

Theories of rationality

MA Program in Philosophy (Philosophy International Curriculum)

University of Turin, 2021-2022

In order to obtain the relevant credits (6), students will have to comply with (I) AND (II) below.

(I) Mandatory readings for the oral exam (all texts will be available in *Materiale didattico* on the course webpage):

- I. HACKING, *An Introduction to Probability and Inductive Logic* (Cambridge University Press): pp. xi-126 (chapters 1-10);
- ONE chosen among (1)-(7) below (see the list in section II);
- R. SAMUELS and S. STICH, “Rationality and psychology”. In A.R. Mele and P. Rawling (eds.), *The Oxford Handbook of Rationality* (Oxford University Press, 2004): pp. 279-300.

Alternatively: Written test (early June) on the topics discussed during the lecture series, including the key reading assignments addressed, namely (1), (2), (3), (5), and (6) (but *not* the other material indicated below or in the Moodle page of the course).

(II) A written essay (*roughly* 2.000 / 3.000 words) on one of the topics below.

The essay must be submitted by email no less than one week before the chosen oral examination session, and will also have to be briefly discussed during the oral examination (such discussion will partly contribute to the final assessment).

What is required in the essay is the presentation and explanation of the key aspects of the topic selected, with appropriate appreciation of correct terminology and relevant argumentation. Suggested readings are, well, *suggested*: it is unlikely that a very good essay will come out if they are disregarded, but one should *not* be worried that *all* material be covered explicitly in the essay itself.

All readings will be made available in *Materiale didattico* on the course webpage.

Topic: **PROBABILITY JUDGMENT and THE CONJUNCTION FALLACY**

(1) Key reading: A. TVERSKY and D. KAHNEMAN, “Extensional vs. intuitive reasoning: The conjunction fallacy in probability judgment”. *Psychological Review*, 90 (1983): pp. 293-315.

Further suggested material:

- (1a) E. STEIN, *Without Good Reason* (Clarendon Press, Oxford, 1996): pp. 93-102.
- (1b) G. GIGERENZER, “I think, therefore I err”. In *Rationality for Mortals: How People Cope with Uncertainty* (Oxford University Press, 2008): pp. 65-79
- (1c) R. MORO, “On the nature of the conjunction fallacy”. *Synthese*, 171 (2009): pp. 1-24.
- (1d) V. CRUPI (2016), “Razionalità, ragionamento e cognizione”. In M. Dell'Utri and A. Rainone (eds.), *I modi della razionalità* (pp. 81-98).

Topic: **BAYESIAN REASONING and BASE-RATE NEGLECT**

- (2) Key reading: A. TVERSKY and D. KAHNEMAN, "Evidential impact of base-rates".
In D. Kahneman, P. Slovic, and A. Tversky (eds.), *Judgment under Uncertainty: Heuristics and Biases* (Cambridge University Press, 1982): pp. 153-160.

Further suggested material:

- (2a) I. LEVI, "Who commits the base-rate fallacy?" *Behavioral and Brain Sciences*, 6, 1983: 502-506.
(2b) G. GIGERENZER, *Calculated Risks: How to Know When Numbers Deceive You* (Simon & Schuster, 2002): pp. 39-51 (chapter 4: "Insight").
(2c) V. CRUPI, F. ELIA, and F. APRÀ, "Understanding and improving decisions in clinical medicine: Towards cognitively informed thinking". *Internal and Emergency Medicine*, 13 (2018): 449-451.
(2d) J. WATSON, "Interpreting a Covid-19 test result". *British Medical Journal*, 12 May 2020.

Topic: **DECISION MAKING and FRAMING**

- (3) Key reading: A. TVERSKY and D. KAHNEMAN, "Rational choice and the framing of decisions".
Journal of Business, 59 (1986): pp. S251-S278.

