

MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE
Lesya Ukrainka Volyn National University
Faculty of International Relations
Department of International Relations

SYLLABUS
of an elective educational component
“Modern Information and Analytical Technologies in International Studies”
for the training of a **Master’s degree student**

Lutsk – 2025

The syllabus of the educational component “Modern Information and Analytical Technologies in International Studies” for the training of Master’s degree students

Course developer:

PhD (Geography), Associate Professor,
Associate Professor of the Department of International Relations

Sergii V. Fedoniuk

Approved by:

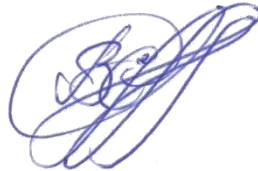
Guarantor of the Educational
and Professional Programme:



Professor **Nataliia P. Karpchuk**

The syllabus of the educational component was approved at the meeting of the Department of International Relations,
No. 1 of **September 1, 2025**

Head of the Department:



Associate Professor **Yevhenia V. Vozniuk**

I. Description of the Educational Component

Indicator Name	Field of knowledge, educational and professional programme /, education level	Characteristics of the academic component
Full-time form of education	C Social Sciences, Journalism, Information and International Relations, C3 International Relations, International Strategic Communications, Master	Optional
Number of hours / credits 120 / 4		Year of study: 2st
		Semester: 1st
		Lectures 10 h.
		Seminars 14 h.
		Independent work 88 h.
		Consultations 8 h.
Form of control: credit.		
Language of education: English		

II. Instructor Information

Full name: Sergii Valentynovych Fedoniuk

Academic degree: PhD in Geography

Academic title: Associate Professor

Position: Associate Professor, Department of International Relations

Contact information: Sergii.Fedoniuk@vnu.edu.ua

Class schedule: classes are conducted according to the timetable published on the website <https://ps.vnu.edu.ua/cgi-bin/timetable.cgi>

III. Description of the Educational Component

Course annotation

The educational component “**Modern Information and Analytical Technologies in International Studies**” is aimed at developing Master’s degree students’ practical skills in applying digital, analytical, and information technologies for researching international processes, information flows, and communication interactions.

The course focuses on the applied use of modern tools for data collection, processing, analysis, and visualization (OSINT, media and social network analysis, basic analytical platforms), as well as on the preparation of analytical products relevant to the field of international relations and strategic communications.

Purpose and objectives of the educational component

Purpose:

to form students’ ability to apply modern information and analytical technologies for researching international processes and preparing applied analytical materials.

Objectives of the educational component:

- familiarization with modern information and analytical technologies in international studies;
- development of skills for working with open data and digital information resources;
- development of abilities for analytical processing of information using digital tools;
- application of methods for visualization and presentation of analytical results;
- formation of a critical approach to the use of information technologies in professional activity.

Soft skills

- ability to learn and acquire modern knowledge;
- ability to identify, formulate, and solve problems;
- ability to work in an international context;
- ability to evaluate and ensure the quality of performed work.
- ability to make well-grounded decisions in the field of international relations;
- ability to analyze international processes in an informational context;
- ability to conduct applied analytical research and prepare analytical materials;
- ability to apply modern information technologies in professional activity.

Structure of the Educational Component

Content module	Topic	Lectures (hours)	Practical classes (hours)	Independent work (hours)	Forms of control
Module 1. Information and analytical technologies in IR	Digitalization of international studies and analytical technologies	2	2	14	D 15
	Data and sources in international research	2	2	14	PS/C 15
Total for Module 1		4	4	28	
Module 2. Analysis and visualization tools	Information and analytical platforms and OSINT	2	4	22	PS/C 15
	Data analysis and visualization of results	2	4	22	PS/C 15
Total for Module 2		4	8	44	
Module 3. Analytical products and presentation	Preparation of analytical reports and reviews	2	2	16	IRT/ISW 40
Total for Module 3		2	2	16	
TOTAL		10	14	88	Pass

Forms of control:

Discussion (D), Debates (DB), Tests (T), Training (TR), Problem-solving / case-solving (PS/C), Individual research task / individual student work (IRT/ISW), Work in small groups (WSG), Module test / control work (MT/CW), Essay (E), analytical note, analytical essay, text analysis, etc. Presentation (P).

Questions and Tasks for Independent Study

Content Module 1

Questions:

- The role of information and analytical technologies in modern international studies.
- Types of data in international research and their limitations.
- Ethical aspects of using digital tools.

