

### MEDITATION, MINDFULNESS AND HEALTH (PSYD33 H3)

### COURSE SYLLABUS – FALL 2021

Instructor: Zindel Segal, Ph.D., C.Psych. Distinguished Professor of Psychology in Mood Disorders, Graduate Program in Psychological Science, UTSC. Class Time and Location: Wednesdays 10am to 12pm Office Hours and Location: Wednesdays at 9am Email: <u>zindel.segal@utoronto.ca</u> Office Phone: (416) 208-2231

**Suggested Textbook:** A good general sourcebook available in paperback. Brown KW, Creswell JD, Ryan RM (eds.). <u>Handbook of Mindfulness: Theory, Research, and Practice.</u> Guildford Press. New York, NY. 2015.

#### **Summary**

This course is designed to provide students with an overview of the relationship between the practice of meditation and health outcomes in a number of physical (obesity, hypertension, cardiovascular, sleep, pain) and mental health (depression, anxiety, stress) domains. In light of the growing literature on the use of contemplative practices in complementary and alternative medicine, as well as considerable community-based participation in meditation programs and apps, this course will equip students with an empirical foundation for understanding and evaluating work in this area. This seminar course will employ mixed teaching methods that combine conceptual (lectures, selected readings and student led presentations) and experiential (guided in class meditation practice) learning to facilitate engagement with the topic and to deepen understanding of work in this area. We will review the evidence base for the use of meditation across and health and mental health domains, assess the methodological rigour of studies conducted and evaluate the psychological, physiological and neural mechanisms by which meditation and mindfulness-based interventions are thought to exert their salutary effects on health and well-being. The combination of didactic, experiential and presentation-based learning will, at a more general level, provide students with the opportunity to develop skills for effectively delivering written and oral presentations on important issues in the field of meditation and health.

#### **Learning Outcomes**

By the end of this course, you will be able to

• Identify differences in attentional foci related to training in concentrated and open awareness practices.

- Evaluate the relative impacts of meditation on physical health and mental health (e.g. obesity, physical activity, sleep, depression, and anxiety).
- Extract key information from contemporary research and review articles in the service of constructing effective oral presentations.
- Assess studies in the field for methodological rigour.
- Describe plausible mechanisms by which meditation may influence health.
- Define some of the primary mindfulness interventions used in health care and community settings (e.g. Mindfulness-Based Stress Reduction, Mindfulness-Based Cognitive Therapy, Compassion Cultivation Training).
- Analyze the strengths and limitations of the major types of mindfulness interventions that are available in public health and educational settings
- Describe first-person experience with mindfulness practices, and how the practices help personal well-being, if at all.

### **Description of Course Evaluations**

**Class Participation (15%)** will be assessed by weekly attendance (5%) and participation (10%) in classroom discussions. Students will be asked to submit one discussion question on the article that is assigned per week.

**Group Presentation (35%):** Students will be asked to present in groups of three on the impact of meditation on one of the weekly health domains. These presentations will be 45 minutes in length, with each student presenting for appx. 15 minutes and then responding to questions from the class. Students are asked to prepare Powerpoint slides for their presentation. Each student will be responsible for addressing one of 3 core questions relevant to their particular domain.

- 1) Definitional what is the nature of the illness/disorder (prevalence, incidence, scope of public health impact), what is provided as conventional treatment? what type(s) of meditation practice(s) have been studied in this illness/disorder, what does the practice require the participant to do?
- Mechanistic what is the deficit that is intended to be corrected through the practice of meditation? How does this manifest at a physiological, psychological and neurobiological levels of analysis? How is meditation assumed to address this deficit?
- 3) Statistical what is the evidence base for the use of meditation with this illness/disorder? Is the evidence base strong (independent randomized controlled trials and meta-analyses), middling (some

randomized studies) or weak (case studies, case series)? Does the evidence support or discourage use of meditation with this illness/disorder (emphasis on effect sizes and comparison to standard care)? If your aunt had this disorder would you recommend that she practice meditation as part of her care?

