Health Psychology and Kinesiology - KAHS 3100

Course Instructor: Paul Ritvo, Ph.D., Professor

Office: 136 Chemistry Building

Office Hours: by Appointment (remote contacts can be arranged on zoom) <pritvo@yorku.ca>

Course Description: The potential advances for 21st century health and chronic disease management have been greatly altered by the COVID-19 pandemic.

Much, if not most, health service is now provided online. The connectivity has led to changes in interactive consultation. The resulting emphasis on self-healing and management has moved normative interests towards a critical array of data from health psychology.

This has invigorated the evolution of physical and mental monitoring technology, via 'wearables' and platform interfaces. There has been an acceleration in how we learn from and apply biobehavioural measures and data to healing and health promotion.

In this course, we investigate how health psychology is applied to the prevention and amelioration of disease states, and how engagement in health behaviours can counteract physical and mental disorder.

Course Organization: 2 x 1.5 hours weekly: remote and in-person - lectures, guest lectures, class discussions, required readings, research participation

Required Reading: Peer reviewed journal articles are assigned. Each is provided on the e-Class site for downloading or through Zoom address [below]. Attendance in class is encouraged but not required. All exams take place in person.

Zoom Meeting https://yorku.zoom.us/j/2727629659 Meeting ID: 272 762 9659 One tap mobile +15873281099,2727629659# Canada +16473744685,,2727629659# Canada Meeting ID: 272 762 9659 Find local number: https://yorku.zoom.us/u/ac21jKG0Tm

Evaluation: 2 exams during the regular semester (50% of final grade); 1 final exam during the exam period (46%); participation (4%) in either a long (3 hour) online mindfulness session hosted by Dr. Ritvo (& 500 word subjective reflection) or an ethically approved research study by York, UHN affiliated hospitals (Toronto General, Princess Margaret, Toronto Western), or Centre for Addiction and Mental Health, being conducted by a York student or faculty, or staff at UHN/CAMH.

Lecture Date Slides Readings - Articles

1. Our Times – Our Behaviours – What Makes Mental Health Di**ffi**cult in 2024 January 9, 2024 Slides

2. Heart Rate Variability & Meaning in Life – How to Increase Meaning January 11, 2024 Slides and Readings: Meaning in Life: Cardiac-**Vagal and Time Varying Properties during Rest,** Stress and Mindfulness Dang et al., Int. J of Psychophysiology, 2021 (PDF provided)

Heart rate variability enhanced in controls but not in maladaptive perfectionists during brief mindfulness meditation following stress induction: A stratified-randomized trial. (PDF provided) Azam et al. 2015 International J. of Psychophysiology, 98(1), 27-24. (PDF provided)

3. New Pharmacology & Integration with Healing Behaviour 1 January 16, 2024 Slides and Readings: Ketamine Assisted Psychotherapy: A Systematic Narrative Review Drodz et al., Journal of Pain Research, 2022 (PDF provided)

4. New Pharmacology & Integration with Healing Behaviour 2 January 18, 2024 Slides and Readings: Effects of Psilocybin-Assisted Therapy on Major Depressive Disorder A Randomized Clinical Trial Davis et al, JAMA Psychiatry, 2021 (PDF provided)

5. Unfortunate Habit Patterns: Perfectionism January 23, 2024 Slides and Readings: Web-Based Cognitive-Behavioural Therapy for Perfectionism: A Randomized Controlled Trial- Arpin-Cribbie et al., Psychotherapy Research, 2012 (PDF provided)

6. Unfortunate Habit Patterns: Boredom Proneness January 27, 2024 Slides and Readings: Boredom and Smart Phone Use Matic et al., UBICOMP , 2015 (PDF provided)

7. Flow - & Use of Flow Principles February 6, 2024 Slides and Readings: **Video game characteristics, happiness and flow as predictors of addiction** among video game players Hull et al., 2013 (PDF provided)

8. Flow and Addiction: Overcoming Addiction February 8, 2024

Slides and Readings: Addiction and Recovery, P. Ritvo, 2023 pgs. Psychedelic Therapies and Treatment Alternatives, Pg 1 - 18 (PDF provided)

9. Review Lecture 1 February 13, 2024 #'s 1 - 5
10. Review Lecture 2 February 15, 2024 #'s 6 - 8
No Classes – Reading Week – Feb 17 - 23
Midterm 1 – Slide content emphasized in examination Feb 27 -

