



UNIVERSITÀ  
DEGLI STUDI DI MILANO-BICOCCA

## COURSE SYLLABUS

### Psychology of Thinking, Decision Making and Communication

2223-1-F5106P003

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#### Learning area

FUNDAMENTALS AND RESEARCH METHODS IN SOCIAL AND ECONOMIC PSYCHOLOGY

#### Learning objectives

##### *Knowledge and understanding*

- promote the in-depth knowledge of cognitive psychological processes, with particular reference to the study of decision making, problem solving and communication;
- become familiar with the main normative and descriptive theories;
- understand the current scientific debate in the psychology of reasoning, decision making, problem solving and communication.

##### *\*Applying knowledge and understanding*

- ability to critically evaluate the methodology used and the conclusions drawn from the main researches.
- ability to apply the models in natural settings

#### Contents

The course explores the cognitive processes related to the choice behavior and the systematic errors emerged in

decision-making tasks, risk prediction and problem solving and their relationship with communication.

## **Detailed program**

### **LECTURES**

- Human rationality: ecological, grounded and relevance oriented rationality
- Normative and descriptive approaches. Paradigm shift in the Psychology of reasoning
- Different explanation of Cognitive Biases
- Prospect Theory and the Heuristics and Biases Program
- Risk perception and communication
- Nudge and Behavioural sciences
- The Fast and frugal heuristics-Boost
- The pragmatic approach
- The Dual Process Theories: intuitive and analytic thinking
- Problem solving and creativity

The course will examine researches conducted in the laboratory and in various applicative areas. Many examples and applications will be considered, concerning medical, economic, legal and public policy areas.

**Group work:** design, run, and present an experimental study on the psychology of thought, decision making and communication.

### **Prerequisites**

The knowledge of the basis of Psychology of Thinking enables a more aware use of the course contents.

Anyway, the first lessons will be dedicated to the review of the main issues.

### **Teaching methods**

Lectures, discussions, video presentations, group work.

### **Assessment methods**

The verification of learning will be carried out through an oral examination aimed at verifying the specific knowledge of the main theoretical and experimental aspects of the course and the argumentative and critical thinking of the student.

Participation in the optional activities (group presentation, exercises, etc.) proposed during the course contributes to the final evaluation (only for attending students).

\*Although this course is held in Italian, Erasmus students can take the exam in English if they wish to do so.

## Textbooks and Reading Materials

**Levinson, S. C. (1995).** Interactional biases in human thinking. In E. N. Goody (Ed\*), Social intelligence and interaction.\* Cambridge: Cambridge University Press, pp. 222-242.

**Mosconi, G. (1998).** Norma logica e regole discorsive nella ricerca sul ragionamento. In F. Castellani e L. Montecucco (a cura di), *Normatività logica e ragionamento di senso comune*. In Mulino, Bologna, pp. 223-240.

**Politzer, G., Macchi, L. (1999).** Reasoning and Pragmatics. *Mind & Society*, 1 (1), 73-94.

**Bagassi M. & Macchi L. (2016).** The Interpretative function and the emergence of the *unconscious analytic thought*. In L. Macchi, M. Bagassi & R. Viale (Eds). *Cognitive Unconscious and Human Rationality*. MIT Press, Cambridge: Massachusetts, cap.1, pp. 43-76.

**Macchi L., Bagassi M. (2012).** Intuitive and analytical processes in the insight problem solving: a psycho-rethorical approach to the study of reasoning. *Mind & Society*, 11 (1), Special issue on "Dual Process Theories of Human Thought: The Debate", 53-67.

**Macchi, L. & Bagassi, M. (2020).** Bounded rationality and Problem solving: The *interpretative function* of thought. In R. Viale (Ed.), *Routledge Handbook on Bounded Rationality*. London: Routledge.

**Gigerenzer, G. (2000).** Ecological intelligence. In Gigerenzer, G., *Adaptive thinking. Rationality in the real world*. Oxford: Oxford University Press, 57-77 (parte II, cap. 4).

**Tversky A. & Kahneman D. (1981).** The framing of decisions and the psychology of choice. *Science*, 211, 453-458.

**Kahneman, D. (2003).** A perspective on judgment and choice: mapping bounded rationality. *American Psychologist*, 58, 697-720.

**Tversky A. & Shafir, E. (1992).** The disjunction effect in choice under uncertainty. *Psychological Science*, 3, 305-309.

**Bagassi, M. & Macchi, L. (2006).** Pragmatic approach to decision making under uncertainty: the case of the disjunction effect. *Thinking and Reasoning*, 12, 3, 329-350.

**Thaler, R.H. & Sunstein C.R. (2014).** *Nudge. La spinta gentile. La nuova strategia per migliorare le nostre decisioni su denaro, salute, felicità*. Milano: Feltrinelli.

## Sustainable Development Goals

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