

SYLLABUS

Rational and irrational beliefs in clinical cognitive sciences

University year 2025-2026

1. Information regarding the programme

1.1. Higher education institution	Babeş-Bolyai University
1.2. Faculty	Faculty of Psychology and Educational Sciences
1.3. Department	Department of Clinical Psychology and Psychotherapy
1.4. Field of study	Psychology - Cognitive Sciences
1.5. Study cycle	Bachelor level
1.6. Study programme/Qualification	Psychologist
1.7. Form of education	Full-time education

2. Information regarding the discipline

2.1. Name of the discipline	Rational and irrational beliefs in clinical cognitive sciences			Discipline code	PLE1212		
2.2. Course coordinator	Assistant Professor Liviu-Andrei Fodor, Ph.D.						
2.3. Seminar coordinator	Assistant Professor Liviu-Andrei Fodor, Ph.D.						
2.4. Year of study	1	2.5. Semester	2	2.6. Type of evaluation	E	2.7. Discipline regime	DS

3. Total estimated time (hours/semester of didactic activities)

3.1. Hours per week	3	of which: 3.2 course	2	3.3 seminar/laboratory	1
3.4. Total hours in the curriculum	42	of which: 3.5 course	28	3.6 seminar/laborator	14
Time allotment for individual study (ID) and self-study activities (SA)					hours
Learning using manual, course support, bibliography, course notes (SA)					25
Additional documentation (in libraries, on electronic platforms, field documentation)					15
Preparation for seminars/labs, homework, papers, portfolios and essays					15
Tutorship					2
Evaluations					2
Other activities: research activities					-
3.7. Total individual study hours					58
3.8. Total hours per semester					100
3.9. Number of ECTS credits					4

4. Prerequisites (if necessary)

4.1. curriculum	<ul style="list-style-type: none"> • Introduction to psychology • Experimental psychology • Introduction to cognitive sciences
4.2. competencies	-

5. Conditions (if necessary)

5.1. for the course	<ul style="list-style-type: none"> • Classroom with at least 180 seats, computer and video a projector / Online course conducted through the MS Teams platform. • Online platforms / virtual reality / mobile apps will be used as key educational resources for conducting teaching activities
5.2. for the seminar /lab activities	<ul style="list-style-type: none"> • Room with at least 50 seats, computer and video projector / Online seminar conducted through the MS Teams platform. • Online platforms / virtual reality / mobile apps will be used as key educational resources for conducting teaching activities

6.1. Specific competencies acquired ¹

Professional/essential competencies	<p>Knowledge and understanding</p> <ul style="list-style-type: none"> • Understanding the place and role of rational and irrational beliefs in the human mind and clinical cognitive sciences (health and illnesses). • Knowledge of fundamental aspects and the role of rational and irrational beliefs in health field. • Characterization of the main study paradigms of rational and irrational beliefs in clinical cognitive sciences. • Understanding the role of rational and irrational beliefs on various health issues. • Familiarization with the principles of fundamental research of rational and irrational beliefs in clinical cognitive sciences. • Acquiring skills to identify concrete ways of using digital technologies to train rational beliefs <p>Explanation and interpretation</p> <ul style="list-style-type: none"> • Arguing the importance of the rational and irrational beliefs in health. • Interpretation of the role of rational and irrational beliefs in psychopathology and other health-related aspects. • Carrying out comparative analyses of the main study paradigms of rational and irrational beliefs. • Explaining and arguing the experimental approach in rational and irrational beliefs. <p>Instrumental - applicative</p> <ul style="list-style-type: none"> • Learning the main techniques for investigating human mind processes in the cognitive sciences. • Develops skills to conduct a research project. <p>Attitude</p> <ul style="list-style-type: none"> • Manifestation of a positive and responsible attitude towards the scientific field. • Cultivating a responsible attitude towards the research activity in the field. • Interest in personal development in the field.
Transversal competencies	<ul style="list-style-type: none"> • Written and oral communication skills. • Relationship and teamwork skills. • Competences regarding the management of material and time resources. • Competences in using scientific terminology in the field of cognitive science. • Competences for interdisciplinary use of knowledge and terminology in the fields of psychology and cognitive sciences.

