COURSE SYLLABUS MEDITATION, MINDFULNESS AND HEALTH PHP1880/COST1080

GENERAL INFORMATION

Course Information

Class Location: TBD

Meeting Times: Tuesdays and Thursdays, 2:30-3:50

Audience and Prerequisites: This course is open to undergraduate and graduate students. There are no

prerequisites.

Web Platform: This course uses the Canvas platform.

Instructor Information

Eric Loucks. Ph.D.

Professor

Director, Mindfulness Center

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Dr. Loucks' Office Hours: Wednesdays 4:00-4:30. Zoom link: https://brown.zoom.us/j/94676341823

Teaching Assistants:

TBD

TA Office Hours:

TBD

Course Description

This course provides an overview on the relation of mindfulness (the ability to attend in a nonjudgmental way to one's own physical and mental processes during ordinary, everyday tasks) with various health outcomes and disease risk factors such as obesity, pain management, opioid addiction, depression, and anxiety. Mechanisms by which mindfulness may influence health will be addressed. The course will assess studies in the field for methodological rigor, and students will be taught strengths and weaknesses of current research. Mixed teaching methods will be used, such as small and large group discussions, informal student presentations, and lectures. Students will be taught various mindfulness practices including direct experience with mindfulness meditation.

Mindfulness and meditation interventions have become more mainstream in behavioral medicine and psychiatry, with the advent of therapies such as Acceptance and Commitment Therapy (ACT), Dialectic Behavior Therapy (DBT), Mindfulness-Based Stress Reduction (MBSR), Mindfulness-Based Cognitive Therapy (MBCT), Mindfulness-Oriented Recovery Enhancement (MORE) amongst others. Mindfulness-based programs have been building evidence to potentially, in part, alleviate many of the critical health outcomes that public health is focused on, such as depression, anxiety, and cardiovascular disease. However, moving forward, it is important to provide students with a methodologically rigorous, critical evaluation of the evidence to date, plausible mechanisms, and interventions with the strongest evidence base to be effective.

Course Competencies (see Appendix for more details):

- Evaluate the relative impacts of mindfulness on physical health and mental health (e.g., depression, anxiety, obesity, hypertension, pain, opioid addiction).
- Describe plausible mechanisms by which mindfulness may influence health.
- Assess studies in the field for methodological rigor.
- Analyze the strengths and limitations of the major types of mindfulness interventions that are available in public health and educational settings
- Define some of the primary mindfulness interventions used in health care and community settings (e.g., Mindfulness-Based Stress Reduction, Mindfulness-Based Cognitive Therapy, Acceptance and Commitment Therapy).
- Describe first-person experience with mindfulness practices, and how the practices helped personal well-being, if at all.

COURSE CONTENT

Topics Expected to be Addressed in the Course

- State of the evidence on causal associations between mindfulness and various health outcomes and disease risk factors (e.g., depression, anxiety, obesity, hypertension, pain, opioid addiction).
- Plausible mechanisms by which mindfulness may influence health.
- Assessment of studies in the field for methodological rigor.
- Strengths and weaknesses of current research on mindfulness and health.
- Primary mindfulness interventions used in health care and community settings.
- First-person experience with mindfulness practices customized to foster well-being in college student settings.

SCHEDULE

Note that dates and speakers are tentative, and will be confirmed.

