



Syllabus Course Program



Internet-based research of economic activities

Specialty

054 - Sociology

Institute

Institute of Socio-Humanitarian Technologies

Educational program

Sociological support of economic activity

Department

Department of Sociology and Public Administration (305)

Level of education

Master

Course type

Special (professional), Mandatory,

Semester

1

Language of instruction

English, Ukrainian

Lecturers and course developers

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Doctor of Sociology, Professor, Professor of the Department of Sociology and Public Administration (NTU "KhPI")

Author of more than 300 scientific and educational publications. Leading lecturer in the courses: "Sociology of Internet Communications", "Academic English", "Theory of Information Society", "Social Communications in a Global Society", "Business Communications".

[More about the lecturer on the department's website](https://web.kpi.kharkov.ua/sp/goroshko-olena-igorivna/)

<https://web.kpi.kharkov.ua/sp/goroshko-olena-igorivna/>

General information

Summary

The course is devoted to the study of Internet as a social phenomenon, and online methods of data collection in the social sciences, in particular in economic activity. The course examines the features of the online data collection format in comparison with the traditional offline format, discusses the key advantages and disadvantages of this format. The course also covers such methods of data collection as online surveys, online interviews, online focus groups, network ethnography, online observation, non-reactive data collection methods related to the analysis of documents and digital traces, and social networks. For each of these methods, the key advantages and limitations are discussed, and practical advice is provided on how to collect the highest quality data. The course includes an important practical part related to learning how to program online questionnaires using general and specialized software. Standards for conducting and presenting research results using the online methods are examined in detail. Examples of empirical research designs using online methods in economic and sociological research are discussed.

Course objectives and goals

to disseminate the experience of using the Internet for conducting sociological research in the field of economic activity

Format of classes

Lectures, practical classes, independent work, consultations. The final control is exam

Competencies

SC03. Ability to design and fulfill sociologic research, to develop and substantiate their methodology.

SC04. Ability to collect and analyze empirical data with the use of present-day sociologic research methods and digital technologies.

SC05. Ability to discuss the outcomes of social research and project in Ukrainian and a foreign language.

SC07. Ability to design and evaluate social projects and programs.

Learning outcomes

PR01. To analyze social phenomena and processes using empirical data and present-day concepts and theories in sociology.

PR03. To develop and implement social and interdisciplinary projects with accounting for social, economic, legal, environmental, and other aspects of social life.

PR04. To apply scientific knowledge, sociological and statistical methods, digital technologies, specialized software for solving complex tasks in sociology and conterminal knowledge areas.

PR05. To carry out search for, to analyze and estimate the needed information in scientific literature, databases and other sources.

PR06. Co communicate fluently in oral speech and writing in Ukrainian and a foreign language when discussing professional issues, research and innovations in the field of sociology and conterminal sciences, including the context of cooperation with European and Euro-Atlantic institutions.

PR09. To plan and carry out scientific research in the field of sociology, to analyze its outcomes and substantiate the conclusions.

PR 11. Apply modern digital tools and specialized software to solve complex economic problems.

Student workload

The total volume of the discipline is 150 hours (5 ECTS credits): lectures - 32 hours, practical classes - 32 hours, independent work - 86 hours.

Course prerequisites

To successfully complete the course, you must have knowledge and practical skills in the following areas: Methodology and methods of sociological research; General sociology; Workshop on modern methods of sociological research of business activities; Workshop on sociological support of advertising and marketing research; Sociological methods of Internet research.

The level of English proficiency is B2 ESP.

Features of the course, teaching and learning methods, and technologies

Lectures are conducted interactively with the use of multimedia technologies. Practical classes use a project-based approach to learning, game methods, and focus on application of information technology in the English-speaking business environment. Training materials are available to students through Google Disk Drive and LMS (learning management systems). During the lectures, the following teaching methods are also used: explanatory and illustrative method (demonstration of presentation slides, visualization of educational material on the screen); method of problematic presentation; partially search, or heuristic method (lectures on certain topics are taught in a problematic form).

Practical classes - conducted in the form of seminars. For seminar classes, students work on lecture material, prepare speeches using educational and scientific literature, and make presentations. The lecturer evaluates the students' activity during the seminar according to the accepted grading scale. During the seminar, the level of students' knowledge is assessed for each topic using test tasks and written independent work to determine their knowledge of the basic concepts on the topic.