6.2. Learning outcomes

Knowledge	The student knows what is the main role of rational and irrational beliefs with regard to the human mind in particular and in clinical cognitive sciences in general, their impact on health and illness, key research paradigms, fundamental principles, and practical applications, including the use of digital technologies to foster rational beliefs
Skills	The student is able to explain, interpret, and critically analyze the main experimental approaches that investigate the impact of rational / irrational beliefs on psychopathology and other health-related issues

¹ One can choose either competences or learning outcomes, or both. If only one option is chosen, the row related to the other option will be deleted, and the kept one will be numbered 6.

Responsibility and autonomy:	The student has the ability to work independently to obtain insight with regard to the functionality of the cognitive processes and, to investigate them, via applied research projects.
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7. Objectives of the discipline (outcome of the acquired competencies)

7.1 General objective of the discipline	<ul style="list-style-type: none"> Familiarizing students with advances on the topic of rational and irrational beliefs.
7.2 Specific objective of the discipline	<ul style="list-style-type: none"> Presentation of the theories and research on rational and irrational beliefs and their impact on psychopathology and health-related issues. Analysis of the place and role of rational and irrational beliefs in the health field. Discussion of the main research paradigms and practical implications of rational and irrational beliefs. Rational and irrational beliefs approach to psychopathology and health.

8. Content

8.1 Course	Teaching methods	Remarks
History of the study of rationality and irrationality. The psychological case of rational and irrational beliefs Keywords: History of science, Philosophy of science	Lecture, demonstrative example, synthesis of knowledge, guided discovery	
Fundamentals of rational and irrational beliefs study: Implications for clinical cognitive sciences Keywords: Beliefs, Philosophy of mind, Clinical Psychology	Lecture, demonstrative example, synthesis of knowledge, guided discovery	
Biological basis of rational and irrational beliefs / Rational and irrational beliefs and psychophysiological responses Keywords: Biology, Psychophysiology	Lecture, demonstrative example, synthesis of knowledge, guided discovery	
Cultural basis of rational and irrational beliefs / Cross-cultural context of rational and irrational beliefs: implications for health and illness Keywords: Culture	Lecture, demonstrative example, synthesis of knowledge, guided discovery	
Developmental basis of rational and irrational beliefs Keywords: Development	Lecture, demonstrative example, synthesis of knowledge, guided discovery	
Rational and irrational beliefs and emotions Keywords: Emotions	Lecture, demonstrative example, synthesis of knowledge, guided discovery	
Rational and irrational beliefs and behaviors Keywords: Behavior	Lecture, demonstrative example, synthesis of knowledge, guided discovery	

Rational and irrational beliefs and other cognitions Keywords: Cognitions	Lecture, demonstrative example, synthesis of knowledge, guided discovery	
Rational and irrational beliefs in psychopathology I Keywords: Psychopathology	Lecture, demonstrative example, synthesis of knowledge, guided discovery	
Rational and irrational beliefs in psychopathology II Keywords: Psychopathology	Lecture, demonstrative example, synthesis of knowledge, guided discovery	
Rational and irrational beliefs in psychopathology III Keywords: Psychopathology	Lecture, demonstrative example, synthesis of knowledge, guided discovery	
Rational and irrational beliefs in psychopathology IV Keywords: Psychopathology	Lecture, demonstrative example, synthesis of knowledge, guided discovery	
Rational and irrational beliefs in health I Keywords: Health	Lecture, demonstrative example, synthesis of knowledge, guided discovery	
Rational and irrational beliefs in health II (online/mobile, gamified and virtual reality technologies) Keywords: Health	Lecture, demonstrative example, synthesis of knowledge, guided discovery	

Mandatory bibliography

David, D., Lynn, S., & Ellis, A. (2010). Rational and irrational beliefs in human functioning and disturbances: Implications for research, theory, and practice. Oxford University Press, London.

Ellis, A., Bernard, M.E. (2006). Rational Emotive Behavioral Approaches to Childhood Disorders. Theory, Practice and Research. Springer New York, NY

Ellis, A. (1976). The biological basis of human irrationality. *Journal of Individual Psychology*, 32(2), 145–168.

