

**FEDERAL STATE BUDGET EDUCATIONAL INSTITUTION OF HIGHER EDUCATION
M.V.LOMONOSOV MOSCOW STATE UNIVERSITY**

FACULTY OF ECONOMICS

«APPROVED»

Dean, Faculty of Economics

Professor _____ A.A.Auzan

«01» February 2020

COURSE SYLLABUS

International Risk Management and Climate Change (in English)

Level of higher education

Master

Main field of study for the qualification (specialization)

38.04.02 Management

Profile of the master program

International Business Management

Mode of study

Full-time

Course Syllabus is considered and approved
by the Educational-Methodological Committee of the Faculty of Economics
(minutes № _____, date)

Moscow 2020

The course syllabus is developed in accordance with the self-established MSU educational standard (ES MSU) for implemented main professional educational programs of higher education for Master's degree in the field of study 38.04.02 Management»

ES MSU is approved by the decision of MSU Academic Council dated 27 June 2011 (minutes №3), with adjustments.

Year (years) of enrollment: 2019 and forthcoming

1. Place and status of the course in the Master's programme

Type of the course: *elective*

Trimester: 3

2. Course Prerequisites

This discipline is based on the knowledge and skills acquired as a result of studying following disciplines:

- Managerial Economics (in English),
- Organizational behavior (in English),
- International Business (in English).

3. Intended learning outcomes (ILO) of the course associated to the required competencies of the graduates

Competencies being formed	Intended learning outcomes of the course associated to the required competencies of the graduates
Knowledge of methods of economic and strategic analysis of the behavior of economic agents and markets in the global environment and climate change (M.PC-5)	KNOW the laws of markets' functioning and the basic principles of economic agents' behavior and associated risks M.PC-5.Kn.1
	KNOW models that consider the behavior of economic agents and markets in the global environmental issues M.PC-5.Kn.2
	KNOW models that consider the behavior of economic agents and markets in the global environment and climate change mitigation M.PC-5.Ab.2
Ability to apply acquired knowledge and methods of complex analyses to real business situations in international context including climate change mitigation (M.SPC-2)	BE ABLE to predict and manage the risks of business activities in a foreign territory specially taking into account climate change mitigation M.SPC-2.Ab.4

4. Workload of the course and types of activity

The workload of the discipline is 3 ECTS: 108 academic hours, including 52 academic hours of contact work with a professor, out of which 28 academic hours of classroom work, 12 academic hours of group consultations, 12 academic hours of individual consultations, 56 academic hours – self-directed studies.

5. Learning format: 'ON.ECON' electronic information environment of the Faculty of Economics of Moscow State University is used.

6. Content of the course structured by topics (modules) indicating the number of academic hours allocated to them and types of training

Section/topic title	Total, hours	Including	
		Contact work with a professor	Self-directed

		Classroom work, hours	Group, hours	Individual, hours	studies, hours
Topic 1. Introduction to Risk Management	10	4	-	-	6
Topic 2. Risk Research, Assessment and Management	14	4	2	2	6
Topic 3. Risks Associated with Climate Change	18	4	4	4	6
Topic 4. Impact of Climate Change on Economy, Human Health and Mortality	18	4	4	4	6
Topic 5. Green Consumer Behavior	14	4	2	2	6
Presentation of final projects	24	4	-	-	20
Midterm assessment (control): — Written test	10	4	-	-	6
Total	108	28	12	12	56

Structure and content of the course

Topic 1. Introduction to Risk Management

- 1.1 Introduction to the Discipline. Subjects of the Final Projects.
- 1.2 International Standards and Risk Definition.
- 1.3 Risk Classifications.
- 1.4 Risk Management as a Profession.

Main Literature:

1. Pritchard C. Risk Management: Concepts and Guidance, Fifth edition. CRC Press, 2015. chapters 1- 2
2. Hopkin P. Fundamentals of Risk Management. Understanding, evaluating and implementing effective risk management. Fourth edition. The Institute of Risk Management, 2017, chapters 1, 4

Additional Literature:

1. Merna T., AL-Thani F. Corporate Risk Management. 2nd ed., 2008, chapters 1, 10
2. Steinberg, N. Governance, Risk Management, and Compliance: It Can't Happen to Us-- Avoiding Corporate Disaster While Driving Success. 2011, chapter 6

Topic 2. Risk research, assessment and management

- 2.1 Strategic goals in Risk Management.
- 2.2 Research on External and Internal Risks.
- 2.3 International Risk Classification and Risk Maps.
- 2.4 Global Risk Assessment and Projection.