Further suggested material:

- (3a) A. TVERSKY, "A critique of expected utility theory: Descriptive and Normative Considerations".
Erkenntnis, 9 (1975): pp. 163-173.
(3b) B.J. MCNEIL, S.G. PAUKER, and A. TVERSKY, "The framing of medical decisions".
In D.E. Bell, H. Raiffa, and A. Tversky, *Descriptive, Normative, and Descriptive Interactions*
(Cambridge University Press, 1988): pp. 562-568.
(3c) G. GIGERENZER, "On the supposed evidence for libertarian paternalism". *Review of Philosophy and Psychology*, 6 (2015): pp. 361-383.
(3d) L. SANTOS, "A monkey economy as irrational as ours". TED talk (July 2010):
https://www.ted.com/talks/laurie_santos_a_monkey_economy_as_irrational_as_ours?language=en.

Topic: **THE WASON TASK and CONFIRMATION BIAS**

- (4) Key reading: E. Stein, *Without Good Reason* (Clarendon Press, Oxford, 1996): pp. 79-93.

Further suggested material:

- (4a) R.S. NICKERSON, "Hempel's paradox and Wason's selection task". *Thinking and Reasoning*, 2 (1996): pp. 1-31.
(4b) R.S. NICKERSON, "Confirmation bias: A ubiquitous phenomenon in many guises". *Review of General Psychology*, 2 (1998): pp. 175-220.
(4c) F. VINDROLA and V. CRUPI, "Bayesians too should follow Wason: A comprehensive accuracy-based analysis of the selection task". *British Journal for the Philosophy of Science* (2021).

Topic: **THE SLEEPING BEAUTY PUZZLE and SELF-LOCATING EVIDENCE**

- (5) Key reading: A. ELGA, "Self-locating belief and the Sleeping Beauty problem". *Analysis*, 60 (2000): pp. 143-147.

Further suggested material:

- (5a) D. LEWIS, "Sleeping Beauty: Reply to Elga". *Analysis*, 61 (2001): pp. 171-176.
(5b) M.G. TITELBAUM, "Ten reasons to care about the Sleeping Beauty problem". *Philosophy Compass*, 8 (2013): pp. 1003-1017.
(5c) M. COLOMBO, J. LAI, and V. CRUPI, "Sleeping Beauty goes to the lab: The psychology of self-locating evidence". *Review of Philosophy and Psychology*, 10 (2019): 173-185.

Topic: **NEWCOMB'S PROBLEM and DECISION THEORY**

- (6) Key reading: M. GARDNER, "Newcomb's paradox". In *The Colossal Book of Mathematics* (W.W. Norton & Company, 2001): 580-591.

Further suggested material:

- (6a) A. AHMED, "The 'Why ain'cha rich?' argument". In A. Ahmed (ed.), *Newcomb's Problem* (Cambridge University Press, 2018): pp. 55-72.
(6b) P. MCKAY, "Newcomb's problem: The causalists get rich". *Analysis*, 64 (2004): pp. 187-189.
(6c) G. PRIEST, "Rational dilemmas". *Analysis*, 62 (2002): pp. 11-16.
(6d) E. SHAFIR and A. TVERSKY, "Thinking through uncertainty: Nonconsequential reasoning and choice". *Cognitive Psychology*, 24 (1992): pp. 449-474.
(6e) A. BELLOS, "Newcomb's problem divides philosophers. Which side are you on?". *The Guardian*, November 2016: <https://www.theguardian.com/science/alexs-adventures-in-numberland/2016/nov/28/newcombs-problem-divides-philosophers-which-side-are-you-on>.

Topic: **TROLLEY DILEMMAS and MORAL DECISIONS**

- (7) D. EDMONDS, "Matters of life and death". *Prospect*, 7 October 2015
(here: <https://www.prospectmagazine.co.uk/magazine/ethics-trolley-problem>)

Further suggested material:

- (7a) J. GREENE, "Beyond point-and-shoot morality: Why cognitive (neuro)science matters for ethics". *Ethics*, 124 (2014): pp. 695-726.
(7b) N. HEINZELMANN, "Deontology defended". *Synthese*, 195 (2018): pp. 5197-5216.
(7c) D. LOCKE, "The normative significance of cognitive science reconsidered". *Philosophical Quarterly* (2019).
(7d) M. STEVENS, "The greater good" (VIDEO). *Mind Fields* (series 2, episode 1), December 2017: <https://www.youtube.com/watch?v=1sl5KJ69qjA>.