
FORENSIC DECISION-MAKING (6 CFU) and EPISTEMOLOGY AND PROFESSIONAL ETHICS (Lab, 3 CFU) (Code 10605940)

(9 credits)

Module Convenor

- Professor Fabio Ferlazzo (fabio.ferlazzo@uniroma1.it)
- Office hours: Thursday 10.00-12.00 am. Room 211, via dei Marsi 78, 00185 Rome (Italy) or via email

Course Objectives

The course aims at developing the specific theoretical knowledge and the professional skills needed to understand and assess the psychological mechanisms underlying judgments, choices, and decision errors, especially with regards to the legal, where the relevance of such topics is increasingly recognized. The lectures will be aimed at analysing the multiple theoretical models for judgment and decision-making, as well as their experimental bases, and at discussing the effective countermeasures to decrease the impact of decision errors. The main topics will focus on the main theoretical models and methods; the normative perspective (history, models, and limitations); the psychological models; the heuristics and biases; the role of context, tasks, and information; the role of judgment and decision-making within the legal system.

Knowledge and understanding

At the end of the course students will possess a sound critical knowledge and understanding of the main theories and methods of investigation of judgment and decision-making. They will also be able to frame this knowledge within the current scientific perspectives. Finally, they will use effectively and critically the scientific papers published on international journals.

Applying knowledge and understanding

Students will be able to apply their knowledge, both theoretical and methodological, for devising plausible solutions to complex applied issues involving both decision-making processes and legal issues, through appropriate techniques and methods.

Making judgements

The students will be able to collect and interpret relevant information on decision-making with the aim to form evaluations and scientific hypotheses, also taking into considerations their social, and ethical implications.

Communication skills

The students will be able to communicate information, ideas, solutions, as well as their personal critical opinions and the logical processes that led to formulate those opinions, to both specialists and lay people.

Learning skills

The students will be able to apply their competence on the topics addressed during the course to further levels of study requiring a high level of autonomy.

Course Structure

FORENSIC DECISION-MAKING

There will be **24 lectures** taking place, each lasting **2 hours**. Lectures will be as interactive as possible, with students suggested to ask any question on the discussed topics. A list of the contents of the lectures is outlined below, and these will aim to provide an introduction to the subject matter. In addition to the lectures, if requested, **tutorials** may be organized on specific arguments.

EPISTEMOLOGY AND PROFESSIONAL ETHICS

There will be **12 lectures** taking place, each lasting **3 hours**. Lectures will be as interactive as possible, with students suggested to ask any question on the discussed topics. A list of the contents of the lectures is outlined below, and these will aim to provide an introduction to the subject matter. In addition to the lectures, if requested, **tutorials** may be organized on specific arguments.

Course Assessment

The course includes an intermediate exam (in written form with open questions) and a final exam with a written test (open questions) with oral integration upon request.

Reading List

Standard textbooks for the module on Forensic Decision-making include:

- a) Newell, Lagnado, Shanks (2015), Straight choices: the psychology of decision making, London: Psychology Press (second edition).
- b) Six scientific papers in English:
 1. Reese, 2012 on ForDec (Moodle Sapienza)
 2. Kahneman, 2003 on ForDec (Moodle Sapienza)
 3. Oppenheimer, 2003 on ForDec (Moodle Sapienza)
 4. Klein, 2015 on ForDec (Moodle Sapienza)
 5. Gelberg, 2002 on ForDec (Moodle Sapienza)
 6. Greene et al., 2013 on ForDec (Moodle Sapienza)

Standard textbooks for the module on Epistemology and Professional Ethics include:

1. APA forensic guidelines on ForDec (Moodle Sapienza)
2. Ewing on ForDec (Moodle Sapienza)
3. Elkins, 2020 on ForDec (Moodle Sapienza)

Please note: the exam will be about the entire textbook, the slides, and all the scientific papers above.

Lecture Overview: Forensic Decision-Making

Lecture	Topic	Reading
1.	Introduction to the course; Decision making in the legal system	Slides on the Sapienza e-learning system (Moodle Sapienza: ForDec course). Videos on ForDec (Moodle Sapienza) Textbook (Newell et al., 2015) Chapter 1
2.	Basics of probability theory; The normative approach: theories by B.Pascal and D.Bernoulli	Slides on ForDec (Moodle Sapienza) Textbook Chapters 2 - 8

3.	Why normative models do not account for the human decision making: Basics on human brain and cognitive system	Slides on ForDec (Moodle Sapienza)
4.	Basics on human brain and cognitive system	Slides on ForDec (Moodle Sapienza)
5.	Basics on human brain and cognitive system: the visual system	Slides on ForDec (Moodle Sapienza)
6.	Basics on human brain and cognitive system: the visual system	Slides on ForDec (Moodle Sapienza)
7.	Basics on human brain and cognitive system: the visual system	Slides on ForDec (Moodle Sapienza) Videos on ForDec (Moodle Sapienza)