Tasks:

- analyze the possibilities of using one digital tool for international research;
- prepare a short brief (1–2 pages) on the relevance of selected data sources.

Content Module 2

Questions:

- OSINT as a tool of international analysis.
- Methods of analytical processing of large volumes of information.
- Data visualization in international research.

Tasks:

- perform an analytical task using open data;
- prepare a graphical visualization of analysis results with a brief explanation.

Content Module 3

Questions:

- Types of analytical products in international studies.
- Requirements for the structure of an analytical report.

Tasks:

- prepare an analytical review (3–4 pages) on a selected international topic;
- formulate conclusions and recommendations based on obtained data.

IV. Assessment Policy

Instructor’s policy towards students

Attendance is a mandatory component of assessment for which points are awarded. For valid reasons (e.g., illness, international mobility, participation in academic events, etc.), learning may take place online or according to an individual schedule upon agreement with the instructor.

Under martial law or quarantine restrictions, the educational process may be conducted in a blended format: face-to-face or remotely via Microsoft Teams.

Academic integrity policy

Zero tolerance for cheating. Plagiarism and cheating during written assignments and examinations (including the use of mobile devices) constitute gross violations of academic integrity and are unacceptable during the course.

V. Final Assessment

The final assessment in the form of a **pass (credit)** is regulated by the Regulations on the Organization of the Educational Process at the first (Bachelor’s) and second (Master’s) levels at Lesya Ukrainka Volyn National University.

The pass is awarded based on current performance provided that the student has completed all types of work specified in the syllabus. If a student missed certain classes for valid reasons, they may compensate during consultations.

If a student scores less than 60 points during ongoing assessment, they must pass the credit during academic debt liquidation. In this case, previously accumulated points are annulled. The maximum score during re-assessment is 100 points.

Grading Scale

Score	Verbal grade
90–100	Passed
82–89	Passed
75–81	Passed
67–74	Passed
60–66	Passed
1–59	Failed (re-assessment required)

VI. Recommended Literature and Internet Resources

Textbooks and monographs

Johnson J., Reynolds H., Mycoff J.

Political Science Research Methods (9th ed.). Routledge, 2024.

<https://www.routledge.com/Political-Science-Research-Methods/Johnson-Reynolds-Mycoff/p/book/9781032466824>

Knaflic Storytelling with Data Team.

Storytelling with Data: Let's Practice! Wiley, 2020.

<https://www.wiley.com/en-us/Storytelling+with+Data%3A+Let%27s+Practice!-p-9781119621492>

Salganik M.

Bit by Bit: Social Research in the Digital Age (Updated ed.). Princeton University Press, 2020.

<https://press.princeton.edu/books/paperback/9780691206047/bit-by-bit>

Bennett A., Checkel J.

Process Tracing and the Social Sciences. Cambridge University Press, 2020.

<https://www.cambridge.org/core/books/process-tracing-and-the-social-sciences/1E5F20A9D4F7E4E3C8D1A8A6B35A9F2F>

Scientific articles (peer-reviewed)

Bennett A., Elman C.

Qualitative Research: Recent Developments in Case Study Methods.

Annual Review of Political Science, 2020.

<https://www.annualreviews.org/doi/10.1146/annurev-polisci-121817-093317>

Grimmer J., Roberts M., Stewart B.

Machine Learning for Social Science: An Agnostic Approach.

Annual Review of Political Science, 2021.

<https://www.annualreviews.org/doi/10.1146/annurev-polisci-053119-015921>

Lucas C. et al.

Computer-Assisted Text Analysis for Comparative Politics.

Political Analysis, 2020.

<https://www.cambridge.org/core/journals/political-analysis/article/computerassisted-text-analysis-for-comparative-politics/>

Rauh C., Schwalbach J.

The Use of Big Data in International Relations Research.

Journal of Information Technology & Politics, 2021.

<https://www.tandfonline.com/doi/full/10.1080/19331681.2021.1876947>

Analytical and methodological materials

OECD.

Using Data for Public Policy Making. 2022.

<https://www.oecd.org/gov/digital-government/using-data-for-public-policy-making.htm>

European Commission Joint Research Centre.

Data Analytics in Policy Making. 2021.

https://joint-research-centre.ec.europa.eu/publications/data-analytics-policy-making_en