ODESA I. I. MECHNIKOV NATIONAL UNIVERSITY FACULTY OF INTERNATIONAL RELATIONS, POLITICAL SCIENCE AND SOCIOLOGY DEPARTMENT OF INTERNATIONAL RELATIONS



WORKING PROGRAM OF THE COURSE

Nuclear Factor in Global Politics

Level of higher education: Second (master's)

Field of knowledge: C Social sciences, journalism, information and international relations

Specialty: C3 International relations

Educational and professional program: International relations, public communications and regional studies

The curriculum is developed based on the academic program of the discipline "Nuclear Factor in Global Politics". Odesa: ONU, 2025. 14 p.

Developers: Polina SINOVETS, Ph.D. in Political Science, Associate Professor of the

Department of International Relations
The curriculum was approved at the meeting of the Department of International Relations Protocol No. dated " 20 2025 Head of the Department (Olga BRUSYLOVSKA)
Agreed with the guarantor of the Educational and Professional Program International Relations, Public Communications, and Regional Studies (Olga BRUSYLOVSKA)
Approved by the Educational and Methodological Commission (EMC) of the Faculty of International Relations, Political Science, and Sociology Protocol No dated "
Reviewed and approved at the meeting of the Department of International Relations Protocol No dated ""
Reviewed and approved at the meeting of the Department of International Relations Protocol No dated ""20 Head of the Department (Olga BRUSYLOVSKA)

1. Description of the Academic Discipline

Indicators	Field of Knowledge, Specialty, Specialization,		ristics of the c Discipline
mateurors	Level of Higher Education	Full time form of study	Part time form of study
Total: Credits – 4	Field of knowledge: C Social sciences, journalism, information and international	Elective	discipline
Hours – 120	relations	Year o	of study:
Content Modules – 3	Specialty: C3 International relations	2nd	-
		Sen	nester
	Level of higher education: Second (master's)	3-d	
	Second (masters)	Leo	ctures
		14hours	
		Practical	, Seminars
		26hours	h.
		Лабор	раторні
		hours	h.
		Indepen	dent work
		80hours	h.
		Final Asses	sment Form:
		C	redit

2. Purpose and Objectives of the Academic Discipline

Purpose: To examine key trends in the development of the nuclear non-proliferation regime, an integral part of global international security. The primary objective is to analyze the system of international relations established through the Treaty on the Non-Proliferation of Nuclear Weapons (NPT), which emerged in the 1970s and remains relevant today. Ukraine, having abandoned the world's third-largest nuclear arsenal, is an active member of this regime, and strengthening it is a priority of Ukrainian diplomacy. **The course aims** to develop students' skills in analyzing factors influencing nuclear proliferation processes and forecasting prospective scenarios for the NPT regime based on current trends and patterns in international relations.

The study process targets the formation of the following competencies:

- Ability to identify, pose, and solve problems (3K3);
- Ability to identify and analyze the nature, dynamics, principles of organization of international relations, types and kinds of international actors, and modern trends in global politics (CK1);
- Ability to conduct applied analytical research on international relations, global politics, public communications, and regional studies, and professionally prepare analytical materials and reports (CK7);
- Ability to identify and analyze the development features of countries and regions, global, regional, and local processes, and Ukraine's role in them (CK9);
- Ability for self-learning, maintaining an adequate level of knowledge, readiness to acquire new knowledge, and improving professional skills and qualifications (CK10).

Expected Learning Outcomes

Upon completing the discipline, students should:

- Know and understand the nature, sources, and directions of evolution of international relations, international politics, state foreign policies, and the state of theoretical research in international relations and global politics (PH1);
- Critically comprehend and analyze global processes and their impact on international relations (PH2);
- Analyze and evaluate issues of international and national security, international and internationalized conflicts, approaches, methods, and mechanisms for ensuring security in the international arena and state foreign policy (PH4);
- Identify, assess, and predict political, diplomatic, security, social, and other risks in international relations and global development (PH6);
- Prepare analytical reports, briefs, and other documents on the state of international relations, foreign policy, public communications, and regional studies (PH9).