CLASS	DATE	FORMAT	TOPIC	CLASS LEADER
1	9/5	Lecture	Introduction	Dr. Eric Loucks
		Experiential	MBSR Elements – Orientation	Dr. Eric Loucks
2	9/10	Experiential	MBSR Elements – Class 1A	Dr. Eric Loucks
		Lecture and	Impacts of Mindfulness on Stress	Dr. Eric Loucks
		Discussion		
3	9/12	Lecture	Basic Methods Training	Dr. Eric Loucks
		<u> </u>	Opportunity for 1:1 Check-In with Prof. Loucks	Dr. Eric Loucks
4	9/17	Experiential	MBSR Elements – Class 1B	Dr. Eric Loucks
		Discussion	Basic Methods Training,	Dr. Eric Loucks
5	9/19	Quiz	Impacts of Mindfulness on Stress	Dr. Eric Loucks
Э	9/19	Lecture	Impacts of Mindfulness on Stress Impacts of Mindfulness on Depression	Dr. Eric Loucks
6	9/24	Experiential	MBSR Elements – Class 2	Dr. Eric Loucks
O	9/24	Discussion	Impacts of Mindfulness on Depression	Dr. Eric Loucks
7	9/26	Quiz	Impacts of Mindfulness on Depression	Dr. Eric Loucks
,	3/20	Lecture	Impacts of Mindfulness on Anxiety	Dr. Liz Hoge
	40/4			
	10/1	Experiential	MBSR Elements – Class 8	Dr. Eric Loucks
	40/0	Discussion	Impacts of Mindfulness on Anxiety	Dr. Eric Loucks
	10/3	Quiz	Class Via Zoom:	Dr. Eric Loucks
		Lecture	Impacts of Mindfulness on Anxiety Mechanisms of How Mindfulness May	Dr. Eric Loucks
		Lecture	Influence Mental and Physical Health	DI. EIIC LOUCKS
8	10/8	Experiential	MBSR Elements – Class 3	Dr. Eric Loucks
	10/0	Discussion	Mechanisms of How Mindfulness May	Dr. Eric Loucks
		Bioodocion	Influence Mental and Physical Health	Dir Eilo Eodoko
9	10/10	Quiz	Mechanisms of How Mindfulness May	Dr. Eric Loucks
			Influence Mental and Physical Health	
		Lecture	Impacts of Mindfulness on Hypertension	Dr. Eric Loucks
10	10/15	Experiential	MBSR Elements – Class 4	Dr. Eric Loucks
		Discussion	Impacts of Mindfulness on Hypertension	Dr. Eric Loucks
11	10/17	Quiz	Impacts of Mindfulness on Hypertension	Dr. Eric Loucks
		Lecture	Adapting Mindfulness-Based Programs to	Dr. Jeff Proulx
12	10/22	Experiential	Specific Populations and Contexts MBSR Elements – Class 5	Dr. Eric Loucks
12	10/22	Experiential	WIDSIN Elements – Class 3	DI. EIIC LOUCKS
		Discussion	Adapting Mindfulness-Based Programs to	Dr. Eric Loucks
			Specific Populations and Contexts	
13	10/24		No Class – Eric at Indigenous Mindfulness	
			Consortium Retreat	
14	10/29		No Class – Eric at Indigenous Mindfulness	
1 =	40/24	Oi-	Consortium Retreat	Dr. Eria Lavelea
15	10/31	Quiz	Adapting Mindfulness-Based Programs to Specific Populations and Contexts	Dr. Eric Loucks
		Lecture	Impacts of Mindfulness on Adiposity and Diet	Dr. Eric Loucks
	11/5	Lociule	No Class – Election Day	DI. LIIC LOUCKS
16	11/7	Experiential	MBSR Elements – Class 6	Dr. Eric Loucks
	, .	Discussion	Impacts of Mindfulness on Adiposity and Diet	Dr. Eric Loucks
17	11/12		MBSR Elements – Retreat	Dr. Eric Loucks
18	11/14	Quiz	Impacts of Mindfulness on Adiposity and Diet	Dr. Eric Loucks

		Lecture	Acceptance and Commitment Therapy	Dr. Brandon Gaudiano
19	11/19	Experiential	MBSR Elements – Class 7	Dr. Eric Loucks
		Discussion	Acceptance and Commitment Therapy	Dr. Eric Loucks
20	11/21	Quiz	Acceptance and Commitment Therapy	Dr. Eric Loucks
		Lecture	Impacts of Mindfulness on Pain and Opioid Addiction	Dr. Eric Garland
21	11/26	Experiential	The Mindful College Student - Experiential	Dr. Eric Loucks
		Discussion	Impacts of Mindfulness on Pain and Opioid Addiction	Dr. Eric Loucks
22	12/3	Quiz	Impacts of Mindfulness on Pain and Opioid Addiction	Dr. Eric Loucks
		Discussion	Students' mindfulness and stress levels pre- vs. post-class; mechanisms and implications. Class summary.	Dr. Eric Loucks
	12/13		Term Paper Due Today at 5:00 PM	