Program of the course

Topics of the lectures

Topic 1: The Internet as a socio-technological phenomenon

The history of the network and its conceptual basis. Structure of the Internet environment: organisational, technical, functional, social, informational, economic and legal components. Modern definition of the Internet. Features of the sociological approach. Overview of network services: (e-mail, forum, chat, search services, file sharing, mailing lists, etc.) Geography and audience of the Internet: Internet and World Wide Web. The problem of identifying national segments of the network and calculating Internet distance. The concept of "Internet audience". Classification criteria for its definition.

Topic 2. Internet in the social dimension. Internet and the communication process

Internet space (IS) as a special social, psychological and cultural environment. The social system of the Internet: functions and dysfunctions of the Internet; network norms and values; social actors and interactions on the Internet. The impact of the network at the level of the individual (due to the significant expansion of his/her cognitive and communicative capabilities): virtual identity as a product of Internet communications, communicative virtual identity, presentation and identification practices on the Internet, cyberaddiction). The impact of the network at the level of society (virtual communities, the use of the Internet in social communications (politics, science, education, economics, religion, media)).

Topic 3. Conceptual paradigms of the Internet development

The hypermedia system or web technologies as the basis for the existence of the modern Internet. Website as a structural component of the Internet environment. Conceptual development of the network: Web 1.0, Web 2.0, Web 3.0. Their conceptual structure, main differences. Prospects on the further development of the network. Communicative paradigm of development. Internet as a communicative social institution of the information and communication society.

Topic 4. Social media and their impact on current communication processes in the global society

The emergence of social media and their impact on modern social communications. Blogging. Microblogging. Wiki-projects. Social networks. Social bookmarking. Mashup and bricolage services. File sharing services. Podcasting and screen capture technologies. The impact of social media on social communications in the information and communication society. Further development of Web 2.0. The emergence of Web 3.0 and the conceptual and sociological foundations of its functioning. Examples of websites developed within the framework of the third web concept: their analysis.

Topic 5. Current sociological research on the Internet. Sociology of the Internet as a new direction in the development of branch sociologies

Empirical studies of the Internet in the sociology of communications. Studies of the Internet audience. An attempt to theoretically understand the phenomenon of the Internet in the sociology of communications. Sociology of the Internet as a new interdisciplinary field of knowledge and a new type of branch sociology. Cybersociology. The emergence of Internet studies as a new direction in the development of humanitarian knowledge.

Topic 6: The Internet as a tool for conducting sociological research

Description and analysis of web resources for sociologists. The seven most common technologies for conducting online research (T. Filipova): sending questionnaires by e-mail; posting text questionnaires in messenger groups. Use of Internet forums and messengers. Creating web pages for sociological research. Organising and conducting web surveys. Standard web surveys. Self-downloading surveys. Advantages, additional features of web-based surveys: breadth of coverage, accessibility, affordability, efficiency, speed, anonymity, etc. Disadvantages and limitations of online surveys. Search and selection of respondents. Three types of samples for online surveys: unrestricted (random, uncontrolled), selected (screened) and specially recruited (J. Watt). Use of online panels. Creation and principles of the Internet panel. Online focus groups. Use of open-source software for automatic content and parsing analysis (Semonitor, MAXDA, Polianalyst). Use of video technologies in conducting web-based surveys. Virtual learning environments for sociological research.

Topic 7. Website on the Internet as a basic component of the socio-communicative Internet space

Website as a visual and multimodal socio-cultural phenomenon. Features of website design. Features of the electronic style of correspondence. Netlingo. Deeple. Features of placing graphic information on the site. Practice of testing websites. Main types of website page analysis. Technical analysis of the page; analysis of the page design; checking the relevance of the page; checking for spam; analysis of the quality of the text and the extent of its optimisation. Technical analysis of the page: cross-browser compatibility of the page (checking the correct display of the page in major browsers); checking the correct display of the page at different monitor screen resolutions; analysis of the source code of the page; analysis of links; page size and loading speed; checking broken links on the page, correctness of redirects. Basic tools and indicators of website usability: Page Rank, Alexa Traffic Rank, CYT, SEO.

Topic 8: Using the second web services in conducting sociological research

Blogging and microblogging in sociological research. Social services and networks. Podcasting. Social media and their use in the professional activity of a future sociologist. File sharing for professional activity on the example of YouTube, Flickr, SlideShare, Scribd. The problem of trust in information obtained through web 2.0 services.

Topic 9: The use of Internet technologies in scientific research

Information resources of the World Wide Web. The main types of electronic resources. Specialised portals. Electronic journals. Websites of scientific and research organisations. Checking web texts and web resources for uniqueness. Organising an effective search on the web. Deep web. Working with meta-search engines on the Internet. Google office as a scientific virtual environment. Professional e-portfolio of a researcher. Job search on the Internet. Features of writing and designing an electronic CV.