David, O. A., & David, D. O. (2022). How can we Best Use Technology to Teach Children to Regulate Emotions? Efficacy of the Cognitive Reappraisal Strategy Based on Robot Versus Cartoons Versus Written Statements in Regulating Test Anxiety. *Journal of Rational-Emotive & Cognitive-Behavior Therapy*.

David, O. A., Cardos, R. A. I., & Matu, S. A. (2019). Changes in irrational beliefs are responsible for the efficacy of the RETHink therapeutic game in preventing emotional disorders in children and adolescents: mechanisms of change analysis of a randomized clinical trial. *European Child and Adolescent Psychiatry*, 28(3), 307-318. Doi: <https://doi.org/10.1007/s00787-018-1195-z>.

David, O. A., Stroian, P. I., Predatu, R., & Maffei, A. (2022). State anxiety and frontal alpha asymmetry effects of the RETHink online video game for children and adolescents: A six-month follow-up. *Personality and Individual Differences*, 196, 111725.

Kahneman, D. (2011). *Thinking Fast and Slow*. Farrar, Straus and Giroux.

Reeve, J. (2009) *Understanding Motivation and Emotion*. Seventh Edition, Wiley, Hoboken.

Craske, M. G., Stein, M. B., Eley, T. C., Milad, M. R., Holmes, A., Rapee, R. M., & Wittchen, H. U. (2017). Anxiety disorders. *Nature reviews. Disease primers*, 3, 17024.

Rapee, R. M., & Heimberg, R. G. (1997). A cognitive-behavioral model of anxiety in social phobia. *Behaviour research and therapy*, 35(8), 741–756.

Wells A. (1999). A cognitive model of generalized anxiety disorder. *Behavior modification*, 23(4), 526–555.
<https://doi.org/10.1177/0145445599234002>

Coelho, C. M., & Purkis, H. (2009). The Origins of Specific Phobias: Influential Theories and Current Perspectives. *Review of General Psychology*, 13(4), 335-348. <https://doi.org/10.1037/a0017759>

Beck A. T. (2008). The evolution of the cognitive model of depression and its neurobiological correlates. *The American journal of psychiatry*, 165(8), 969–977

Tomoiagă, C., & David, O. (2022). The Efficacy of Guided and Unguided Game-Based Cognitive-Behavioral Therapy in Reducing Distress in College Students. *Games for Health Journal*, 11(6), 403-413. Doi: <https://doi.org/10.1089/g4h.2021.0195>.

!!! Note: from the works mentioned above, only the chapters related to the topics taught in the course and seminar are mandatory. Taking into account the emerging nature of this field –rational and irrational beliefs - specific new articles/chapters will be suggested in advance for each topic.

Optional bibliography:

David, O. A., Cardoso, R. A., & Matu, S. (2019). Is RETHink therapeutic game effective in preventing emotional disorders in children and adolescents? Outcomes of a randomized clinical trial. *European Child & Adolescent Psychiatry*, 28, 111–122.

David, O. A., Cardoso, R. A. I., & Oltean, H-R. (2019). REBT and Parenting Intervention. In M. Bernard and W. Dryden (Eds.), *Advances in REBT: Theory, Practice, Research, Measurement, Prevention and Promotion*. New York: Springer Publishing House. Doi: 10.1007/978-3-319-93118-0

Ellis, A. (2001). *Feeling better, getting better, staying better: Profound self-help therapy for your emotions*. Atascadero, CA: Impact.

Ellis, A. (1962). *Reason and emotion in psychotherapy*. New York: Lyle Stuart.

Ellis, A. (1959). Rationalism and its therapeutic applications. *Annals of Psychotherapy*.

Ellis, A. (1958). Rational psychotherapy. *The Journal of General Psychology*, 59, 35-49.