Readings to be Completed Prior to Each Class

TOPIC	READING
Impacts of Mindfulness on Stress	 Epel et al. More than a feeling: A unified view of stress measurement for population science. Frontier Neuroendocrinol. 2018; 49: 146-169. Hoge EA et al. The effect of mindfulness meditation training on biological acute stress responses in generalized anxiety disorder. Psychiatr Res. 2018; 262: 328–332.
	Galante et al. A mindfulness-based intervention to increase resilience to stress in university students (the Mindful Student Study): a pragmatic randomised controlled trial. <i>Lancet Pub Health</i> . 2018; 3: e72–81.
Basic Methods Training	Coggon D, Rose G and Barker DJP. Epidemiology for the uninitiated. <i>Br Med J.</i> Please access article at this link: http://www.bmj.com/about-bmj/resources-readers/publications/epidemiology-uninitiated Reading all chapters 1-13 (they are brief) is recommended to give a big picture knowledge of key epidemiologic methods. This should provide you methodological knowledge to help better decide for yourself if you believe the findings reported in papers provided in this (and likely other) courses. Lillis J et al. Teaching Acceptance and Mindfulness to Improve the Lives of the Obese: A Preliminary Test of a Theoretical Model. <i>Ann Behav Med.</i> 2009
Impacts of Mindfulness on Depression	 Kuyken W et al. Efficacy of Mindfulness-Based Cognitive Therapy in prevention of depressive relapse: an individual patient data meta-analysis from randomized trials. <i>JAMA Psychiatry</i>. 2016;73(6):565-574. Kuyken W, Hayes R, Barrett B, et al. 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. <i>Lancet</i>. 2015. 386(9988): 63-73. Zhang Q et al. Effectiveness of mindfulness-based stress reduction (MBSR) on symptom variables and health-related quality of life in breast cancer patients—a systematic review and meta-analysis. <i>Supportive Care in Cancer</i>. 2019 27:771–781.
Mechanisms of How Mindfulness May Influence Mental and Physical Health	Loucks EB et al. Mindfulness and Cardiovascular Disease Risk: State of the Evidence, Plausible Mechanisms, and Theoretical Framework. Curr Cardiol Rep. 2015; 17:112. Tang Y-Y et a. The neuroscience of mindfulness meditation. Nature Rev Neurosci. 2015; 16: 213-225. Alsubaie M et al. Mechanisms of action in mindfulness-based cognitive therapy (MBCT) and mindfulness-based stress reduction (MBSR) in people with

