

DECISION MAKING AND COGNITIVE BIASES

(1) GENERAL

SCHOOL	School of Social Sciences		
ACADEMIC UNIT	Department of Psychology		
LEVEL OF STUDIES	Undergraduate		
COURSE CODE	Ψ 2106	SEMESTER	6 th
COURSE TITLE	Decision Making and Cognitive Biases		
COURSE INSTRUCTOR	Dimitrios Adam		
INDEPENDENT TEACHING ACTIVITIES	WEEKLY TEACHING HOURS	CREDITS	
Lectures	3	4	
COURSE TYPE	Optional		
PREREQUISITE COURSES	-		
LANGUAGE OF INSTRUCTION and EXAMINATIONS	Greek		
IS THE COURSE OFFERED TO ERASMUS STUDENTS	No		
COURSE WEBSITE (URL)			

(2) LEARNING OUTCOMES

Learning Outcomes
<p>In daily life, decisions shape our health, social interactions, career, and overall well-being. The course explores how cognitive biases—systematic errors that affect people’s judgments and decisions—play a crucial role in the decision-making process. These biases often arise from quick cognitive shortcuts called heuristics, that is, emotional and social influences on cognitive processes. This course covers the theoretical and practical assumptions of cognitive biases, their impact on decision-making, and strategies to mitigate their effects.</p> <p>Upon successful completion of the course, students should be able to:</p> <ul style="list-style-type: none"> • Critically analyze the role of cognitive biases in the decision-making process • Understand and evaluate the implications of heuristics on decision-making • Develop skills that will enable them to comprehend the influence of cognitive biases on personal and professional decisions • Improve their ability to apply knowledge of cognitive biases to enhance the effectiveness of their judgments and decisions • Reflect on the ethical implications of decision-making processes affected by cognitive biases
General Competencies
<ul style="list-style-type: none"> • Critical thinking and analytical skills for evaluating decision-making processes • Ability to identify, evaluate, and prevent cognitive biases in decision-making • Application of theoretical knowledge to practical implementation

- Independent learning and self-improvement in understanding cognitive biases
- Collaboration and effective communication in teams
- Ethics and reflection of the implications of decisions
- Adaptability and flexibility in problem-solving strategies

(3) SYLLABUS

1. Introduction to cognitive biases: Two systems of thought
2. The psychology of attention and effort in decision making
3. Heuristics and biases: How our minds takes shortcuts
4. The role of cognitive ease in decision making
5. Emotion and decision making: Understanding the influence of affect
6. Exploring norms, surprises and causes in cognitive biases
7. Overconfidence: The pitfalls of intuition
8. Intuition vs. formulas: Making decisions under uncertainty
9. The illusion of understanding: Recognizing cognitive pitfalls
10. Evaluating risk perception and decision making
11. The rules of choice: Understanding decision making frameworks
12. Challenges and errors in economic decision making
13. Cognitive biases and stereotypes in personnel selection

(4) TEACHING and LEARNING METHODS - EVALUATION

DELIVERY	Face to face		
USE OF INFORMATION AND COMMUNICATION TECHNOLOGY	Use of ICT in teaching Use of e-class for the support of teaching and the achievement of learning outcomes		
TEACHING METHODS	Teaching Methods	Workload	ECTS Credits
	Lectures/meetings	39 hours	1,56
	Independent reading	75 hours	3,00
	Final examination	3 hours	0,12
	Total	117 hours	4,68
STUDENT PERFORMANCE EVALUATION	Γραπτή τελική εξέταση με ερωτήσεις ανάπτυξης. Η αξιολόγηση γίνεται στην Ελληνική.		

(5) ATTACHED BIBLIOGRAPHY

- Abatecola, G., Caputo, A., & Cristofaro, M. (2018). Reviewing cognitive distortions in managerial decision making: Toward an integrative co-evolutionary framework. *Journal of Management Development*, 37(5), 409-424. doi: 10.1108/JMD-08-2017-0263
- Hartley, C. A., & Phelps, E. A. (2012). Anxiety and decision-making. *Biological Psychiatry*, 72(2), 113-118. doi: 10.1016/j.biopsych.2011.12.027
- Kahneman, D. (2011). *Thinking, fast and slow*. Farrar, Straus and Giroux.
- MacLean, C. (2022). Cognitive bias in workplace investigation: Problems, perspectives and proposed solutions. *Applied Ergonomics*, 105, 103860. doi: 10.1016/j.apergo.2022.103860
- Nelson, J. (2014). The power of stereotyping and confirmation bias to overwhelm accurate assessment: The case of economics, gender, and risk aversion. *Journal of Economic Methodology*, 21(3), 211-231. doi: 10.1080/1350178X.2014.939691
- Tversky, A., & Kahneman, D. (Eds.). (2000). *Choices, values, and frames*. Cambridge University Press.