indicators of achievement)** | **Teaching forms and methods of that contribute to the development of a competence** |
| --- | --- | --- | --- |
| **Systemic Competencies**1. Ability to work with complex data and use methods of network analysis and statistics appropriately. |  СК-М2 | Correctly selects appropriate model / method of network analysis for a given problem. | Lectures, readings, in-class exercises, data analysis projects |
| 2. Ability to translate conceptual thinking into publishable quality papers |  СК-М6 | Confidently uses available data to test proposed hypotheses. Able to develop a solid theoretical foundation for the project at hand. Able to integrate information found from various sources and compensate for lack of data by adjusting models.  | Lectures, readings, in-class exercises, data analysis projects |
| 3. Ability to advance own knowledge in the area of research methods. | CK-M3 | Masters advanced research methods, including network methods, without direct supervision, and is capable of using these methods to analyze complex models. | Lectures; independent work. |
| 4. Ability to reflect on learned research methods and tools | CK-M1 | Processes learned information, and is capable of integrating learned material into a cohesive research toolchest | Lectures; independent work. |
| **Instrumental Competencies** |
| 1. Ability to conduct written and oral communication in English to convey research ideas | ИК-M2.1/2.1/2 | Concisely and precisely expresses research ideas in English in written and oral communication | Lectures, readings, in-class exercises, data analysis projects |
| 2. Ability to conduct written and oral communication in English language to convey professional and scientific ideas | ИК-М2.1/2.\_2.4.1 | Concisely and precisely expresses research ideas in English in written and oral communication | Lectures, readings, in-class exercises, data analysis projects |
| 3. Ability to present and defend a scientific argument in front of a wide audience | ИК-M2.5.2\_3.1/2 | Effectively presents research ideas to peers, instructors, and general audience | Lectures, readings, in-class exercises, data analysis projects |

**Grading and Credits**

Course is graded on Pass/Fail basis; students earn a grade of “Pass” if at least 70% of the points are achieved. Points are calculated as follows:

Attendance (each day is 10 points, for a total possible of 50) – 70%

Project (100 points) – 30%

Projects requirements will be provided in a separate document.

**Copyright Notice**

All handouts in this course are copyrighted, including all materials posted on the website for this course. “Handouts” refers to all materials generated for this class, which include but are not limited to the reading materials, syllabus, class notes, lab problems, in-class materials, review sheets, and additional problem sets. You have the right to download materials from the course website for your own use during this class; however, because these materials are copyrighted, you do not have the right to copy the handouts for other purposes unless the instructors expressly grant permission.

**Good luck and have fun!**