3. Content of the Academic Discipline

CONTENT MODULE I. Nuclear Weapons and the Revolution in Military Affairs

- **Topic 1. Nuclear Weapons: Historical Stages of Development** From Curie's radium discovery to the nuclear chain reaction. The Manhattan Project and nuclear weapons testing in 1945. Hiroshima and Nagasaki bombings and their historical significance. Nuclear weapons in U.S. and Russian policy during the Cold War. The Cuban Missile Crisis as an element of nuclear deterrence adaptation. The phenomenon of nuclear parity and strategic stability.
- **Topic 2. Nuclear Deterrence as a Theory and Key Principle in State Policy** The phenomenon of deterrence. Categories of nuclear deterrence credibility: theoretical, practical, and historical examples. The concept of "unacceptable damage" and its evolution since the Cold War. The theory of arms control.
- **Topic** 3. Nuclear Programs of States Nuclear programs of the U.S., Russia, France, the UK, and China post-Cold War. Current state of nuclear programs amid modern crises in international security.India and Pakistan's nuclear tests in 1998.North Korea as a challenge to the NPT.Iran's nuclear program as a challenge to international security.Modernization and reduction of nuclear arsenals.New technologies and their impact on nuclear states' policies.

CONTENT MODULE II. Nuclear Weapons in Leading Theories of International Relations

- **Topic 4. Concept of Nuclear Disarmament and Arms Control** Nuclear deterrence as the basis of strategic stability theory. The evolution of arms control during the Cold War from SALT to New START. Key criteria of the arms control concept. The ABM Treaty in the context of strategic stability. Dialectics of offensive and defensive armaments. Collapse of the INF Treaty and consequences for international security.
- **Topic 5. Nuclear Disarmament in Russian and U.S. Nuclear Policy** Negotiations and signing of the INF Treaty as the first treaty to eliminate an entire class of missiles. Tactical nuclear weapons and the Presidential Nuclear Initiatives by George H.W. Bush and Yeltsin. Nuclear disarmament of Ukraine, Belarus, and Kazakhstan. Indefinite extension of the NPT at the 1995 conference. The "Four Nations Initiative" and the Obama administration's call for global nuclear zero. Prospects for further nuclear reductions.
- **Topic 6. Nuclear Weapons in Neorealism, Constructivism, and Liberal Institutionalism** Neorealism and nuclear weapons: Mearsheimer and Waltz on the necessity of nuclear weapons for international security. Liberal institutionalism and the possibility of a "nuclear-free environment" through the NPT. Constructivism and state image: examples of South Africa, Ukraine, and India. J. Hymans and the concept of national identities.

CONTENT MODULE III. Non-Proliferation Regimes, Nuclear Reductions, and Disarmament

Topic 7.Treaty on the Non-Proliferation of Nuclear Weapons as the Basis of International Security

Creation and signing of the NPT in 1968.Official and unofficial nuclear states. Guarantee system: positive and negative. IAEA safeguards as a key NPT element. Export control organizations: Zangger Committee, Nuclear Suppliers Group (NSG), and Missile Technology Control Regime. Ukraine's role and place.

Topic 8. Treaties on Nuclear Arms Reductions Nuclear tests by the USSR and U.S. in the 1950s–60s: process and consequences. The "Lucky Dragon" incident and Soviet nuclear bomb tests. Environmental consequences. Signing of the Comprehensive Nuclear-Test-Ban Treaty (CTBT) in 1996. Creation of the CTBT Organization.Prerequisites and history of nuclear-weapon-free zones (NWFZs).Treaties of Tlatelolco, Rarotonga, Bangkok, Pelindaba.Semipalatinsk Treaty and the creation of an NWFZ in Central Asia. Challenges to establishing NWFZs in critical regions: East Asia and the Middle East.

4. Structure of the Academic Discipline

Topics					Hot	ırs				
		Fu	ıll-time	;			Par	t-time		
	In total		including		In total		inclu	ıding		
		L	P	-	I		L	P	-	I
1	2	3	4	5	6	7	8	9	10	11
Content Mod	ule 1. Nuc	clear V	Weapo	ns: Hi	storica	l and Polit	tical S	Signifi	cance	I
Topic 1. Nuclear	13	2	-	-	11					
Weapons: History										
and Combat Use										
Topic 2. Nuclear	11	1	2	-	8					
Deterrence in										
Theory and Policy										
Topic 3. Arms	16	2	5	_	9					
Control Theory										
Total for Content	40	5	7	-	28					
Module 1										
Content Module 2. Nuclear Programs of States										
Topic 4. Nuclear	16	2	3	-	11					
Programs of										
Russia and the										
U.S.										

