

Applied Rationality

Code: 43844
ECTS Credits: 6

Degree	Type	Year	Semester
4316227 Applied Philosophy	OT	0	2

Contact

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Use of languages

Principal working language: english (eng)

Teachers

José Antonio Noguera Ferrer

Jordi Tena Sanchez

Prerequisites

- Good reading abilities in English language; participation in class discussion can be done both in Spanish and English.
- Interest in philosophical and scientific debates over rationality and/or reason
- Interest in the critical discussion of classical and current texts on the class topic
- Knowledge of basic logic is necessary; knowledge of theories of probability and rational decision is helpful.
- Willingness to prepare the class discussion of one of the readings (summary of one article/book chapter plus preparation of discussion questions and/or critical evaluation of the arguments contained)
- Readings are obligatory unless noted otherwise. Don't just read the course texts passively; work actively with them and come well-prepared to classes. Three questions are always central: What's the author's main claim? What is his argument for the claim? What should we think of the argument's form and premises? Especially for your own presentation of an article/book chapter, please use these questions as guidelines.

Objectives and Contextualisation

Theories of rationality should ideally provide us with tools for a number of important tasks: We want to avoid irrationality, or aim at justifying our beliefs and decisions by certain standards. This is important for many tasks in ordinary life, such as judgments and decisions of individual and public health, wealth, and happiness. We want to be clear about whether the reasons for our beliefs and actions are valid or reasonable. Furthermore, we often have to communicate with others about our beliefs and decisions, such as in scientific, ethical, or political contexts. All this requires conceptions or even theories of reason or rationality.

But what do we mean when we say that something, or someone, is rational (or irrational)? What are the normative standards of rationality? How should a theory of rationality be built? What are its presuppositions, its potentials and limits? What role does science play in it? In the answers to such questions, different thinkers have introduced a bewildering variety of distinctions - such as theoretical versus practical, instrumental versus non-instrumental, formal versus content-based, or optimizing versus "bounded" concepts of rationality. The

course presents a selection of classical and current debates in which such understandings of rationality or reason emerge.

Skills

- Analyze and interpret topics and problems in current contemporary philosophical research based on the interrelation between ethics, art and politics.
- Communicate and justify conclusions clearly and unambiguously to both specialised and non-specialised audiences.
- Continue the learning process, to a large extent autonomously.
- Contribute to debates in current philosophical research making significant critical contributions, with conceptual precision and good arguments by means of public presentation.
- Relate the concepts and knowledge of the various areas of current philosophical research in relation to dependencies between science and technology, and the ethical and political implications of such dependencies.
- Search for, select and manage information autonomously, both from structured sources (data bases, bibliographies, specialized journals) and from information distributed on the web.
- Solve problems in new or little-known situations within broader (or multidisciplinary) contexts related to the field of study.

Learning outcomes

1. Apply the theory of rationality to problem areas in regulations, aesthetics and science and technology.
2. Communicate and justify conclusions clearly and unambiguously to both specialised and non-specialised audiences.
3. Continue the learning process, to a large extent autonomously.
4. Know the main contemporary theories on rationality, especially its social, political, ethical and cognitive implications in scientific and technological development.
5. Make a written or oral heuristic contribution to the theories of rationality.
6. Search for, select and manage information autonomously, both from structured sources (data bases, bibliographies, specialized journals) and from information distributed on the web.
7. Solve problems in new or little-known situations within broader (or multidisciplinary) contexts related to the field of study.

Content

"Rationality" refers to the idea that our beliefs and decisions can be evaluated according to normative standards of reasoning; but it is also a concept used in the empirical sciences, such as sociology, psychology, or economics, for explaining how we judge and decide. We will look at its explanatory uses in sociology and psychology, but also at its normative problems at the interfaces between the sciences and philosophy. Which norms do and should guide our inferences? How are the norms related to the actual ways in which human beings reason? And how responsible do we have to be for our beliefs to be rational? To answer such questions, we will look at debates in philosophy and the sciences over human rationality. This course has thus two interrelated aims: First, it provides exercises in reasoning and rationality; second, it is a philosophical study of controversies in the empirical sciences of rationality.

1. Rationality in social science I

Goldthorpe, J. (1998), Rational action theory for sociology. *The British Journal of Sociology*, 49, 167-192.