	physical and/or psychological conditions: A systematic review. <i>Clin Psychol Rev.</i> 2017; 55: 74-91.
Impacts of Mindfulness on Blood Pressure	Hughes <i>et al.</i> Randomized controlled trial of Mindfulness-Based Stress Reduction for Prehypertension. <i>Psychosom Med. 2013; (75) 721-728</i> Loucks EB et al. Effect of Adapted Mindfulness Training in Participants With Elevated Office Blood Pressure: The MB-BP Study: A Randomized Clinical Trial. Journal of the American Heart Association. 2023: e028712. doi:10.1161/JAHA.122.028712
	Lee EKP et al. Effect and Acceptability of Mindfulness-Based Stress Reduction Program on Patients With Elevated Blood Pressure or Hypertension: A Meta-Analysis of Randomized Controlled Trials. <i>Hypertension</i> . 2020;76(6):1992-2001.
Adapting Mindfulness- Based Programs to Specific Populations and	Loucks, E.B. et al. Mindfulness-Based Programs: Why, When, and How to Adapt? Glob Adv Health Med. 2022; 11:21649561211068805. doi:10.1177/21649561211068805
Contexts	Proulx J et al. Considerations for Research and Development of Culturally Relevant Mindfulness Interventions in American Minority Communities. Mindfulness. 9 (2): 361-370.
	Tenfelde SML et al. "Maybe black girls do yoga": A focus group study with predominantly low-income African-American women. Complement Ther Med 2018; 40: 230-235
Impacts of Mindfulness on Adiposity and Diet	Rogers JM et al. Mindfulness-based interventions for adults who are overweight or obese: a meta-analysis of physical and psychological health outcomes. Obes Rev. 2017;18(1):51-67. Loucks EB et al. Mindfulness and cardiovascular disease risk: State of the
	evidence, plausible mechanisms, and theoretical framework. <i>Curr Cardiol Rep.</i> 2015; 17:112. Mason A et al. Testing a mobile mindful eating intervention targeting craving-
Acceptance and Commitment Therapy	related eating: feasibility and proof of concept. J Behav Med. 2017. A-Tjak JGL et al. A meta-analysis of the efficacy of Acceptance and Commitment Therapy for clinically relevant mental and physical health problems. Psychother Psychosom. 2015; 84: 30-36.
	Harris R. Embracing your demons: an overview of Acceptance and Commitment Therapy. <i>Psychother Austral.</i> 2006; 12(4):2-8. Gaudiano BA. Brief Acceptance and Commitment Therapy for the acute
	treatment of hospitalized patients with psychosis. In: Cognitive Behaviour Therapy for Schizophrenia: Evidence-Based Interventions and Future directions. Ed: C. Steel. John Wiley & Sons, Ltd. 2013.
Impacts of Mindfulness on Anxiety	Strauss C et al. Mindfulness-based interventions for people diagnosed with a current episode of an anxiety or depressive disorder: A meta-analysis of randomized controlled trials. <i>PLoS ONE</i> . 2014; 9(4): e96110. Khoury B et al. Mindfulness-based stress reduction for healthy individuals: A
	meta-analysis. <i>J Psychosom Res.</i> 2015;78(6):519-528. Hoge E et al. Mindfulness-Based Stress Reduction vs Escitalopram for the Treatment of Adults With Anxiety Disorders: A Randomized Clinical Trial. <i>JAMA Psychiatr.</i> 2023; 80(1):13-21
Impacts of Mindfulness on Pain and Opioid Addiction	Herman P et al. Cost-effectiveness of Mindfulness-based Stress Reduction Versus Cognitive Behavioral Therapy or Usual Care Among Adults With Chronic Low Back Pain. SPINE. 2017; 42: 1511–1520. Anheyer D et al. Mindfulness-Based Stress Reduction for Treating Low Back
	Pain: A Systematic Review and Meta-analysis. Ann Intern Med. 2017;166:799-807 Garland E et al. Mindfulness-Oriented Recovery Enhancement vs Supportive Group Therapy for Co-occurring Opioid Misuse and Chronic Pain in Primary
	Care: A Randomized Clinical Trial. JAMA Intern Med. 2022; 182: 407-417.

INSTRUCTIONAL METHOD & EXPECTATIONS

- Each class session will be approximately one hour twenty minutes duration, involving lectures, group
 discussions, and student-led discussions. Classes will typically be arranged to use mixed teaching
 methods, including a blend of lectures and group work to ensure that the class remains dynamic and
 interesting to the students as much as possible through the duration of each session.
- Assigned readings will be provided with clear reading objectives.
- Students are expected to attend all lectures, as well as complete the corresponding assigned reading **prior** to each lecture.
- All assignments should be uploaded and submitted through Canvas.
- Students are encouraged to attend Instructor and TA office hours with questions regarding concepts covered in class, course reading, or homework assignments. Questions requiring detailed responses will not be provided over e-mail.
- Excused absences and extensions will be granted based on the Brown attendance policy: https://www.brown.edu/academics/college/support/faculty/final-exams/deans-notes-exam-excuses-and-incompletes
- Students are expected to know what constitutes plagiarism and that such misconduct is taken very
 seriously and subject to penalty. Please review The Academic Code of Brown University
 (https://www.brown.edu/academics/college/degree/policies/academic-code) for more information on
 plagiarism and other forms of academic misconduct.
- A student's name on any exercise (e.g., a theme, report, notebook, performance, computer program, course paper, quiz, or examination) is regarded as assurance that the exercise is the result of the student's own thoughts and study, stated in his or her own words, and produced without assistance, except as quotation marks, references, and footnotes acknowledge the use of printed sources or other outside help. (<u>Academic Code</u>, p. 5)
- Academic achievement is evaluated on the basis of work that a student produces independently. A student who obtains credit for work, words, or ideas which are not the products of his or her own effort is dishonest. Such dishonesty undermines the integrity of academic standards of the University. Infringement of the Academic Code entails penalties ranging from reprimand to suspension, dismissal or expulsion from the University. Brown students are expected to tell the truth. Misrepresentation of facts, significant omissions or falsifications in any connection with the academic process (including Change of Course permits, the academic transcript, or applications for training or employment) are violations of the Code. This policy also applies to alumni, insofar as it relates to Brown transcripts and other records of work at Brown. Misunderstanding the Code will not be accepted as an excuse for dishonest work. If a student has questions on any aspect of the Academic Code as it relates in a particular course or as it may be interpreted in practice, he or she should consult the instructor in the course or one of the deans of the Graduate School so as to avoid the serious charge of academic dishonesty. (Academic Code, p.4)
- Late assignments will be penalized 10% per day unless an extension has been previously approved, or if there are exceptional circumstances. No assignments will be accepted after 7 days following the original due date.
- For leading the small group discussions, group leaders are expected to lead the group on the day they signed up to do so. Rescheduling leading the small group discussion will only be permitted with a Dean's note or a medical note from a health care provider.