Each presentation will be followed by a class discussion based upon the themes and findings highlighted in the student presentations. Additional details regarding the requirements and evaluation of the presentation will be provided in class. **Presentation topics and dates will be assigned during class time on September 15th**. Students absent on that date will be informed of their presentation topic and date via email.

## Outline of Final Paper (10%) Due Date: October 27, 2021 @ 11:59PM EST

Your outline should be no more than two pages and will be used by *you* to clearly guide the writing of your final research paper. Email your outline (name the file *Last Name, First Name*) as an attachment to: <u>zindel.segal@utoronto.ca</u> Note: This is an *individual* assignment and should not be completed with any collaboration from others, including members from your group presentation.)

## Final Paper (40%) Due Date: December 1, 2021 @ 11:59PM EST

The final paper consists of a written report prepared by you (*individually – this is not a group assignment*). Requirements for the paper include no less than 7 and no more than 20 pages (double-spaced, Times New Roman font, 12-point size, not including title page, abstract, or references) and the entire paper (including but not limited to title page, abstract, headings/subheadings, references, tables and figures) must conform to American Psychological Association style as described in the 7th Edition of the Publication Manual of the American Psychological Association.

# Weekly Topics, Readings and Important Dates

WEEK	DATE	TOPIC	
1	September 8	Class canceled – see Prof. Segal's recorded presentation on Quercus that	
	1	outlines the course structure, expectations and format.	
2 September 15		Course Overview, Questions of Cultural Appropriation, Deracination and	
	1	the Broad Adoption of Meditation in the West	
		Reading: No reading, just bring your curiosity	
		15 Minute Mindfulness Practice	
		Start to think about your presentation topic	
3	September 22	ber 22 Methodologies Used in the Study of Meditation: 1 <sup>st</sup> /3 <sup>rd</sup> Person Perspectives,	
	1	Adepts and Novices, Superpowers or Everyday Relief?	
		15 Minute Mindfulness Practice	
		Reading: Davidson & Kazniak, 2015	
		Presentation topics and dates assigned (please be sure to have a second and	
		even third choice with respect to a topic)	
4	September 29	Evaluating Outcomes of Meditation on Stress	
	1	15 Minute Mindfulness Practice	
		Reading: Goyal et al., 2014	
5	October 6		
		15 Minute Mindfulness Practice	
		Readings: Levine et al., 2017	
6	October 13	Reading Week (no class)	
7	October 20	Evaluating Outcomes of Meditation on Sleep	
/	October 20	15 Minute Mindfulness Practice	
		Readings: Rusch et al., 2019	
8	October 27	Evaluating Outcomes of Meditation on Chronic Pain	
0	October 27	15 Minute Mindfulness Practice	
		Readings: Hilton et al., 2017	
		Due: Outline of Final Paper	
9	November 3	Evaluating Outcomes of Meditation on Depression	
,	November 3	15 Minute Mindfulness Practice	
		Readings: Kuyken et al., 2015	
10	November 10	Evaluating Outcomes of Meditation on Anxiety	
10		15 Minute Mindfulness Practice	
		Readings: Hoge et al., 2018	
11	November 17	Evaluating Outcomes of Meditation on Weight Loss and Diet	
11		15 Minute Mindfulness Practice	
		Readings: Carrière et al., 2018	
12	November 24	Evaluating Outcomes of Meditation in the School System	
		15 Minute Mindfulness Practice	
		Readings: Amundsen et al., 2020	
13	December 1	Evaluating Digital Meditation Apps for Health and Mental Health	
10		Prof. Segal will present	
		r vie begut nin prosent	

15 Minute Mindfulness Practice Readings: Lau et al., 2020; Segal et al., 2020 Due: Final Paper (submit electronically via TurnItIn.com @ 11:59PM EST)

### **Respect for Diversity and Inclusive Learning Environment**

My goal is to create a positive and constructive learning environment for all students. I view the diversity that students bring to this class as a strength and benefit. It is my intent to present materials in a way that is respectful of gender, sexuality, disability, age, disease status, socioeconomic status, ethnicity, race, and culture. Please let me know ways to improve the effectiveness of the course for you personally or for other students or student groups. Please let me know your name and pronouns if they are different from what is on your student record. In addition, if any of our class meetings conflict with your religious events, please let me know so that we can make appropriate arrangements for you.