Topic 5. Nuclear Programs of the	11	1	2	-	8					
UK, France, and										
China										
Topic 6. Nuclear	13	2	3	-	8					
Programs of										
Unofficial and										
Threshold Nuclear										
States										
Total for Content	40	5	8	-	27					
Module 2										
Content M	odule 3. l	Key C	hallen	ges to l	Moder	n Internat	ional	Secur	ity	
Topic 7. NPT,	21	2	6	-	13					
CTBT, and										
Comprehensive										
Nuclear-Test-Ban										
Treaty										
Topic 8. Nuclear	19	2	5	-	12					
Disarmament of										
Ukraine										
Total for Content	40	4	11	-	25					
Module 3										
Total Hours	120	14	26	-	80					

5. Seminar Topics

Seminars are not provided.

6. Practical Session Topics

No.	Торіс	Hours
	Nuclear Deterrence in Theory and Policy Discussion Questions:	
1	1. Basic concepts and features of nuclear deterrence.	2
	2. Nuclear deterrence in Cold War history.	
	3. Nuclear deterrence in Russia's policy during the war against Ukraine.	
	Arms Control Theory	
	Discussion Questions:	
2	1. Features of arms control theory and its distinction from disarmament.	5
	2. Strategic stability phenomenon: U.S. and Soviet/Russian interpretations.	3
	3. Arms control in Soviet-U.S. relations.	
	4. Arms control post-Cold War and its prospects today.	

3	Nuclear Programs of Russia and the U.S. Discussion Questions: 1. Nuclear threshold issues in both strategies. 2. U.S. nuclear deterrence from Bush Jr. to Biden. 3. Russian nuclear deterrence from the 2000 Military Doctrine to the 2024 Nuclear Doctrine. 4. Key Russia-U.S. treaties and their prospects (New START and discussions on its successor).	3
4	Nuclear Programs of the UK, France, and China Discussion Questions: 1. UK nuclear program: history and present. 2. France nuclear program: history and present. 3. China nuclear program: history and present.	2
5	Nuclear Programs of Unofficial and Threshold Nuclear States Discussion Questions: 1. Iran's nuclear program. 2. North Korea's nuclear program.	3
6	NPT, CTBT, and Comprehensive Nuclear-Test-Ban Treaty Discussion Questions: 1. NPT and its three pillars. Key treaty articles. 2. CTBT and its key articles. 3. Contradictions between NPT and CTBT. 4. Prospects of both treaties post-Russia's invasion of Ukraine.	6
7	Nuclear Disarmament of Ukraine Discussion Questions: 1. Legal framework for nuclear weapons relations post-USSR collapse. 2. Key Ukrainian disarmament documents. 3. Tactical nuclear weapons issues. 4. Strategic nuclear weapons issues. 5. Budapest Memorandum and its violation by Russia.	5
Total		26

7. Laboratory Sessions

Laboratory sessions are not provided.

8. Independent Work

No. Topic				
1	Nuclear Weapons: History and Combat Use	11		
2	Nuclear Deterrence in Theory and Policy	8		
3	Arms Control Theory	9		
4	Nuclear Programs of Russia and the U.S.	11		

Hours
80
12
13
8
]

¹Students may independently select resources relevant to the discipline. For recognition as periodic, ongoing, or partial final assessment, students must submit documentation confirming informal education, a program description, and a description of competencies and learning outcomes achieved. The instructor reserves the right to verify these competencies and outcomes.

Deterrence	
http://odcnp.com.ua/300-	
call-for-application-for-	
xvth-odcnp-	
international-summer-	
school-the-new-	
international-order-after-	
ukraine-nuclear-	
deterrence-arms-control-	
and-nonproliferation	

9. Teaching Methods

Verbal: Lectures (problem-based, visualization lectures, case study analysis, etc.), storytelling, explanation, discussion, debate, addressing problematic situations. **Visual**: Multimedia presentations, demonstrations, direct observation, presentation of research results.

Practical: Role-playing games, individual assignments (essay preparation and defense).

10. Assessment Forms and Methods

Ongoing/Periodic Assessment Methods: Oral questioning, evaluation of individual assignments (essays), defense of individual assignment results. Final Assessment: Credit (oral form).