Topic 10. Methodological issues of online research using the Internet

Online research as a method. Features of sampling for online research. Cataloguing of online research methods. Opportunities and limitations of online research. Key trends in the development of online research. International standards for conducting and presenting online research results. The main threats to data quality in online surveys. Tools for assessing and improving data quality. The problem of feedback and ways to solve it. Features of sample design in online surveys. Basic principles of visual presentation of the questionnaire in online surveys. The impact of visualisation of survey tools on respondents' answers. Basic principles of online questionnaire programming. Qualitative online research: interviews and focus groups. Features of project development and implementation of qualitative research in the online environment. Typology of interviews and focus groups in the online environment. Approaches to developing interview and focus group guides. Key threats to data quality in online interviews and focus groups. Using mixed (online and offline) methods of collecting qualitative data. Network ethnography. The main approaches to the development and implementation of an ethnographic research project in an online environment. Features, advantages and disadvantages of the method. Key hazards of data quality. Non-active methods of online data collection. Analysing digital footprints and network activity. Ethical aspects of using non-reactive data collection methods. Visualisation of network data.

Topic 11: Challenges and trends in online research

The problem of defining national borders on the Internet. The problem of trust in information obtained through the Internet. The merger of quantitative and qualitative Internet research methods. The emergence and development of mixed quantitative and qualitative methods of Internet research. Ethics of research in cyberspace. Internet of the future.

Theme 12: Information, information systems and information technologies.

Informatisation of society. The impact of IT on business. Modern information technologies: Big data technology. Cloud computing. Internet of things. Blockchain technologies. Artificial intelligence technologies.

Topic 13: Tasks and place of the IT department in the company's activities

The concept of enterprise IT infrastructure. IT outsourcing, corporate information systems. Enterprise resource planning and management systems. ERP systems. Customer relationship management systems. Overview of CRM systems

Topic 14: E-state in action

Electronic economy, e-business, e-marketing and e-commerce. Electronic document management systems, ECM systems

Topics of the workshops

Topics of practical classes

Topic 1: The Internet as a socio-technological phenomenon

Introduction to the virtual learning environment Moodle. Registration of students on it. Explanations on how to complete web-based surveys and create personal virtual presentations in Moodle.

Taking tests to test your final knowledge of computer science and the basics of using the Internet: Questionnaire on expectations from the course "Internet Technologies in Social Communications".

Brainstorming on the questions:

Internet in modern life: more positive or negative?

Internet in your personal life: more positive or negative?

Conducting meta-planning on the topic: "How do I see the use of the Internet in my future career?"

Topic 2. The Internet in the social dimension. The Internet and the communication process

Introduction to communication services on the Internet. Opening personal accounts on them: Google, Yahoo, Pinterest, Facebook, Instagram, Tik-Tok.

A personal computer and mobile phone as a means of mastering social reality. Where to start and how? (Brainstorming).

Presentations by undergraduates on their personal use of various communication Internet services. An attempt to identify and describe communicative web genres.

- Group work. During the practical session, students are divided into four groups. Each group should identify:

What are the main changes in modern society (not only in Ukraine but also in the world) over the past 10-15 years in one of the four spheres of social life:

Group A - in ECONOMY,

Group B - in POLITICS,

Group C - in the social sphere (public relations), Group D - in culture.

What is the role of the Internet in these changes?

What changes may occur in these areas in the near future due to the further development and spread of new information technologies? It is best if each group prepares, discusses and agrees on this list of changes in advance. During the session, each group will have 5-7 minutes to present their list. Then the others will add to and comment on the list they have proposed.

Topic 3. Conceptual paradigms of Internet development

Students are given a list of websites and asked to identify which web they belong to. Then students have to identify the basic differentiating characteristics and audit the sites.

Free association method: "What spatial metaphors are commonly used to describe the Internet?"

Using the brainstorming technique, hold a debate on the topic:

How do anonymity and invisibility on the Internet affect communication on the Internet?

In what ways is the lack of physical interaction and limited sensory experience overcome?

How does the idea of time and space change due to Internet communication?

What are the main features of the new Internet culture?

Topic 4. Social media and their impact on modern communication processes in a global society

Opening a blog on the Internet on Blogspot, Hiblogger. Conducting meta-planning on the topic: "Using blogging for sociological research".

Register on Twitter and Del.icio.us. Subscribe to the topics of interest to receive the necessary information. Follow the innovations on the web for continuous professional development.