We will start each class with a brief meditation practice. This is intended to provide you with an experiential understanding of the meditation research we will be discussing. You are not obligated to participate if you prefer not to and there is no element of your grade that will be determined by the inclass meditation.

UTSC is committed to full inclusion of all students. Please inform me early in the term if you may require accommodations or modification of any of course procedures. You may speak with me after class, during office hours, or by appointment. If you need accommodations around online learning or in classroom accommodations, please be sure to reach out to AccessAbility Services for their assistance (ability.utsc@utoronto.ca; 416 287-7560).

## Weekly Required Readings:

### Week 3 – Methodologies Used in the Study of Meditation

Conceptual and methodological issues in research on mindfulness and meditation. Davidson RJ, Kaszniak AW. *American Psychologist* 2015 Oct;70(7):581-92. doi: 10.1037/a0039512. PMID: 26436310

### Week 4 – Outcomes of Meditation in Reducing Stress

Meditation programs for psychological stress and well-being: a systematic review and meta-analysis. Goyal M, Singh S, Sibinga EM, Gould NF, et al. *JAMA Internal Medicine* 2014 Mar;174(3):357-68. doi: 10.1001/jamainternmed.2013.13018. PMID: 24395196

# Week 5 – Outcomes of Meditation in Reducing Hypertension

Meditation and Cardiovascular Risk Reduction: A Scientific Statement From the American Heart Association.

Levine GN, Lange RA, Bairey-Merz CN, Davidson RJ et al., American Heart Association Council on Clinical Cardiology; Council on Cardiovascular and Stroke Nursing; and Council on Hypertension. *Journal American Heart Association*. 2017 Sep 28;6(10):e002218. doi: 10.1161/JAHA.117.002218. PMID: 28963100

# Week 7 – Outcomes of Meditation in Improving Sleep

The effect of mindfulness meditation on sleep quality: a systematic review and meta-analysis of randomized controlled trials. Rusch HL, Rosario M, Levison LM, Olivera A, et al. *Annals New York Academy of Sciences*. 2019 Jun;1445(1):5-16. doi: 10.1111/nyas.13996. Epub 2018 Dec 21. PMID: 30575050

# Week 8 – Outcomes of Meditation in Reducing Chronic Pain

Mindfulness Meditation for Chronic Pain: Systematic Review and Meta-analysis. Hilton L, Hempel S, Ewing BA, Apaydin E, et al. *Annals Behavioral Medicine*. 2017 Apr;51(2):199-213. doi: 10.1007/s12160-016-9844-2. PMID: 27658913

# Week 9 – Outcomes of Meditation in Reducing Depression

Effectiveness and cost-effectiveness of mindfulness-based cognitive therapy compared with maintenance antidepressant treatment in the prevention of depressive relapse or recurrence (PREVENT): a randomised controlled trial.

Kuyken W, Hayes R, Barrett B, Byng R, et al. *Lancet*. 2015 Jul 4;386(9988):63-73. doi: 10.1016/S0140-6736(14)62222-4. Epub 2015 Apr 20. PMID: 25907157

# Week 10 – Outcomes of Meditation in Reducing Anxiety

<u>The effect of mindfulness meditation training on biological acute stress responses in generalized anxiety</u> <u>disorder.</u>

Hoge EA, Bui E, Palitz SA, Schwarz NR, et al. *Psychiatry Research*. 2018 Apr;262:328-332. doi: 10.1016/j.psychres.2017.01.006. PMID: 28131433

# Week 11- Outcomes of Meditation in Supporting Weight Loss

Mindfulness-based interventions for weight loss: a systematic review and meta-analysis. Carrière K, Khoury B, Günak MM, Knäuper B. *Obesity Review*. 2018 Feb;19(2):164-177. doi: 10.1111/obr.12623. Epub 2017 Oct 27. PMID: 29076610

# Week 12 – Outcomes of Meditation in Teaching Emotion Regulation in the School System

Mindfulness in primary school children as a route to enhanced life satisfaction, positive outlook and effective emotion regulation.