GENERAL CRITERIA FOR EVALUATING STUDENTS' ACADEMIC ACHIEVEMENTS

National Grade	Theoretical Preparation	Practical Preparation
Excellent	Masters the material, presents it freely, independently, and with reasoning during oral and written responses; deeply and comprehensively addresses theoretical questions using normative, mandatory, and additional literature; makes independent conclusions, identifies causal relationships; independently finds and uses additional information to complete tasks. Able to identify key features, formulate conclusions, and operate with facts and data.	approaches; freely applies
Good	Adequately masters the material, presents it with reasoning during oral and written	Correctly solves most tasks; has consistent task execution skills.

responses using normative and mandatory literature; lacks depth and argumentation in some responses, applies knowledge to standard situations; analyzes information but makes minor inaccuracies.

Satisfactory

Masters material at a reproductive level or situations, has basic, inconsistent partially reproduces it with logical connections, knows basic concepts; struggles to identify key features, causal relationships, and conclusions.

Can apply knowledge in standard task execution skills. Correctly solves half of the calculation/test tasks. Struggles with identifying key features, causal relationships, and conclusions.

Unsatisfactory with possibility of retake

Superficially and fragmentarily masters material (without reasoning); randomly identifies features; cannot perform basic analysis and synthesis; makes significant errors in responses.

Inadequately addresses practical tasks, makes significant inaccuracies, correctly solves some tasks with instructor assistance, lacks formed skills.

Unsatisfactory course retake

with mandatory Does not master the material.

Performs only task elements, requires constant instructor assistance.

11. Questions for Ongoing and Periodic Assessment

- 1. Manhattan Project dates, essence, consequences, and impact on international security.
- 2. Nuclear deterrence definition, methods of analysis.
- 3. Nuclear deterrence in Cold War history. Role of Hiroshima and Nagasaki bombings.
- 4. Strategic stability key criteria and parameters.
- 5. "Unacceptable damage" category and its role in deterrence.
- 6. Doctrine of "mutual assured destruction" in superpower relations during the Cold War.
- 7. "Stability-instability paradox" and its historical examples.
- 8. Arms control concept. Key treaties.
- 9. Arms control during the Cold War.
- 10. Nuclear deterrence in USSR-U.S. relations during the Cold War.
- 11. France's nuclear strategy.
- 12. UK's nuclear strategy.
- 13. China's nuclear strategy.
- 14. Russian Federation's nuclear strategy evolution from 2000–2022.
- 15. U.S. nuclear strategy from 2002–2018.
- 16. "Bush Doctrine" and its impact on international relations.
- 17. D. Trump's nuclear policy.
- 18. New technologies and their impact on strategic stability.
- 19. START issues in Russian-U.S. relations. New START.
- 20. ABM issues in Russian-U.S. relations.
- 21. Nuclear non-proliferation regime (1968): key documents and organizations.
- 22. Treaty on the Prohibition of Nuclear Weapons (2017): characteristics and state positions.
- 23. International export control regime.

- 24. Nuclear-weapon-free zones (NWFZs) and their role in the non-proliferation regime.
- 25. Israel's nuclear program and its impact on Middle East international relations.
- 26. India's nuclear program and "new relations" with the U.S.
- 27. Pakistan's nuclear program and its role in undermining non-proliferation principles.
- 28. Iran's nuclear program international crisis around the "Iranian dossier."
- 29. North Korea's nuclear program.
- 30. Scientific approaches to the role of nuclear weapons in the world.
- 31. Ukraine's nuclear disarmament process and challenges.
- 32. Impact of Russia's war against Ukraine on the international nuclear order.

