Global Climate Change

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| Course code | MNG246 |
| Level of studies | Undergraduate |
| Number of credits | 6 ECTS (48 contact hours + 2 consultation hours, 110 individual work hours) |
| Course coordinator (title and name) | Associate Professor Dr. Jonathan Boyd |
| Prerequisites | NA |
| Language of instruction | English |

**Aim of the course**

Our warming planet is transforming the natural world and our societies, and it is doing so in alarming ways. To understand climate change, we need to acknowledge its many aspects and study it in a holistic, multidisciplinary way. Accordingly, this course aims to address the climate change issue in a collaborative way by bringing together the perspectives of all of ISM’s undergraduate study programmes – communications, management, technology, finance, politics, and economics. We will address several important questions: what is the basic science behind climate change? What are the sources of emissions? What are scientists predicting about the changes in climate? What will the impact be on human well-being and the natural world? How might climate change affect Europe and specifically Lithuania and the Baltic region? Do we have moral obligations to the planet and to future generations? How can we effectively communicate these issues to the public and mobilise climate action? What technologies exist, or might be invented, to slow climate change? Is sustainable development possible? And perhaps most importantly: what can we do, as individuals, as nations, and as corporations?

**Mapping of course level learning outcomes with degree level learning objectives**

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| **Course level learning outcomes (objectives)** | **Learning objectives for BSc in Social Science/Business Management** | **Assessment methods** | **Teaching methods** |
| CLO1: Understand climate change from several perspectives, including their own field of study, but also from the perspective of each of the other ISM undergraduate study programmes; | BLO1.1; BLO1.2; BLO2.1; ELO1.1; ELO1.2; ELO2.1 | Assignments, midterm exam, final exam | Lectures, seminars, individual work |
| CLO2: Demonstrate knowledge about the basic science of climate change and the sources of emissions; | BLO3.2; ELO3.2 | Aassignments, midterm exam | Lectures, seminars, individual work |
| CLO3: Explain how global warming is changing, and is predicted to change, the environment, and in turn, how it will affect human well-being and security; |  | Assignments, final exam | Lectures, seminars, individual work |
| CLO4: Understand these changes not only on a global level, but also in the Baltic region; | BLO1.1; BLO1.2; BLO2.1; BLO3.2; BLO4; ELO1.1; ELO1.2; ELO2.1; ELO3.2; ELO4 | Assignments, Midterm exam, final exam | Lectures, seminars, individual work |
| CLO5: Describe the psychological, technological, economic and political obstacles to addressing climate change; | BLO1.1; BLO1.2; BLO2.1; ELO1.1; ELO1.2; ELO2.1 | Assignments, Midterm exam, final exam | Seminars, individual work |
| CLO6: Weigh the advantages and disadvantages of solutions to global warming; | BLO1.1; BLO1.2; BLO2.1; BLO3.2; BLO4; ELO1.1; ELO1.2; ELO2.1; ELO3.2; ELO4 | Assignments, Midterm exam, final exam | Lectures, seminars, individual work |
| CLO7: Describe how one’s unique talents and skills, in collaboration with others, and in business settings, could effectively contribute to addressing climate change. | BLO1.1; BLO1.2; BLO2.1; BLO3.2; BLO4; ELO1.1; ELO1.2; ELO2.1; ELO3.2; ELO4 | Assignments, Midterm exam, final exam | Lectures, seminars, individual work |

**ACADEMIC HONESTY AND INTEGRITY**

The ISM University of Management and Economics Code of Ethics, including cheating and plagiarism are fully applicable and will be strictly enforced in the course. Academic dishonesty, and cheating can and will lead to a report to the ISM Committee of Ethics. With regard to remote learning, ISM remind students that they are expected to adhere and maintain the same academic honesty and integrity that they would in a classroom setting.

**Course outline**

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| **Week** | **Topic** | **In-class hours** | **Readings/assignments** |
| **1** | Course introduction | 4 |  |
| **2** | What is climate change? | 4 | 1. UNCC: e-Learn Course: Climate Change: From Learning to Action Module: What is climate change? 2. NASA: Global Climate Change website |
| **3** | How do we adapt to climate change? | 4 | UNCC: e-Learn Course: Climate Change: From Learning to Action Module: How do we adapt to climate change? |
| **4** | How do we mitigate climate change? | 4 | UNCC: e-Learn Course: Climate Change: From Learning to Action Module: How do we mitigate climate change? |
| **5** | A ‘Wicked Problem’: the psychology of climate change | 4 | George Marshall “Don’t even think about it: Why our brains our wired to ignore climate change”, 2015. |
| **6** | Student presentations | 4 | Climate Risk Assessment |
| **7** | Green Economies | 4 | 1. Core-Econ Unit 4: Social Interactions (sections 4.1, 4.3) 2. UNCC: e-Learn Course: Introduction to Green Economy |
| **8** | Green Finance | 4 | 1. UNCC: e-Learn Course: Climate Change: From Learning to Action Module: How do we plan and finance action on climate change? 2. UNCC: e-Learn   Course: Introduction to Sustainable Finance   1. UNCC: e-Learn Course: Finding the Money – Financing Climate Action |
| **9** | Climate justice | 4 | 1. UN: Climate change is a matter of justice – here‘s why“ ([Link](https://climatepromise.undp.org/news-and-stories/climate-change-matter-justice-heres-why#:~:text=Climate%20justice%20means%20putting%20equity,relation%20to%20the%20climate%20crisis.)) |
| **10** | International Legal Regime | 4 | 1. UNCC: e-Learn Course: Climate Change: From Learning to Action Module: How do climate change negotiations work? 2. UNCC: e-Learn Course: Climate Change International Legal Regime |
| **11** | Corporations and climate change | 4 | TBA |
| **12** | Student presentations | 4 | Local climate action: reports and presentations |
|  |  | Total 48 hours |  |
|  | Consultations | 2 |  |
|  | Final exam | 2 |  |

