MODERN TECHNOLOGIES AND METHODS OR MANAGERIAL DECISION-MAKING

Level of higher education: MSc
Field of study: 38.04.02. MANAGEMENT
Master Program in International Business Management
Mode of study: Full-time
Trimester: 1
Lecturer: Tatiana Selskaya

Workload of the course by types of activity

The workload of the discipline is 3 ECTS: 108 academic hours, including 52 academic hours of contact work with a professor, 56 academic hours of self-directed studies.

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

Title and brief content of sections and topics of the course (module)	Total (hours)	Contact work (work in contact with a professor)			Student self-directed studies
		Seminars	Individual consultations	Total	
Topic 1. Intro into management decisions. Basic principles.	16	4	4	8	8
Topic 2. Strategy consulting toolkit in decision making	16	4	4	8	8
Topic 3. Decision making in uncertainty	16	4	4	8	8
Topic 4. Game theory and other patterns in decision making	16	4	4	8	8
Topic 5. Human factor in decision making	16	4	4	8	8
Topic 6. Digital in decision making	16	4	4	8	8
Midterm assessment: exam	12	4		4	8
Total	108	28	24	52	56

Brief content of the course topics

Topic 1. Intro into management decisions. Basic principles.
What decisions are considered "management decisions". Why this is relevant to everyone and not just top managers. Course program overview. What decision sciences are about. Art of asking open questions. How to reformulate a problem into something potentially solvable. SMART principles. Problem statement (problem description template). Top-down and bottom-up approaches to problem solving and decision making. Decision making as a process (decision funnel). 1-2 cases in small teams.

Topic 2. Strategy consulting toolkit in decision making.
Issue trees, hypothesis trees. Formulating, structuring and testing hypotheses. MECE principle (mutually exclusive, collectively exhaustive). Frameworks – typical ways to structure and solve business problems. Decision / solution communication: pyramid principle, Situation-Complication-Resolution sequence. 1-2 cases in small teams.

Topic 3. Decision making in uncertainty.

Uncertainty types by zone of control. Strategies to handle uncertainty. Relevant tools and concepts from risk management (asymmetric risks, tail risks, scenario planning, risk adjusted forecasting etc.). Relevant tools of business / startup development under uncertainty (Lean Startup methodology, hypotheses testing, experiments, iterations, MVP). No regret moves. Case study in small teams.

Topic 4. Game theory and other patterns in decision making.

Why it is useful to know game theory and other decision making patterns. Most commonly observed games from game theory and their relevance for business situations (prisoner's dilemma, battle of sexes, top dog / puppy dog / fat cat / lean & hungry look etc.). Concept of commitment device. Concept of finite and infinite games and influence of game duration on game results. Ethical dilemmas (trolley problem, money vs. lives etc.).

Topic 5. Human factor in decision making.

What is behavioral economics. Cognitive biases and how they affect decision quality and consequences. Aspects of decision making in a group. How team structure and dynamics affect decision quality. Importance of diversity and difference in opinions. Inclusive vs. extractive institutions. Evolution of organizational decision making in the course of organization's development. Teal organizations.

Topic 6. Digital in decision making.

How digital affects decision making. What decisions can and cannot be automated. What becomes easier and what becomes more difficult in decision making. How decision making priorities and rules of the game change because of digital. Panel interviews over zoom with various industry practitioners specializing in digital.

Course assessment criteria (scores):

Types of assessment tools	Score
1. Participation in discussions	40
2. Mini-essays and feedback forms after every class	40
3. Interim group project	40
4. Exam	30
Total	**150**

Grade for the course is determined based on the following criteria:

Grade	Minimum score	Maximum score
Excellent	127,5	150,0
Good	97,5	127,0
Satisfactory	60,0	97,0
Failed	0,0	59,5

Note: in case a student's score obtained during the trimester is 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 she/he receives for the midterm assessment, including all the course material, no less than 85% of the score allocated to this assessment'.

List of main and additional literature

Main literature: Materials of lectures

Additional literature:

1. Victor Cheng. Case Interview Secrets: A Former McKinsey Interviewer Reveals How to Get Multiple Job Offers in Consulting. Innovation Press, 2012.
2. Barbara Minto. The Pyramid Principle: Logic in Writing and Thinking. Prentice Hall, 3rd edition, 2010.
3. Nassim Taleb. The Black Swan: The Impact of the Highly Improbable. Penguin, 2008.
4. Nassim Taleb. Antifragile: How to Live in a World We Don't Understand. Penguin, 2012.
5. Jim Collins, Morten T. Hansen. Great by Choice: Uncertainty, Chaos and Luck – Why Some Thrive Despite Them All. Harper Business, 2011.
6. Jim Collins. Good to Great: Why Some Companies Make the Leap and Others Don't. Harper Business, 2001.
7. Haim Shapira, PhD. Gladiators, Pirates and Games of Trust: How Game Theory, Strategy and Probability Rule our Lives. Watkins Publishing, 2017.
8. Malcolm Gladwell. The Tipping Point: How Little Things Can Make a Big Difference. Little, Brown and Company, 2006.
9. Simon Sinek. The Infinite Game: How Great Businesses Achieve Long-Lasting Success. Penguin, 2019.
10. Dan Ariely. Predictably Irrational: The Hidden Forces That Shape Our Decisions. Harper Perennial, revised and expanded edition, 2010.
11. Daniel Kahneman. Thinking, Fast and Slow. Farrar, Straus and Giroux, 2011.
12. Richard H. Thaler, Cass R. Sunstein. Nudge. The Final Edition. Penguin Books, 2021.
13. Dave Logan, John King, Halee Fischer-Wright. Tribal Leadership: Leveraging Natural Groups to Build a Thriving Organization. Harper Business, 2011.
14. Don Edward Beck, Christopher C. Cowan. Spiral Dynamics: Mastering Values, Leadership, and Change. Blackwell, 2005.
15. Daron Acemoglu, James A. Robinson. Why Nations Fail: The Origins of Power, Prosperity, and Poverty. Profile Books, 2013.
16. Yuval Noah Harari. 21 Lessons for the 21st Century. Random House, 2018.
17. Thomas M. Siebel. Digital Transformation: Survive and Thrive in an Era of Mass Extinction. RosettaBooks, 2019.
18. Tony Saldanha. Why Digital Transformations Fail: The Surprising Disciplines of How to Take Off and Stay Ahead. Berrett-Koehler Publishers, 2019.
19. Artificial Intelligence: The Insights You Need from Harvard Business Review (HBR Insights). Harvard Business Review Press, 2019.