RESPECT FOR DIVERSITY AND AN 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.
- Brown University 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 requirements. 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 Student Accessibility Services (SAS) for their assistance (seas@brown.edu, 401-863-9588). Undergraduates in need of short-term academic advice or support can contact an academic dean in the College by emailing college@brown.edu. Graduate students may contact one of the deans in the Graduate School by emailing graduate_school@brown.edu.

CLASS RECORDING AND DISTRIBUTION OF MATERIALS

Lectures and other course materials are copyrighted. Students are prohibited from reproducing, making copies, publicly displaying, selling, or otherwise distributing the recordings or transcripts of the materials. The only exception is that students with disabilities may have the right to record for their private use if that method is determined to be a reasonable accommodation by Student Accessibility Services. Disregard of the University's copyright policy and federal copyright law is a Student Code of Conduct violation.

COURSE MATERIALS

Course Texts

Loucks, EB. <u>The Mindful College Student</u>. New Harbinger Publications. Oakland, CA. 2022. If you prefer not to purchase a copy, the Brown library has both physical copies and electronic copies with access at the links below:

- Physical copy: https://bruknow.library.brown.edu/permalink/01BU_INST/9mvq88/alma991043370477006966
- E-Book: https://bruknow.library.brown.edu/permalink/01BU_INST/9myg88/alma991043464920906966

There are no other mandatory course texts. For deepening understanding of course material, the two optional texts below may be helpful and of interest.

- For those with minimal background in Epidemiology, it can be helpful to familiarize yourself with the major concepts addressed in the following brief book: Rothman, Kenneth J. <u>Epidemiology: An</u> Introduction. Oxford University Press. New York, NY. 2012.
- The following book is a high quality overview of mindfulness. It is not mandatory to obtain, but is a good source. Brown KW, Creswell JD, Ryan RM (eds.). <u>Handbook of Mindfulness: Theory, Research, and Practice</u>. The Guildford Press. New York, NY. 2015.

Note that if your Brown undergraduate financial aid package includes the Book/Course Material Support Pilot Program (BCMS), concerns or questions about the cost of books and course materials for this or any other Brown course (including RISD courses via cross-registration) can be addressed to bcms@brown.edu. For all other concerns related to non-tuition course-related expenses, whether or not your Brown undergraduate financial aid package includes BCMS, please visit the Academic Emergency Fund in E-GAP (within the umbrella of "E-Gap Funds" in UFunds) to determine options for financing these costs, while ensuring your privacy.

Additional Materials

There will be mandatory weekly readings, distributed through the course website.

IS THIS A GOOD TIME TO ENGAGE IN MINDFULNESS PRACTICES?