**Course assessment:**

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| **Type of assignment** | **%** |
| *Group Components* |  |
| Climate risk assessment: report and presentation | 30 |
| Local initiatives: report and presentation | 30 |
| *Individual Components* |  |
| Carbon footprint: take-home midterm exam | 15 |
| Final exam | 25 |
| **Total:** | **100** |

1. Climate risk assessment: report and presentation (30%)

What might Lithuania expect, and what might the changes look like throughout your lives? What we need is to understand the risk that climate change poses to us – our country, our region, our industries, our landscapes, towns and cities. This assignment will be a group effort to understand these risks, and to share your discoveries with me and your classmates.

1. Local climate action: report and presentation (30%)

You will provide a group report on local initiatives – by communities, by companies, by groups of volunteers -- to tackle climate change; or, what some of Lithuania’s disputes are, and how they’re being mediated and resolved; or, since Lithuania has become a technology hub, what technological solutions are being invented and implemented here?

1. Midterm take-home assignment: your carbon footprint (15%)

This assignment will ask you to calculate your personal or household’s contribution to carbon emissions – your carbon footprint -- using the latest tools and models, along with a personal abatement strategy.

1. Final exam (25%). The lecturer reserves the right to choose the form of the exam (multiple choice/ open answer questions/ essay).

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| **TYPE** | **TOPICS** | **TOTAL HOURS** | **EVALUATION %** |
| Climate risk assessment: report and presentation | 1 -- 5 | 34 | 30 |
| Local initiatives: report, presentation and blog post | 1 -- 12 | 34 | 30 |
| Carbon footprint: take-home midterm exam | 1 -- 6 | 16 | 15 |
| Final exam | 6--12 | 28 | 25 |
| **TOTAL** |  | **112** | **100** |

**RETAKE POLICY**

If final (cumulative) mark of the course, including final exam score, is insufficient, students will be allowed to exercise their right of retake. The retake exam will cover all lectures and topics discussed in class during the course. It will be held during the last week of the exam session and will replace the 40% combined value of the exams (mid-term and final). Acquired scores from all assignments will be summed up and the final (cumulative) grade will be given. The lecturer reserves the right to choose the form of the exam (multiple choice/ open answer questions/ essay).

**ADDITIONAL REMARKS**

Attendance and participation in the lectures and seminars are not obligatory, however strongly recommended. Studying solely from slides/readings is not considered to be sufficient preparation for the exam.

Due to the dynamic nature of the content of the course additional material can be assigned during the course. In case of unforeseen events the schedule will be adapted. The lecturer is trying to include actual and relevant materials – therefore the reading list may differ. Slide handouts and readings will be prepared for each class and available for download. The slides are the intellectual property of the teaching instructor and students may not distribute or duplicate these notes without written consent.

**DEGREE LEVEL LEARNING OBJECTIVES**

**Learning objectives for the Bachelor of Business Management**

*Programmes:*

*International Business and Communication,*

*Business Management and Marketing,*

*Finance,*

*Industrial Technology Management,*

*Entrepreneurship and Innovation*

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| **Learning Goals** | **Learning Objectives** |
| Students will be critical thinkers | BLO1.1. Students will be able to understand core concepts and methods in the business disciplines |
| BLO1.2. Students will be able to conduct a contextual analysis to identify a problem associated with their discipline, to generate managerial options and propose viable solutions |
| Students will be socially responsible in their related discipline | BLO2.1. Students will be knowledgeable about ethics and social responsibility |
| Students will be technology agile | BLO3.1. Students will demonstrate proficiency in common business software packages |
| BLO3.2. Students will be able to make decisions using appropriate IT tools |
| Students will be effective communicators | BLO4.1. Students will be able to communicate reasonably in different settings according to target audience tasks and situations |
| BLO4.2. Students will be able to convey their ideas effectively through an oral presentation |
| BLO4.3. Students will be able to convey their ideas effectively in a written paper |

**Learning objectives for the Bachelor of Social Science**

*Programmes:*

*Economics and Data Analytics,*

*Economics and Politics*

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| **Learning Goals** | **Learning Objectives** |
| Students will be critical thinkers | ELO1.1. Students will be able to understand core concepts and methods in the key economics disciplines |
| ELO1.2. Students will be able to identify underlying assumptions and logical consistency of causal statements |
| Students will have skills to employ economic thought for the common good | ELO2.1.Students will have a keen sense of ethical criteria for practical problem-solving |
| Students will be technology agile | ELO3.1. Students will demonstrate proficiency in common business software packages |
| ELO3.2. Students will be able to make decisions using appropriate IT tools |
| Students will be effective communicators | ELO4.1.Students will be able to communicate reasonably in different settings according to target audience tasks and situations |
| ELO4.2.Students will be able to convey their ideas effectively through an oral presentation |
| ELO4.3. Students will be able to convey their ideas effectively in a written paper |