COURSE UNIT (MODULE) DESCRIPTION

Course unit (module) title	Code
Game theories	

Lecturer(s)	Department(s) where the course unit (module) is delivered
Coordinator: Dr. Žilvinas Martinaitis	Institute of International Relations and Political Science

Study cycle	Type of the course unit (module)
Second	Elective

Mode of delivery	Period when the course unit (module) is delivered	Language(s) of instruction
face to face	2 semester	

Requirements for students	
Prerequisites: None	**Additional requirements (if any):** None

Course (module) volume in credits	Total student's workload	Contact hours	Self-study hours
6	160	32	128

Purpose of the course unit (module): programme competences to be developed

The purpose of the course is to provide students with the knowledge and skills necessary for analysing policy formation processes and explaining political phenomenon, to develop students' in-depth theoretical understanding of policy formation processes and its outcomes, to develop students' ability to construct and apply different models of policy formation processes. A particular attention is given to the problem of collective preference aggregation including Condorcet paradox, Arrow's impossibility theorem, Black median voter theorem, Plott's symmetry and McKelvey's Chaos Theorem.

This course aims to develop a set of subject specific competences, such as ability to define and apply prevailing theories based on the assumptions of rational choice theory, ability to list and explain key notions, methods and tools that are used in policy formation processes, ability to construct explanatory models for policy analysis, also, generic competences: ability to work and study individually, ability to present findings in coherent written form, ability to share relevant insights and reasonable arguments, ability to respond promptly and comprehensively to questions raised by colleagues or professor, ability to conduct empirical research independently.

Learning outcomes of the course unit (module)	Teaching and learning methods	Assessment methods
Will be able to explain prevailing theories, models and tools that are used in the field of policy formation processes	Problem-based teaching, group discussions, independent reading	Assessment of work during the seminars.
Will be able to list key premises of the game theories and apply them by analysing different policy formation processes and its outcomes	Independent reading, research methods (texts analysis, preparation of written assignment (review of an article))	Assessment of work during the seminars and written assignment (review of an article)
Will be able to construct and apply models of policy analysis independently	Practical tasks (students have to present projects to each of the studied methods and	Assessment of presentation and written assignment (review of an article)

	demonstrate its practical use in examining the problem situation), preparation of written assignment (review of an article).	
Will be efficient in apply academic literature and theoretical knowledge	Presentation of practical tasks during the seminars	Assessment of presentation
Will be able to apply theories based on the premises of rational choice.	Face-to-face lectures, preparation of written assignment (review of an article)	Assessment of work during the seminars and written assignment (review of an article)

Content: breakdown of the topics	Lectures	Seminars	**Contact hours**	**Self-study hours**	**Assignments**
1. Introduction. Course subject, objectives and requirements of the further discussions. The main concept of the course	2		2		-
2. What are the main assumptions of models based on rational choice? Aggregation of preferences: rational people and irrational society?		2	2	8	Compulsory readings and analysis of the texts: Kenneth A. Shepsle and Mark S. Bonchek, Analyzing Politics: Rationality, Behaviour, and Institutions, New York and London: W.W Norton & Company, 1997, 5-49 (Chapters: 1,2,3)
3. Condorcet paradox, Arrow's theorem and dimensional models.		4	4	8	Compulsory readings and analysis of the texts: Kenneth A. Shepsle and Mark S. Bonchek, Analyzing Politics: Rationality, Behaviour, and Institutions, New York and London: W.W Norton & Company, 1997, 49-137 (Chapters 4 and 5)
4. Problems of preference aggregation and its importance for democracy theory: what are liberal and populist concepts of democracy? Strategic behaviour and agenda control: How often can vote results be manipulated?		2	2	8	Compulsory readings and analysis of the texts: Kenneth A. Shepsle and Mark S. Bonchek, Analyzing Politics: Rationality, Behaviour, and Institutions, New York and London: W.W Norton & Company, 1997, 137- 166 (Chapter 6); William H. Riker, Liberalism Against Populism: A Confrontation Between the Theory of Democracy and the Theory of Social Choice, Prospect Heights, Illinois: Waverland Press, Inc., 1988.
5. Government formation and dissolution analysis: What are the key principles of government formation analysis in parliamentarian democracies? What is government equilibrium? What are the main conditions of long-term coalitions? Can we construct the model explaining Lithuanian government formation process and its outcomes?		2	2	8	Compulsory readings and analysis of the texts: Kenneth A. Shepsle and Mark S. Bonchek, Analyzing Politics: Rationality, Behaviour, and Institutions, New York and London: W.W Norton & Company, 1997, 432-457 (Chapter 16)
6. Individual and collective veto		2	2	8	Compulsory readings and analysis of the