- Meditation involves coming closer to our thoughts, feelings, and physical sensations. This can sometimes be uncomfortable. If you have a psychiatric challenge, such as trauma, post-traumatic stress disorder (PTSD), psychosis, depression, anxiety, suicidality, depersonalization, or bipolar disorder, this may be a difficult time to engage in learning mindfulness and meditation. There is evidence supporting that mindfulness trainings can help with all of these health challenges, but sometimes in a particular adapted way for the specific condition (see, for example, Treleaven. Trauma Sensitive Mindfulness. 2018; Kuyken et al. JAMA Psychiatry. 2016; de Vibe et al. Campbell Review. 2017; Gaudiano et al. J Cogn Psychother. 2020). You are encouraged to talk with your doctor or mental health provider to see if now is a good time to engage in mindfulness and meditation training, and if so, if they have recommendations. You are also welcome to talk with Dr. Loucks about if there are particular adaptions that could be best for you. As you go through this course, you are encouraged to notice how the mindfulness and meditation practices feel to you. If they are helpful, then keep using them. If they aren't, then let them go. Engaging in the mindfulness practices is not required for you to successfully complete this course, but rather the mindfulness practices are voluntary and available for you to better understand what mindfulness training is, and how it is often delivered.
- Finally, some mindfulness movements (light yoga) will be done in class. The movement patterns are shown on the Canvas website. If you have any physical limitations that may affect your ability to do the mindful movements, you are welcome to show these postures to your health professional to gain advice on which postures you may want to avoid or modify. The mindful movements are not a requirement in this class, and you should always listen more closely to your body than to any words of the instructor offering postures.

ASSIGNMENTS AND EVALUATION

Assignments and evaluation are designed to be consistent with the course competencies described above. It is hoped that the assignments provide a supportive structure to aid student learning. The course is designed to be clearly structured so that the students are able to gain an excellent understanding of the key concepts in the field.

Assessment

- 1. Quizzes. The role of the quizzes are to help gauge overall understanding of the concepts of the class. The quizzes will be composed of short answer and short essay (e.g., 1-2 paragraph answer) questions. The questions will aim to test understanding of the course competencies listed above.
- 2. Term Paper. The topic of the term paper should be a literature review of evidence on the relation between a specific mindfulness intervention and a particular health (e.g., anxiety, sleep, obesity, etc.) or human flourishing (e.g., athletic performance, artistic performance, happiness, etc.) outcome. For example, the paper could present on the state of evidence for a novel mindfulness intervention that has not been covered in class, or only minimally covered in class (e.g., Mindfulness-Based Relapse Prevention, Prison Mindfulness Institute Intervention, Mindfulness-Based Eating Awareness Training, Dialectical Behavior Therapy) and health. Another option would be to present on the evidence of how a particular mindfulness-based intervention already covered in class (e.g., Mindfulness-Based Stress Reduction, Mindfulness-Based Cognitive Therapy) may influence a particular health outcome that was not covered in class (e.g., diabetes). Students are encouraged to utilize Hill's criteria of causal inference as a guide to evaluate the level of evidence on the mindfulness-based intervention. This is a chance for students to delve more deeply in an area that they are particularly interested in. Similar to the course competencies described above, the papers should include:
 - State of the evidence on causal associations between the mindfulness-based intervention and the health outcome

- Plausible mechanisms by which the mindfulness-based intervention could influence health.
- Assessment of studies in the field for methodological rigor.
- Strengths and weaknesses of current research on this topic

Papers should be limited to 6 double-spaced pages (not including references, figures or tables), using 1" margins and 11 point Arial font, 12 point Times New Roman or 12 point Calibri font. For every page over the limit, 5% of the grade will be deducted.

The article will be graded based on the following criteria:

A quality work shows creative thinking and superior communication skills: original, tightly organized, fully developed, properly documented texts with accurate citations to the sources of the scientific findings reported; texts that require no further editing for correct language or appropriate style. Work of this quality is not only easy for readers to comprehend, summarize and remember, but it is also fresh, new and insightful. The writer shows an ability to think critically, to take a clear position and create a compelling argument with appropriate evidence. To earn a grade of A, students must do more than display information in predetermined formats and error-free language. They must also show they can summarize accurately, analyze and synthesize information, and apply what they have read in new contexts to solve new problems. In order to achieve an A, the writer must come up with his or her own ideas and be able to support them with the readings.

B quality work is of fairly high quality, lacks originality. Language may need a modest amount of editing for minor usage problems (punctuation, spelling, vocabulary, minor grammar errors). Problems in development and organization are also relatively minor. Overall, the writer can discuss the literature well and the text can be read and understood with minimal difficulty, but it contains little that pushes beyond what was given. In addition a B paper may contain some weakness in documentation. There may be improper framing of arguments so that the reader cannot tell where the writer's ideas and the source's ideas start and end.

C quality work either says very little (offering only obvious, shallow arguments or summaries) or the work is difficult to read and understand.