Register on social networking sites Ning, Facebook, Linkdeln. Develop proposals for the use of social media in sociological research. Search for professional and scientific communities on these networks and try to establish relationships with them.

Register on YouTube and propose options for using video resources and Internet video technologies for sociological research. Suggest options for sociological study of the YouTube service itself.

Register on the PBwiki website and start developing a Wikipedia project for beginner sociologists.

Topic 5. Recent sociological research on the Internet. Sociology of the Internet as a new direction in the development of branch sociologies

Individual presentations on the topic "How I will use the Internet and technologies based on it in my master's thesis".

Conducting a checking test on the topic of Module 1.

Topic 6: The Internet as a tool for conducting sociological research

Introduction to the portal Monkey.survey.com. Developing your own web-based questionnaire for conducting research for a course or diploma project.

Starting to develop a professional sociologist's portfolio using the Mahara.org service - OpenSource.E-Portfolio.

Develop a mini-project for conducting online focus groups as part of your course project.

Develop and conduct an online survey using Googleforms.

Topic 7. Website as a basic component of the socio-communicative Internet space

Four steps in planning the content of your website.

Selection of keywords.

How to develop the best website concept.

How to write content for a website on the Internet.

How to choose the best design solution for your website.

How to conduct a website audit. Checking the usability of the site.

Expert evaluation of the site;

Analysis of traffic statistics (Google Analytics, LiveInternet);

Analysis of user activity records (WebVisor and similar programs);

User testing of the site.

Basics of working with DreamWeaver, YahooPipe, Vicasm, Presentation Software.

Topic 8: Using the services of the second web in conducting sociological research

Brainstorming on the topic: "How can we use the services of the second web in sociological research?"

Creating a collective blog for sociological research of the group's masters.

Creating a collective group on Ning "Virtual community of sociologists: using social networks for research purposes".

Work with wiki projects.

Continuing to develop a professional e-portfolio of a sociologist.

Topic 9: Using Internet technologies in research

Optimisation of the Internet search.

Working with the Exquick metasearch engine.

Working with the Google Office. Demonstration of all the features and capabilities of this software.

Job search using the Internet.

Preparation of a professional electronic CV.

Topic 10. Methodological issues of conducting online research using the Internet

Implementation of your own sociological project using online focus groups.

Implementation of your own sociological project using in-depth interviews online.

Implementation of your own sociological project using mixed methods of research online.

Implementation of your own sociological project using the online expert interview method.

Topic 11: Challenges and trends in online research

Conducting a checking test on the topic of Module 2.

Topic 12: Information, information systems and information technologies.

Prepare a presentation of interesting cases with the use of AI technologies in business.

Prepare a presentation of interesting cases with the use of Big Data technologies in business.

Prepare a presentation of interesting cases with the use of cloud technologies in business.

Prepare a presentation of interesting cases with the use of Blockchain technologies in business.

Topic 13: Tasks and place of the IT department in the company's activities

Development of a presentation on the topic "City of ICT in a modern company"

Topic 14: E-state in action

Conducting a checking test on the topic of Module 3.

Topics of the laboratory classes

Laboratory work is not included in the course.

Self-study

Independent work of students is carried out in the form of individual or group assignments - a type of independent work outside of classroom hours, when students, using lecture material and additional sources of knowledge, develop their own topic.

Preparation of a presentation is a type of independent work performed by a student (or 2-3 students) outside of class hours. The student freely chooses a topic from among the topics offered by the seminar syllabus or agrees with the instructor on an initiative topic. The next step is to conduct a bibliographic search using library collections or Internet resources. They also draw up a presentation plan or ask questions that need to be answered with reason. Having mastered the sources on the topic, the student reveals the content of the questions and presents the work done at the seminar. The volume of the presentation is 16-25 slides, the text of the report is 4-6 standard pages typed on a computer. The main content of the presentation is presented in a free form at the seminar, and the student receives a grade from the teacher

Course materials and recommended reading

Main literature:

1. Goroshko O. I. Sociology of Internet Communications, 2014 - Kharkiv, publishing house of the National University: Vasyl Karazin State University, - 820 p.
2. Zavada O., Pryima S. Global Internet. Texts of lectures. Lviv, Publishing Center of the Faculty of Economics of Ivan Franko National University of Lviv, 2017. 64c.
3. Zamikhovska O.L. Information systems and technologies in the economy: a textbook. Ministry of Education and Science of Ukraine, Ivano-Frankivsk National Technical University of Oil and Gas. Ivano-Frankivsk: IFNTUOG, 2014. 371 c.
4. Pereverziev O. S. Modern practices of using the latest non-interrogative methods of data collection in sociology Scientific records of NaUKMA. 2017. Vol. 196. Sociological sciences: 19-23.
5. Shvachych G.G., Tolstoy V.V., Petrechuk L.M., Ivashchenko Y.S., Guliaeva O.A., Sobolenko O.V. Modern information and communication technologies: Study guide. Dnipro: NMetAU, 2017. 230 p. *Hewson, C., Vogel, C. and Laurent, D., (2016). Internet Research Methods. Second Edition* 55 City Road, London: SAGE Publications Ltd. Available at: <<https://dx.doi>