players. What are the veto players, kernel and strongest alternatives? What are the main conditions of political stability? How can we define and graphically describe the decisions of veto players? What are the conditions of political instability?					texts: George Tsebelis, Veto Players: How Political Institutions Work, Princeton, New Jersey: Princeton University Press, 2002, 17-38 (1Chapter); George Tsebelis, Veto Players: How Political Institutions Work, Princeton, New Jersey: Princeton University Press, 2002, 38-65 (2 Chapter);
7. Application of the theory of veto players: How to identify veto players: institutional and political veto players. Agenda control: what we can learn more from veto players' theory? Case analysis.		2	2	8	Compulsory readings and analysis of the texts: George Tsebelis, Veto Players: How Political Institutions Work, Princeton, New Jersey: Princeton University Press, 2002, 67-116; 222-248 (Chapters 3, 4 and 10);
8. Returning to the sources of game theories: What is 'minmax" strategy? What is Nash equilibrium, when it exists and how can it be identified?		4	4	8	Compulsory readings and analysis of the texts: James D. Morrow, Game Theory for Political Scientists, Princeton, New Jersey: Princeton University Press, 1994, 51 -120 (Chapter 4).
9. Nonzero sum games: what is public goods and side effects? What are the conditions for actors cooperating together?		4	4	8	Compulsory readings and analysis of the texts: Peter C. Ordeshook, Game theory and political theory: an introduction, Cambridge, New York: Cambridge University Press, 1995 (Chapter 5);
10. E-lecture: evolutionary game theory.		4	4	8	Literature will be provided during the course
11. Self-study		4	4	16	Compulsory readings and analysis of the texts: Simon E. Levin (ed.), Games, Groups and the Global Good, Springer: Dordrecht Heidelberg London New York, 2008.
Presentation				16	Independent reading and analysis
Written assignment				24	Independent reading and analysis
Total	**2**	**30**	**32**	**128**	

Assessment strategy	**Weight,%**	**Deadline**	**Assessment criteria**
Written assignment (review of an article)	50%	During the semester	Ability to refer to academic literature by presenting the theoretical model and its hypothesis (10%), Ability to analyse the presented text by giving reasonable argumentation of explaining the functioning of the given model (20%), Comprehensiveness and logic of the critique of presented model (10%); Correspondence to methodological requirements (10%);
Performance during seminars	50%	During semester	Quality of comments, insights and relevant remarks (10%), Knowledge and ability to refer to assigned academic literature (20%), Active participation in seminars (10%), Ability to respond adequately to colleagues and professor's comments, questions (10%),.

Author	**Year of publication**	**Title**	**Issue of a periodical or volume of a publication**	**Publishing place and house or web link**
Compulsory reading				
Levin, Simon E. (ed.)	2008	Games, Groups and the Global Good		Springer: Dordrecht Heidelberg

				London New York
Morrow, James D.	1994	Game Theory for Political Scientists		Princeton, New Jersey: Princeton University Press
Riker, William H.	1998	Liberalism Against Populism: A Confrontation Between the Theory of Democracy and the Theory of Social Choice, Prospect Heights		Illinois: Waverland Press, Inc
Shepsle, Kenneth A. and Mark S. Bonchek	1997	Analyzing Politics: Rationality, Behaviour, and Institutions		New York and London: W.W Norton & Company
Tsebelis, George	2002	Veto Players: How Political Institutions Work		Princeton, New Jersey: Princeton University Press
Optional reading				
Drew Fudenberg and Jean Tirole	1991	Game Theory		Cambridge: The M.I.T. Press
Roger B. Myerson	1991	Game Theory: Analysis of Conflict		Cambridge: Harvard University Press
Thomas C.Shelling	2007	Strategy of Conflict		Harvard University Press