Manzo, G. (2013), Is rational choice theory still a rational choice of theory? A response to Opp. *Social Science Information*, 52, 361-382.

2. Rationality in social science II

Boudon, R. (2006), Homo sociologicus: Neither a rational nor an irrational idiot. *Papers*, 80, 149-169.

Leon Medina, F. (2014), Reasons and biological causes. Some reflections of Boudon's theory of ordinary rationality. *Papers*, 99, 595-629.

3. Rationality in psychology: Heuristics and biases

Tversky, A. & Kahneman, D. (1974). Judgment under uncertainty: Heuristics and biases. *Science*, 185, 1124-1131.

Botterill, G. & Carruthers, P. (1999). *The philosophy of psychology* (pp. 105-130, "Reasoning and irrationality"). Cambridge: Cambridge University Press.

4. Are we irrational? Philosophical reactions to "heuristics and biases"

Cohen, L.J. (1981). Can human irrationality be experimentally demonstrated? *Behavioral and Brain Sciences*, 4, 317-331 (comments and responses, 331-59).

Stich, S. (1985). Could man be an irrational animal? Some notes on the epistemology of rationality. *Synthese*, 64, 115-135.

5. Psychological debates about "heuristics and biases"

Gigerenzer, G. (1991). How to make cognitive illusions disappear: Beyond heuristics and biases. *European Review of Social Psychology*, 2, 83-115.

Kahneman, D. & Tversky, A. (1996). On the reality of cognitive illusions. *Psychological Review*, 103, 582-591.

Gigerenzer, G. (1996). On narrow norms and vague heuristics: A rebuttal to Kahneman and Tversky. *Psychological Review*, 103, 592-596.

6. Evolution and rationality I

Sober, E. (1981), The evolution of rationality. *Synthese*, 46, 95-120.

Stein, E. (1996). Evolution. In: Stein, E. Without good reason: The rationality debate in philosophy and cognitive science. Oxford: Clarendon Press, 173- 213.

7. Evolution and rationality II

Fodor, J. (2000). Why we are so good at catching cheaters. *Cognition*, 75, 29-32.

Beaman, C.P. (2002). Why we are good at detecting cheaters? A reply to Fodor. *Cognition*, 83, 215-220 (Discussion, 221)

Cosmides, L., Tooby, J., Fiddick, L. and Bryant, G. A. (2005). Detecting cheaters. *Trends in Cognitive Sciences*, 9, 505-506.

Atran, S. (2001). A cheater-detection module? Dubious interpretations of the Wason selection task and logic. *Evolution and Cognition*, 7, 187-192.

8. Evolution and rationality III

Mercier, H. & Heintz, C. (2014). Scientists' argumentative reasoning. *Topoi*, 33, 513-524.

Mercier, H. (2016). The Argumentative Theory: Predictions and Empirical Evidence. *Trends in Cognitive Sciences*, 20, 689-700.

9. Are psychologists irrational? Philosophical reactions to the "rationality wars"

Samuels, R., Stich, S. & Bishop, M., 2002. Ending the rationality wars: How to make disputes about human rationality disappear. In: R. Elio (ed.), *Common Sense, Reasoning and Rationality*. Oxford: Oxford University Press, 236-268.

Goldman, A. (2008). Human rationality: Epistemological and psychological perspectives. In: A. Beckermann & Sven Walter (eds.), *Philosophie: Grundlagen und Anwendungen/Philosophy: Foundations and Applications* (pp. 230-247). Paderborn: Mentis.

10. How responsible should we be about beliefs and reasoning?

Bishop, M. (2000). In praise of epistemic irresponsibility: How lazy and ignorant can you be? *Synthese*, 122, 179-208.

Hieronymi, P. (2008). Responsibility for believing. *Synthese*, 161, 357-373.

Methodology

The module is structured into 10 sessions of 3.5 hours each. The sessions alternate between lecturing and seminar discussion of basic course readings. In the tutorials, professors will supervise the preparation of a written paper of 10-15 pages related to some topic treated in the module.

Activities

Title	Hours	ECTS	Learning outcomes
Type: Directed			
Class discussion	17.5	0.7	1, 6, 4, 5, 7, 2
Type: Supervised			
Supervision	22.5	0.9	1, 6, 7, 2, 3
Type: Autonomous			
Autonomous study	110	4.4	1, 6, 4, 5, 7, 2, 3

Evaluation

Please check the master's general guidelines.