Additional literature:

6. Bakirov V. S. Big Data as a tool for sociological research [Electronic resource] / V. S. Bakirov, G. M. Zholtkevych // Materials of the scientific conference "Methodology and methods of sociological research in Ukraine: history and modern problems. To the 70th anniversary of Vladimir Paniotto." - 2017. - Access mode: <http://soc-research.info/downloads/Paniotto70.zip>. - Title from the screen
7. Goroshko O I The phenomenon of Uanet: sociological analysis / O I Goroshko // Collection of scientific works "Sociology of management." - Donetsk: DonDUU, 2009. - Vol. X, Issue 116. - P. 111-127. - (Series "Special and Branch Sociologies").
8. Goroshko OI Sociology of the Internet: methods of studying the virtual audience / OI Goroshko // Materials of the second scientific conference "Modern social problems in the dimension of sociology of management." - Donetsk: DonDUU, 2006. - P. 152-164.

9. The state in a smartphone // Ukrinform. Access mode: <https://www.ukrinform.ua/tag-derzava-u-smartfoni> Title from the screen
10. Kazanzhi A. P. The concept and meaning of the "method effect" in "mixed-mode" research / A. P. Kazanzhi // Actual problems of sociology, psychology, pedagogy. 2015.
11. Tomashevskiy O.M., Tsehelyk G.G., Viter M.B., Duduk V.I. Information technologies and modeling of business processes. Study guide. Kyiv: Center for Educational Literature, 2012. 296 c
12. Shevchenko L. (2021) "Diya" - is it cool? We looked at how it is in other countries Liga.Net Access mode: <https://tech.liga.net/ua/other/article/chego-ne-hvataet-v-diya-izuchili-elektronnye-pravitelstva-drugih-stran> Title from the screen
13. Goroshko, O.Ig., Boiko N.L. (2023) [Uanet Through Socio-Political Perspectives](#) // Internet in the Post-Soviet Area Technological, Economic and Political Aspects. - Springer, pp. 135-160.
14. Goroshko, O.Ig., Salionovych, L.M. Linguistics 2.0: Internet Research in the post-Soviet Space // Media and Public Relations Research in Post-Socialist Societies. Lexington Books of Rowman & Littlefield. USA, - pp.287-300.
- @article{Miller2017ExplanationIA, title={Explanation in Artificial Intelligence: Insights from the Social Sciences}, author={Tim Miller}, journal={Artif. Intell.}, year={2017}, volume={267}, pages={1-38}, url={https://api.semanticscholar.org/CorpusID:36024272} }

Assessment and grading

Criteria for assessment of student performance, and the final score structure

100% The final grade is composed of the assessment results in the form of a test (20%) and ongoing assessment (80%). The test includes completing an individual assignment and an oral presentation. Ongoing assessment involves completing an individual assignment in the form of a paper with a presentation (40%) and completing tasks on the topics during practical sessions (40%)..

Grading scale

Total points	National	ECTS
90–100	Excellent	A
82–89	Good	B
75–81	Good	C
64–74	Satisfactory	D
60–63	Satisfactory	E
35–59	Unsatisfactory (requires additional learning)	FX
1–34	Unsatisfactory (requires repetition of the course)	F

Norms of academic integrity and course policy

The student must adhere to the Code of Ethics of Academic Relations and Integrity of NTU "KhPI": to demonstrate discipline, good manners, kindness, honesty, and responsibility. Conflict situations should be openly discussed in academic groups with a lecturer, and if it is impossible to resolve the conflict, they should be brought to the attention of the Institute's management.


Regulatory and legal documents related to the implementation of the principles of academic integrity at NTU "KhPI" are available on the website: <http://blogs.kpi.kharkov.ua/v2/nv/akademichna-dobrochesnist/>

Approval

Approved by

Date, signature

Head of the department
Vladimir MOROZ

28.06.2024 

Date, signature

27.08.2024



Guarantor of the educational
program

Nadiia SHANIDZE