Ellis, A., & Bernard, M. E. (Eds.). (2006). *Rational Emotive Behavioral Approaches to Childhood Disorders*. Kluwer Academic Publishers. <https://doi.org/10.1007/b137389>

Kahneman, D. (2003). Maps of bounded rationality: A perspective on intuitive judgment and choice. In T. Frangsmyr [Nobel Foundation], (Ed.), *Les Prix Nobel: The Nobel Prizes 2002* (pp. 449-489). Stockholm: The Nobel Foundation.

Kahneman, D., Slovic, P., & Tversky, A. (Eds.) (1982). *Judgment under uncertainty: Heuristics and biases*. New York : Cambridge University Press.

Simon, H.A. (1959). Theories of decision-making in economics and behavioral science. *American Economic Review* 49, 253–283.

8.2 Seminar / laboratory	Teaching methods	Remarks
Introduction and organizatory remarks Keywords: Practical organizational aspects	Exposure, conversation	
Models of rational and irrational beliefs Keywords: Paradigms	Presentation, knowledge synthesis, conceptual clarification, group activities, guided discovery, practical activities	
Evolutionary aspects of rational and irrational beliefs: Research and practical implications Keywords: Evolution, Research, Applications	Presentation, knowledge synthesis, conceptual clarification, group activities, guided discovery, practical activities	

<p>Neurobiological underpinnings of rational and irrational beliefs: Research and practical implications</p> <p>Keywords: Biology, Research, Applications</p>	<p>Presentation, knowledge synthesis, conceptual clarification, group activities, guided discovery, practical activities</p>	
<p>Cultural models of rational and irrational beliefs: Research and practical implications</p> <p>Keywords: Culture, Research, Applications</p>	<p>Presentation, knowledge synthesis, conceptual clarification, group activities, guided discovery, practical activities</p>	
<p>Developmental models of rational and irrational beliefs: Research and practical implications</p> <p>Keywords: Development, Research, Applications</p>	<p>Presentation, knowledge synthesis, conceptual clarification, group activities, guided discovery, practical activities</p>	
<p>Rational and irrational beliefs and emotional disorders: Research and practical implications</p> <p>Keywords: Emotional disorders, Research, Applications</p>	<p>Presentation, knowledge synthesis, conceptual clarification, group activities, guided discovery, practical activities</p>	
<p>Rational and irrational beliefs and behavioral disorders: Research and practical implications</p> <p>Keywords: Behavioral disorders, Research, Applications</p>	<p>Presentation, knowledge synthesis, conceptual clarification, group activities, guided discovery, practical activities</p>	
<p>Rational and irrational beliefs and cognitive disorders: Research and practical implications</p> <p>Keywords: Cognitive disorders, Research, Applications</p>	<p>Presentation, knowledge synthesis, conceptual clarification, group activities, guided discovery, practical activities</p>	
<p>Rational and irrational beliefs and severe psychopathology: Research and practical implications</p> <p>Keywords: Severe psychopathology, Research, Applications</p>	<p>Presentation, knowledge synthesis, conceptual clarification, group activities, guided discovery, practical activities</p>	
<p>Rational and irrational beliefs and non-psychopathological clinical conditions: Research and practical implications</p> <p>Keywords: Clinical (non- psychopathological) conditions, Research, Applications</p>	<p>Presentation, knowledge synthesis, conceptual clarification, group activities, guided discovery, practical activities</p>	
<p>Rational and irrational beliefs and health: Research and practical implications I</p> <p>Keywords: Health, Research, Applications</p>	<p>Presentation, knowledge synthesis, conceptual clarification, group activities, guided discovery, practical activities</p>	
<p>Rational and irrational beliefs and health: Research and practical implications II (using online, mobile, game based and virtual reality technologies)</p> <p>Keywords: Health, Research, Applications</p>	<p>Presentation, knowledge synthesis, conceptual clarification, group activities, guided discovery, practical activities</p>	
<p>Summary seminar – putting it all together</p> <p>Keywords: Synthesis, integration, recap</p>	<p>Knowledge synthesis, conceptual clarification, conversation</p>	

