



Course program and reading list

Semester 0 Year 2023

School: Baruch Ivcher School of Psychology

Guided Research - Mindfulness, psychological flexibility and the brain

Lecturer:

Prof. Nava Levit-Binnun navalb@runi.ac.il

Course No.:	Course Type :	Weekly Hours :	Credit:
8970	Elective	2	2

Course Requirements :	Group Code :	Language:
Final Paper	230897001	English

Prerequisites

Prerequisite:

8000 - Introduction To Psychology

Students who took one of the courses listed below will not be allowed to register to the course Guided Research - Mindfulness, psychological flexibility and the brain (8970):

3048 - Guided Research - Project Alpha: Genetic and Epigenetic Study of Psychological Development

3451 - Guided Research- Brain Research

8157 - Guided Research -Infant Development - Development of the caregiver, the infant and the relationship between the two.

8172 - Guided Research of mental processes in sport and exercise

8929 - Guided Research on social defense theory and its implication to interpersonal relationships

8931 - Guided Research research conducted by the members of DICE@IDC research center

8932 – Guided research on the psychology of intergroup conflict
8933 – Guided Research Group project course in the Advanced Reality Lab
8966 – Attachment processes
8967 – Guided Research – Intervention for suicide prevention and strength development among students in middle and high schools in Israel
8968 – Hormones, Behavior and Chemo-Signaling
8969 – Guided Research – Yes we can communication aging and neuro



Course Description

The course is a one-year internship at the brain research lab of the Sagol Center for Brain and Mind. Participants are trained and then incorporated as research assistants in the various lab research projects, where they actively participate in planning and running experiments, as well as collecting and analyzing data.

The overarching theme of the various research projects this year will be mindfulness, and we will explore it in various contexts. For example:

1. Mechanisms of mindfulness such as attention flexibility and the role of language.
 2. Cultural adaptation of mindfulness interventions
 3. Mindfulness and social-emotional learning in schools
 4. Mindfulness in conflict
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Course Goals

To introduce students to "hands-on" scientific work that includes:

1. Planning and carrying out empirical studies.
2. Recruiting and working with human subjects.
3. Operating lab equipment.
4. Collecting and analyzing data.
5. Understanding the scientific rationale behind their work as well as its results and implications.
6. Understanding and gaining theoretical and experiential experience in mindfulness and associated practices.

7. Acquaintance with the neuroscience of wellbeing and ways to study it,



Grading

90% of the final grade will be given based on the student's involvement in the lab, according to the following criteria:

1. Completing about 180 lab hours, with an availability of at least 7 weekly hours (on average) for research related work.
2. Attendance and active participation in group meetings (arriving on time, contributing to group discussions etc.
2. Willingness to assist when technical problems or unexpected needs arise.
3. Teamwork and mutual help.
4. Attention and responsivity to problems and difficulties encountered during research work and helping solve them.
5. Dependability and initiative-taking.

10% of the final grade will be given based on:

1. Attendance and active participation in the formal meetings (arriving on time, contributing to group discussions etc.). Attendance is mandatory in the Tuesday morning meetings. Before some of the meetings reading material will be distributed and then discussed during the meetings.
 2. Submitting a 2-page summary lab report at the end of the year.
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Learning Outcomes

Students will:

1. Gain experience as researchers, including first-hand experience with physiological, behavioral and self-report measurement tools.
2. Gain experience in listening to- and reading scientific literature
3. Gain experience in working with human participants.
3. Experience teamwork and working under pressure.
4. Acquaintance with mindfulness and wellbeing practices.
5. Acquaintance with thinking and perceiving from the point of view of social diversity and

inclusion

Lecturer Office Hours

Dr. Nava Levit Binnun: navalb@runi.ac.il, 09-9527936

Reception hours are flexible and can be scheduled according to need.

Teaching Assistant

Adi Gnapp will serve as teaching assistant

her email is adignapp2@gmail.com

Reading List

Recommended reading:

These papers will enable you to get a sense of the kind of research conducted in our lab these days, including interest areas, research questions and methods used. Additional reading material will be distributed according to the specific projects you will be assigned to.

1. Alkoby A, Pliskin R, Halperin E, Levit-Binnun N. Increased flexible and adaptive Emotion Regulation Following an Eight-Week Mindfulness Workshop, *Emotion*, in press.
2. Alkoby A., Halperin E., Tarrasch, R., Levit-Binnun, N. (2017). Increased Support for Political Compromise in the Israeli-Palestinian Conflict Following an 8-Week Mindfulness Workshop. *Mindfulness*, 1-9. doi: 10.1007/s12671-017-0710-5.
3. Shahar, B., Szepsenwol, O., Zilcha-Mano, S., Haim, N., Zamir, O., Levi-Yeshuvi, S., & Levit-Binnun, N. (2015). A wait-list randomized controlled trial of loving-kindness meditation programme for self-criticism. *Clinical psychology & psychotherapy*, 22(4), 346-356.
4. Brown, K. W., Creswell, J. D., & Ryan, R. M. (2015). *Introduction: The evolution of mindfulness science*. In K. W. Brown, J. D. Creswell, & R. M. Ryan (Eds.), *Handbook of mindfulness: Theory, research, and practice* (p. 1-6). The Guilford Press.
5. Schultz, P. P., Ryan, R. M., Niemiec, C. P., Legate, N., & Williams, G. C. (2015). Mindfulness, work climate, and psychological need satisfaction in employee well-being. *Mindfulness*, 6(5), 971-985.