Both class participation, quality of presentations and final written work (when applicable) in each segment of the module will contribute to your final mark.

Each teacher will set a date and place for the review of the evaluation. There will also be a supplementary assessment if the student fails: the date will be agreed with the Faculty.

Evaluation activities

Title	Weighting	Hours	ECTS	Learning outcomes
Class presentation	50%	0	0	1, 6, 4, 5, 7, 2, 3
Development of a written essay	50%	0	0	1, 6, 4, 5, 7, 2, 3

Bibliography

- Atran, S. (2001). A cheater-detection module? Dubious interpretations of the Wason selection task and logic. *Evolution and Cognition*, 7, 187-192.
- Beaman, C.P. (2002). Why we are good at detecting cheaters? A reply to Fodor. *Cognition*, 83, 215-220 (Discussion, 221)
- Bishop, M. (2000). In praise of epistemic irresponsibility: How lazy and ignorant can you be? *Synthese*, 122, 179-208
- Boudon, R. (2006). Homo sociologicus: Neither a rational nor an irrational idiot. *Papers*, 80, 149-169.
- Bishop, M.A. & Trout, J.D. (2005) *Epistemology and the psychology of human judgment*. New York: Oxford University Press.
- Botterill, G. & Carruthers, P. (1999). The philosophy of psychology (pp. 105-130, "Reasoning and irrationality"). Cambridge: Cambridge University Press.
- Cohen, L.J. (1981). Can human irrationality be experimentally demonstrated? *Behavioral and Brain Sciences*, 4, 317-331 (comments and responses, 331-59).
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- Fodor, J. (2000). Why we are so good at catching cheaters. *Cognition*, 75, 29-32.
- Gigerenzer, G. (1991). How to make cognitive illusions disappear: Beyond heuristics and biases. *European Review of Social Psychology*, 2, 83-115.
- Gigerenzer, G. (1996). On narrow norms and vague heuristics: A rebuttal to Kahneman and Tversky. *Psychological Review*, 103, 592-596.
- Gigerenzer, G. (2008). Bounded and rational. In: A. Beckermann & Sven Walter (eds.), *Philosophie: Grundlagen und Anwendungen* (pp. 203-228). Paderborn: Mentis.
- Gigerenzer, G. & Sturm, T. (2012). How (far) can rationality be naturalized? *Synthese*, 187, 243-268.
- Goldman, A. (2008). Human rationality: Epistemological and psychological perspectives. In: A. Beckermann & Sven Walter (eds.), *Philosophie: Grundlagen und Anwendungen* (pp. 230-247). Paderborn: Mentis.
- Goldthorpe, J. (1998). Rational action theory for sociology. *The British Journal of Sociology*, 49, 167-192.
- Grice, P. (1975). Logic and conversation. In: P. Cole & J. L. Morgan (Eds.), *Syntax and semantics 3: Speech acts* (pp. 41-58). New York: Academic.
- Hieronymi, P. (2008). Responsibility for believing. *Synthese*, 161, 357-373.
- Kahneman, D. & Tversky, A. (1996). On the reality of cognitive illusions. *Psychological Review*, 103, 582-591.
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- Lopes, L., 1991. The rhetoric of irrationality. *Theory and Psychology*, 1, 65-82.
- Manzo, G. (2013). Is rational choice theory still a rational choice of theory? A response to Opp. *Social Science Information*, 52, 361-382.
- Mercier, H. & Heintz, C. (2014). Scientists' argumentative reasoning. *Topoi*, 33, 513-524.
- Mercier, H. (2016). The Argumentative Theory: Predictions and Empirical Evidence. *Trends in Cognitive Sciences*, 20, 689-700.

Nozick, R. (1993). *The nature of rationality*. Princeton, NJ: Princeton UP.

Samuels, R., Stich, S. & Bishop, M. (2002). Ending the rationality wars: How to make disputes about human rationality disappear. In: R. Elio (ed.), *Common Sense, reasoning and rationality*. Oxford: Oxford University Press, 236-268.

Sober, E. (1981), The evolution of rationality. *Synthese*, 46, 95-120.

Stein, E. (1996). *Without good reason: The rationality debate in philosophy and cognitive science*. Oxford: Clarendon Press.

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