Mandatory bibliography

- Beck, A. T., & Haigh, E. A. (2014). Advances in cognitive theory and therapy: the generic cognitive model. *Annual review of clinical psychology*, 10, 1-24.
- Pinker, S. (2021) *Rationality: what it is, why it seems scarce, why it matters*. Viking, New York.
- David, O. A., Cardoso, R. A. I., & Matu, S. (2019). Is RETHink therapeutic game effective in preventing emotional disorders in children and adolescents? Outcomes of a randomized clinical trial. *European child & adolescent psychiatry*, 28(1), 111-122
- David, O. A., Cardoso, R. A. I., & Matu, S. (2019). Changes in irrational beliefs are responsible for the efficacy of the RETHink therapeutic game in preventing emotional disorders in children and adolescents: mechanisms of change analysis of a randomized clinical trial. *European child & adolescent psychiatry*, 28(3), 307-318
- David, O. A., & Fodor, L. A. (2023). Are gains in emotional symptoms and emotion-regulation competencies after the RETHink therapeutic game maintained in the long run? A 6-month follow-up. *European child & adolescent psychiatry*, 32(10), 1853-1862.
- David, O. A., & Fodor, L. A. (2023). Preventing mental illness in children that experienced maltreatment the efficacy of RETHink online therapeutic game. *NPJ digital medicine*, 6(1), 106.
- Cisler, J. M., & Koster, E. H. (2010). Mechanisms of attentional biases towards threat in anxiety disorders: An integrative review. *Clinical psychology review*, 30(2), 203-216
- Kuhnen, C. M., & Knutson, B. (2005). The neural basis of financial risk taking. *Neuron*, 47(5), 763-770.
<https://doi.org/10.1016/j.neuron.2005.08.008>
- Sharot, T., Korn, C. W., & Dolan, R. J. (2011). How unrealistic optimism is maintained in the face of reality. *Nature Neuroscience*, 14(11), Article 11. <https://doi.org/10.1038/nn.2949>
- Ellis, A., Bernard, M.E. (2006). *Rational Emotive Behavioral Approaches to Childhood Disorders. Theory, Practice and Research*. Springer New York, NY (Chapter 10)
- Morris, G. B. (1993). A Rational-Emotive Treatment Program with Conduct Disorder and Attention-Deficit Hyperactivity Disorder Adolescents. *Journal of Rational-Emotive & Cognitive-Behavior Therapy*, 11, 123-134
- Tecuta, L., Gardini, V., Schumann, R., Ballardini, D., & Tomba, E. (2021). Irrational Beliefs and Their Role in Specific and Non-Specific Eating Disorder Symptomatology and Cognitive Reappraisal in Eating Disorders. *Journal of clinical medicine*, 10(16), 3525.
- Hutchinson, G. T., Patock-Peckham, J. A., Cheong, J., & Nagoshi, C. T. (1998). Irrational beliefs and behavioral misregulation in the role of alcohol abuse among college students. *Journal of Rational-Emotive & Cognitive-Behavior Therapy*, 16(1), 61-74.
- Podina, I., Popp, R., Pop, I., & David, D. (2015). Genetic Correlates of Maladaptive Beliefs: COMT VAL(158)MET and Irrational Cognitions Linked Depending on Distress. *Behavior Therapy*, 46(6), 797-808.
- Víslá, A., Flückiger, C., grosse Holtforth, M., & David, D. (2016). Irrational Beliefs and Psychological Distress: A Meta-Analysis. *Psychotherapy and Psychosomatics*, 85(1), 8-15.
- Buschmann, T., Horn, R.A., Blankenship, V.R. et al. (2018). The Relationship Between Automatic Thoughts and Irrational Beliefs Predicting Anxiety and Depression. *J Rat-Emo Cognitive-Behav Ther* 36, 137-162
- Fodor, L. A., Todea, D., & Podina, I. R. (2023). Core Fear of Cancer recurrence symptoms in cancer survivors: A network approach. *Current Psychology: A Journal for Diverse Perspectives on Diverse Psychological Issues*, 42(28), 24795-24810
- Sensky, T., Turkington, D., Kingdon, D., Scott, J. L., Scott, J., Siddler, R., O'Carroll, M., & Barnes, T. R. (2000). A randomized controlled trial of cognitive-behavioral therapy for persistent symptoms in schizophrenia resistant to medication. *Archives of general psychiatry*, 57(2), 165-172. <https://doi.org/10.1001/archpsyc.57.2.165>

Turner, J. A., Holtzman, S., & Mancl, L. (2007). Mediators, moderators, and predictors of therapeutic change in cognitive-behavioral therapy for chronic pain. *Pain*, 127(3), 276–286.