Amundsen R, Riby LM, Hamilton C, Hope M, et al. *BMC Psychology*. 2020 Jul 8;8(1):71. doi: 10.1186/s40359-020-00428-y. PMID: 32641161

## Week 13 – Outcomes of Digital Meditation Apps

Android and iPhone Mobile Apps for Psychosocial Wellness and Stress Management: Systematic Search in App Stores and Literature Review.

Lau N, O'Daffer A, Colt S, Yi-Frazier JP, et al. Journal of Internet Medical Research Mhealth Uhealth. 2020 May 22;8(5):e17798. doi: 10.2196/17798. PMID: 32357125

Outcomes of Online **Mindfulness**-Based Cognitive Therapy for Patients With Residual Depressive Symptoms: A Randomized Clinical Trial.

Segal ZV, Dimidjian S, Beck A, Boggs JM, Vanderkruik R, Metcalf CA, Gallop R, Felder JN, Levy J. *JAMA Psychiatry*. 2020 Jun 1;77(6):563-573. doi: 10.1001/jamapsychiatry.2019.4693. PMID: 31995132

### <u>Plagiarism</u>

Please review this website which describes tips on how <u>not</u> to plagiarize:

<u>http://www.writing.utoronto.ca/advice/using-sources/how-not-to-plagiarize</u>. You will submit your final written report to the turnitin.com site. Turnitin.com is a tool that assists in detecting textual similarities between compared works (i.e., it is an electronic resource that assists in the detection and deterrence of plagiarism). Detailed instructions on setting up your account can be found at <u>http://www.turnitin.com</u>.

Normally, students will be required to submit their course essays to Turnitin.com for a review of textual similarity and detection of possible plagiarism. In doing so, students will allow their essays to be included as source documents in the Turnitin.com reference database, where they will be used solely for the purpose of detecting plagiarism. The terms that apply to the University's use of the Turnitin.com service are described on the Turnitin.com web site.

You must submit an *electronic copy* of your final paper through turnitin.com before midnight on the due date. All submissions midnight or later will be counted as late submissions.

Steps for you to set up your own account and submit papers are described on this web site: <u>http://www.teaching.utoronto.ca/teaching/academicintegrity/turnitin/guide-students.htm</u>

### Accessibility:

Students with diverse learning styles and needs are welcome in this course. In particular, if you have a disability/health consideration that may require accommodations, please feel free to approach me and/or the Access*Ability* Services Office as soon as possible. I will work with you and Access*Ability* Services to ensure you can achieve your learning goals in this course. Enquiries are confidential. The UTSC

Access*Ability* Services staff (located in S302) are available by appointment to assess specific needs, provide referrals and arrange appropriate accommodations (416) 287-7560 or <u>ability@utsc.utoronto.ca</u>.

### Video and Auditory Recording

For reasons of privacy as well as protection of copyright, unauthorized video or audio recording in classrooms is prohibited. This is outlined in the Provost's guidelines on *Appropriate Use of Information and Communication Technology*. Note, however, that these guidelines include the provision that students may obtain consent to record lectures and, "in the case of private use by students with disabilities, the instructor's consent must not be unreasonably withheld."