Midterm 2 - Publications emphasized in examination Feb 29 -

11. Telomeres & Stress Reduction (Diet – Exercise – Meditation). March 5 Slides and Readings: Effect of comprehensive lifestyle changes on telomerase activity and telomere length in men with biopsy-proven low-risk prostate cancer: 5-year follow-up of a descriptive pilot study. Ornish et al. 2013 Lancet Oncology (PDF provided)

Aerobic exercise lengthens telomeres and reduces stress in family caregivers. Puterman et al. 2018 Psychoneuroendocrinology (PDF provided)

12. Telomeres & Stress Reduction (Meditation)March 7Slides and Readings: Intensive meditation training, immune cell telomerase activity, and
psychological mediators. Jacobs et al. 2011 – Psychoneuroendocrinology (PDF provided)

13. Telomeres & Healthy Diet March 12 Slides and Readings: Mediterranean diet reduces senescence-associated stress in endothelial cells Marin et al., AGE, (2012) - (PDF provided)

14. Telomeres & Sleep March 14 Slides and Readings: **Randomized Controlled Trial of Mindfulness Meditation for Chronic** Insomnia Ong et al. Sleep, 2014 (PDF provided)

The history of sleep apnea is associated with shorter leukocyte telomere length: the Helsinki Birth Cohort Study Savolainen et al. 2014, (PDF provided)

15. Telomeres & Healthy Thinking March 19 Slides and Readings: Wandering Minds and Aging Cells. Epel et al., 2013 (PDF provided)

Zen meditation, Length of Telomeres, and the Role of Experiential Avoidance and Compassion. Alda et al. 2016 (PDF provided)

16. Conscientious & Purpose March 21

Slides and Readings: **Childhood Conscientiousness and Leukocyte Telomere Length 40 Years** Later in Adult Women—**Preliminary Findings of a Prospective Association** Edmonds et al., 2015, PLoS ONE

Purpose in Life Predicts Better Emotional Recovery from Negative Stimuli, Schaefer et al. November 13, 2013, PLoS One,

Midterm 2 – Part 1 Slide content emphasized in examination March 26

Midterm 2 – Part 2 Publication content emphasized in examination March 28

Online – Mental Health April 2 Slides and Readings: Online Mindfulness-**Based Cognitive Behavioral Therapy Intervention** for Youth With Major Depressive Disorders: Randomized Controlled Trial. Ritvo et al., J Med Internet Res 2021, v. 23, iss. 3 e24380

Brain Health & Nutrition April 4

Slides and Readings: Effects of Dietary Weight Loss and Exercise on Leukocyte Telomere Length in Postmenopausal Women - Mason et al., Obesity (2013) 21, E549–E554. doi:10.1002/oby.20509

Classes end April 8

Grading, Assignment Submission, Lateness Penalties and Missed Tests:

<u>Grading</u>: The grading scheme for the course conforms to the 9-point grading system used in undergraduate programs at York^{**} (e.g., A + = 9, A = 8, B + -7, C + = 5, etc.). Assignments and **tests^{***} will be evaluated using either a letter grade designation or a corresponding** numerical value (e.g. A + = 90 to 100, A = 80 to 90, B + = 75 to 79, etc.).

****For more information, please see the Senate Policy on Common Grading Scheme for Undergraduate Faculties (https://secretariat**-policies.info.yorku.ca/policies/common-grading-scheme-for-undergraduate-faculties/).

<u>Lateness Penalty</u>: Assignments received later than the due date will be penalized. (State penalty: e.g., one-half letter grade (1 grade point) per day that assignment is late). Exceptions to the lateness penalty for valid reasons such as illness, compassionate grounds, etc., may be entertained by the Course Instructor but may require supporting documentation (e.g., a doctor's letter).

<u>Missed Tests</u>: Students with a documented reason for missing a course test, such as illness, compassionate grounds, etc., which is <u>confirmed</u> by supporting documentation (e.g., doctor's letter) may request accommodation from the Course Instructor. For more information on rescheduling an exam for students currently registered with Student Accessibility Services or as a Religious Accommodation please visit: https://altexams.students.yorku.ca/reschedule-

your- exam. Please note that permission to reschedule is at the discretion of the course instructor and is not guaranteed

Important Additional Course Information

York University seeks to provide for equal rights and opportunities without discrimination for all students. The overall aim is a climate of understanding and mutual respect for the dignity and worth of each community member so that each person feels a part of York University and is able to fully participate in university life.

The following information describes some of your important rights and responsibilities as students, along with the supports, accommodations and services made available to you by York.