NC quality work indicates failure and is usually granted in the case where the student did not do the required work, or the quality of language and analysis was so poor that the objectives of the assignment were in no way fulfilled. It may also mean that the student has been found to have committed plagiarism, which results in an irrevocable NC for the assignment and the student may be asked to leave the program.

- 3. Reading Assignments. Reading assignments will be provided weekly. This course is designed to maximize efficient use of in-class and out-of-class time. Studies have shown that surface knowledge acquisition is often more efficiently performed by students studying outside of class. However, practice of that knowledge (e.g., through group discussions, presentations; practical applications, problem-based learning assignments) is necessary for attaining deep knowledge that lasts for years. Consequently, students are encouraged to perform readings before class, so that the class discussions and learning will be more effective. Focused reading objectives will be provided. Answers to the reading objectives will be submitted to the instructor 5% of grade will be given for completion of answering the reading objectives before each class.
- 4. Self-Reflection Exercise. A self-reflection exercise on the first-person experiential modules will be provided. This course is designed to foster understanding of potential influences of mindfulness on health from both within (i.e., first-person experience) as well as knowing scientific findings on the topic. First-person experiences will be shared with the instructor through reflections on the formal and informal mindfulness practices that the student is engaging with, and sharing insights, challenges, doubts, and positive experiences with the practices that students are comfortable sharing with the instructor. The instructor will provide personalized feedback on the self-reflection exercise. Answers to the self-reflection

exercise will be submitted to the instructor – 5% of grade will be given for completion of answering the self-reflection exercise.

5. Leading Reading Discussion: In leading the reading discussions, students will be expected to summarize the readings in about a 5 min informal presentation, with focus on the course competencies, described on page 2 above. Furthermore, they will be expected to share particular elements of the papers they felt were particularly applicable to the course objectives or to their first-person mindfulness experience of the impacts of that reading on well-being. Students are expected to have questions they would like clarification on, and feedback on from the group, as both clarification for themselves, and what they feel would be important discussion topics to deepen the knowledge of students in the class, related to the course objectives.

A: a student receiving an A or A- comes to class prepared; provides a clear overview of the papers that relate to all relevant course competencies (stated on pg. 2 above). Students provide insightful, rich questions for discussion that lead to deeper understanding for fellow students in the topics that the readings address, and related to the course competencies. A student receiving this grade facilitates the class discussion skillfully, helping students in the group to contribute readily to the conversation but not dominating it; making thoughtful contributions that advance the conversation; showing interest in and respect for others' views. Presentations are clear and show creative thinking and superior communication skills: original, tightly organized, fully developed communication of concepts. Work of this quality is not only easy for the audience to comprehend, summarize and remember, but it is also fresh, new and insightful.

B: a student received a B provides an overview of the papers, but there may be some lapses in organization of the overview, or the overview addresses some, but not all relevant course competencies (stated on pg. 2 above). Students provide questions for group discussion, but questions could be more rich or insightful to help lead to deeper understanding for fellow students in the topics that the readings address, and related to the course competencies. A student receiving this grade facilitates the class discussion, but misses some opportunities to foster conditions for helping students in the group to contribute readily to the conversation without dominating it; making thoughtful contributions that advance the conversation; showing interest in and respect for others' views.

C: is given to students who provide an overview of the papers, but in a problematic way. The overview is disorganized, says very little (offering only obvious, shallow arguments or summaries), or does not address the course objectives. Students provide questions for group discussion, but questions are lacking richness and insight to help lead to deeper understanding for fellow students in the topics that the readings address, and related to the course competencies. A student receiving this grade facilitates the class discussion, but misses many opportunities to foster conditions for helping students in the group to contribute readily to the conversation without dominating it; making thoughtful contributions that advance the conversation; showing interest in and respect for others' views.

NC: students in this range often provide an overview of the readings demonstrating minimal understanding of the material. Students receiving an NC often have a lack of insightful questions or facilitation so that there is minimal fostering of group discussion, leading to minimal opportunities for deepening understanding for fellow students in the topics that the readings address, and related to the course competencies. "NC" quality work indicates failure and is usually granted in the case where the student did not do the required work, or the quality of presentation and group facilitation was so poor that the objectives of the assignment were in no way fulfilled.