12. Distribution of Points for Students

Ongoing/Periodic Assessment	Total Points
Content Module 1 (ongoing assessment in	Content Module 2 (ongoing assessment in
lectures and practicals)	lectures and practicals)
T1	T2
7	7

Grading Scale: National and ECTS

Total Points for All Activities	ECTS Grade	National Grade	
		For Exam, Course Project, Practice	For Credit
90-100	A	Excellent	Passed
85-89	В	Good	
75-84	C		
70-74	D	Satisfactory	
60-69	E		
35-59	FX	Unsatisfactory with possibility of retake	Not passed with possibility of retake
0-34	IH .	Unsatisfactory with mandatory course retake	Not passed with mandatory course retake

13. Educational and Methodological Support

1. Sinovets P.A. Syllabus of the course "Nuclear Factor in Global Politics." Odessa: ONU, 2022. 5 p.

14. Recommended Literature

Required readings

- 1. Sinovets P. TheNuclearWeaponsFactoronInterstatePoliticsintheRussia-Ukraine War. *PONARS Eurasia*. September 19, 2022. URL:https://www.ponarseurasia.org/author/polina-sinovets/
- 2. Ukraine's Nuclear History: A Non-Proliferation Perspective / Ed. P. Sinovets. Springer Nature Switzerland AG, 2022.
- 3. Sinovets P., Hesse V. RussianForeignandSecurityPolicy: TheEvolutionoftheEscalationStrategy. *ArmsControlandEurope*. *NewChallengesandProspectsforStrategicStability*/Ed. P.Sinovets, W. Alberque. SpringerNatureSwitzerland AG, 2022. P. 21-28.
- 4. Синовец П. А.Двуликий Янус, илиТеория ядерного сдерживания вXXI веке. Одесса: Феникс, 2008.
- 5. DeGroot G. J.TheBomb: A Life.Cambridge, Massachusetts: HarvardUniversityPress, 2004.
- 6. Terrais B. PrinciplesofNuclearDeterrenceandStrategy. NDC ResearchPaper,2021. N 19.

Recommended readings

- 1. Sinovets P., Maksymenko I., SkrypnykM.TheRussian roulette: theKremlin'sescalationstrategyintheBalticSeatotheBlackSea. *LithuanianAnnualStrategic Review*, 15 June, 2022. URL:https://journals.lka.lt/journal/lasr/article/1919/info;
- 2. Acton J. M. DeterrenceduringDisarmament: DeepNuclearReductionsandInternationalSecurity. London: Routledge, 2011.
- 3. Sinovets P.BetweentheRockandtheHardPlace: WilltheBlackSeavoidtheEscalationLadder? SecuritydilemmaintheBlackSearegioninthelightofthe Russian-Ukrainian conflict / Eds. O. Polegkyiand T. Stepniowski. Lublin: IES Policy Papers, InstituteofCentralEurope, 2021. P.57-72. URL:https://ies.lublin.pl/ies-policy-papers/security
- 4. Davis P., Gilmore J., Frelinger D., Geist E., Gilmore C., Oberholtzer J., Tarraf D. ExploringtheRoleNuclearWeaponsCouldPlayinDeterringRussianThreatstotheBalticStates . 2019, October 24. URL: https://www.rand.org/pubs/research_reports/RR2781.html
- 5. Fitzpatrick M. HowEuropeansviewtacticalnuclearweaponsontheircontinent. BulletinoftheAtomicScientists. 2011. N 67(2). P. 57-65. doi:10.1177/0096340211399405
- 6. Hodges B., Bugajski J., Wojcik R., Schmiedl C. One Flank, One Threat, OnePresence. 2020, May 26. URL:https://cepa.org/one-flank-one-threat-one-presence/
- 7. Kühn U. PreventingEscalationintheBaltics: A NATO Playbook. 2018, March 28. URL: https://carnegieendowment.org/2018/03/28/preventing-escalation-in-baltics-nato-playbook-pub-75878
- 8. NuclearPostureReviewFinalReport U.S. DepartmentofDefense. 2018, February. https://media.defense.gov/2018/Feb/02/2001872886/-1/-1/1/2018-NUCLEAR-POSTURE-REVIEW-FINAL-REPORT.PDF
- 9. Tertrais B. FrenchNuclearDeterrence: Policy, Forces, andFuture: A Handbook. Recherches&Documents.2020. N 4.

URL: https://www.frstrategie.org/sites/default/files/documents/publications/recherches-et-documents/2020/202004.pdf

15. Electronic Resources

- 1. Carnegie Endowment for International Peace. URL: http://carnegieendowment.org/#/slide_374_china-s-military-and-us-japan-alliance-in-2030
- 2. Institut Françaisdes Relations Internationales. URL: http://www.ifri.org/?a=b&lang=uk.
- 3. James Martin Center for Nonproliferation Studies (CNS). URL:http://cns.miis.edu/.