Course Title	Behavioral Science & Decision-Making with Modern Technology
Course Code	IS511
Course Type	Elective
Level	Postgraduate
Year / Semester	1st / 2nd

ECTS	7.5	**Lectures / week**	1	**Laboratories / week**	-

Course Purpose and Objectives	This course serves as a guide for strengthening decision-making and problem-solving skills in the modern professional environment, using science-based techniques, behaviorally-infused research methods and technology tools. Based on findings at the cross of managerial decision science and behavioral economics, the course provides students with an applicable understanding of how people make decisions, what drives us, the predictable errors in our cognitive thinking and how we can be nudged to improve our decisions. Drawing from the behavioral science field, the course examines ways in which decision-makers can: (1) improve their own decisions and (2) help those around them (teammates, managers, customers, suppliers etc.) make better decisions, ethically.

Learning Outcomes	1. Knowledge	**CLO1.** Explain cognitive, psychological and social factors influencing decision-making in specific contexts. **CLO2.** Analyze the use of cutting-edge models and technology-enabled tools, including AI, used by established companies for making decisions and solving problems. **CLO3.** Compare the advantages and disadvantages of different methods and tools for making decisions within an organization.

	2. Skills	**CLO4.** Explore how cognitive, psychological and social factors can affect decision-making and goal attainment across business functions - from customer satisfaction to efficient operations and ethical behaviors.	
		CLO5. Debate the key lessons from real-life examples of (non) successful decision-making processes.	
		CLO6. Design processes, research protocols and evaluation systems for organizational decisions using appropriate techniques and technology tools.	
		CLO7. Apply critical thinking tools, creativity, ethical decision-making and data governance to improve decision-making outcomes, both as facilitator and as a leader.	
	3. Competencies (Responsibility and autonomy)	**CLO8.** Utilize modern technology-enabled decision-making processes in a systematic way, as needed.	
		CLO9. Advocate the importance of disruptive technologies, such as Big Data, Cloud, IoT and Artificial Intelligence, and their uses to facilitate decision-making and problem-solving.	
		CLO10. Embrace decision-making as a lifelong learning competency.	
Prerequisites	-	**Required**	-
Course Content	1st week: Introduction to decision-making and problem-solving - System 1 and System 2 thinking, bounded rationality, satisficing, heuristics, biases, mental models 2nd week: The process - steps in standard model, reframing, loop, WRAP		

	3rd week: Critical thinking - elements in thinking, reflective skepticism, biases, counterfactual thinking, logical fallacies, REF conditions for intuition

4th week: Creativity - brainstorming, brainswarming, boosting own creativity, the role of Artificial Intelligence

5th week: Behavioral insights – common heuristics & biases, tools such as premortem technique

6th week: Ethos – herding, fairness assessment

7th week: Case studies - In-class presentations by student groups

8th week: Revisiting the process - examples of decision-making & problem-solving at tech giants e.g. Meta

9th week: Decision readiness & the concept of quitting - emotions, stress, fatigue, time element

10th week: Decision facilitation and leadership – presenting information, influence, empowerment, 12-question checklist

11th week: Decision-making for women professionals - gender stereotypes and how to overcome them

12th week: The role of technology - Artificial intelligence, where we are at

13th week: Revision |
| **Teaching Methodology** | The course is taught through:

- Interactive lectures
- Group activities/discussions
- In class activities
- Multimedia activities
- Guest Lectures |
| **Bibliography** | **Essentials**

- Bazerman, Max, and Don A. Moore. Judgment in Managerial Decision Making. 8th ed. John Wiley & Sons, 2013.

Recommended

- Heath, Chip and Heath, Dan (2013). Decisive: How to make better choices in life and work. Currency – The Crown Publishing Group |

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- Heath, Chip and Heath, Dan (2013). Decisive: How to make better choices in life and work. Currency – The Crown Publishing Group |

- Kahneman, Daniel. (2011). Thinking, fast and slow. Farrar, Straus and Giroux.
- Thaler, H. Ruchard and Sunstein, R. Cass (2021). Nudge: The Final edition. Penguin books
- Cialdini, B. Robert (2021). Influence, new and expanded: The psychology of persuasion. Harper Business

Research Papers:

- Allison, S. T., Messick, D. M., & Goethals, G. R. (1989). On being better but not smarter than others: The Muhammad Ali effect. Social Cognition, 7(3), 275–295.
- Bazerman, Max, and Francesca Gino. "Behavioral Ethics: Toward a Deeper Understanding of Moral Judgment and Dishonesty." Annual Review of Law and Social Science 8 (December 2012): 85–104.
- Buchanan, L., & O Connell, A. (2006). A brief history of decision making. *Harvard business review*, *84*(1), 32.
- Fox, J. (2015). From "economic man" to behavioral economics. *Harvard Business Review*, *93*(5), 78-85.
- Kahneman, D., Lovallo, D., & Sibony, O. (2011). Before you make that big decision. *Harvard business review*, *89*(6), 50-60.
- Luca, Michael, and Max Bazerman. "Want to Make Better Decisions? Start Experimenting." MIT Sloan Management Review 61, no. 4 (Summer 2020).
- Milkman, Katherine L., Dolly Chugh, and Max H. Bazerman. "How Can Decision Making Be Improved?" Perspectives on Psychological Science 4, no. 4 (July 2009): 379–383.
- Moore, Don A., and Max H. Bazerman. Decision Leadership: Empowering Others to Make Better Choices. New Haven: Yale University Press, 2022.
- Smith, G. F. (2003). Beyond critical thinking and decision making: Teaching business students how to think. *Journal of Management Education*, *27*(1), 24-51.
- Snowden, D. J., & Boone, M. E. (2007). A leader's framework for decision making. *Harvard business review*, *85*(11), 68.

Assessment		Percentage	CLO1	CLO2	CLO3	CLO4	CLO5	CLO6	CLO7	CLO8	CLO9	CLO10
	4 Interactive Activities	20%	√	√	√	√			√	√		√
	Main Coursework	20%	√	√		√	√	√			√	
	Final Exam	60%		√	√	√	√	√			√	

Language	English