Class Participation

A: Outstanding Participation

- Consistently attends class.
- Actively engages in discussions and activities, contributing thoughtful and relevant insights.
- Frequently initiates discussions and asks questions that enhance understanding of the material.
- Demonstrates excellent preparation, having read and understood assigned readings.

- Respects and listens to peers, fostering a collaborative learning environment.
- Provides constructive feedback to classmates when appropriate.

B: Good Participation

- · Attends class regularly with few absences.
- Participates in discussions and activities, contributing relevant insights and questions.
- Shows good preparation, having read and understood most of the assigned readings.
- Listens to peers and respects different viewpoints.
- Occasionally provides feedback to classmates.

C: Satisfactory Participation

- Attends class occasionally.
- Participates sporadically in discussions and activities, often needing prompting.
- Demonstrates some preparation but may not fully understand assigned readings.
- Listens to peers but may not actively engage with their ideas.
- Rarely provides feedback to classmates.

NC: Unsatisfactory Participation

- Frequently absent or consistently late to class.
- Rarely participates in discussions or activities, even when prompted.
- Demonstrates little to no preparation, often not having read or understood assigned readings.
- Does not listen to or respect peers, possibly disrupting the learning environment.
- Does not provide feedback to classmates.

Notes:

- Participation will be assessed weekly based on the criteria outlined above.
- Active participation is essential for a dynamic and effective learning environment. Students are encouraged to prepare thoroughly and engage actively in all class activities.
- Consistent effort and improvement in participation will be taken into consideration when determining final participation grades.

Weighting of Grades

Quizzes: 40%Term paper: 30%

Reading assignment completion: 5%
Self-reflection exercise completion: 5%

Leading reading discussion: 10%

Class participation: 10%

Classification of Grades

Grades	Numerical Scale
Α	90-100%
В	80-89%
С	65-79%
NC	0-64%

APPENDIX: SUMMARY OF EVALUATION METHODS FOR PUBLIC HEALTH COMPETENCIES

1. Evaluate the relative impacts of mindfulness on physical health and mental health

Assessment:

Exams: Weekly exams are focused on specific health outcomes or mindfulness interventions, as shown in the weekly topics above. Paragraph questions will assess knowledge about relative impacts of mindfulness on physical health and mental health to fulfill the following course competencies:

- Explain the state of the evidence on causal associations between mindfulness and various health outcomes and disease risk factors (e.g., obesity, depression, and anxiety).
- Describe plausible mechanisms by which mindfulness may influence health.

Term Paper:

The topic of the term paper is a literature review of evidence on the relation between a specific mindfulness intervention and a particular health outcome. For example, the paper could present on the state of evidence for a novel mindfulness intervention that has not been covered in class, or only minimally covered in class (e.g., Mindfulness-Based Relapse Prevention, Prison Mindfulness Institute Intervention, Mindfulness-Based Eating Awareness Training, Dialectical Behavior Therapy) and health. Another option would be to present on the evidence of how a particular mindfulness-based intervention already covered in class (e.g., Mindfulness-Based Stress Reduction, Mindfulness-Based Cognitive Therapy) may influence a particular health outcome that was not covered in class (e.g., diabetes). Students are encouraged to utilize Hill's criteria of causal inference as a guide to evaluate the level of evidence on the mindfulness-based intervention. This is a chance for students to delve more deeply in an area that they are particularly interested in. Similar to the course objectives, the papers should include:

- State of the evidence on causal associations between the mindfulness-based intervention and the health outcome
- Plausible mechanisms by which the mindfulness-based intervention could influence health.
- Assessment of studies in the field for methodological rigor.
- Strengths and weaknesses of current research on this topic

2. Analyze the strengths and limitations of the major types of mindfulness interventions that are available in public health and educational settings

Assessment:

Exams: Weekly exams are focused on the relation between various mindfulness interventions (e.g., Acceptance and Commitment Therapy, Mindfulness-Based Stress Reduction, Mindfulness-Based Cognitive Therapy) and specific health outcomes. Paragraph answers to questions will assess knowledge about relative impacts of mindfulness on physical health and mental health to fulfill the following course competencies:

- Assess studies in the field for methodological rigor.
- Understand strengths and weaknesses of current research on mindfulness and health.