Main Literature:

1. Pritchard C. Risk Management: Concepts and Guidance, Fifth edition. CRC Press, 2015. chapter 2
2. Hopkin P. Fundamentals of Risk Management. Understanding, evaluating and implementing effective risk management. Fourth edition. The Institute of Risk Management, 2017 chapters 1-2, 5-6
3. Global Risk Report 2020. World Economic Forum, 2019.

Additional Literature:

1. Casualty Actuarial Society. Overview of Enterprise Risk Management.2003. <https://www.casact.org/area/erm/overview.pdf>
2. Merna T., AL-Thani F. Corporate Risk Management. 2nd ed., 2008, chapters 2-3
3. Loss and Damage from Climate Change. Concepts, Methods and Policy Options. Editors: Reinhard Mechler, Laurens M. Bouwer, Thomas Schinko, Swenja Surminski and JoAnne Linnerooth-Bayer. Springer Open, 2019.

Topic 3. Risks Associated with Climate Change

3.1 International Documents on Climate Change

3.2 Paris Agreement on Climate Change 2015.

3.3 Climate Risk Management and Mitigation.

Main Literature:

1. Paris Agreement on Climate Change 2015.
2. EU Policy Framework for Climate and Energy in the period from 2020 to 2030. Brussels, 22.1.2014
3. Global Warming of 1.5°C. Summary for Policymakers. IPCC, 2018.

Additional Literature:

1. Climate risk and response. Physical hazards and socioeconomic impacts. McKensy Global Institute, January 2020.
2. Global Assessment Report on Disaster Risk Reduction. UN, 2019.
3. Trends and projection in Europe. Tracking progress towards Europe’s climate and energy targets. European Energy Agency Report, #15, 2019.
4. Loss and Damage from Climate Change. Concepts, Methods and Policy Options. Editors: Reinhard Mechler, Laurens M. Bouwer, Thomas Schinko, Swenja Surminski and JoAnne Linnerooth-Bayer. Springer Open, 2019.

Topic 4. Impact of Climate Change on Economy, Human Health and Mortality

4.1 Impact of Climate Change on Health and Human Mortality

4.2 Impact of Climate Change on Finance

4.3 Transition to Low Carbon Economy

4.4 New technologies and Climate Change

Main Literature:

1. WHO health and climate change survey report. Tracking global progress. WHO, 2019
2. A call for action: Climate change as a source of financial risk. Network for Greening the Financial System, 2019.
3. Climate Change and the Insurance Industry: Taking Action as Risk Managers and Investors. Geneva Association, 2018.
4. A guidebook to the Green Economy. Issue 1: Green Economy, Green Growth, and Low-Carbon Development – history, definitions and a guide to recent publications. UNDESA, 2012.
5. Absolute Zero. Delivering the UK’s climate change commitment with incremental changes to today’s technologies. London, 2020.

Additional Literature:

1. COP24 special report on health and climate change. WHO, 2019.
2. Renewables 2019. Global status report, REN21, 2019.
3. Lights out. The risks of climate and natural disaster related disruption to the electric grid. SwissRe, 2017.

Total	150
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The final assessment on discipline is done on the basis of the following criteria:

Final grade	Minimum score	Maximum score
<i>Excellent</i>	127,5	150
<i>Good</i>	97,5	127,4
<i>Satisfactory</i>	60	97,4
<i>Failed</i>	30	59,9

Comment: in case student's scores obtained during the trimester are less than 20% of the maximum score of the discipline the following rule of passing the course should be applied at the midterm assessment (and further re-examination): 'a student can obtain only a satisfactory mark and only in case he/she receives for the midterm assessment, including all the course material, not less than 85% of the score allocated to this assessment'.