6. Roth, G., Vansteenkiste, M., & Ryan, R. M. (2019). Integrative emotion regulation: Process and development from a self-determination theory perspective. *Development and psychopathology*, 31(3), 945–956.
7. Donald, J. N., Bradshaw, E. L., Ryan, R. M., Basarkod, G., Ciarrochi, J., Duineveld, J. J., ... & Sahdra, B. K. (2020). Mindfulness and its association with varied types of motivation: A systematic review and meta-analysis using self-determination theory. *Personality and Social Psychology Bulletin*, 46(7), 1121–1138.
8. Schultz, P. P., & Ryan, R. M. (2015). The "why," "what," and "how" of healthy self-regulation: Mindfulness and well-being from a self-determination theory perspective. In *Handbook of mindfulness and self-regulation* (pp. 81–94). Springer, New York, NY.
9. Ryan, R. M., & Deci, E. L. (2019). Brick by brick: The origins, development, and future of self-determination theory. In *Advances in motivation science* (Vol. 6, pp. 111–156). Elsevier.
10. Kesebir, P., Gasiorowska, A., Goldman, R., Hirshberg, M. J., & Davidson, R. J. (2019). Emotional Style Questionnaire: A multidimensional measure of healthy emotionality. *Psychological assessment*.
11. DeLuca, S. M., Kelman, A. R., & Waelde, L. C. (2018). A systematic review of ethnoracial representation and cultural adaptation of mindfulness-and meditation-based interventions. *Psychological Studies*, 63(2), 117–129.
12. Biggers, A., Spears, C. A., Sanders, K., Ong, J., Sharp, L. K., & Gerber, B. S. (2020). Promoting Mindfulness in African American Communities. *Mindfulness*, 11(10), 2274–2282.
13. Lueke, A., & Gibson, B. (2015). Mindfulness meditation reduces implicit age and race bias: The role of reduced automaticity of responding. *Social Psychological and Personality Science*, 6(3), 284–291.
14. Lueke, A., & Gibson, B. (2016). Brief mindfulness meditation reduces discrimination. *Psychology of Consciousness: Theory, Research, and Practice*, 3(1), 34.
15. Rupprecht, S., Koole, W., Chaskalson, M., Tamdjidi, C., & West, M. (2019). Running too far ahead? Towards a broader understanding of mindfulness in organisations. *Current opinion in psychology*, 28, 32–36.
16. Mahfouz, J., Greenberg, M. T., & Rodriguez, A. (2019). Principals' social and emotional competence: A key factor for creating caring schools. *University Park: Edna Bennett Pierce Prevention Center, Pennsylvania State University*.
17. Ergas, O., Hadar, L. L., Albelda, N., & Levit-Binnun, N. (2018). Contemplative neuroscience as a gateway to mindfulness: Findings from an educationally framed teacher learning program. *Mindfulness*, 9(6), 1723–1735.
18. Colaianne, B. A., Galla, B. M., & Roeser, R. W. (2020). Perceptions of mindful teaching are associated with longitudinal change in adolescents' mindfulness and compassion. *International Journal of Behavioral Development*, 44(1), 41–50.
19. Braun, S. S., Schonert-Reichl, K. A., & Roeser, R. W. (2020). Effects of teachers' emotion regulation, burnout, and life satisfaction on student well-being. *Journal of Applied Developmental Psychology*, 69, 101151.
20. Dvořáková, K., Greenberg, M. T., & Roeser, R. W. (2019). On the role of mindfulness

and compassion skills in students' coping, well-being, and development across the transition to college: A conceptual analysis. *Stress and Health*, 35(2), 146-156.

21. Davidson, R. J. (2021). Mindfulness and More: Toward a Science of Human Flourishing. *Psychosomatic Medicine*, 83(6), 665-668.
22. Dahl, C. J., Wilson-Mendenhall, C. D., & Davidson, R. J. (2020). The plasticity of well-being: A training-based framework for the cultivation of human flourishing. *Proceedings of the National Academy of Sciences*, 117(51), 32197-32206.
23. Levit-Binnun, N., Arbel, K., & Dorjee, D. (2021). The Mindfulness Map: A practical classification framework of mindfulness practices, associated intentions, and experiential understandings, *Frontiers in Psychology*
24. Ardi, Z., Golland, Y., Shafir, R., Sheppes, G., & Levit-Binnun, N. (2021). The effects of mindfulness-based stress reduction (MBSR) on the association between autonomic interoceptive signals and emotion regulation selection. *Psychosomatic Medicine*.
25. Eidelman-Rothman, M., Ben-Simon, E., Freche, D., Keil, A., Hendler, T., & Levit-Binnun, N. (2019). Sleepless and desynchronized: Impaired inter trial phase coherence of steady-state potentials following sleep deprivation. *NeuroImage*, 202, 116055.
26. Kritzman, L., Eidelman-Rothman, M., Keil, A., Freche, D., Sheppes, G., & Levit-Binnun, N. (2022). Steady-state visual evoked potentials differentiate between internally and externally directed attention. *NeuroImage*, 254, 119133.