<u>Academic Honesty and Integrity</u>. York students are required to maintain the highest standards of academic honesty and they are subject to the Senate Policy on Academic Honesty (secretariat-policies.info.yorku.ca/policies/academic-honesty-senate- policy-on/). The Policy affirms the responsibility of faculty members to foster acceptable standards of academic conduct and of the student to abide by such standards. Comprehensive information about academic honesty, along with information about how to find resources at York to help improve your research and writing skills and cope with University life, can be found at: www.yorku.ca/academicintegrity/

<u>Conduct in Academic Situations</u>. Students and instructors are expected to maintain a professional relationship characterized by courtesy and mutual respect. It is the responsibility of the instructor to maintain an appropriate academic atmosphere in the classroom and other academic settings, and the responsibility of the student to cooperate in that endeavour. Further, the instructor is the best person to decide, in the first instance, whether such an atmosphere is present in the class in keeping with the Senate Policy and Procedures on Disruptive and/or Harassing Behaviour in Academic Situations (secretariat-policies.info.yorku.ca/policies/disruptive- andor-harassing-behaviour-in-academic-situations-senate-policy/).

<u>Ethics Review Process</u>. York students are subject to the York University Policy for the Ethics **Review Process for Research Involving Human Participants (secretariat**policies.info.yorku.ca/policies/ethics-review-process-for-research-involving-human**participants**- policy/). Ethics **approval must be obtained prior to the starting any research activities involving human participants, including research conducted by students in a** graduate or undergraduate course, for an undergraduate thesis or project, or for a Major **Research Paper, Thesis or Dissertation. If you are in doubt as to whether this requirement applies to you, contact your Course Director immediately. More information can be found at:** www.yorku.ca/research/human-**participants/**

<u>Religious Accommodation</u>. York University is committed to respecting the religious beliefs and practices of all members of the community, and making accommodations for observances of

special significance to adherents. Should any of the dates specified in your course syllabus pose such a conflict for you, contact the Course Director within 14 days of the date for which accommodation is sought. Other procedures are outlined in the York University policy, guidelines and procedures on Academic Accommodation for Students' Religious Observances (secretariat-policies.info.yorku.ca/policies/academic-accommodation-for-students-religious-observances-policy-guidelines-and-procedures/). Please note that to arrange an alternative date or time for an examination scheduled in the formal examination periods (December and April/May), students must complete an Religious Accommodation Agreement, which can be found at: registrar.yorku.ca/pdf/exam-accommodation.pdf

<u>Accessibility Services</u>. Student Accessibility Services (accessibility.students.yorku.ca/) provides academic accommodations and supports for students with temporary and permanent disability including physical, sensory, medial, learning, and mental health disabilities. Students who had an Individualized Education Plan (IEP) in high school are eligible for support. Please note that registering with disabilities services and discussing your needs with your professors is necessary to avoid any impediment to receiving the necessary academic accommodations to meet your needs.

<u>Academic Skills Support</u>. York University Libraries (www.library.yorku.ca) and the Learning Commons (learningcommons.yorku.ca/) provide students with academic support for their course assignments and research requirements. The Libraries offer an array of supports, services, workshops, resources and people available to help ensure continued success during a student's academic career.

<u>Centre for Human Rights, Equity, and Inclusion</u>. The Centre for Human Rights, Equity and Inclusion (rights.info.yorku.ca/) facilitates confidential processes to discuss allegations of discrimination and harassment by York Community members. There are also robust training opportunities and workshops available to the community year round.

<u>Counselling, Health and Well Being</u>. Student Counselling, Health & Well Being (counselling.students.yorku.ca) supports students in realizing and developing their personal **potential in order to maximally benefit from their university experience and manage the** challenges of university life. Services include: peer-**led workshops, certificate training** programs, support groups, same-day and appointment-based counselling, short-term therapy, and more.

<u>Sexual Violence Response and Support</u>. The Centre for Sexual Violence Response, Support and **Education (thecentre.yorku.ca) facilitates support, services and accommodations for those** who have experienced sexual violence. The support offered is based on the needs and wishes of the person disclosing/reporting.

<u>Student Community Relations</u>. The Office of Student Community Relations (oscr.students.yorku.ca/) supports students impacted by critical incidents, facing personal crises or multiple complex issues, such as, but not limited to, critical illness or injury of a student, student death, attempted suicide and sexual assault. OSCR provides advice, referrals, alternate dispute resolution methods and judicial processes (local adjudication, tribunals).