8.	Basics on human brain and cognitive system: the attention system	Slides on ForDec (Moodle Sapienza) Textbook Chapters 12 - 14
9.	Heuristics	Slides on ForDec (Moodle Sapienza) Textbook Chapters 6 - 11 Videos on ForDec (Moodle Sapienza)
10	Heuristics	Slides on ForDec (Moodle Sapienza) Textbook Chapters 6 - 11 Videos on ForDec (Moodle Sapienza)
11.	Heuristics: debiasing techniques	Slides on ForDec (Moodle Sapienza) Reese, 2012 on ForDec (Moodle Sapienza) Kahneman, 2003 on ForDec (Moodle Sapienza)
12.	Heuristics: exercise on an expert witness report	Expert witness report on ForDec (Moodle Sapienza)
13.	Heuristics: review on the exercise	Discussion about the two videos on ForDec (Moodle Sapienza)

14.	Prospect Theory	Slides on ForDec (Moodle Sapienza) Textbook Chapter 9
15.	Prospect Theory	Slides on ForDec (Moodle Sapienza) Textbook Chapter 9
16.	Prospect Theory Limits of the prospect theory: Bayes' Theorem and the Gigerenzer vs. Kahneman debate	Slides on ForDec (Moodle Sapienza) Textbook Chapters 5 - 9 Gigerenzer, 1991 on ForDec (Moodle Sapienza) Kahneman & Tversky, 1996 on ForDec (Moodle Sapienza)
17.	Gigerenzer's Fast and Frugal Heuristics	Slides on ForDec (Moodle Sapienza) Textbook Chapter 3 Oppenheimer, 2003 on ForDec (Moodle Sapienza)
18	Naturalistic Decision-Making approach (NDM) Image theory	Slides on ForDec (Moodle Sapienza) Textbook Chapter 13 Klein, 2015 on ForDec (Moodle Sapienza) Pauley, 2013 on ForDec (Moodle Sapienza)
19.	Naturalistic Decision-Making approach (NDM) G. Klein's Recognition	Slides on ForDec (Moodle Sapienza) Textbook Chapter 13 Klein, 2015 on ForDec (Moodle Sapienza) Pauley et al., 2013 on ForDec (Moodle Sapienza)

	Primed Decision (RPD)	
20.	Emotions in decision-making: regret theory	Slides on ForDec (Moodle Sapienza) Textbook Chapter 15 Gelberg, 2002 on ForDec (Moodle Sapienza) Zeelenberg et al., 1998 on ForDec (Moodle Sapienza) Camille et al., 2004 on ForDec (Moodle Sapienza)
21.	Emotions in decision-making: Damasio's Somatic Marker Hypothesis	Slides on ForDec (Moodle Sapienza) Textbook Chapter 15
22.	Combining information (compensatory vs non compensatory)	Textbook Chapter 3
23.	Thaler's Nudge Theory	Slides on ForDec (Moodle Sapienza) Textbook Chapter 17 Greene et al., 2013 on ForDec (Moodle Sapienza)
24.	Final recap of the previous lectures	

Lecture Overview: Epistemology and professional ethics

Lecture	Topic	Reading
1	Introduction on epistemology	Slides on ForDec (Moodle Sapienza)
2.	Bacon	Slides on ForDec (Moodle Sapienza) Tesli, 2020 on ForDec (Moodle Sapienza)
3.	Logical positivism (Vienna Circle)	Slides on ForDec (Moodle Sapienza) Allesina, 2011 on ForDec (Moodle Sapienza) Ferlazzo & Sdoia, 2012 on ForDec (Moodle Sapienza)
4.	Logical positivism (Vienna Circle)	Slides on ForDec (Moodle Sapienza) Allesina, 2011 on ForDec (Moodle Sapienza) Ferlazzo & Sdoia, 2012 on ForDec (Moodle Sapienza)
5.	Falsificationism (Popper)	Slides on ForDec (Moodle Sapienza)

6.	The null hypothesis	Slides on ForDec (Moodle Sapienza)
7.	Admission of expert witness	Slides on ForDec (Moodle Sapienza) Frye standard Daubert standard
8.	T. Kuhn and the scientific revolutions	Slides on ForDec (Moodle Sapienza)
9.	Lakatos and Feyerabend	Slides on ForDec (Moodle Sapienza)
10.	Case discussion	Report on report on ForDec (Moodle Sapienza)
11.	Case studies 1-5 discussion	Materials on ForDec (Moodle Sapienza)

12.	Case studies 6-8 discussion	Materials on ForDec (Moodle Sapienza) Ewing, 2020
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