### **Academic Integrity:**

Academic integrity is essential to the pursuit of learning and scholarship in a university, and to ensuring that a degree from the University of Toronto is a strong signal of each student's individual academic achievement. As a result, the University treats cases of cheating and plagiarism very seriously. The University of Toronto's *Code of Behaviour on Academic Matters* 

(<u>http://www.governingcouncil.utoronto.ca/policies/behaveac.htm</u>) outlines the behaviours that constitute academic dishonesty and the processes for addressing academic offences. Potential offences include, but are not limited to:

#### In papers and assignments:

- Using someone else's ideas or words without appropriate acknowledgement.
- Submitting your own work in more than one course without the permission of the instructor.
- Making up sources or facts.
- Obtaining or providing unauthorized assistance on any assignment.

#### On tests and exams:

- Using or possessing unauthorized aids.
- Looking at someone else's answers during an exam or test.
- Misrepresenting your identity.

#### In academic work:

- Falsifying institutional documents or grades.
- Falsifying or altering any documentation required by the University, including (but not limited to) doctor's notes.

All suspected cases of academic dishonesty will be investigated following procedures outlined in the Code of Behaviour on Academic Matters. If you have questions or concerns about what constitutes appropriate academic behaviour or appropriate research and citation methods, you are expected to seek

out additional information on academic integrity from your instructor or from other institutional resources (see <u>http://www.utoronto.ca/academicintegrity/</u>).

### Policies for this Course Regarding Grading, Late Assignments and Missed Group Presentations:

**Grading:** Any complaint about grading on any course evaluation (assignments, group presentation) should be made in writing to Dr. Segal <u>within one week of receiving the graded material</u> and should detail the point of contention.

Late Assignments (including Outline and Final Paper): If you do not have legitimate documentation for a late assignment, 10% of the total value of the assignment will be deducted for each late day (this includes *any time* after the deadline, so please be sure to submit your assignments well in advance of the specified deadlines). If you provide legitimate documentation for your late assignment (for example, UTSC Student Medical Certificate completed by your doctor), you must contact Dr. Segal <u>within one</u> week of the missed assignment deadline (or as soon as is *reasonably* possible) to discuss a new deadline for your late assignment(s). Please take note of the last day for submission of term assignments in S courses (as set by the University). If you wish to submit work to be graded beyond the last day for submission of term assignments, you must contact the Registrar's office to submit a petition (this is beyond the instructor's control).

**Missed Group Presentation:** If you miss your group presentation without legitimate documentation, you will receive a mark of zero. If you provided legitimate documentation for your missed examination (for example, UTSC Student Medical Certificate completed by your doctor), you will be given <u>one</u> additional opportunity to make your presentation individually to Dr. Segal during office hours. You must contact Dr. Segal <u>within one week of the missed presentation</u> (or as soon as is *reasonably* possible) to discuss a new date for your make-up presentation.

**Medical Documentation:** Any medical documentation that you provide must indicate the date(s) that you needed to be excused from course work, which must include the date of the presentation and/or assignment(s) that you missed. You are advised to see your physician within one day of the missed examination. Only documentation from a doctor registered with the College of Physicians and Surgeons of Ontario will be accepted (as per the UTSC Medical Certificate). You must contact Dr. Segal within one week of a missed presentation or assignment (or as soon as is reasonably possible).

The form for medical documentation can be found at the following link:

http://www.utsc.utoronto.ca/~registrar/resources/pdf\_general/UTSCmedicalcertificate.pdf

Please Note: The UTSC Medical Certificate must be signed by a registered member in good standing with the College of Physicians and Surgeons of Ontario.

# **Grade Scales and Meaning of Grades**

NUMERICAL MARKS	LETTER GRADE	GRADE POINT VALUE
90 - 100%	A+	4.0
85 - 89%	А	4.0
80 - 84%	A-	3.7
77 - 79%	B+	3.3
73 - 76%	В	3.0
70 - 72%	В-	2.7
67 - 69%	C+	2.3
63 - 66%	С	2.0
60 - 62%	C-	1.7
57 - 59%	D+	1.3
53 - 56%	D	1.0
50 - 52%	D-	0.7
0 - 49%	F	0.0

Please note that assignment of an "A" grade in this course signifies that your work suggests that you are prepared for post-graduate work.