!!! Note: from the works mentioned above, only the chapters related to the topics taught in the course and seminar are mandatory. Taking into account the emerging nature of this field – clinical cognitive neurosciences - specific new articles/chapters will be suggested in advanced for each topic.

Optional bibliography:

D. S. Charney, E. J. Nestler, P. Sklar, & J. D. Buxbau (Eds.) (2018), *Neurobiology of mental illness*. Oxford University Press, New York.

Dryden, W. (2020). Awfulizing: Some Conceptual and Therapeutic Considerations. In *Journal of Rational-Emotive & Cognitive-Behavior Therapy* (Vol. 38, Issue 3, pp. 295–305). Springer Science and Business Media LLC.

Tryon, W. (2014). *Cognitive Neuroscience and Psychotherapy*, Academic Press, New York.

David, D. (2015). *Psihologia poporului Român. Profilul psihologic al românilor într o monografie cognitiv experimentală*. Editura Polirom

Lee, E., Meguro, K., Hashimoto, R., Meguro, M., Ishii, H., Yamaguchi, S., & Mori, E. (2007). Confabulations in episodic memory are associated with delusions in Alzheimer's disease. *Journal of geriatric psychiatry and neurology*, 20(1), 34–40.

Pless, A., Ware, D., Saggi, S., Rehman, H., Morgan, J., & Wang, Q. (2023). Understanding neuropsychiatric symptoms in Alzheimer's disease: challenges and advances in diagnosis and treatment. *Frontiers in neuroscience*, 17, 1263771.

Turkington, D., Dudley, R., Warman, D. M., & Beck, A. T. (2004). Cognitive-behavioral therapy for schizophrenia: A review. *Journal of Psychiatric Practice*, 10(1), 5–16

Morrison A. K. (2009). Cognitive behavior therapy for people with schizophrenia. *Psychiatry (Edgmont(Pa. : Township))*,6(12), 32–39

9. Corroborating the content of the discipline with the expectations of the epistemic community, professional associations and representative employers within the field of the program

- The proposed course and seminar topics are central topics in fundamental and applied research in the (sub)field of rational and irrational beliefs and the approach is based on the most recent results from the literature and consistent with other internationally relevant academic programs and handbooks in the field.
- The course also offers state of the art research skills that are transferable to any scientific and applied field of knowledge.

10. Evaluation

Activity type	10.1 Evaluation criteria	10.2 Evaluation methods	10.3 Percentage of final grade
10.4 Course		Written exam	70%
10.5 Seminar/laboratory		Research project	30%
10.6 Minimum standard of performance			
<ul style="list-style-type: none"> • The final evaluation will be based on a written exam conducted in the session at the end of the second semester and of a research project • The final grade consists of: <ul style="list-style-type: none"> ○ score obtained in the written exam in proportion of 70% (maximum 7 points) ○ research project 30% (up to 3 points) • The simultaneous conditions for passing the Rational and irrational beliefs in clinical cognitive sciences exam are: <ul style="list-style-type: none"> ○ a minimum of 3.5 points for the written exam out of the 7 maximum possible points ○ a minimum 5 points from the final grade (combined score: project and exam) ○ participating to a minimum of 75% of the teaching and seminar/practical activities. 			

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11. Labels ODD (Sustainable Development Goals)²

	General label for Sustainable Development														
															
															

Date:
07.03.2025

Signature of course coordinator

Signature of seminar coordinator

Date of approval:
...

Signature of the head of department
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² Keep only the labels that, according to the [Procedure for applying ODD labels in the academic process](#), suit the discipline and delete the others, including the general one for *Sustainable Development* – if not applicable. If no label describes the discipline, delete them all and write „*Not applicable.*”.