Typical tasks, methodological guidelines and implementation requirements:

— *Questions for discussions*

1. Global Risks and Global Economic Forum Risk Projection
2. Pure and speculative risks, man-made disaster and natural catastrophe risks
3. Market risk and risks of climate change mitigation
4. Impact of climate change
5. Risk of transition to low carbon economy
6. Green consumption in modern life

— *Presentations*

- Risk management in given country
- Green energy in given country
- Impact of permafrost melting on economy of given country (cases)
- Electric vehicles vs traditional vehicles (cases)
- Zero energy consumption houses (cases)

— *Practical home tasks*

Prepare a brief literature review on the selected topic (example)

- Man-made disasters in a chosen country
- Natural catastrophes in a chosen country
- Waste management in a chosen country (case)
- Electric vehicles in a chosen country (case)
- Green consumption in a chosen country (case)
- Green energy in a given country (case)

— *Project*

The project within the course is carried out in small groups, the distribution of students into groups and discussion of the project topics takes place at the first seminar.

Each project team selects a specific country for research, in which analyzes the following issues:

- 1) Risk attitude in chosen country on three levels: individual, corporate and public;
- 2) Climate change mitigation for chosen country;
- 3) Impact of climate change on different business and possibility of its mitigation
- 4) Waste problem and countries' best practice to manage it
- 5) Permafrost melting impact on business and local life in the Arctic regions

- 6) Transition to green economy: countries best practice
- 7) 'Sin' investment vs socially responsible investment: pros and cons

— *Written test*

Written test consists of questions with multiple choice.

Test questions examples:

Risk financing method of risk management include (please indicate right answer):

- a) Risk transfer
- b) Loss reduction
- c) Risk diversification
- d) Risk doubling

Green energy sources do not include:

- a) Gas
- b) Wood
- c) Sun
- d) Wind

Renewable sources of energy do not include:

- a) Wood
- b) Oil
- c) Waste
- d) Grain

'Sin' investment assets do not include:

- a) Bonds of alcohol producers
- b) Shares of tobacco companies
- c) Shares of casinos
- d) Bonds of electric cars producers

8. Facilities, Equipment and Software

8.1. List of main and additional literature

Course literature:

1. Hopkin P. Fundamentals of Risk Management. Understanding, evaluating and implementing effective risk management. Fourth edition. The Institute of Risk Management, 2017
2. Global Risk Report 2020. World Economic Forum, 2019.
3. Global Warming of 1.5oC. Summary for Policymakers. IPCC, 2018.
4. WHO health and climate change survey report. Tracking global progress. WHO, 2019
5. A call for action: Climate change as a source of financial risk. Network for Greening the Financial System, 2019.
6. 1.5-DEGREE LIFESTYLES: Targets and options for reducing lifestyle carbon footprints. Institute for Global Environmental Strategies, 2019.

Additional literature:

1. Merna T., AL-Thani F. Corporate Risk Management. 2nd ed., 2008.
2. Peattie, K. Green consumption: behavior and norms. Annual Review of Environment and Resources, 35(1), 2010.
3. Renewables 2019. Global status report, REN21, 2019.
4. Lights out. The risks of climate and natural disaster related disruption to the electric grid.

SwissRe, 2017.

5. COP24 special report on health and climate change. WHO, 2019.

Periodicals:

1. Swiss Re. Global Catastrophic Review
2. Climate and Development Journal. <https://www.tandfonline.com/toc/tcld20/current>
3. The International Journal of Climate Change: Impacts and Responses <https://on-climate.com/journal>

8.2. List of licensed software

Package of Software ‘Microsoft Office’.

8.3. List of professional databases and information referral systems

Institutional subscription resources of the Faculty of Economics, MSU.

8.4. List of Internet resources (if necessary)

1. International Risk Management Institute
<https://www.theirm.org/qualifications/international-certificate-in-enterprise-risk-management/course-content.aspx>
2. UN Climate Change site. <https://www.un.org/en/sections/issues-depth/climate-change/>
3. Climate Change site of NASA. <https://climate.nasa.gov>
4. The Intergovernmental Panel on Climate Change. <https://www.ipcc.ch/>

8.5. Description of material and technical support

For the appropriate organization of classes the following equipment is needed: microphone, projector, flip chart, markers, Internet access, etc.

9. Language of instruction: English

10. Professors: PhD in Economics, assoc. prof. Echenike V.J., PhD in Economics Denisov B.P., assoc. prof. Ulyanova M.E.

11. Authors of the course: PhD in Economics, assoc. prof. Echenike V.J.